CUSHMAN & WAKEFIELD

Class A Multifamily: Construction Wave Ebbing

December 2019

Executive Summary

- Multifamily construction activity this business cycle has consistently exceeded that of the previous decade. Activity has been driven by Class A development, which accounted for more than 68% of annual deliveries in the peak construction years of 2015 to 2018.

- Ten markets captured 36% of the deliveries from 2015 to 2018. However, those deliveries were not outsized relative to existing inventory; collective multifamily inventory in the ten markets grew an average of only 2.2% annually from 2015 to 2018. This is supported by the fact that U.S. vacancy was 5.9% as of Q3 2019—the lowest national vacancy rate since 2001.

- The construction wave was a response to robust rent and occupancy trends supported by renter household growth, particularly affluent households,[1] which in turn drove out-sized returns to investors, attracting further capital to the sector.

- Construction has peaked. Class A deliveries have declined precipitously, down 22% YTD Q3 2017 to YTD Q3 2019, contributing to the multifamily pipeline waning. The amount of non-Class A housing has increased in 2019 but the increase has not fully compensated for the decline.

- Construction will continue to soften and remain constrained due to rising construction costs, land scarcity in key pipeline markets, moderating rent growth and slower capital appreciation among multifamily assets.

- We expect the current investor focus on workforce housing to continue in the near-term given the slower construction environment but also a cyclical reversion to Class A assets in the medium-term. We anticipate sustainable demand for occupancy—particularly as opportunistic higher-income renters vacate older Class A and B+ product in favor of Class A.

Elevated Class A Multifamily Construction Activity Met with Equal Demand

From 2001 to 2019, the U.S. multifamily market expanded by just over 200,000 units annually on average. Beginning in 2014, deliveries surpassed the average, peaking in 2017 at 354,000 units. In the previous expansion, new Class A units averaged 30% of deliveries in any given year and only exceeded 100,000 units in the peak years of 2008 and 2009. In the current cycle, Class A deliveries have averaged 63% of deliveries and have exceeded 100,000 units per year every year beginning in 2013. Meanwhile, the number of non-Class A deliveries annually has been relatively stable until this year.[2]

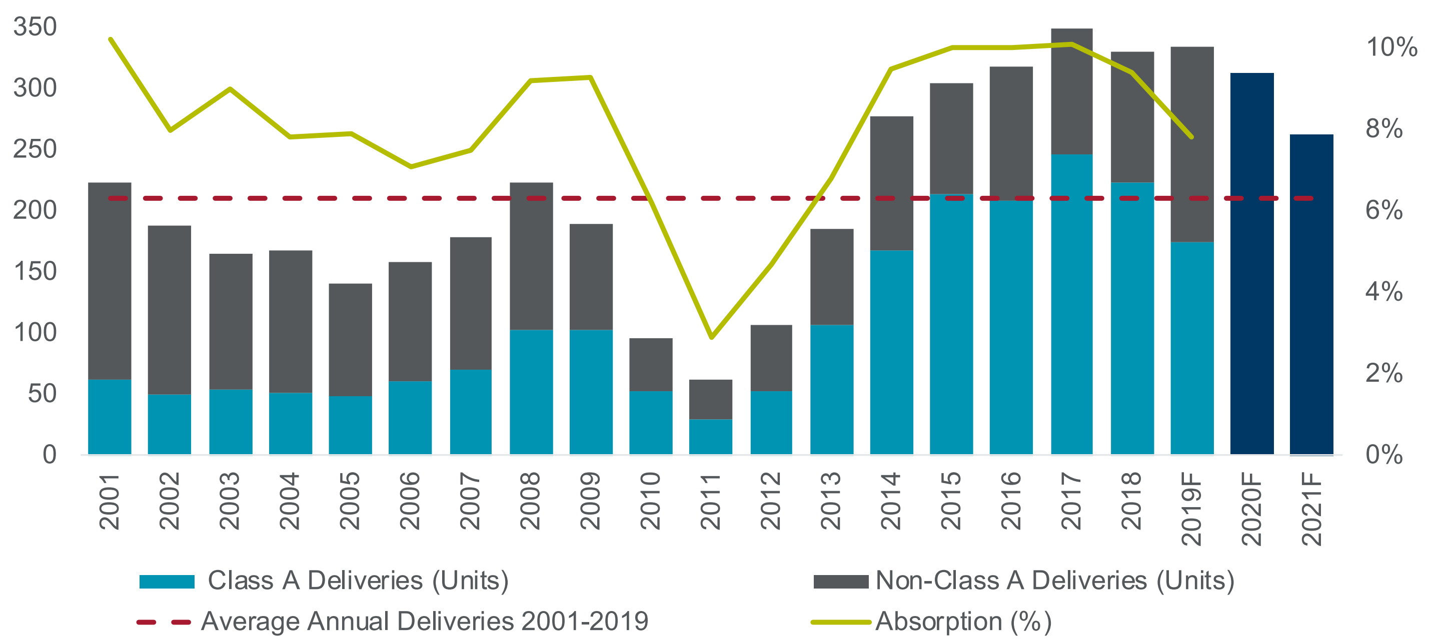
[1]For purposes of this report, affluent households are defined as those with annual income of at least $100,000.
[2]The units included in this statistic are 100% market-rate, multifamily units, excluding affordable, partially affordable, condominiums, senior, student, military, corporate, and mobile home units. The data is from CoStar.

Class A Multifamily: Construction Wave Ebbing

December 2019

Class A Dominates Pipeline & Absorption Keeps Pace

Units in Thousands



Source: Costar, Cushman & Wakefield Research

Construction Wave Concentrated in Largest Markets

The top 10 construction markets include four gateway cities—New York, Washington, DC, Chicago, and Los Angeles—Seattle, Denver, and four Sunbelt secondaries with Texas dominating the list (Dallas, Houston, and Austin). These top 10 account for more than a third of deliveries from 2015 to 2018, indicating that construction has been concentrated in key markets. However, those deliveries were not outsized relative to existing inventory in these markets. The collective multifamily inventory in the 10 markets grew by an average of only 2.2% annually from 2015 to 2018. Denver and Austin stand out as they experienced the largest average annual percent increases in inventory from 2015 to 2018 at 3.4% and 4.0%, respectively. Within these top markets, deliveries have been concentrated in specific submarkets: Chicago's Downtown/The Loop, Downtown Denver, Downtown Los Angeles, Frisco/Prosper in Dallas, Long Island City and Brooklyn in New York, Buckhead in Atlanta, Downtown Seattle, Pflugerville in Austin, and Southwest/Navy Yard in Washington, DC. While construction may appear robust on its face, renter household growth has been even stronger.[3] Deliveries are expected to slow in all of the most active markets over the next two years, particularly New York, Los Angeles, Dallas, Charlotte and Austin.

Elevated Demand Supported the Heightened Construction Wave

Rising Demand from Affluent Renters

The renter population has risen significantly since the Great Recession. The renter population—as a share of total households—has increased 280 bps to 35.2% from Q3 2009 to Q3 2019. The current rate does not factor in the peak of 37.1% recorded in Q2 2016.[4]

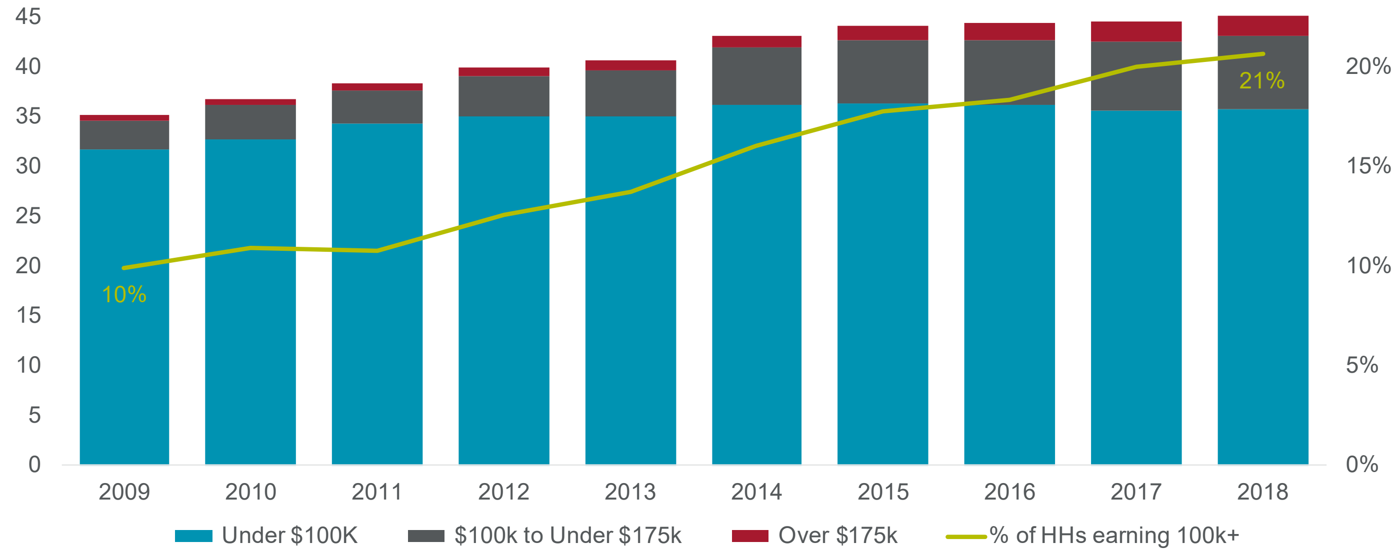
[3] The number of multifamily units (all sub-asset types) delivered in the U.S. from 2010 to 2019 is 2.88 million according to CoStar compared to 4.78 million renter households formed during that period according to Cushman & Wakefield Research and ESRI.
[4] https://fred.stlouisfed.org/series/RHORUSQ156N
[5] Cushman & Wakefield Analytics Gallery, ESRI; https://cwgallery.cushwake.com/#!

Class A Multifamily: Construction Wave Ebbing

December 2019

Changing Renter Wallets: U.S. Percent of $100k+ Renter HHs Nearly Doubles

Households in millions, Share of Renter Households



Source: U.S. Census Bureau, Cushman & Wakefield Research

Renter household growth over the past five years has been particularly strong in Los Angeles, Kansas City, San Diego, San Francisco, San Jose, Austin, Seattle, Miami, Dallas and Boston. The share of renter households ranges from 40% in Boston, Dallas, Miami and Seattle to as high as 52% in Los Angeles.[5] These metros will remain the top renter markets through 2024 per Cushman & Wakefield Research and ESRI projections,[6] and could be considered for investment opportunities based upon demographic fundamentals alone.

Within the renter household segment, the number of affluent renters has grown even more than the broader population.[7] Over the past decade, the share of renter households with six-figure incomes nearly doubled from 11% to 21%. A generation ago, a portion of these households would have been homeowners. This demand has fueled the wave of high-end construction, particularly in the gateway and top secondary markets where these trends were most prevalent.

The Construction Wave Led to Temporary Dislocation but Has Now Been Absorbed

Given the lead time necessary for multifamily construction, it is no coincidence that the height of Class A deliveries occurred two years after Class A rent growth peaked at 5.8% in 2015, according to CoStar. Class A deliveries peaked in 2017 and consequently so did Class A vacancy, at 11.4%.[8] Class A rent growth declined in 2016 and since then has steadily, albeit not dramatically, risen through 2019 YTD.

At 5.9%, overall multifamily vacancy in the U.S. is at a historic low as of Q3 2019 having declined 40 basis points (bps) YTD. This is a considerable improvement (-80 bps) compared to 2017 when the market was absorbing the flurry of new multifamily product delivered that year. The combination of positive market indicators—low vacancy, ongoing rent growth and diminishing supply—demonstrates that new supply did not hamper the market and provides a foundation for the multifamily industry

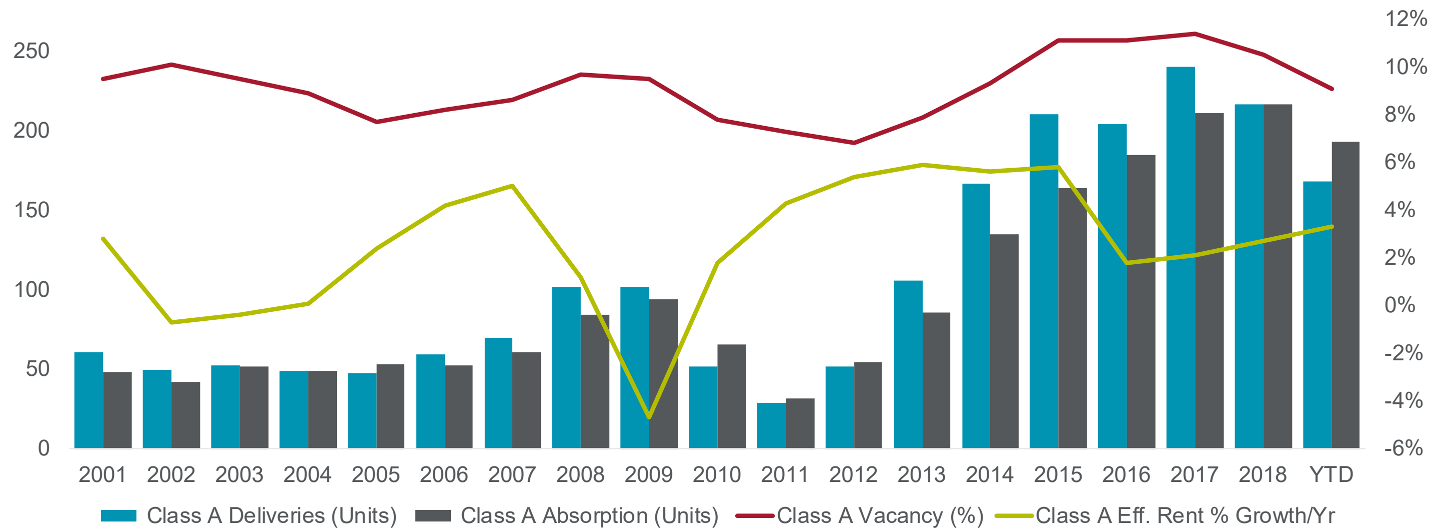
[6] Cushman & Wakefield Analytics Gallery, ESRI; https://cwgallery.cushwake.com/#!
[7] https://www.wsj.com/articles/so-you-make-100-000-it-still-might-not-be-enough-to-buy-a-home-11571149819?mod=searchresults&page=1&pos=4
https://www.wsj.com/articles/income-quintiles-dont-tell-the-whole-story-11573580927
[8] CoStar is used here as CoStar includes vacancy for properties in lease up.
[9] The source for vacancy here is CoStar, which includes units that have delivered and are in lease up. Cushman & Wakefield Research's third quarter 2019 capital markets multifamily report shows 3.7% U.S. multifamily vacancy as of Q3 2019 per Axiometrics, which only takes into consideration assets that have stabilized.

Class A Multifamily: Construction Wave Ebbing

December 2019

Class A Deliveries & Vacancy Peak in 2017 Followed by Attenuation

Units in thousands, Percent (%)



Source: Costar, Cushman & Wakefield Research

to weather potential national macroeconomic softening. Vacancy among all multifamily market-rate assets is projected to hover around 6.4% to 6.7% in 2020 and 2021.[9]

Renters-by-Choice Support Rental Revenue Gains
National Class A multifamily rent growth peaked at 4.7% in 2015. Class A rents began to converge with the national average as the wave of new product increased landlord competition for tenants. The forecast through 2021 calls for overall (all classes) rent growth to normalize at the 2.0% range in 2020 according to CoStar.

From 2010 to 2014, effective rent growth was restrained in New York, but in San Francisco and Los Angeles rent growth boomed, registering over 7% annual gains. Chicago, Washington, DC and Boston were positioned between 5.0% to 6.0% rent growth during the height of this period.

Rapid Price Appreciation Amplified by Compressing Cap Rates
Multifamily attracted and continues to attract investors in droves, with multifamily accounting for 37.8% of capital deployed in the U.S. in 2019 through the third quarter—up from 30.5% in 2014—and outpacing investment in office (24.0%), industrial (13.6%) and retail (8.9%).

At the beginning of the cycle, much investor attention focused on mid/high-rise properties, particularly in the gateway markets. As a result, mid/high-rise prices appreciated significantly, attracting further investor interest. From Q2 2012 to Q2 2015, price appreciation of mid/high-rise multifamily product vastly outpaced garden assets, according to Real Capital Analytics' Commercial Property Price Indices (CPPI), peaking in Q2 2015 at 19.0% YoY.[10] Garden assets subsequently began to outperform mid/high-rise in 2016 and have continued to do so since that time. Mid/high-rise price gains have meanwhile continued to moderate. As of Q3 2019, garden assets appreciated by 9.0% YoY compared to a -2.8% appreciation rate for mid/high-rise product.

During the three-year period when mid/high-rise price appreciation outperformed, Class A mid/high-rise cap rates compressed from 5.1% to 4.4% and subsequently traded in a 15 bps band. With lower exit cap rates, developers gained confidence in development spreads to target their yield on costs, thus fueling multifamily construction. As of Q3 2019, there have been no signs of multifamily cap rate expansion, and we don't foresee significant cap rate compression going forward.

[10] *Real Capital Analytics Commercial Property Price Indices (CPPI)*

Class A Multifamily: Construction Wave Ebbing

December 2019

Class A Effective Rent Growth Reaccelerating

Source: Costar, Cushman & Wakefield Research

Is Another Construction Wave Coming?

Naturally occurring checks and balances to new multifamily supply signal that another construction wave is not coming. Moderating rent growth, tenant affordability issues, rising construction costs, slowing multifamily transaction activity and price appreciation, as well as the shift in investment sentiment towards workforce housing, is pulling investment away from Class A CBD construction.

Moderating Rents

Rent growth has slowed and is liable to remain below the levels observed earlier in the cycle. Part of this is attributable to continued elevated competition resulting from the construction wave. This will, however, attenuate as product is absorbed by growing renter household demand. Even then, landlords will find themselves constrained in their ability to push rents as a they run up against tenant budget constraints. While the percent of renters paying more than 30% of their income towards rent has declined 570 bps since the peak in 2010, 31.5% of renters are still cost over-burdened.[11]

Rising Construction Costs

Heightened construction and diminishing land availability also limit development. The National Association of Home Builders (NAHB) Housing Market Index (HMI) industry reports reveal persisting labor shortages with a record average rate of shortage incidences in 2019 among the occupations NAHB has been tracking since the 1990s.[12] Labor can account for nearly half of building construction costs,[13] and the prices for raw materials such as lumber and steel jumped due to U.S. tariffs against Canada, Mexico and China.[14] Construction average hourly earnings have increased by 214% during the past decade and average weekly earnings increased by 31% over the same period.[15]

[11] *Joint Center for Housing Studies (JCHS) "2019 State of the Nation's Housing."*
[12] *http://eyeonhousing.org/2019/08/labor-shortages-still-hurting-affordability/*
[13] *https://www.proest.com/apartment-building-construction-cost-breakdown/*
[14] *https://www.nreionline.com/multifamily/trade-tensions-raise-construction-costs-multifamily-sector*
[15] *https://www.constructiondive.com/news/construction-unemployment-returns-to-2009-low/564537/*

Class A Multifamily: Construction Wave Ebbing

December 2019

Slowing Multifamily Price Appreciation & Returns
Annualized multifamily price appreciation slowed by 70 bps through Q3 2019 YTD compared to the CY 2018 rate per the RCA Commercial Property Price Index (CPPI). This has been an ongoing trend in recent years. Similarly, multifamily returns, according to NCREIF's National Property Index (NPI), have slowed YTD to a 5.3% annualized rate through the third quarter of 2019, impacting nearly all subtypes: garden (-110 bps), low-rise (-50 bps), high-rise (-40 bps), major markets (-90 bps) and secondary markets (-50 bps). As the market steps back from a period of high capital returns, the incentive to build has tightened the pipeline spigot.

Outlook
As a result of these impacts, the construction pipeline has tempered nationally, particularly due to a slowdown in Class A construction. Class A deliveries—which accounted for more than 68% of deliveries from 2015 to 2018—have declined 30% from 2017 Q3 YTD to 2019 Q3 YTD and non-Class A deliveries have not compensated for the decrease.

We believe that this slowdown in construction activity will continue, especially as investors have become increasingly focused on the middle market over the last several years. Meanwhile, the secular drivers underlying robust demand for luxury product in the top markets remain intact, namely the proportion of affluent renter households and a tight labor market. This dynamic could give rise to a resurgence in rent growth and sustained high occupancy. In the event of a downturn, we would expect rent growth to slow but occupancies to remain sustained as opportunistic higher-income renters vacate older Class A and B+ product in favor of Class A.

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