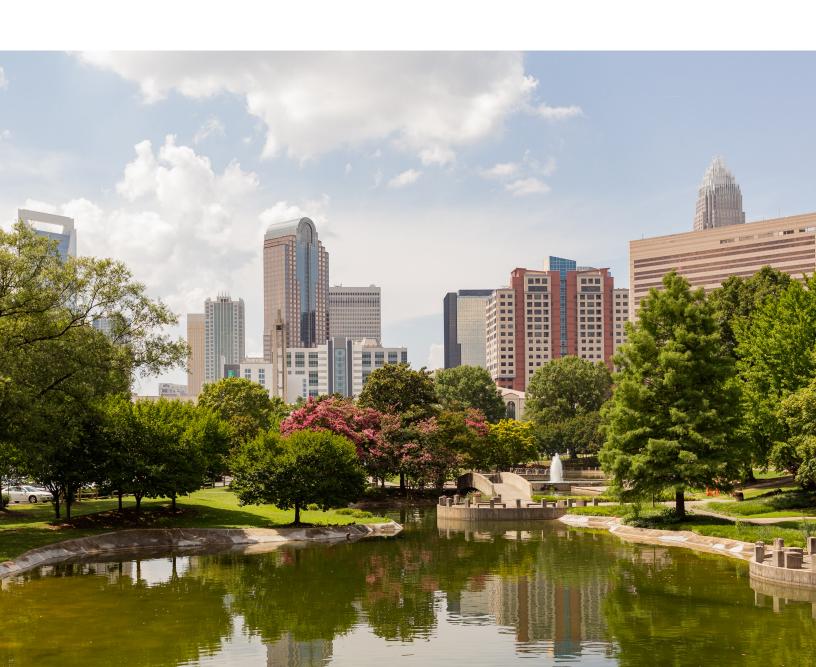
Yardi[®] Matrix

Multifamily National Report

November 2019



Multifamily Rents Decline in November

- The average U.S. multifamily rent fell \$3 in November to \$1,473, while year-over-year rent growth declined by 20 basis points to 3.1%.
- Demand continues to be strong nationally. With 320,000 units absorbed to date, this is the sixth straight year with more than 250,000 units absorbed.
- Rent growth remains strong across the board, with metros in the Southwest, Southeast and California dominating the top 10 of the rankings. There is seasonal weakness in several metros in the Pacific Northwest, with three-month drops of 0.4% or more in San Jose, San Francisco and Seattle.

Average U.S. multifamily rents fell slightly in November to \$1,473 per month as the winter seasonal slowdown starts to take hold. Rents are up 3.1% year-over-year and have been at 3.0% or higher since the spring of 2018, which demonstrates the strength and consistency of demand.

Already this year, more than 320,000 multifamily units have been absorbed nationally. While we don't expect absorption to reach 2016's cycle peak of 377,000 units, 2019 marks the sixth straight year with at least 250,000 multifamily units absorbed. Seattle, Denver and Dallas topped the absorption list, with Houston, Austin and Washington, D.C., also strong.

The Southwest and West continue to exhibit the highest rent growth, with Phoenix (7.5%), Las Vegas (6.0%) and Sacramento (5.3%) producing the strongest gains. The Southeast also is well represented, with Raleigh and Charlotte (both 4.6%) and Nashville (4.5%) in the top 10. Midwest con-

tenders include Indianapolis (4.0%), the Twin Cities (3.7%) and Kansas City (3.5%).

On the weaker end are San Jose (0.1%), and San Francisco and Houston (both 1.4%). Houston has been near the bottom for some time; San Jose and San Francisco—along with fellow Northwest tech metro Seattle—posted sharply negative growth over the last three months. For reasons that are not entirely clear, these metros have developed the same pattern of larger-than-average seasonal changes in recent years, with high growth in the summer and rent declines in the winter.

Overall demand in all of these markets remains extremely high, and none have extreme winters, so the pattern doesn't have an obvious explanation. Rents may be affected by new deliveries that tend to come online in the fall. Job growth and in-migration continue to be strong in the Pacific Northwest, so we would expect rent gains to pick up again in the new year.

National Average Rents

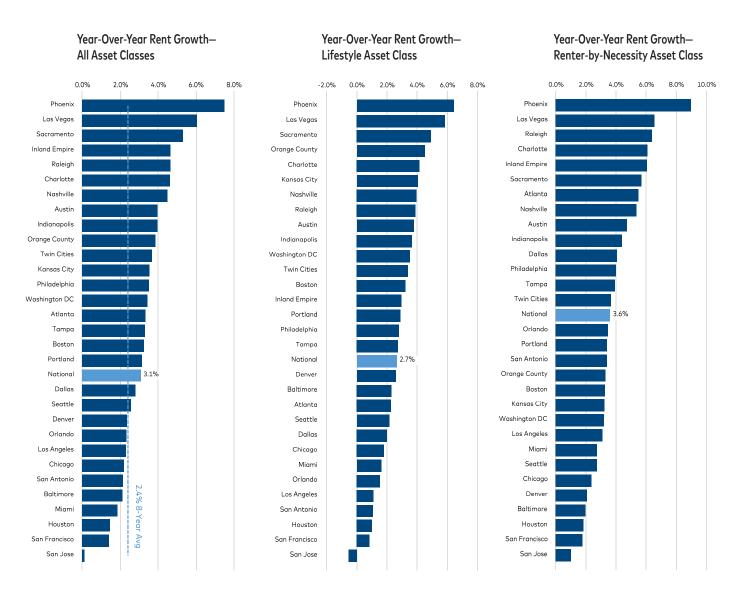


National averages include 127 markets tracked by Matrix, not just the 30 metros featured in the report.

All data provided by YardiMatrix.

Year-Over-Year Rent Growth Rent Gains Soften but Steady Demand Remains

- Year-over-year rent growth softened to 3.1% nationwide in November, a 20-basis-point decline from October and a 40-basis-point reduction from the 2019 high this summer. Despite the slow-down, rent growth remains steady, with nationwide rents growing 3% or more since early 2018. The seasonal slowdown is expected to continue through early 2020, but substantial demand for multifamily housing remains, and rent growth will likely accelerate again in the spring.
- As has been the case for months, Phoenix (7.5%) and Las Vegas (6.0%) top our rankings. Job growth and strong in-migration continue to fuel the desert Southwest. Demographic tailwinds are supporting a number of markets with robust new-supply pipelines, including Raleigh and Charlotte (both 4.6%), Nashville (4.5%), and Austin (4.0%). All four markets are in the top 10 for new deliveries as a percentage of stock; they are also in the top 10 for year-over-year rent growth.



Trailing 3 Months: The OC and Phoenix Tops in Short-Term Growth

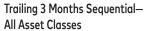
- Rent growth remained level, increasing 0.1% on a trailing three-month (T-3) basis in October.
- Southern and Western markets increased the fastest, while tech markets including San Jose, Seattle, Boston and San Francisco slowed the most.

Rent growth was flat or negative in 18 of the top 30 markets on a trailing T-3 basis, which compares the last three months to the previous three months. The T-3 ranking demonstrates short-term changes and not necessarily long-term trends.

Rents were flat nationally overall. Warm markets

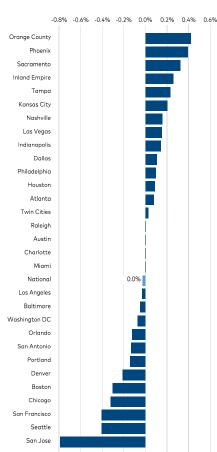
in the Southeast saw the highest growth, while there were declines in some technology-centric and gateway markets.

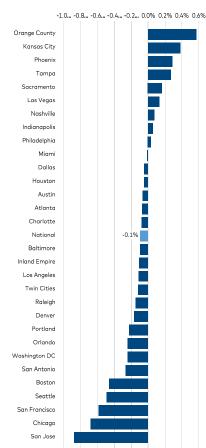
Orange County and Phoenix (both 0.4) led all markets in T-3 rent growth, as continued strong demand and muted supply in Orange County propelled rents higher. As expected, seasonality, specifically in gateway markets and key tech markets, led to some negative growth. San Jose (-0.8%), Seattle and San Francisco (both -0.4%) fell the fastest on a T-3 rent growth basis in November. These three markets have also been among the most volatile over the past seven years, growing quickly in the summer months but performing negatively throughout the winter.

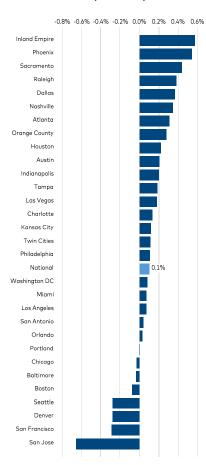


Trailing 3 Months Sequential— Lifestyle Asset Class

Trailing 3 Months Sequential— Renter-by-Necessity Asset Class







Employment, Supply and Occupancy Trends; Forecast Rent Growth

- Nearly a decade into a very positive cycle for commercial real estate, many in the industry are wondering how long it can last and looking for signs of weakness.
- Although transaction underwriting and debt levels are not as frothy as they were in 2006-07, investors are getting very little premium for high-risk assets such as value-add properties and mezzanine loans.
- Market players should keep abreast of the possible economic headwinds and develop strategies to deal with such events.



Commercial real estate performance has been stellar for about eight years. Fundamentally, occupier demand is strong, and rents continue to grow in most segments. Meanwhile, property values are at all-time highs and debt markets are functioning smoothly, with healthy deal flow and few delinquencies. The industry, however, isn't used to lengthy periods of uninterrupted success, which leads to anxiety about the other shoe dropping.

While it doesn't feel like it did in 2006-07, when large acquisitions underwritten with pro-forma numbers were funded with 90% debt packages, underwriting is tight and the margin of error narrow, requiring better information to reduce uncertainty and exposing any overlevered deals to downside risk.

Of course, commercial real estate is always at the mercy of the broader economy, and there have been a lot of crosswinds, with the talk being more about "when" a recession will come, rather than "if." For example, short-term bond rates have topped long-term rates at various times in recent months, which has presaged recessions in the past. Another sign is the recent hiccup in the overnight repo market that led the Federal Reserve to implement a new round of quantitative easing.

GDP growth has waned as the tax cut stimulus

has worn off, and business investment and manufacturing are struggling. Trade tensions and uncertainty as to the structure of supply chains have scrambled business plans. Yet consumer confidence is high, the labor market is tight and compensation has grown without sparking inflation, allowing the Fed to ease up on credit conditions.

What might set off the next downturn? One possibility is corporate debt, which has mushroomed in this cycle as companies with lots of cash on hand borrow at historically low rates. Debt service at current levels is manageable for most companies, but that could change if income declines or rates increase. The global economy could weaken, with potential trouble spots including the U.K. with its never-ending Brexit saga, a manufacturing slowdown in Western Europe, and political unrest in Asia, Eastern Europe and the Middle East.

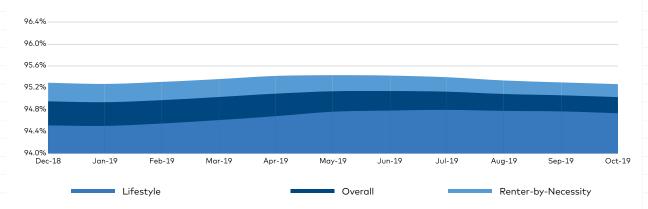
Global equity markets are driven by daily news about trade. Tariffs are a small part of the economy but have an outsize impact on some segments. The bigger issue, though, is that businesses have a hard time planning when there is so much uncertainty about rules. And with the next presidential election a year away, policies could change soon. For the time being, however, the economy remains set to expand at a 2%-plus real rate, enough to power the real estate expansion forward.

Employment, Supply and Occupancy Trends; Forecast Rent Growth

Market	YoY Rent Growth as of Nov - 19	Forecast Rent Growth (YE 2019)	YoY Job Growth (6-mo. moving avg.) as of Sept - 19	Completions as % of Total Stock as of Nov - 19	Occupancy Rates as of Oct - 18	Occupancy Rates as of Oct - 19
Las Vegas	6.0%	7.3%	2.3%	1.6%	95.0%	95.0%
Phoenix	7.5%	6.4%	2.9%	2.8%	95.2%	95.0%
Seattle	2.5%	6.4%	3.1%	4.9%	95.3%	95.6%
Boston	3.2%	6.2%	1.2%	2.0%	96.4%	96.6%
Charlotte	4.6%	6.0%	2.5%	4.3%	95.0%	95.0%
Raleigh	4.6%	5.8%	1.4%	3.1%	94.8%	94.8%
Sacramento	5.3%	5.7%	1.8%	0.6%	96.2%	96.1%
Austin	4.0%	5.4%	2.2%	3.4%	94.7%	95.0%
Nashville	4.5%	5.4%	2.1%	2.9%	94.7%	95.4%
Portland	3.1%	5.3%	2.0%	2.5%	95.5%	95.5%
Washington DC	3.4%	4.8%	1.0%	2.0%	95.4%	95.5%
Atlanta	3.3%	4.8%	1.9%	2.4%	94.3%	94.1%
nland Empire	4.6%	4.7%	2.1%	1.1%	96.1%	95.9%
Chicago	2.2%	4.6%	1.3%	2.9%	94.5%	94.5%
Philadelphia	3.5%	4.5%	1.2%	0.9%	95.6%	95.7%
Orlando	2.3%	4.4%	3.7%	2.8%	95.4%	95.0%
Twin Cities	3.7%	4.4%	0.1%	2.3%	96.9%	96.8%
San Francisco	1.4%	4.3%	2.3%	2.3%	96.0%	95.8%
_os Angeles	2.3%	4.3%	1.2%	1.9%	96.5%	96.3%
San Antonio	2.1%	4.1%	2.0%	1.7%	93.2%	93.0%
Гатра	3.3%	4.1%	2.1%	2.7%	95.1%	94.8%
ndianapolis	4.0%	3.9%	0.8%	1.4%	94.4%	94.4%
Kansas City	3.5%	3.9%	1.5%	2.1%	94.7%	95.0%
San Jose	0.1%	3.9%	2.6%	2.1%	95.6%	95.7%
Denver	2.3%	3.7%	1.7%	4.2%	95.0%	94.9%
Dallas	2.8%	3.5%	3.2%	2.7%	94.4%	94.3%
Baltimore	2.1%	3.1%	0.9%	0.8%	94.6%	94.9%
Miami Metro	1.9%	3.1%	2.2%	3.5%	95.1%	94.9%
Orange County	3.8%	3.1%	1.2%	1.3%	96.0%	96.0%
Houston	1.4%	1.8%	2.8%	1.2%	92.9%	93.0%

Occupancy & Asset Classes

Occupancy—All Asset Classes by Month

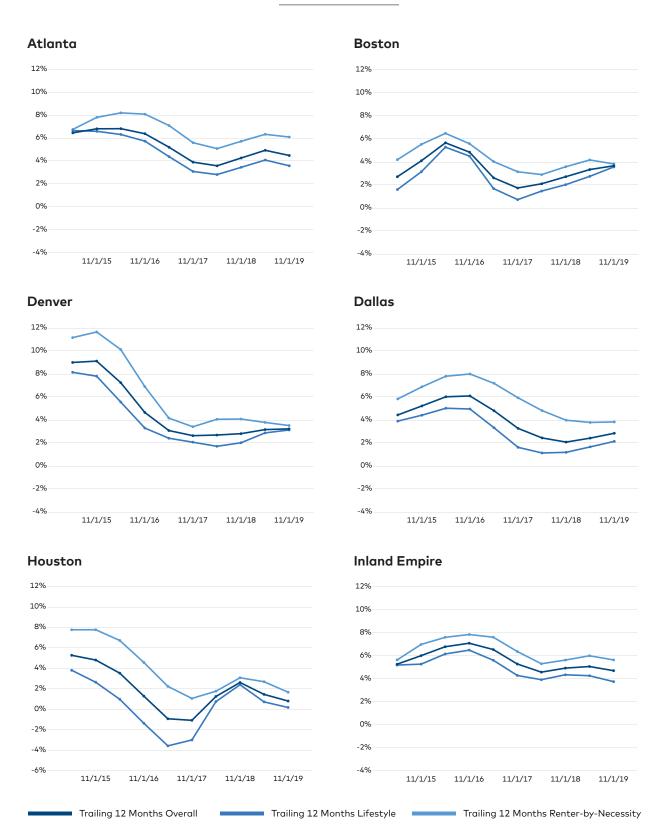


Source: Yardi Matrix

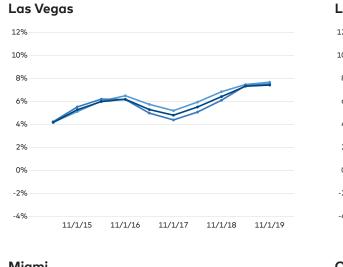
Year-Over-Year Rent Growth, Other Markets

	November 2019				
Market	Overall	Lifestyle	Renter-by-Necessity		
Albuquerque	5.9%	7.5%	5.0%		
Tacoma	5.9%	5.7%	6.2%		
Tucson	5.6%	4.5%	5.9%		
Central Valley	5.6%	2.6%	6.4%		
Colorado Springs	5.5%	4.5%	6.8%		
NC Triad	4.9%	5.1%	4.8%		
Long Island	4.5%	3.1%	5.1%		
Indianapolis	4.0%	3.7%	4.4%		
St. Louis	3.7%	3.0%	4.1%		
Salt Lake City	3.4%	2.1%	4.2%		
Louisville	3.1%	1.6%	4.1%		
Central East Texas	2.9%	3.2%	2.3%		
San Fernando Valley	2.7%	2.5%	2.9%		
Northern New Jersey	2.7%	1.6%	3.7%		
Bridgeport-New Haven	2.5%	3.1%	1.9%		
El Paso	2.3%	2.0%	2.3%		
Reno	1.8%	0.1%	3.3%		
SW Florida Coast	1.4%	1.4%	1.2%		
Source: Yardi Matrix					

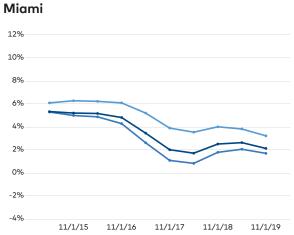
Market Rent Growth by Asset Class

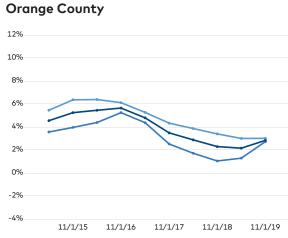


Market Rent Growth by Asset Class

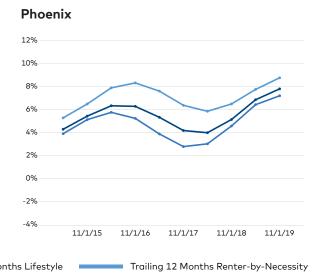






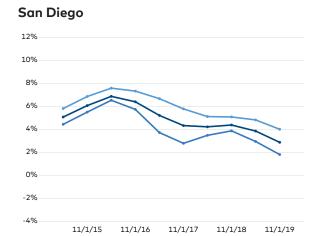




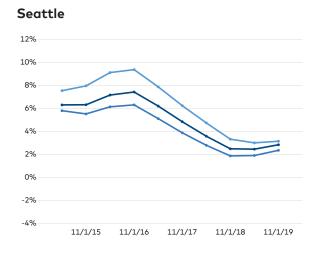


Market Rent Growth by Asset Class

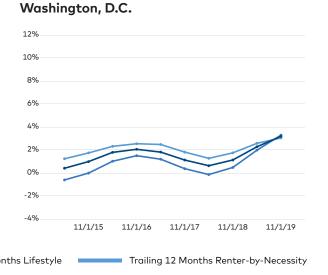
Sacramento 12% 10% 8% 6% 4% 2% 0% -2% -4% 11/1/15 11/1/16 11/1/17 11/1/18 11/1/19











Definitions

Reported Market Sets:

- National rent values and occupancy derived from core 60 markets with years of tracked data that makes a consistent basket of data
- All 133 markets, including any that have been recently released

Average Rents: Average Same-Store index rent (mean), rolled up from unit mix level to metro area level, weighted by units

Rent Growth, Year-Over-Year: Year-over-year change in average market rents, as calculated by same month

Rent Growth, Quarterly: Year-over-year change in average market rents, as calculated by same quarter average. Partially completed quarters are only compared to partial quarters.

Forecast Rent Growth: Year-over-year change in average forecasted market rents, as calculated by same month

Market rent: Converted rent that reflects of the effect of differences in relevant attributes that hold reasonably quantifiable value.

Actual (effective) rent: Monthly rate charged to residents to occupy an apartment and is shown as-is without additional concessions or adjustments.

Same-Store index rent: Rents adjusted to new supply as it joins the market

Employment Totals: Total employment figures and categories provided by Bureau of Labor Statistics, seasonally adjusted

Employment Data Geography: Comprises entirety of United States, which Matrix data covers 90% of US metro population. Reported information is for MSAs that overlap Matrix Markets.

Market: Generally corresponds to a Standard Metropolitan Statistical Area (SMSA), as defined by the United States Bureau of Statistics, though large SMSA are split into 2 or more Markets

Metro: 1 or more Matrix markets representing an economic area. Shown with combined Matrix markets when necessary, and do not necessarily fully overlap an SMSA.

Occupancy Rates: Ratio of occupied unit count and total unit count, as provided by phone surveys and postal records. Excludes exception properties: closed by disaster/renovation, affordable, and other relevant characteristics.

Completions as % of Total Stock: Ratio of number of units completed in past 12 months and total number of completed units

Ratings:

- Lifestyle/Renters by Choice
- Discretionary—has sufficient wealth to own but choose rent
- Renters by Necessity
- High Mid-Range—has substantial income but insufficient wealth to acquire home/condo
- Low Mid-Range—Office workers, police officers, technical workers, teachers, etc
- Workforce—blue-collar households, which may barely meet rent demands and likely pay distortional share of income toward rent
- Other Categories
- Student—may span range of income capability
- Military—subject to relocation
- Subsidized—Partially to fully subsidized by a governmental agency subsidy. Can extend to middle-income households in high-cost markets.

Market Position	Improvement Ratings		
Discretionary	A+ / A		
High Mid-Range	A-/B+		
Low Mid-Range	B / B-		
Workforce	C+/C/C-/D		

The value in application of the Yardi® Matrix Context rating is that standardized data provides consistency; information is more meaningful because there is less uncertainty. The user can move faster and more efficiently, with more accurate end results.

The Yardi® Matrix Context rating is not intended as a final word concerning a property's status—either improvements or location. Rather, the result provides reasonable consistency for comparing one property with another through reference to a consistently applied standard.

To learn more about Yardi® Matrix and subscribing, please visit www.yardimatrix.com or call Ron Brock, Jr., at 480-663-1149 x2404.

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