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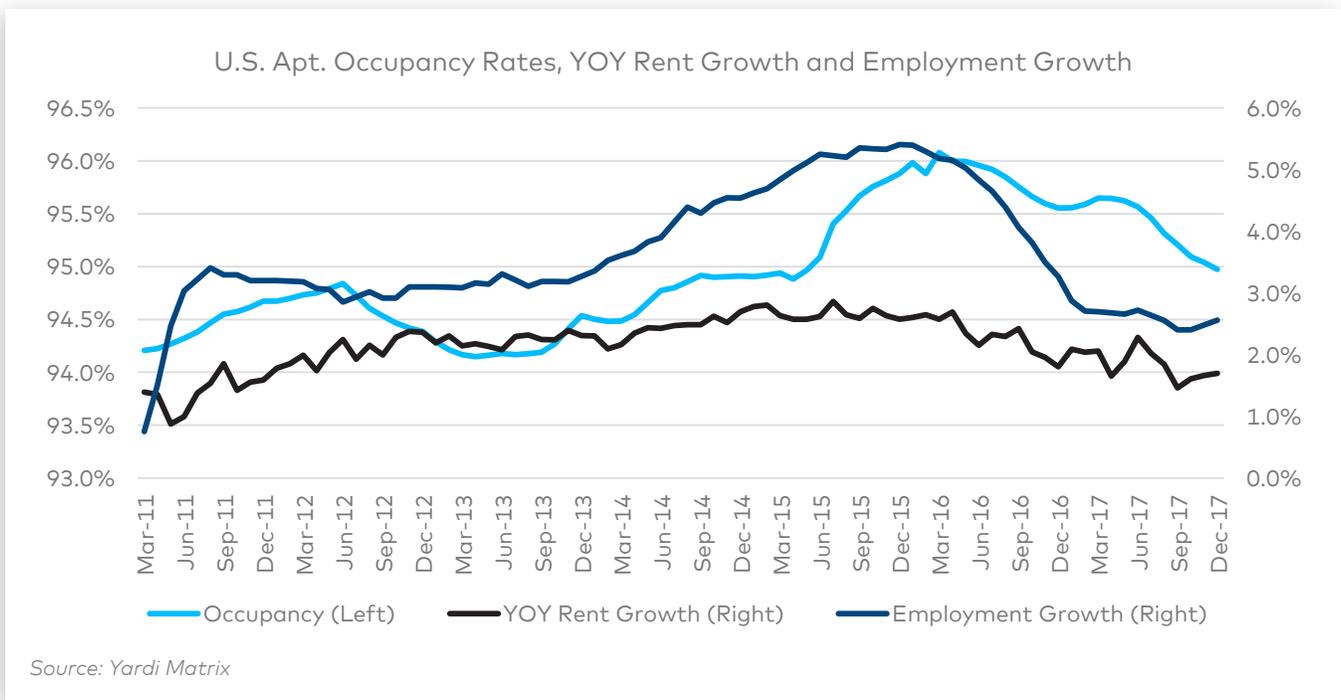


## It's the Occupancy: Why Multifamily Rents Are Decelerating

U.S. multifamily rents have decelerated sharply over the last 18-24 months, across all metros and regions. Year-over-year rent growth rose as high as 5.5 percent in January 2016, before steadily and gradually dropping to 2.3 percent in December 2017. The downward trend has multiple causes—including diminishing affordability, increasing supply and slightly weaker job growth—that are present to one degree or another in each metro. However, the main driver of the deceleration appears to be the extent to which supply growth has put downward pressure on occupancy rates in individual metros.

To understand the decline in rent growth by metro between year-end 2016 and 2017, we analyzed multiple factors, including changes in employment and the overall increase in supply. By far the metric that tracked most closely with the change in rents was the occupancy rate. There is a connection between the amount of new stock coming online and changes in occupancy, but metros with high demand are better able to absorb new units.

The link is strongest over the short term. We also examined three- and five-year periods, but the correlations grow weaker past one year. That demonstrates that supply growth is a bigger issue for rents in the short term, while over the long term, total demand is a more important factor. Developers



and municipal officials can adjust course over time when demand is not keeping up with supply.

Although occupancy rates are high by historical levels, they have fallen 60 basis points in each of the last two years. With supply growth expected to hit a cycle peak of 360,000 in 2018, it's a good bet that rent growth will level off or continue to decelerate in most metros for another year or two. Beyond that, rent increases will depend on how well developers calibrate development with demand for rental units.

### Multifamily's Strong Cycle

Multifamily fundamentals have excelled during the long economic expansion that started after the housing-fueled Great Recession. Demand for rentals soared while the supply pipeline was largely shut down in the wake of the recession. Multifamily deliveries barely totaled 100,000 in 2009 and 2010, about one-third of the average of the last several decades.

As the economy recovered, adding two million-plus jobs per year, and homeownership faltered, the

number of renters soared. The occupancy rate of stabilized apartments climbed from 94.2 percent in the first quarter of 2011 to 96.1 percent in the first quarter of 2016, while over the same time period year-over-year rent growth rose from less than 1 percent to 5.5 percent. But the market then began to weaken, albeit slowly and gradually. The occupancy rate dropped to 94.9 percent and year-over-year rent growth fell to 2.3 percent as of December 2017, per Yardi Matrix.

There are numerous reasons for the softening. For one thing, rents are becoming difficult to afford—particularly in the most expensive metros—such as New York, San Francisco and Los Angeles—but it is also a growing problem in metros that have had sharp increases in recent years, such as Denver, Portland, San Jose and Miami. Rent growth has exceeded wage increases, and rents are taking up a bigger share of personal income. And with labor slack declining, growth in employment has slowed in some metros.

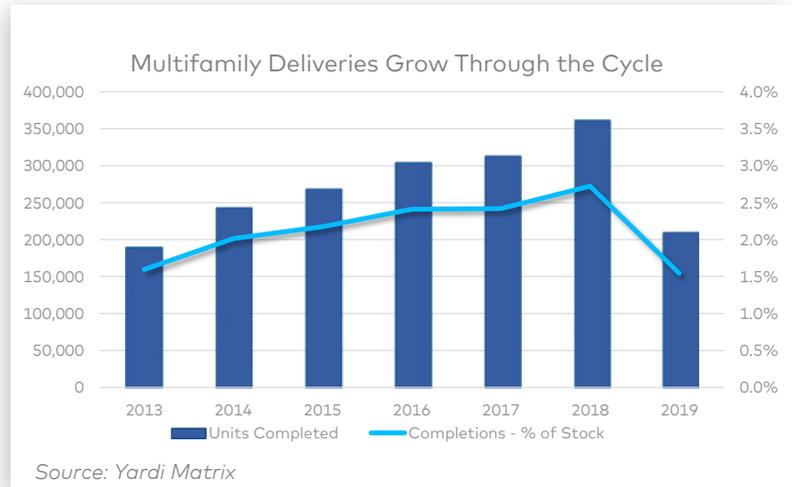
Another issue is supply growth, which has risen steadily in recent years, to 307,000 units in 2016 and 312,000 in 2017, according to Yardi Matrix.

At the beginning of 2018, some 600,000 units were under construction, and new stock is projected to hit 360,000 units in 2018.

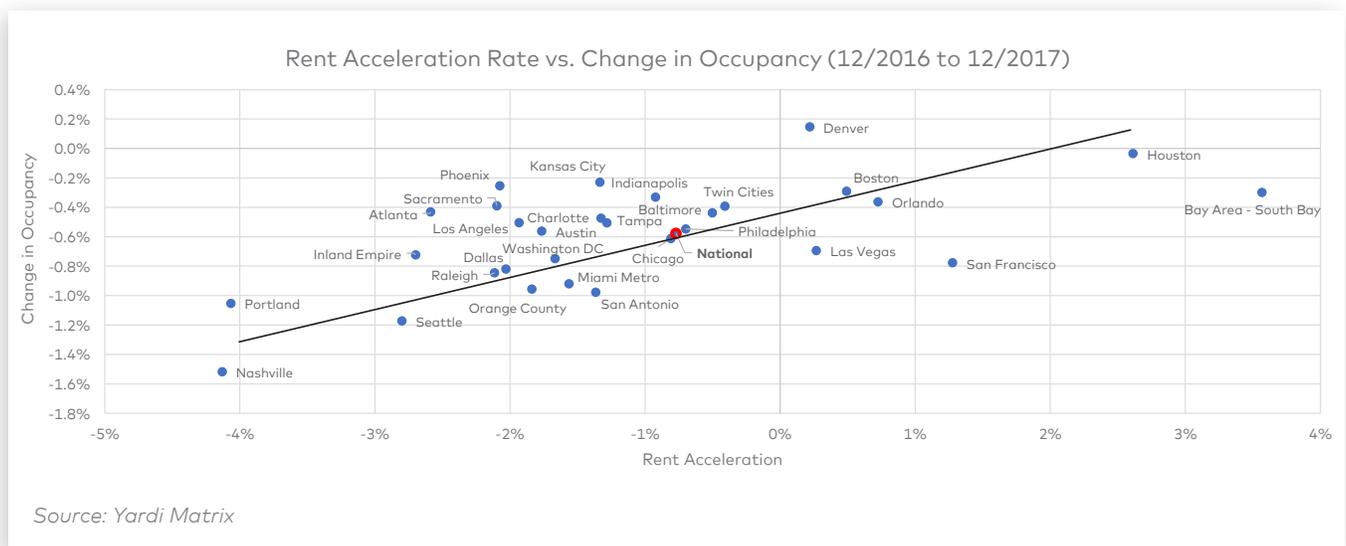
## Rent Deceleration and Declining Occupancy

To understand the cooling in rent growth, we looked at different metrics, including job growth and supply growth, and the changes in the occupancy rate seem to be most culpable. In the table below, we plotted the change in rent growth between December 2016 and December 2017 in 30 top metros with the change in occupancy rate during the same period.

What we see is that metros in which rent growth decelerated the most also had sharp decreases in occupancy rates. The most glaring examples were Nashville, Portland and Seattle. The rate of rent growth dropped 410 basis points in Nashville and Portland and 280 basis points in Seattle. Each metro had substantial declines in occupancy rates during the year: 150 basis points in Nashville, 110 basis points in Seattle and 120 basis points in Portland.



It's important to note there are substantial differences in supply/demand factors among metros. Nashville's apartment stock rose 6.1 percent during the year, Seattle was up 4.8 percent and Portland 2.3 percent. Those numbers indicate demand was especially strong in Nashville and Seattle, and moderately strong in Portland. The lesson isn't that those markets are underperforming as much as the fact that supply increases have depressed occupancies and caused rents to flatten in the short term.



## Change in Rent Growth and Occupancy

(by Metro 12/16 to 12/17)

	Deceleration Rate	Overall % Change in Occupancy	Overall % Change in Supply
Nashville	-4.1	-1.5	6.1
Portland	-4.1	-1.1	2.3
Seattle	-2.8	-1.2	4.8
Inland Empire	-2.7	-0.7	0.8
Atlanta	-2.6	-0.4	2.6
Raleigh	-2.1	-0.8	3.3
Sacramento	-2.1	-0.4	0.5
Phoenix	-2.1	-0.3	2.3
Dallas	-2.0	-0.8	2.4
Los Angeles	-1.9	-0.5	2.2
Orange County	-1.8	-1.0	2.7
Austin	-1.8	-0.6	3.5
Washington DC	-1.7	-0.7	2.0
Miami Metro	-1.6	-0.9	4.2
San Antonio	-1.4	-1.0	2.9
Kansas City	-1.3	-0.2	2.5
Charlotte	-1.3	-0.5	3.3
Tampa	-1.3	-0.5	2.7
Indianapolis	-0.9	-0.3	1.7
Chicago	-0.8	-0.6	2.4
<b>National</b>	<b>-0.8</b>	<b>-0.6</b>	<b>2.6</b>
Philadelphia	-0.7	-0.5	1.7
Baltimore	-0.5	-0.4	1.7
Twin Cities	-0.4	-0.4	2.5
Denver	0.2	0.1	2.9
Las Vegas	0.3	-0.7	1.8
Boston	0.5	-0.3	3.3
Orlando	0.7	-0.4	2.9
San Francisco	1.3	-0.8	2.3
Houston	2.6	0.0	3.0
Bay Area-South Bay	3.6	-0.3	3.5

Source: Yardi Matrix

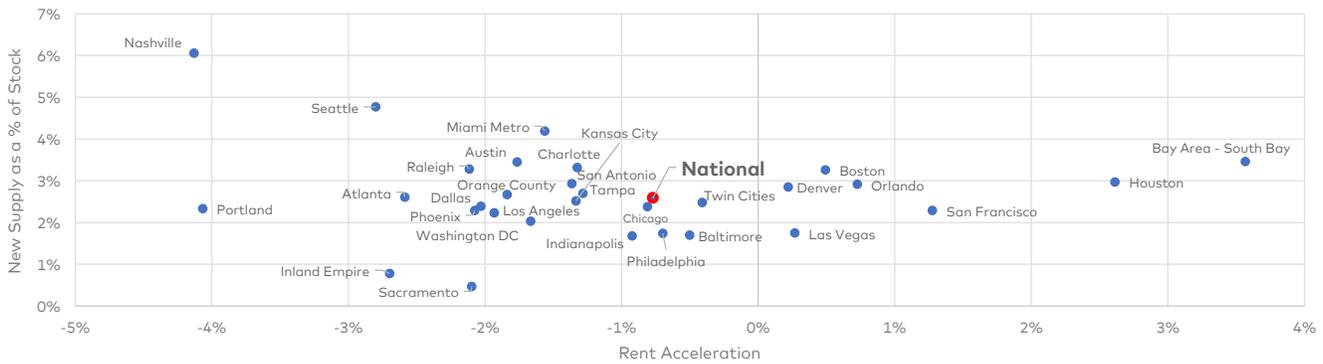
On the other side of the equation, Denver (up 10 basis points) and Houston (flat) are the only metros in which the overall occupancy rate did not decrease, and only seven metros had a higher rate of rent growth in December 2017 than a year earlier. Houston is an outlier because apartment demand rose in the wake of Hurricane Harvey, which displaced some homeowners and took some apartments out of commission. In the Bay Area (San Francisco and San Jose), rents increased in 2017, but they had fallen sharply at the end of 2016. Orlando and Las Vegas have had consistently healthy rent growth over the last two years, owing to healthy population growth, affordable overall rents and moderate increases in supply.

The deceleration in rents was less correlated with total supply increases. Below we plotted year-over-year rent growth as of year-end 2017 with growth in apartment stock by metro. There is a general correlation, but not nearly as strong as the link between rent growth deceleration and changes in occupancy. Sacramento has the highest rent growth and lowest supply, and Nashville was an outlier in terms of supply growth while rent increases stalled. However, in some metros—such as Seattle, Orlando and Denver—rents increased at a rate above the national average with above-trend supply growth.

For example, San Jose saw rent growth accelerate 3.6 percent despite 3.5 percent growth in supply, well above the national 2.6 percent average. Likewise, in Houston rents accelerated 2.6 percent despite a 3.0 percent increase in total stock. And rents decelerated by more than 200 basis points in the Inland Empire and Sacramento, despite supply growth of less than 1 percent in 2017.

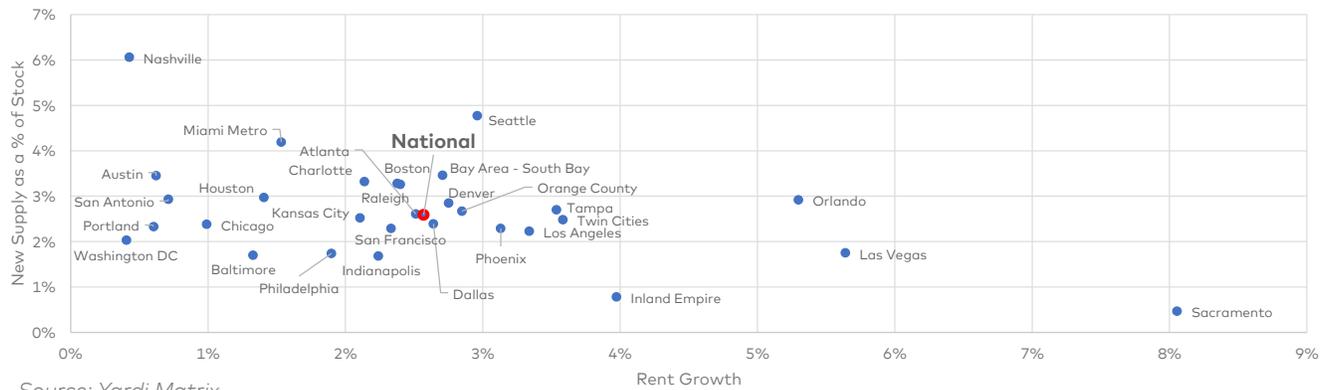
The results underscore that each metro has a unique set of drivers. San Jose is perpetually undersupplied and the recent increases are needed to keep up with demand. Houston is perpetually

Rent Acceleration vs. New Supply as a % of Stock (12/2016 to 12/2017)



Source: Yardi Matrix

Rent Growth vs. New Supply as a % of Stock (12/2016 to 12/2017)



Source: Yardi Matrix

on the verge of oversupply, but rent growth shot up in the last quarter due to the impact of Hurricane Harvey. Despite the deceleration, the Inland Empire and Sacramento still maintain healthy rent growth amid tepid construction pipelines. The point remains, though, that the change in occupancy is more telling regarding the direction of rent growth than other metrics.

### Correlation Fades Over Time

The change in occupancy is closely correlated with rent deceleration over the past year, but the relationship breaks down when we look at longer time periods. In the three years through December 2017, rents rose 11.7 percent on a national basis, while supply increased 8.3 percent and occupancy was flat overall.

There was little correlation on a metro level, however. For example, rents increased robustly in Portland (18.6 percent) and Seattle (17.4 percent) despite having among the steepest declines in occupancy rates (Portland 120 basis points, Seattle 80 basis points). Kansas City rents increased by only 10.0 percent despite having the occupancy rate increase by 170 basis points. Indianapolis (7.7 percent rent growth, 60 basis point increase in occupancy) and Philadelphia (7.9 percent rent growth, 70 basis point increase in occupancy) also were outliers.

Over five years, the correlation breaks down even further. In the five years ending in December 2017, U.S. multifamily rents increased by 21.0 percent, while occupancy rose 60 basis points and total stock increased by 12.8 percent. On a metro

### 3-Year Analysis (12/2014-12/2017)

	% Change in Rent	% Change in Occupancy	% Change in Supply
Sacramento	30.4	0.6	1.8
Inland Empire	18.9	0.4	3.0
Orlando	18.7	1.0	8.6
Portland	18.6	-1.2	9.0
Las Vegas	18.1	1.0	4.9
Seattle	17.4	-0.8	15.6
Los Angeles	16.5	0.1	6.8
Tampa–St Petersburg	16.2	-0.3	7.3
Phoenix	15.9	0.8	7.2
Atlanta	15.0	-0.1	7.4
Dallas	14.3	-0.4	7.4
San Francisco	13.4	-0.3	7.6
Orange County	13.3	-0.3	7.0
Charlotte	12.8	-0.3	15.0
Denver	12.4	0.1	12.7
Nashville	11.9	-1.5	14.3
Raleigh–Durham	11.9	-0.7	10.3
<b>National</b>	<b>11.7</b>	<b>0.0</b>	<b>8.3</b>
Twin Cities	11.3	0.3	7.3
Boston	10.9	0.2	10.4
Miami Metro	10.7	0.1	12.5
Bay Area–South Bay	10.5	-0.1	12.6
Kansas City	10.0	1.7	7.3
Austin	8.6	-1.1	13.7
Philadelphia	7.9	0.7	4.8
Indianapolis	7.7	0.6	5.6
San Antonio	6.7	-0.1	9.6
Chicago	6.6	0.5	7.4
Baltimore	5.5	-0.3	4.4
Washington DC	4.3	-0.1	8.7
Houston	3.6	0.3	9.0

Source: Yardi Matrix

### 5-Year Analysis (12/2012-12/2017)

	% Change in Rent	% Change in Occupancy	% Change in Supply
Sacramento	44.3	1.5	2.6
San Francisco	35.2	0.3	11.5
Portland	35.2	-1.0	14.5
Seattle	31.9	0.1	25.2
Denver	31.2	1.1	19.3
Bay Area–South Bay	30.0	0.6	19.9
Atlanta	29.0	0.3	10.2
Inland Empire	28.7	1.1	5.8
Orlando	28.1	2.1	14.6
Los Angeles	26.5	0.5	10.6
Las Vegas	25.7	2.4	6.2
Tampa–St Petersburg	25.0	0.4	10.8
Phoenix	24.2	2.3	10.9
Dallas	23.8	-0.3	11.5
Orange County	23.4	0.7	9.6
Nashville	23.3	-0.9	20.5
Miami Metro	21.0	0.6	20.0
<b>National</b>	<b>21.0</b>	<b>0.6</b>	<b>12.8</b>
Charlotte	20.7	0.1	22.0
Austin	18.4	-0.9	24.3
Raleigh–Durham	17.8	-0.3	18.6
Boston	17.7	0.5	15.9
Kansas City	15.0	2.5	10.7
Houston	14.4	1.6	13.5
Chicago	12.3	1.2	10.9
Philadelphia	12.2	1.2	7.5
San Antonio	11.7	0.3	16.5
Baltimore	9.8	-0.1	8.3
Washington DC	4.5	-0.3	14.2

Source: Yardi Matrix

level, there is little correlation between changes in occupancy rates, rent growth and supply growth.

### Asset Quality Counts

Since construction is heavily weighted toward luxury apartments, we must consider the impact of apartment development by quality level. Over the last two years, 550,000 of the 619,000 new units (89 percent) to come online in the U.S. have been high-end Lifestyle assets, with only 18,000 (3 percent) in the working-class Renter-by-Necessity (RBN) category (the rest were mostly affordable/subsidized units).

As a result, Lifestyle stock increased by 6.7 percent year-over-year through December 2017, while RBN stock grew only 0.1 percent. RBN rents increased by 3.1 percent as opposed to only 1.6 percent for Lifestyle. Interestingly, the decline in occupancy between the two is roughly the same, -0.6 percent for RBN and -0.5 percent for Lifestyle. Some renters are taking advantage of the new stock to trade up into properties that are newer and have better amenities.

However, over time, the results are more in line with what would be expected. RBN properties outperform Lifestyle, although maybe not by as much as expected given the lopsided construction pattern. Between 2015 and 2017, when Lifestyle stock grew by 6.7 percent annually and RBN stock grew by 0.1 percent, Lifestyle rents grew by 8.0 percent

compared to 13.6 percent for RBN. Lifestyle occupancy rates fell 30 basis points over that time while RBN occupancy grew by 50 basis points.

Over the last five years, Lifestyle stock grew by 6.2 percent annually and the occupancy rate was unchanged, while RBN stock rose only 0.2 percent annually and the occupancy rate increased by 120 basis points. Lifestyle rents increased 14.4 percent compared to 22.8 percent for RBN.

### Lesson: Deliveries, Growth Of Fundamental Importance

There are several lessons we can derive from the study. One is that, over time, a metro's performance is based on fundamentals. Metros that are a destination for individuals and families due to healthy economic growth, job creation, or even for lifestyle or climate will benefit from strong demand. Metros such as Seattle, San Jose, Denver, Charlotte and Miami have added more than 19 percent to multifamily stock over five years, with an increase to the occupancy rate and strong rent growth. Nashville and Portland have had strong rent growth over five years despite above-trend deliveries and declining occupancy rates. Price counts, as well. Rent growth is weakest in expensive Northeast metros that are facing issues of affordability and outmigration.

Another lesson is that short-term trends should not be ignored. It's not a sure bet that once

### Supply, Rents and Occupancy Trends (by Apartment Quality Level)

	RBN Supply Growth	RBN Occupancy	RBN Rent Growth	Lifestyle Supply Growth	Lifestyle Occupancy	Lifestyle Rent Growth
1-Year Change	0.1%	-0.6%	3.1%	6.7%	-0.5%	1.6%
3-Year Change	0.2%	0.5%	13.6%	6.8%	-0.3%	8.0%
5-Year Change	0.2%	1.2%	22.8%	6.2%	0.0%	14.4%

Source: Yardi Matrix

the current spate of new projects is absorbed, robust rent growth will automatically pick up again. We expect that supply growth will begin to diminish after 2018, but recent data on multi-family starts shows that deliveries might remain elevated into 2019 or beyond. What's more, with rent growth elevated so much in recent years, the capacity to raise rents in secondary markets might be reduced.

None of this is to sound alarmist. Apartment demand is expected to remain strong and new supply is needed to house the growth in population, which is increasingly tilted toward renters as op-

posed to homeowners. Supply is especially crucial in metros that have kept a lid on development either through over-regulation or NIMBY-ism, where rentals have become too expensive for low- and middle-income renters. In those markets, increasing the total amount of supply is the most effective solution to the affordability problem. At the same time, it's a solution that comes at a cost to existing property owners, since new supply has the effect of reducing the growth in rent increases.

—**Paul Fiorilla**, *Associate Director of Research*

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