



U.S. Multifamily Supply and Demand Forecasts by Metro

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Yardi® Matrix

Supply and Demand by Metro

Multifamily Development Pipeline Creates Near-Term Risks

Yardi Matrix studied demand and supply trends in the top 30 U.S. metros by population over the next five years to determine which markets might be at risk of oversupply—and conversely which might need new units. The results found:

- With significant supply expected to be delivered over the next two years, multifamily deliveries may outpace demand in some of the top 30 metros in the U.S. Expect volatility, as some markets and submarkets with outsize development activity experience rising vacancy rates and stagnating rent growth.
- In the near term, markets at risk of oversupply include Denver, Seattle, Charlotte, Dallas, Phoenix and Miami, where deliveries are expected to outpace demand. Investors and developers can still find attractive deals in those markets, but submarket and site selection will become even more important.
- The converse holds true in markets where supply and demand appear to be in balance. In many markets, the majority of development is taking place in the urban core, which may create opportunities in growing and urbanizing suburban areas.
- Over the longer term, the supply picture is more balanced. We expect construction will moderate after the more than 600,000 units currently under construction are completed.
- Most of the metros that are at short-term risk of oversupply have strong economies and healthy multifamily demand, so units coming online should be absorbed by growing populations. Plus, developers will pull back the throttle if occupancy rates wane much.
- Metros with the most deliveries relative to projected demand long term include Seattle, Charlotte, Dallas and St. Louis. Metros with the most favorable demand/supply metrics include Los Angeles, the Inland Empire, San Diego, Houston and Chicago.

The study demonstrates that the market must be thoughtful in its approach to development. The recent increase in deliveries—620,000 units were completed in 2016 and 2017 combined, per Yardi Matrix—has helped compensate for the construction shortage in the wake of the Great Recession. But demand is not unlimited, and developers must intelligently calibrate the amount and location of new projects.

Supply and Demand by Metro

Homeownership to Rebound Slightly

The study assumes that homeownership will continue to rebound, increasing by 10 basis points annually in 24 of our 30 metros and remaining flat in six core markets (New York, Washington, D.C., Boston, Chicago, Los Angeles and San Francisco). The U.S. homeownership rate peaked at 69.2 percent in 4Q04 and dropped as low as 62.9 percent in 2Q16. It ticked up to 64.2 percent as of 1Q18, and we believe it will continue to grow slightly. Millennials and Generation X households

have reached an age when their earnings will grow, many will pay off student debt and they'll begin to have children. That will start a search for better schools and more space to raise families. What's more, rapidly increasing apartment rents make owning a home cheaper by comparison.

The exception is in large, expensive metropolitan areas, where the cost of single-family houses makes homeownership a difficult proposition for many working families. The impact is exacerbated by the new federal tax law. Homeowners in high-tax states and metros—such as the New York metropolitan area, Los Angeles and the state of California—will no longer be able to deduct the entirety of their non-federal taxes. That will help create movement to less expensive locales, especially among first-time buyers and empty-nest homeowners with high property taxes.

To be clear, the impact of the tax law was not factored into our methodology. We do, however, foresee the continuation of the long-term population shift toward less expensive markets with moderate climates and attractive lifestyle features. The shift is not only evident among individual households; a steady stream of corporations are choosing to expand and/or move entire operations to locations with lower tax rates and cheaper housing for their workforces.

Methodology

- We used Yardi Matrix population projections and a per-person household figure to determine the number of households in each metro.
- We then multiplied that by the percentage of renters in each metro. Renters comprise 35.8 percent of U.S. households as of 1Q18, ranging by metro from 51 percent in New York and Los Angeles to 27 percent in Pittsburgh.
- To calculate demand specifically for multifamily, we multiplied the number of total renter households by the percentage of multifamily renters as a share of all renters in each metro. The percentage of households living in multifamily properties tends to be higher in large urban areas.
- The supply numbers were derived from Yardi Matrix's database. The two-year forecasts encompass all properties that are currently under construction. The five-year forecasts include properties that are under construction and "planned," which means they have approvals in place to begin construction. We factored in a 50% haircut in planned units being delivered for 13 markets with the most excess five-year supply and a 50-basis-point annual obsolescence.

Two-Year Projections

Our numbers forecast 440,000 units will be delivered in the top 30 metros, while we expect demand for 290,000 apartment units. Supply growth is led by the New York metro, Dallas, Washington, D.C., Los Angeles, Denver and Miami, all of which have at least 25,000 units under construction right now. Metros projected to have the highest amount of new demand are New York, Los Angeles, Washington, D.C., Houston and Miami.

Supply and Demand by Metro

2-Year Supply and Demand (Units)

Metro	Apartment Supply	Apartment Demand
New York	52,547	52,935
Dallas	45,551	14,503
Washington DC	28,009	16,184
Los Angeles	27,436	36,385
Denver	27,016	10,802
Miami	25,526	15,016
Seattle	23,197	9,695
Atlanta	19,524	6,551
San Francisco	16,668	14,464
Chicago	16,348	14,345
Phoenix	16,083	5,261
Boston	15,282	9,333
Charlotte	13,046	4,230
Houston	12,729	15,410
Orlando	10,691	6,402
Philadelphia	9,372	5,489
Tampa	8,621	6,554
Twin Cities	8,568	4,487
Portland	8,438	4,665
Kansas City	7,965	3,188
San Antonio	7,747	4,044
San Diego	7,660	7,362
Baltimore	6,232	2,948
Las Vegas	4,669	3,639
St Louis	4,229	2,047
Detroit	3,983	2,659
Inland Empire	3,704	5,482
Pittsburgh	3,114	697
Sacramento	2,963	3,172
Cincinnati	2,820	1,897
Total	439,738	289,847

Source: Yardi Matrix

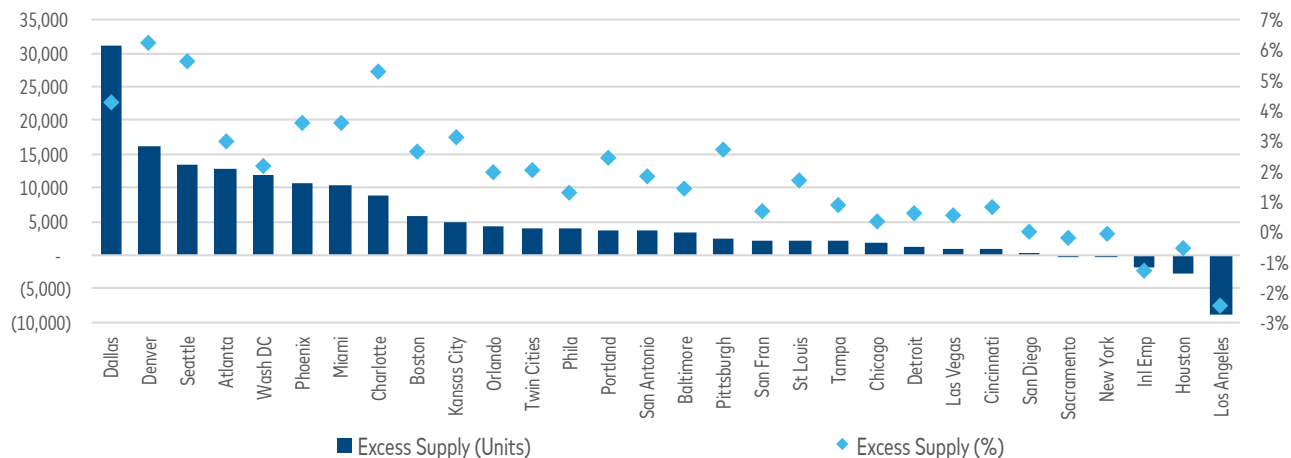
2-Year Supply and Demand

Metro	Supply Growth	Demand Growth
Denver	10.7%	4.5%
Seattle	10.0%	4.4%
Miami	9.3%	5.7%
Charlotte	8.0%	2.7%
Boston	7.1%	4.5%
San Fran	6.7%	6.1%
Los Angeles	6.7%	9.2%
Dallas	6.4%	2.2%
Portland	5.8%	3.4%
Wash DC	5.5%	3.3%
Phoenix	5.5%	1.9%
Kansas City	5.3%	2.3%
New York	5.3%	5.4%
Orlando	5.2%	3.3%
Chicago	4.9%	4.6%
Atlanta	4.6%	1.6%
Twin Cities	4.3%	2.3%
San Diego	4.2%	4.2%
Tampa	4.2%	3.4%
San Antonio	4.1%	2.3%
Pittsburgh	3.5%	0.8%
St Louis	3.5%	1.8%
Phila	3.3%	2.0%
Baltimore	2.9%	1.4%
Las Vegas	2.8%	2.3%
Cincinnati	2.6%	1.9%
Inl Emp	2.5%	3.8%
Sacramento	2.3%	2.6%
Houston	2.0%	2.6%
Detroit	1.9%	1.3%

Source: Yardi Matrix

Supply and Demand by Metro

2-Year Supply and Demand Comparison



Source: Yardi Matrix

The results show that the occupancy rate of stabilized apartments in the U.S.—which has dropped about 100 basis points over the last two years to 94.8 percent as of April, per Yardi Matrix—is likely to keep trending downward.

Metros in which supply is expected to exceed demand the most as a percentage of stock include: Denver, Seattle, Charlotte, Dallas, Phoenix and Miami. Deliveries in each of these markets over the next two years are at least 2.5 percent more than the amount of expected demand. These markets have largely performed well in recent years, but the supply/demand imbalance will put a strain on rent growth and occupancy rates.

On the other side of the equation, metros in which demand is expected to exceed supply by 1.0 percent or more include Los Angeles, the Inland Empire, Houston, Sacramento, New York and San Diego. Fundamentals should remain strong in these markets, although affordability is constraining rent growth in many submarkets in New York and Los Angeles.

Five-Year Projections

Our numbers forecast 617,000 new apartment units in the top 30 metros over five years, with demand for 677,000 units. Deliveries in New York, Washington, Dallas, Los Angeles and Miami encompass about 250,000 units, or 40 percent of the total new development. Metros with the most projected demand for apartments are New York, Los Angeles, Washington, D.C., Chicago and Houston.

Metros in which forecast supply exceeds demand the most as a percentage of stock includes Seattle, Charlotte, Dallas and St. Louis. Metros which have the most favorable demand/supply metrics include Los Angeles, the Inland Empire, San Diego, Houston and Chicago.

These projections come with some caveats. One is that long-term forecasts have some elasticity. Projects not yet under construction can and will be delayed if demand proves to be weak and occupancies and rents begin to slip. On the flip side, if demand exceeds supply, the timeline for many projects will speed up.

Supply and Demand by Metro

5-Year Supply and Demand (Units)

Metro	Apartment Supply	Apartment Demand
New York	98,815	128,988
Los Angeles	59,465	86,637
Dallas	47,112	29,865
Wash DC	43,607	36,748
Miami	39,289	34,061
San Fran	34,651	33,598
Seattle	33,041	22,024
Denver	27,413	24,501
Chicago	26,084	36,250
Boston	24,781	22,372
Atlanta	17,497	15,610
Phoenix	15,875	10,969
Charlotte	15,215	9,889
Phila	15,034	12,987
Twin Cities	13,768	11,235
Orlando	12,570	14,430
Tampa	10,708	14,839
Houston	10,368	34,107
Portland	10,032	10,219
San Antonio	9,110	8,913
Kansas City	8,728	7,620
St Louis	7,922	5,211
San Diego	7,748	17,335
Baltimore	5,928	6,925
Las Vegas	4,953	8,523
Sacramento	4,892	7,571
Cincinnati	4,722	3,944
Inl Emp	3,217	13,090
Detroit	2,749	6,983
Pittsburgh	2,690	1,875
Total	617,985	677,318

Source: Yardi Matrix

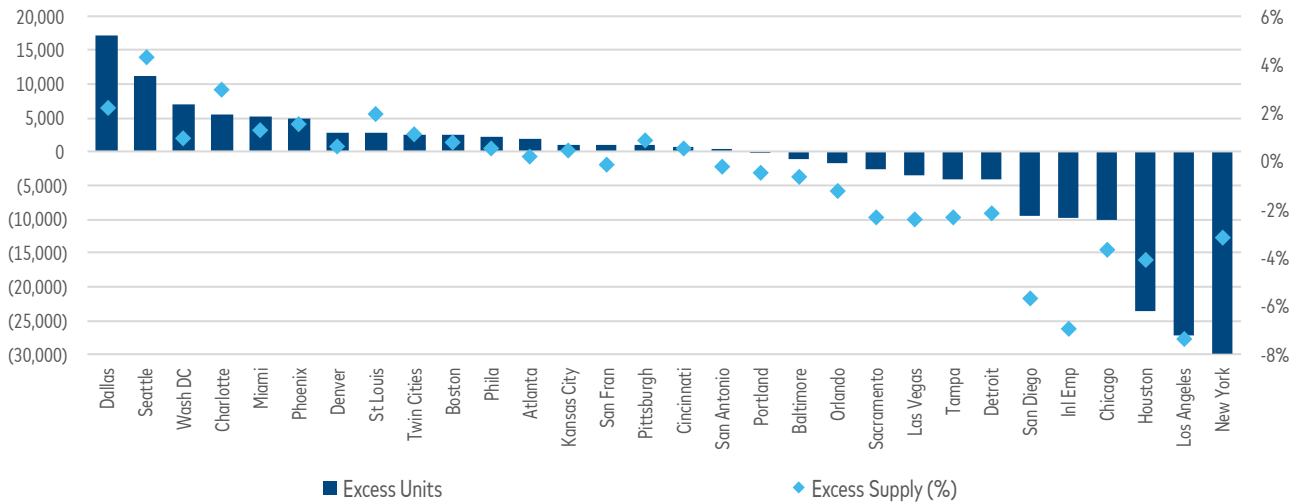
5-Year Supply and Demand

Metro	Supply Growth	Demand Growth
Los Angeles	14.5%	21.9%
Seattle	14.3%	10.0%
Miami	14.3%	13.0%
San Fran	14.0%	14.2%
Boston	11.6%	10.8%
Denver	10.9%	10.3%
New York	9.9%	13.1%
Charlotte	9.4%	6.4%
Wash DC	8.6%	7.6%
Chicago	7.8%	11.5%
Twin Cities	6.9%	5.8%
Portland	6.8%	7.3%
Dallas	6.6%	4.5%
St Louis	6.6%	4.6%
Orlando	6.2%	7.4%
Kansas City	5.9%	5.4%
Phoenix	5.4%	3.9%
Phila	5.2%	4.7%
Tampa	5.2%	7.6%
San Antonio	4.8%	5.1%
Cincinnati	4.4%	3.9%
San Diego	4.3%	9.9%
Atlanta	4.1%	3.9%
Sacramento	3.8%	6.2%
Pittsburgh	3.0%	2.2%
Las Vegas	2.9%	5.3%
Baltimore	2.7%	3.4%
Inl Emp	2.1%	9.1%
Houston	1.6%	5.8%
Detroit	1.3%	3.5%

Source: Yardi Matrix

Supply and Demand by Metro

5-Year Supply and Demand Comparison



Source: Yardi Matrix

Another caveat is that our demand methodology assumes that the percentage of apartment renters will remain constant over the five-year period. That favors metros (such as New York and Los Angeles) in which apartments currently represent a higher portion of total housing stock. If future new residents occupy apartments at a different rate than current levels, that could affect actual demand in individual metros.

Social Trends Affect Demand

This study was based broadly on population growth and homeownership trends. Other factors that impact demand for housing could change the direction of household formation. For example, the strong job market since 2010 has encouraged household formation, but that would change if the economy hits a downturn. Apartment demand will also depend on a host of demographic and lifestyle trends, including:

- Whether job growth will be concentrated in urban areas with educated workers.
- The growth in the gig economy, which encourages mobility found in rentals and makes it more difficult to qualify for mortgages.
- Trends in transportation, such as fewer young people with driver licenses and development of driverless cars.
- Commuting preferences, which could concentrate development in inner-ring suburbs.
- Immigration policy. Immigrants tend to settle in big coastal markets.
- Land use, increasing use of infill locations for housing as opposed to far-flung suburbs. The cost of infill land has reached the point where development has become difficult for anything other than luxury apartments.

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- Preference for the live-work-play lifestyle with access to amenities such as restaurants and shopping, which favors urban areas and transit-oriented-development suburbs.

Deep Into Cycle, Margin For Error Thins

Although there are uncertainties, some general lessons that seem clear:

Demand will be healthy, but it is not unlimited. Our calculation forecasts demand for 135,000 to 145,000 multifamily units per year in the top 30 metros, which represent about two-thirds of the population and demand in the U.S. The recent trend in deliveries is more than 300,000 per year. If that trend continues, occupancy rates can only be maintained under the most favorable demand and economic scenarios.

It might take time, but metros with strong economic and population growth will ultimately absorb supply. Markets with educated workforces, attractive lifestyle amenities and healthy business climates are growing the fastest. Examples of these markets include Dallas, Houston, Atlanta and Charlotte. Orlando and Las Vegas are among the projected growth leaders, although those metros' economies are more fragile, being dependent on tourism, and by extension the economic health of the country.

Don't turn out the lights in core markets such as New York, San Francisco and Los Angeles. Core metros remain critical as hubs of industry, and they continue to be aspirational landing spots for highly educated young workers and immigrants. Absolute numbers favor primary metros, even if percentage growth is higher elsewhere.

Understanding the future demand for rental housing is critical for the multifamily industry. The questions of "where to build?" and "how much to build?" are important not only to forming public policy but for individual developers and lenders, as well. Looking forward, the industry needs to find ways to develop housing that is affordable without overbuilding in a way that disrupts business models.

New stock is positive on several levels, such as to revitalize urban areas, add residential units near transportation hubs, and meet demand for modern amenities. Building more units also remains the best way to alleviate the affordability problem. Even so, demand has its limits, and as deliveries accumulate, the margin for error begins to thin. Investors must be careful that projects in "hot" markets are in the right locations and targeted at the right audience.

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