

INSTITUTIONAL PROPERTY ADVISORS

2020 MULTIFAMILY Investment Forecast

TO OUR VALUED CLIENTS

Multifamily fundamentals and investment activity bested expectations last year as transaction volumes for assets above \$20 million reached a near cycle high. The elevated propensity to rent will keep absorption expanding this year but it will be tempered as the low vacancy rate will hold back new household formations. Rent growth nationally will also moderate; however, a number of metros will see rents expanding significantly above the national average due to strong population growth and extremely tight vacancy rates. With the 10-year Treasury yield holding steady just below 2 percent, the spread between Treasurys and multifamily cap rates offers investors an attractive current yield. Given cap rate stabilization, future valuations are dependent on healthy property operations, organic rent growth, rehab premiums and successful development execution.

While the multifamily market appears ready for another solid year, economic and political risks loom. Economically, the pause in the trade war with China has eased tensions slightly but business investment remains frozen as many manufacturers reevaluate their supply chains and wait for a more definitive long-run resolution. In addition, interest rates will remain front and center for investors after the Federal Reserve paused cutting short-term rates and the yield curve has uninverted. Fears of a pending recession have been tempered, but the potential for long-term rates to rise has climbed and so has the possibility of cap rates increasing. These economic risks could be overshadowed by further expansion of rent-control legislation after three states dramatically changed the landscape of this issue last year. The lack of available housing nationwide has severely affected affordability and driven the increased call for rent control. Yet, economic research has repeatedly shown that rent-control restricts future supply additions and only exacerbates higher housing costs, defeating the overall promised relief of the measures.

The combination of strong apartment fundamentals, low interest rates and an abundance of capital searching for solid risk-adjusted returns should provide the fuel necessary to maintain robust transaction volume. However, the transaction market will be tested in the coming year due to concerns regarding peaking supply, the expansion of rent-control laws to more states and possible rising interest rates. In addition, the November presidential election could trigger a pause in transaction activity as investors weigh the prospect of a leadership change and how it could affect valuations. As you evaluate the impact of these potential risks and opportunities, our investment professionals look forward to assisting you in meeting your investing goals.

JEFFERY J. DANIELS

Senior Vice President Director, IPA Multifamily

pay hybik

JAY LYBIK Vice President IPA Research Services

National Perspective

Executive Summary	3
Public Policy Impact/2020 National Multifamily Index	4-5
U.S. Economy	6
U.S. Apartment Overview	7
U.S. Capital Markets	8
U.S. Investment Outlook	9
Migration Landscape/Supply Outlook	10-11

Market Overviews

Atlanta	12-13
Austin	14-15
Baltimore	16-17
Boston	18-19
Chicago	
Cincinnati	22-23
Cleveland	24-25
Columbus	
Dallas/Fort Worth	
Denver	
Fort Lauderdale	
Houston	
Los Angeles	
Miami-Dade	
Minneapolis-St. Paul	
New York City	
Northern New Jersey	
Oakland	
Orange County	48-49
Orlando	50-51
Phoenix	
Portland	
Raleigh	
Riverside-San Bernardino	
San Antonio	
San Diego	62-63
San Francisco	64-65
San Jose	
Seattle-Tacoma	
Tampa-St. Petersburg	
Washington, D.C.	
West Palm Beach	

Canada

Greater Edmonton Area/Greater Montreal Area76
Greater Toronto Area/Greater Vancouver Area77

Client Services

Contacts, Sources and Definitions	.78
Statistical SummaryBack Con	ver

Developed by IPA Research Services. Additional contributions were made by IPA investment brokerage professionals nationwide.

National Multifamily Index (NMI)

- Strength across the board in fundamentals, regional economic growth and rising valuations catapulted Orlando (#1) to the top position for the 2020 Index, up five places from six months ago. Robust apartment absorption has outpaced or matched recent supply additions, resulting in rent growth above the national rate, which is forecasted to continue for the coming year.
- Tampa-St. Petersburg (#5) broke into the top 5 due to a solid multifamily outlook and local cap rates compressing to their cycle low. Phoenix's (#6) rise persists as it moved up two notches and sits poised to break into the top 5 if it beats the current absorption forecasts and fills its cycle-high deliveries in 2020.

National Economy

- With the national unemployment rate hovering near a 50-year low in the mid-3 percent range, job creation will remain strong but taper from last year as organizations face the difficult task of finding qualified workers.
- The tight hiring market will continue to place upward pressure on wage growth, supporting 3 percent gains and pushing disposable income to a record high. Plentiful jobs and climbing incomes will deliver elevated household formation once again this year.
- Household growth this year will be 12 percent above the current cycle's yearly average as 1.3 million new households are formed. This will generate additional
 demand for rental housing as households have continued to show a strong preference for renting over owning.
- Though several tariffs were put on hold in the back half of 2019 and a phase one trade deal was reached, ongoing negotiations may spill over into 2020 and restrain growth. Additional pressure from slowing international economies and the potential impact of Brexit could further taper domestic expansion. Still, key benchmarks such as Small Business Optimism and the ISM Non-Manufacturing Index remain strong, supporting the 2020 economic outlook.

National Apartment Overview

- After coming off the second highest year of apartment absorption of this cycle, demand will moderate this year but expected solid leasing activity will keep the national vacancy rate below 4.5 percent.
- Despite the significant inventory gains, developers have been effective in aligning new supply with job creation and population growth, keeping most markets in the U.S. in balance. Sunbelt markets, which receive a disproportionate in-migration of young adults, remain a focal point for developers, although major job hubs such as New York City, Seattle-Tacoma and San Jose have also attracted a considerable volume of supply additions.
- The expected modest uptick in the national apartment vacancy rate in 2020 reflects a shortage of Class B/C apartments rather than a slackening of demand. With workforce housing vacancy at its lowest level in 20 years, prospective renters will face difficulty finding an available unit to occupy.

Capital Markets

- The Federal Reserve will balance a whirlwind of economic and geopolitical forces this year as it sets policies to sustain domestic growth. Based on policy statements at the end of 2019, few changes are expected this year, but Chairman Jerome Powell has reemphasized that the Committee will continue to monitor conditions as they develop and set policy accordingly.
- Invigorated by increased Fannie Mae and Freddie Mac lending, apartment debt financing will remain highly liquid this year. In addition to the Government Sponsored Enterprises (GSE), a variety of local, regional and national banks, pension funds, insurance companies, and CMBS sources will be active.

Investment Outlook

- The current wide spread between Treasurys and multifamily cap rates offers investors an attractive yet relatively stable return, which should keep upward pressure on demand for assets.
- Overall, the current pricing environment allows both buyers and sellers to find a positive reason to transact. Sellers can take advantage of valuations holding near the cycle peak while buyers can secure assets with attractive yields.



Rent Control: A Local Impact That Could Ripple Across the U.S.

Three states add rent-control laws. Last year California, New York and Oregon enacted rent control, and several more states will consider adding rent-restriction policies in 2020. California and Oregon tied restrictions on rent growth to inflation with an exemption for newer construction, while New York added new regulations to an already complex set of rules that allow different levels of annual rent increases based on the type of rent control the property falls under. All three states tightened eviction policies. While the policies in Oregon and New York appear to be stable, California could face additional rent control on ballots that could change the supplementary rules going forward, so there is more uncertainty surrounding rent control in that state.

Apartments can perform well in rent control. Although statewide rent-control laws are new, several U.S. cities including New York, San Francisco and Washington, D.C., have had rent control in place for decades. While many investors are uncertain about how the new rules will affect their properties, history has proved that investors can generate strong returns on assets in rent-controlled markets. That said, operators will face additional restrictions that will undoubtedly increase required documentation and paperwork. **Rent control reaches beyond state boundaries.** While the new rentcontrol laws only apply to apartments within the three states, the new policies could affect the flow of capital into multifamily investments across the country. Combined, sales transaction activity in the three states declined by nearly 20 percent in the first three quarters of 2019. While this likely reflects a short-term bout of uncertainty generated by the new policies, it could also point to a reduction of out-of-state capital flowing into these markets. Should that trend hold, increased capital could flow to other metros that do not have rent-control laws in place.

Economic implications could run deep. Over the long term, rent control tends to restrain multifamily housing development, exacerbating local housing shortages and adding upward momentum to owner-occupied home prices. This places upward pressure on the local cost of living, making it more difficult and more expensive for companies operating in the local market to attract talent. Ultimately, by adding rent control, states could be faced with slower economic growth as companies choose to locate facilities in other metropolitan areas.

U.S. Multifamily Index

Ascending Secondary Markets Dominate Top 5 As Most Coastal Markets Edge Downward

Secondary markets' vigor propels one of their own to the top. Strength across the board in fundamentals, regional economic growth and rising valuations catapulted Orlando (#1) to the top position for the 2020 Index, up five places from six months ago. Robust apartment absorption has outpaced or matched recent supply additions, resulting in rent growth above the national rate, which is forecasted to continue for the coming year. Seattle-Tacoma (#2) dropped a notch due to a projected moderation in rent growth from a slight rise in 2020 deliveries. Steady vacancy and rent growth projections above the national average pushed both San Diego (#3) and Riverside-San Bernardino (#4) up one spot and three places, respectively. Tampa-St. Petersburg (#5) broke into the top five due to a solid multifamily outlook and local cap rates compressing to their cycle low. Phoenix's (#6) rise persists as it moved up two notches and sits poised to break into the top 5 if it beats the current absorption forecasts and fills its cycle-high deliveries in 2020. Declining in the index after holding the top spot a year ago, Minneapolis-St. Paul (#7) looks to have solid but not stellar growth during 2020 with rents expanding just under 5 percent. Boston (#8) moves down three places as record-high deliveries will test the ability of the market to ramp up demand quickly over the next 12 months. Recently passed and potential further new rent legislation laws cast a shadow over New York City (#9) valuations in 2020 despite an otherwise robust apartment market; it dropped six places in the Index. Breaking back into the top 10, Oakland (#10) could become the Bay Area's tightest vacancy rate metro as more renter households see the huge positives of the metro's lower cost of living compared with its neighbors.

Move-up metros worth keeping an eye on. Markets outside of the top 10 making strong upward movements that should be on investors' watch list as the year progresses include Fort Lauderdale (#11), which advanced two more spots after a strong upward surge in the summer of 2019. Strong demand will once again match forecasted supply additions and keep vacancy level over the next 12 months. In addition, as it is a true barrier-to-entry market, the long-term upside rent growth potential should keep valuations rising. Raleigh (#13) edged up three places with solid multifamily dynamics driven by excellent employment and household growth rates outpacing the nation. Additionally, Atlanta (#14) rose three places as expanding demand in 2020 will push overall rent growth to almost 6 percent. Northern New Jersey (#19), however, saw the largest jump within the Index over the past six months, rising six places. It has the potential for further upward movement as absorption once again should exceed supply additions. Furthermore, the higher yield potential for assets of comparable quality in New York City with similar rent growth trajectory has many institutional capital sources searching for acquisition opportunities.

Index Methodology

The NMI ranks 32 major markets on a collection of 12-month, forward-looking economic indicators and supply-and-demand variables. Markets are ranked based on their cumulative weighted-average scores for various indicators, including projected job growth, vacancy, construction, housing affordability and rents. Weighing both the forecasts and incremental change over the next year, the Index is designed to show relative supply-and-demand conditions at the market level.

Users of the Index are cautioned to keep several important points in mind. First, the NMI is not designed to predict the performance of individual investments. A carefully chosen property in a bottom-ranked market could easily outperform a poor choice in a higher-ranked market. Second, the NMI is a snapshot of a one-year horizon. A market encountering difficulties in the near term may provide excellent long-term prospects, and vice versa. Third, a market's ranking may fall from one year to the next even if its fundamentals are improving. The NMI is an ordinal Index, and differences in rankings should be carefully interpreted. A top-ranked market is not necessarily twice as good as the second-ranked market, nor is it 10 times better than the 10th-ranked market.

Market Name	Rank 2020	Mid 2019 ¹	Change
Orlando	1	6	イ 5
Seattle-Tacoma	2	1	▲ -1
San Diego	3	4	イ 1
Riverside-San Bernardino	4	7	1 3
Tampa-St. Petersburg	5	10	1 5
Phoenix	6	8	イ 2
Minneapolis-St. Paul	7	2	▲ -5
Boston	8	5	▲ -3
New York City	9	3	★ -6
Oakland	10	11	イ 1
Fort Lauderdale	11	13	イ 2
Los Angeles	12	9	▲ -3
Raleigh	13	16	イ 3
Atlanta	14	17	イ 3
Portland	15	15	• 0
San Jose	16	12	★ -4
San Francisco	17	14	▲ -3
Denver	18	19	イ 1
Northern New Jersey	19	25	イ 6
Orange County	20	18	★ -2
Columbus	21	20	★ -1
Dallas/Fort Worth	22	23	イ 1
Miami-Dade	23	22	★ -1
Austin	24	27	1 3
Houston	25	21	▲ -4
Washington, D.C.	26	28	イ 2
West Palm Beach	27	26	▲ -1
San Antonio	28	29	イ 1
Chicago	29	24	▲ -5
Cincinnati	30	30	• 0
Baltimore	31	32	イ 1
Cleveland	32	31	▲ -1

¹ See National Multifamily Index Note on Page 78.







Rent and Home Payment Gap Widening



^{*} Estimate ** Forecast

Economic Growth Moderating in Record 11th Year of Expansion But Will Still Fuel Housing Demand

Job market guiding economic outlook. The labor market will remain a key factor in the pace of domestic growth in 2020. With the national unemployment rate hovering near a 50-year low in the mid-3 percent range, job creation will remain strong but taper from last year as organizations face the difficult task of finding qualified workers. The labor shortage, illustrated by the 20 percent surplus of job openings relative to job seekers, will restrain employment growth to just 1.5 million positions in 2020, but this should be sufficient to keep the unemployment rate from rising. The tight hiring market will continue to place upward pressure on wage growth, supporting 3 percent gains and pushing disposable income to a record high. Plentiful jobs and climbing incomes will deliver elevated household formation once again this year.

Housing demand bolstered by 10 years of economic expansion. The durability of the current expansion cycle, which will likely extend into its 11th year in 2020, continues to unlock housing demand. Household growth this year will be 12 percent above the current cycle's yearly average as 1.3 million new households are formed. This will generate additional demand for rental housing as households have continued to show a strong preference for renting over owning. Even with a dramatic downturn in mortgage rates in 2019, existing home sales did not move off their four-year average of 5.5 million and the homeownership rate remains stable near 65 percent. Though a rising share of millennials may consider buying a house, the migration to homeownership will be restrained by the limited availability of entry-level houses, tight underwriting standards and the reduction of tax incentives such as mortgage and real estate tax deductibility.

2020 National Economic Outlook

- Geopolitical pressures complicate domestic outlook. The ongoing trade war will continue to be a wild card for the U.S. economy. Though several tariffs were put on hold in the back half of 2019 and a phase one trade deal was reached, ongoing negotiations may spill over into 2020 and restrain growth. Additional pressure from slowing international economies and the potential impact of Brexit could further taper domestic expansion. The upcoming U.S. election is another variable that could generate some uncertainty, possibly restraining investor and business sector decision making. Still, key benchmarks such as Small Business Optimism and the ISM Non-Manufacturing Index remain strong, supporting the 2020 economic outlook.
- **Construction could taper as costs rise.** Construction employment growth has trended lower since 2018 while skilled construction labor costs have risen as contractors struggle to find qualified workers. Over the past year, 146,000 employees were added to the construction sector as it grew by 2.0 percent, down from an average growth rate of 4.3 percent witnessed from 2013 to 2017. This trend, in conjunction with elevated construction material costs, has dampened the pace of multifamily development, slowing deliveries and delaying projects. Though apartment completions are scheduled to rise in 2020, this reflects the rollover of delayed projects from 2019 that should come to market this year.
- Moderating employment growth strong enough to keep unemployment low. Monthly employment gains in 2019 averaged 180,000, down from the 223,000 pace set in the previous year. Economic modeling, however, suggests that the employment market only needs 100,000 jobs a month created to meet the expanding population and labor force growth rates to maintain stable unemployment. Thus, if employers add more than 100,000 positions a month, downward pressure on the unemployment rate will continue.

Economy and Life Changes Driving Multifamily Demand; Sunbelt Welcoming New Residents at Vigorous Pace

New young households and divorce driving apartment demand. After coming off the second highest year of apartment absorption of this cycle, demand will moderate this year but solid leasing activity will keep the national vacancy rate below 4.5 percent. Demand will be maintained across all asset classes with Class B and C properties experiencing the tightest conditions as newly formed younger households flock to these price points. Class A apartments will continue to see elevated demand but not enough to match the deliveries forecasted for the highest-priced segment. Class A vacancy will rise from 4.8 to 5.3 percent over the coming four quarters. Baby boomer demand for luxury product stood out in this cycle and rising divorce rates and empty nest couples moving from owning to renting could be responsible. The divorce rate for couples above 50 years old has doubled in the last 25 years and now accounts for over 250,000 divorces a year. A number of these divorced baby boomers appear to have the income to afford and be attracted to these newly developed Class A properties.

Rapidly growing Sunbelt powering apartment sector. Apartment completions will align with the previous five-year average as 300,000 units come to market nationally. Ten markets will add at least 9,000 new units this year, led once again by the perennial job creation leader Dallas/Fort Worth, where more than 21,000 new apartments are expected. Supply gains as a percentage of inventory will surpass 3 percent in four metros, led by Austin, which will see gains exceeding 3.5 percent. Despite the significant inventory gains, developers have been effective in aligning new supply with job creation and population growth, keeping most markets across the U.S. in balance. Sunbelt markets, which receive a disproportionate in-migration of young adults, remain a focal point for developers, although major job hubs such as New York City, Seattle-Tacoma and San Jose have also attracted a considerable volume of supply additions. While population growth in the Midwest will generally remain slower, the region will also see less construction in 2020, so vacancy rates should remain stable.

2020 National Apartment Outlook

- **Tight Class B/C vacancy weighs on absorption.** The expected modest uptick in the national apartment vacancy rate in 2020 reflects a shortage of Class B/C apartments rather than a slackening of demand. With workforce housing vacancy at its lowest level in 20 years, prospective renters will face difficulty finding an available unit to occupy. Although construction will help provide some alleviation, the predominantly Class A additions will not completely align with the price point and location of demand.
- Slowing urban deliveries could lift rents further. After hitting a nadir in 2016, rent growth for urban submarkets has been on the rise. Urban deliveries peaked in 2016 and have been trending down since. This could be signaling that urban multifamily markets are moving into equilibrium with additional upside rent-growth potential if future deliveries slow further as soaring land and construction costs have caused some development projects to be put on hold.
- Rent growth led by workforce housing. Rent growth will moderate on a national level this year but varies significantly by metro and class. Nationally, Class C apartments will lead with an expected 4.3 percent gain as vacancy for this segment remains exceptionally tight. Growth in the Class A and B tiers will likely be more modest, reaching 3.3 percent and 3.7 percent, respectively. Several markets will outpace the expected 3.8 percent national average rent growth, led by metros benefiting from significant population and job additions, such as Austin, Orlando, and Phoenix.









* Estimate ** Forecast



By Percent of Total Dollar Volume







^{*} Through Dec. 18 ** Estimate

Fed Demonstrates Commitment to Sustaining Growth; Fannie Mae and Freddie Mac Support Market Liquidity

Fed reiterates expectations of growth in 2020. The Federal Reserve will balance a whirlwind of economic and geopolitical forces this year as it sets policies to sustain domestic growth. In 2019, the Fed cut the overnight rate by 25 basis points three times in an effort to offset recessionary risk. Based on policy statements at the end of 2019, few changes are expected this year, but Chairman Jerome Powell has reemphasized that the committee will continue to monitor conditions as it develops and sets policy accordingly. The Fed's approach will likely be influenced by trade negotiations with China. If the trade dispute is resolved, economic growth could be boosted, resulting in upward pressure on inflation and tighter Fed policies. If the trade talks face a substantial setback, the Fed may consider cutting the overnight rate in an effort to breathe more life into the economy. Geopolitical turbulence from the 2020 election, Brexit or other international fronts could also spark a response from the Fed if it perceives a risk to the economy.

Lenders modestly tighten underwriting. Invigorated by increased Fannie Mae and Freddie Mac lending, apartment debt financing will remain highly liquid this year. In addition to the Government Sponsored Enterprises (GSE), a variety of local, regional and national banks, pension funds, insurance companies, and CMBS sources will be active lenders in 2020. That said, underwriters will apply conservative standards, closely monitoring economic momentum and risk patterns. Investors with well-calculated proposals should, however, find numerous funding options. Loan-to-value (LTV) ratios have tightened to the 55 to 65 percent range, depending on the strength of the borrower, asset quality, performance metrics and location. Greater leverage will be available for properties with particularly strong fundamentals including suburban areas that demonstrate above-average demand drivers. Debt availability for urban assets should also remain sturdy as underwriters put a heavier emphasis on market-specific metrics. Construction lending has continued to tighten, though, with underwriters showing increased caution as the cycle extends. While debt financing is still accessible, investors conducting a major property upgrade may need to blend mezzanine debt with other capital sources until they prove out their concepts and substantially fill units.

2020 Capital Markets Outlook

- New GSE lending caps enhance liquidity. Lending caps for Government Sponsored Enterprises Fannie Mae and Freddie Mac were increased to \$100 million each for the five-quarter period of fourth quarter 2019 to fourth quarter 2020. The GSEs have new standards with no exclusions, however, including a requirement that they commit 37.5 percent of their funds to affordable housing. The previous exclusion for Green projects that allowed GSEs to lend beyond their cap has been eliminated.
- Widened yield spreads favor investors. With the 10-year Treasury still below 2 percent, investors will remain favored by strong levered yields. The nationwide average apartment cap rate sits in the low-5 percent range, delivering a 300- to 350-basis-point premium above the 10-year note, among the widest spreads of the past decade.
- Inflation to play key role in Fed decisions. The Fed's preferred inflation measure Core PCE remained in the mid-1 to upper-1 percent range for much of 2019 as the economy sustained moderate growth. Allowing the measure to run hotter or colder than the target 2 percent rate is not seen an immediate risk in the coming months, although prolonged spans on either side of the target may influence the Fed to make policy changes.

Low Interest Rates Allow Multifamily Returns to Shine; Fundamentals Driving Capital to Secondary Markets

Multifamily investments capitalizing on low interest rates. The decline in the 10-year Treasury rate that started at the end of 2018 and continued throughout most of 2019 put the spotlight on the higher potential returns from multifamily investments. The current wide spread between Treasurys and multifamily cap rates offers investors an attractive yet relatively stable return, which should keep upward pressure on demand for assets. Additionally, despite interest rates' wild and fast downward ride during 2019, cap rates remained mostly stable. There was some cap rate compression, which has put some primary and secondary markets near cycle lows, but the market appears to have created a floor for yields. Thus, going forward, increased valuations will have to come directly from rising rental rates advancing NOI growth, and not from further cap rate declines. Given the positive outlook for strong multifamily demand fundamentals, the upside potential for rent growth looks strong, particularly in secondary markets. Overall, the current pricing environment allows both buyers and sellers to find a positive reason to transact. Sellers can take advantage of valuations holding near the cycle peak while buyers can secure assets with attractive, stable yields.

Secondary markets' performance and elevated yields drawing significant capital inflows.

Limited disposition opportunities in primary markets and cap rate compression have pushed many yield-seeking investors to explore secondary or even smaller markets for acquisition and that trend appears poised to continue in the coming year. Coming out of the Great Recession, investors were squarely focused on primary markets and select secondary markets, especially those tagged as housing-bust markets. Yet now, in many cases, markets such as Orlando or Phoenix have much stronger apartment fundamentals compared with primary markets, which has led to secondary markets' transaction volumes soaring over the past few years. In 2010 nearly 60 percent of the dollar volume for \$15 million-plus sales occurred in primary coastal markets but last year the distribution of capital placement inverted with almost 60 percent of transaction volume flowing to secondary or smaller markets. The average cap rate spread between coastal primary markets and secondary hovers close to 50 basis points. However, in some cases the difference can almost disappear, especially for high-quality newly developed core assets, reflecting investor confidence in these markets and their future growth potential.

2020 Investment Outlook

- Migration favors southern markets. Population migration to the Sunbelt continues to highlight
 apartment demand as people seek warmer weather, lower living costs, favorable tax climates and
 a range of job opportunities. California's coastal markets remain integral to population booms
 in Arizona and Texas, while Northeast and Midwest states fuel migration to the Southeast, most
 notably Florida. From 2016 to 2020, the majority of large Sunbelt metros will have welcomed
 more than 250,000 new residents each.
- Investors not shying away from new core developments. The pace of closings in 2019 for newly developed properties matched 2018's total. New buildings in urban locations, even those with elevated construction deliveries, remain highly targeted by institutional capital and REITs looking to capitalize on the live/work/play lifestyle these properties offer.
- Rising REIT purchases reflect market confidence. After sitting on the acquisition sideline for
 most of 2018, REITs doubled their transaction volumes last year. Newly developed properties
 were heavily targeted but not the only asset type acquired. Given REITs extended investment
 horizon, the increased acquisition activity highlights the positive outlook these firms see for
 rent growth plus long-term supply/demand balance.



Secondary and Tertiary Investment Activity



* Through 3Q **Trailing 12 months through 3Q *Trailing 12-month average * Through 2Q

Migration Patterns Favor South and Southwest

2020 Net Migration



Top 10 Markets by Net Migration

Market	* 2020 Net Migration	Net Migration as a Percent of Population
Phoenix	77,600	1.5%
Dallas/Fort Worth	69,600	0.9%
Southeast Florida	68,700	1.1%
Atlanta	55,400	0.9%
Houston	54,800	0.8%
Orlando	48,400	1.8%
Tampa-St. Petersburg	40,800	1.3%
Austin	36,300	1.6%
Seattle-Tacoma	33,400	0.8%
Raleigh	28,200	1.4%

^{*} Forecast

Sources: Marcus & Millichap Research Services; Moody's Analytics; U.S. Census

• Americans are moving to markets in the nation's Sunbelt in greater numbers this year, drawn by a lower cost of living, favorable tax climate, job opportunities and warmer weather, among other factors. Many of these metros will also be leaders in job gains this year as companies move out of

high-cost metros and expand operations.

- Phoenix headlines this demographic shift as more than 200 people move to the metro every day, fueled by a steady flow of retirees, students and young professionals. The Valley maintains a strong presence of finance, insurance and software firms, and attracts Bay Area companies in search of talent and lower business costs.
- Similar trends support migration to Dallas/Fort Worth, exemplified by companies including Uber and McKesson, which are moving their headquarters out of the Bay Area, while Charles Schwab recently announced it will follow suit. Seattle-Tacoma stands out as the only northern market in the top 10 in terms of migratory gains this year. Job growth in the metro is propelled by a long list of tech titans competing for top-tier talent and growing their footprint.

Apartment Construction Elevated but Generally Synchronized With Demand

2020 Completions



Bubble size correlates to absolute completions

Top 10 Markets by Completions

Market	* 2020 Completions	Completions as a Percent of Inventory
Dallas/Fort Worth	21,400	2.6%
New York City	15,200	0.8%
Los Angeles	14,100	1.3%
Bay Area	13,700	2.2%
Houston	11,800	1.7%
Southeast Florida	11,600	1.9%
Washington, D.C.	11,600	1.8%
Seattle-Tacoma	10,300	2.5%
Atlanta	9,800	1.9%
Boston	9,700	2.4%

Rental activity is picking up in secondary and tertiary markets that have recorded minimal supply gains so far this cycle, propelled by demographic shifts, employment gains and demand that has gone unmet by the singlefamily sector. While completions across several of these markets are reaching heightened levels in contrast with existing inventory, strong underlying demand and a shortage of housing support greater construction.

- Austin leads the nation this year with completions accounting for 3.7 percent of existing inventory as the metro appeals to major tech firms and young professionals who prefer the flexibility that renting provides. The Bay Area and Raleigh are in the midst of an active period of rental construction, supported by a thriving technology sector and job growth that has consistently outpaced the national average.
- Portland emerges as the only West Coast market reaching the top 10 in terms of construction as a percentage of inventory, showcasing the ongoing need for more apartments against a backdrop of stringent regulations. A steady flow of major corporations and a wave of young workers bolster the housing market.







* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Workforce Housing Generating Large Rent Gains, Captivating Yield-Driven Investors

Continuing revitalization keeps Class B/C apartment demand high.

Redevelopment projects underway throughout the metro are expanding the construction labor pool, which has grown by the fastest rate amongst job sectors in Atlanta over the past three years. Revitalization efforts are highlighted by the Centennial Yards project downtown, which will convert 50 acres of rail space into 12 million square feet of mixed-use development. A project of this scale will require a large volume of construction workers, many of which will seek housing aligned with their budget. With rental costs near the site out of reach, they will often look farther west for residences within the Perimeter. Here the average Class C unit rent is rising at an accelerated pace, and as the predominant beneficiary of this demand boost, tightening vacancy will continue to appreciate rent. Metrowide, employment gains in working-class fields are contracting Class B/C vacancy into the mid-4 percent area as median home costs are rising at a faster pace than the national level, prompting many to choose budget-friendly rentals.

Excellent growth statistics combined with attractive yields propelling transaction velocity. Positive operational and demographic metrics will

keep Atlanta front in center for investors this coming year. A rent growth forecast above the national average will be driven by strong in-migration and household formations, keeping multifamily absorption elevated across all property classes. The evenly distributed demand will allow investors to deploy various investment strategies depending on return hurdles and hold timing. Value-add acquisitions should remain the most common purchase over the next 12 months. Private capital investors seeking to update older assets view the almost \$500 rent delta between Class A and Class B properties as offering more than enough room to raise rents on renovated units while retaining the current resident profile to hit their pro forma returns. Furthermore, institutional demand for core product has been growing and the steady construction pipeline over the past few years offers a deep pool of high-quality assets for potential acquisition. Core buyers will attempt to leverage Atlanta's slightly higher cap rates compared with primary coastal markets and create a competitive bidding environment for any new developments coming to market for disposition.



Rent growth in the Key Performance Index was the only fundamental variable to see movement over the past six months as it dropped one point to 7. Furthermore, supply and demand remained stable as the construction pipeline has moderated and strong in-migration keeps demand elevated.

Liquidity held steady since midyear and highlights the robust investor interest for assets. The strong demand for assets, however, pushed yield down one point, but Atlanta still holds higher rates of return than primary coastal markets.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast









Housing Affordability Gap Mortgage Payment Effective Rent \$2,800 \$1,800 \$1,800 \$1,300 \$1,300 \$1,000 \$1

Economic Core Shifting to North Austin Where 'Silicon Valley' Transplants Locate

Expanding tech presence ripples to all echelons of housing. The rapid job creation trend of this cycle faced headwinds in 2019, when the unemployment rate started the year below 3 percent. A diminished available labor supply is forcing employers to moderate hiring; however, the technology segment is maintaining its vigorous expansion in northwest Austin. Numerous Bay Area tech companies are establishing strongholds here, highlighted by Apple's ongoing extension into a \$1 billion facility. These companies continue to bring high-wage staff members into the metro, who often look toward luxury rental housing options because of their location, amenities and flexibility. Consumer spending is also being enhanced as more high-wage jobs emerge in Austin, boosting the presence of retailers and service industry employers. The workforce tied to these industries will aid Class B/C leasing, holding vacancy tight in the 4 percent range.

New supply additions will shift acquisition focus to Class B properties.

The transaction market roared back significantly in 2019 as more investors added Austin to their primary acquisition lists. The combination of fastpaced regional economic growth pumping up in-migration that pushed rent growth ahead of the national average and slowing supply deliveries gave investors the green light they were waiting for. Moving into 2020, however, supply forecasts have once again jumped and investors will need to pivot their acquisition strategy in order to capitalize on the opportunities in the market. Over the next 12 months, Class B suburban garden properties, especially those with renovation potential, should see the most attention from investors. The current \$600 a month rent delta between Class A and Class B properties will offer insulation for Class B owners from their existing resident profile making the jump to new properties that offer move-in concessions. Furthermore, the rent delta offers value-add buyers enough room to update properties and adjust rents accordingly without nearing the Class A pricing levels. For investors focused on newer properties, the urban core's deep inventory of recently completed projects could be protected from rent moderation as most deliveries will be focused in other submarkets.





* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Positive upward movement of the rent growth index by three points since the summer stands out despite a slight one-notch pullback in demand. Overall, the fundamentals sit balanced and well positioned as Austin moves into 2020.

The overall positive state of the transaction market can be seen in liquidity holding steady at 7. Yield slipped a point, reflecting the positive outlook investors have for revenue and NOI growth due to rent growth outpacing the national rate as a whole.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Vacancy Drops to Historical Low; Investors Find Comparative Advantage in Baltimore

Vacancy drops to multiyear low amid moderated construction pipeline. Baltimore's well-regarded educational institutions and healthcare providers, comprising about a fifth of the labor force, continue to hire thousands of personnel per year. These new job opportunities are supporting the formation of additional households, contributing to a steady increase in rental demand that will drop vacancy to 4.3 percent in 2020. The number of units available has not fallen much below this threshold since 2000 when vacancy was 2.6 percent. Operations are also benefiting from a more modest construction pipeline. Except for 2019, fewer units will come online in 2020 than during any other year since 2011. While not as many apartments will open within the city of Baltimore as previous years, a handful of large-scale projects are slated to deliver in surrounding towns. Projects with more than 300 units apiece will be finalized in the suburban settings of Ellicott City, Columbia and Towson, where demand for the new supply is underscored by below-market vacancy rates. This dynamic is also leading to above-market average rent growth, contributing to a metrowide appreciation in effective rates similar to 2019.

Expanding investor pool for Baltimore assets poised to continue. The search for yield and stable market conditions over the past two years put Baltimore on more investors' lists for acquisitions and that trend should continue for the coming year. Cap rates typically average 50 basis points higher than primary East Coast markets, which has piqued the interest of a larger buyer pool than traditionally witnessed in the marketplace. Last year recorded acquisitions from cross-border capital sources and REITs, which highlights the expanding interest for the metro and favorable outlook for returns given the long-term hold strategy of these investors. In addition, because Baltimore has been late to the investment cycle as an acquisition target, the market holds a deeper pool of well-located valueadd opportunities that have yet to be tapped. As more capital sources are introduced into the market due to the tempered supply pipeline, potential renovation opportunities and stable rent growth projections, demand for assets will remain elevated. Existing owners could reap strong returns in the coming year given the strong demand for assets and pricing conditions.



Balance in market performance in the second half of 2019 maintained rent growth at 5 as demand advanced from 7 to 8. Supply retreated by two points but still holds a solid 5, reflecting the overall equilibrium in the multifamily market.

Upward liquidity movement of two points shows the growing investment interest in Baltimore as new capital flows into the metro. The rise in liquidity helps explain the two-point drop in yield over the past six months, but it remains at an attractive level.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.

















Elevated homeownership costs underpin apartment demand in Boston.

Healthy tenant demand, coupled with a declining construction pipeline, will support heightened multifamily performance in the metro this year. Vacancy remains one of the lowest among the major markets, creating a shortage of housing as down payments and high mortgage costs make homeownership difficult for many. Class C vacancy, in particular, is hovering in the mid-2 percent band. Average effective rent in these units are \$700 less than Class B spaces metrowide, making it difficult for many individuals to transition to newer apartments. Declining construction this year, together with the already-low vacancy rate, will make finding quality housing difficult, particularly as job growth attracts new residents and supports household formation metrowide. Some renters may look to outer-ring suburbs, where lower rents persist. Vacancy rates in these neighborhoods can typically rest below 3 percent, supporting strong rental increases.

Newly developed core assets the key to advancing transaction market.

Aggressive sales activity and pricing for newly developed assets during 2019 hold the key for Boston maintaining its transaction momentum for the coming year. Almost a third of all transactions above \$20 million that traded in 2019 were recently completed properties with cap rates typically in the mid-4 percent range. Due to Boston's difficult permitting and approval process for new construction, many institutional investors highly covet acquisitions in the market, yet demand frequently far outstrips the supply of available properties for sale. Furthermore, because of the difficult building situation, most developers build for long-term holds. However, over the past couple of years, a handful of developers have taken advantage of the high institutional demand for core assets and listed recently completed properties for sale instead of holding them. This change has propelled transaction volume over the last three years, and for this momentum to continue, developers must contribute more assets to the disposition pipeline. The highly attractive pricing from last year may give some owners the justification to pocket their return and pursue disposition now.





* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Both demand and rent growth saw one-point declines since the midyear numbers, yet their level at 8 and 7, respectively, are strong positions for Boston's Key Performance Index. Supply held steady at 2 as the deliveries remain elevated over their historical average.

Limited properties available for sale keep liquidity at the same level as six months earlier despite robust investor demand for assets. However, yield did see a two-point decline as a high number of newly developed properties traded hands in the second half of the year, pushing down the average cap rate.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

CBD Development Continues; Property Tax Reassessment Weighing on Outlook

Tech sector fuels rental demand in thriving urban core. Chicago will continue to witness rent growth in 2020, lifting the average effective rent above \$1,600 per month. Suburban rent growth will remain stable this year as vacancy sits below 4 percent; however, rental gains in the urban core will drive the marketwide increase. Employment growth is focused in downtown Chicago, particularly among tech firms, providing a boost to apartment demand here as vacancy has pushed down 180 basis points since 2017. Companies including Relativity, Truss and Vistex continue to add jobs, encouraging developers to meet the additional housing demand from new employees. The urban core is set to receive 65 percent of this year's completions, with construction activity in the West Loop and Near North Side. Several inner-ring communities will also receive a portion of the new supply, such as Logan Square and Uptown, which have become viable options for renters who have been priced out of downtown Chicago. Suburban completions will be largely confined to a variety of northern cities, where demand continues to steadily increase.

Risks to future multifamily rent growth and expenses clouding

transaction outlook. Institutional investors seeking core assets will continue to circle Chicago's Loop and adjacent neighborhoods given the true 24-hour live/work/play environment it provides. Furthermore, investors can take advantage of the positive cap rate spread that can be as high as 50 basis points in Chicago compared with primary coastal markets for newer highrise assets in dense urban settings. Political issues, however, appear to have dented transaction activity in 2019. Rent-control legislation being discussed in the state capital and Cook County's dramatic increase in property tax assessments for commercial buildings in the northern suburbs remain downside risks for investors. The assessor still has at least a year before the entire county has been reassessed but increases seen in the suburban submarkets offer insight into what could be in store for apartment buildings throughout the county. Therefore, investors will employ conservative underwriting, especially in Cook County, and transaction activity could suffer until more clarity on these issues comes to light. One potential outlet for investors looking to place capital in the Chicagoland without the risk of property tax reassessments could be DuPage County, especially along the BSNF Metra line, which traditionally has seen high transaction activity.

20.9%	8	2019 share of local population between 20 and 34 years old
36.2%		of local population hold bachelor's degree or higher*
\$259,599		2019 median home price

After hitting a 10 for rent growth in the Midyear Key Performance Index, Chicago retreated but still maintains a solid 6 going into 2020. Demand saw a two-point improvement and supply edged up a point, which will help keep fundamentals balanced.

Liquidity held stable at 6 but also represents one of the lower totals across all the markets as the demand for acquisitions continues to outpace available supply. Yield dropped one point but remains highly attractive especially compared with coastal markets.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast











Entertainment Drives Renters Downtown; Lack of Listings Holding Back Transactions

Thriving apartment demand in city's cultural hub. Households are expected to rise by 7,700 this year, building on 2019's similar gain. This trend is creating strong leasing momentum in downtown Cincinnati, as the area's amenities appeal to renters. Arts events at Music Hall, cultural programs at Washington Park, and new trendy restaurants aid in the livability of downtown, as residents can efficiently access these retail and entertainment venues. Just south, in northern Kentucky, Newport on the Levy will be getting millions of dollars in renovation this year to its 360,000-square-foot mixed-use entertainment district. An upgrade to this area will also appeal to renters seeking living accommodations in Cincinnati's metro core. In 2020, apartment demand overall is expected to continue to grow, supporting the need for the 2,000-unit construction pipeline in Cincinnati this year. The influx of inventory will tick up vacancy though the rate will remain tight in the mid-3 percent area, allowing the average effective rent to rise to a new high.

Limited disposition opportunities leaving capital on the sidelines. Eager investors interested in deploying capital into the Cincinnati metro will continue to be hindered due to limited properties coming to market. The flight to secondary markets for yield and stable market performance has investors circling. Furthermore, as many markets have witnessed rising supply additions as a threat to rent growth, Cincinnati's muted construction pipeline adds another strong argument for capital deployment by supporting consistent revenue growth projections. The downside of the lack of new deliveries, however, can be seen in further limiting the potential pool of disposition properties. Regional private capital sources will remain the major buyer profile in the current conditions as they will leverage their local knowledge and contacts searching for potential acquisition targets. Suburban garden properties just off major interstates will be the most sought assets until any of the recently completed projects in the urban core or close in neighborhoods come to market.





* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Cincinnati's Key Performance Index has one of the best demand and rent growth combinations in the nation with both at 8 despite a onepoint drop in demand. Supply saw downward movement but sits well positioned for favorable fundamentals to drive rents.

The past six months caused no movement in either liquidity or yield as reduced properties on the market for disposition kept capital inflows limited. Nonetheless, Cincinnati's yield index sits at 6, which is the highest number nationally and will keep capital actively searching for acquisitions.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













Luxury Units Outside the Core Begin to Materialize; Dispositions Remain Limited

Luxury rental demand multiplies outside of urban core. Development continues in the central business district this year with three-fifths of Cleveland's 1,700 apartment supply being completed here in 2020. While there is demand for luxury units in the city, renters are also seeking high-end apartments slightly east of the city, where the average effective rent is lower than the central business district's rate. Developers are also enticing renters to these areas by advancing the retail and entertainment components within new apartment buildings. This year in the town of Richmond Heights, construction will begin on the first phase of the Belle Oaks multifamily neighborhood. The full development will be completed in 2022, featuring 790 apartments with approximately 315,000 square feet of retail, including Regal's 20-screen theater complex. Increased leasing activity in this area has already lowered the submarket's vacancy close to 3.0 percent in 2019. Starting in 2020, six out of 10 Cleveland submarkets will start with vacancy under 3.5 percent.

Development could be key to unlocking the disposition market. Limited assets available for acquisition have investors waiting in the wings for a chance to close on a property in order to take advantage of the high-yielding assets within the Cleveland metro. Investors see the low vacancy rate and minimum supply additions as conditions that will remain in place for the short to medium term, which should lock in yearly revenue growth at similar levels to what is being produced today. The current pricing environment would appear to be an opportune time for owners to maximize their returns by listing properties for disposition. The average price per unit sits at its cycle high, cap rates have hit the cycle low, and investors are actively looking to place capital into the market. Recently completed developments offer one of the best opportunities to break open the disposition market as the market has seen more units delivered in the last five years than in the previous 15 years. As these projects stabilize, developers must decide whether to replace construction financing with a permanent loan. This decision point could cause some developers to decide to capitalize on current valuations and list the property for sale. In doing so, it could set a new pricing benchmark, which could persuade others to follow suit.



* Estimate ** Forecast 🏾 Through 3Q

2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Rent growth jumped four points since the summer and indexes at one of the highest levels nationally. Demand held steady at 8 and more than off sets the two-point decline in supply.

The lack of available properties for sale keeps Cleveland's liquidity the lowest of all markets covered in the index despite the second highest yield index at 5. Given investors search for yield, any properties coming up for disposition should see strong interest.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Hiring in Medical and Government Industries Spurs Housing Growth

Leasing follows large influx of construction in urban core. Increased hiring by the healthcare services industry and government sector will help expand household formation in Columbus this year. The central business district continues to be the epicenter of housing formation due to the expansion of office demand and medical center demand. Economic growth in this area has motivated developers to construct apartments in the city as more employees move closer to the urban core for work. Approximately 3,100 apartments will be constructed in 2020, with 1,200 units of the inventory being delivered near the city center. Just north of the central business district, builders have broken ground on Columbus' \$300 million professional soccer stadium to be delivered in 2021, adding to the already flourishing Downtown/University area. Additionally, new mixed-use space is to be developed here, including the six-story Xander on State, which will total 222 units. This project will include 15,000 square feet of commercial space, attracting residents that want to be near a wealth of shopping, food and hometown events. Inflow of supply will minimally expand vacancy downtown; however, demand for housing near these amenities will continue to trigger stable rent gains this year.

Limited disposition pipeline holding back capital placements. Solid multifamily fundamentals and elevated yields put Columbus near the top of the list in terms of highly desired secondary investment markets. However, a lack of properties coming to market for disposition has dramatically slowed transaction momentum and could hold back capital placements in the coming year. With the vacancy rate declining and rent growth just above the national average, many owners are holding back dispositions as they reap strong operational returns despite the steady decline in cap rates and the average price per unit hitting a cycle high at the end of 2018. While owners of existing properties consider whether to take advantage of the valuations, one potential outlet for purchases could be the development pipeline. The market saw 14 properties completed in 2019 and has 17 scheduled for completion this year. These 31 properties offer a potential number of target acquisitions. Institutional capital would be especially interested in the high percentage of them located in high-density neighborhoods within the city of Columbus as these locations perfectly fit into their investment thesis.



Demand and rent growth both slipped one notch since the summer but remain at solid index totals of 8 and 6, respectively. Supply held steady at 4 as unit deliveries leveled off. Overall, the Key Performance Index reflects the positive momentum going into 2020.

Both liquidity and yield held steady in the second half of the year and reflect the potential for increased transaction activity. Limited assets for sale prevented sales activity from rising despite strong investor interest due to higher yields.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













* Estimate ** Forecast ® Through 3Q

2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Expanding Companies Fuel Rental Demand; Area Remains Top of Mind for Buyers

Job creation keeping apartment developers active. The building boom will continue in the Metroplex this year as more than 21,000 units will be delivered. Dallas' urban core will receive nearly 2,000 of those apartments as developers look to capitalize on the area's growing employment hub, headlined by Uber's new campus. Corporate expansions and relocations to downtown Dallas have become an increasingly popular trend; however, the northern suburbs remain the top target for many high-profile firms seeking a presence within the Metroplex. Fueled by employment growth, strong household formation in communities like Frisco and Richardson will provide a boost to construction efforts this year and help alleviate some relatively tight conditions. South Irving and Northwest Dallas boast even lower vacancy rates, although apartment availability will stay limited in these areas as new development remains sparse, giving rents some room to grow. This will support stable marketwide rent growth in 2020 as Dallas/Fort Worth's average effective rent surpasses \$1,200 per month.

Investors' acquisition appetite showing no sign of waning. Dallas appears poised to pick up in 2020 right where it left off in 2019 as one of the most active transaction markets for sales above \$20 million in the nation. Investors focus remains on the demographic and economic metrics typically at two or three times the national average, driving the highest yearly multifamily absorption totals in the country. The deep inventory of property types available for purchase allows multiple investment strategies to be deployed and maintains the high level of liquidity. The market has deep pools of inventory playing directly into the two main capital deployment strategies: value-add and newly developed core assets. Supply additions from the 1990s and early 2000s in many cases sit today in built-out well-located locations primed for renovation and repositioning. While they are not as numerous as earlier in the investment cycle, private capital buyers will keep the search up for all value-add opportunities given the strong upside to the investment yields these assets provide. Furthermore, the renowned Dallas construction pipeline over the past five years has produced numerous mid- and highrise properties in both the urban core and suburban town center locations strongly favored by institutional capital. The lofty levels of capital wanting to be deployed into the Metroplex should maintain valuations and keep owners motivated, filling the disposition pipeline.

21.3%	8	2019 share of local population between 20 and 34 years old
33.3%		of local population hold bachelor's degree or higher*
\$266,320		2019 median home price

The second half of the year saw positive upward movement in both the supply and demand indexes by one point. The improvement in the supply index points to a moderation in deliveries in the coming year and with the rent growth index holding firm at 5, fundamentals look solid.

Liquidity remains stable at 7 as Dallas/Fort Worth remains one of the most active transaction markets in the nation. The high investor activity levels pushed the yield index down one point, reflecting the positive investment outlook for acquiring firms.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













* Estimate ** Forecast [•] Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Wave of Tech Jobs Keep Builders Active; Urban Profile Key for Institutional Buyers

Firms eager to capitalize on Denver's tech talent. Bay Area tech companies remain a key driver behind Denver's apartment market as they relocate to the Mile High City, creating jobs in the area and capitalizing on local talent. This has brought an influx of high-wage jobs to the area from companies such as Amazon and Slack, prompting developers to deliver luxury apartments to the urban core. Downtown Denver and its surrounding neighborhoods will receive more than half of the metro's new supply in 2020, highlighted by several 300-plus unit complexes. Despite the wave of upscale apartments, Class A vacancy dipped to the mid-4 percent range, its lowest level in four years. The Class B and C segments boast even tighter readings in the low-4 and high-3 percent bands, respectively. Sustained job creation in service-oriented fields and ultra-tight unemployment will remain a boon to workforce housing this year, keeping upward pressure on rent growth for these properties. In the past five years, the Class C average effective rent increased 41 percent, while the Class B measure rose 30 percent.

Product, pricing and profile keeping long-term hold investors captivated.

The balance, strength and renter profile of the Denver apartment market has translated into one of the most active transaction markets in the nation. The region attracts capital sources across the board, highlighting how the market supports numerous investment theses from urban-core long-term holds to suburban value-add opportunities. A deep pool of newly constructed infill mid-rise/high rise properties in the city of Denver has been and will continue attracting significant institutional investor interest in the coming year. Investors seeking to capitalize on these live/work/play urban locations will find assets with resident profiles focused on the highly educated workforce the region continues to attract. In addition, any newly developed or existing suburban garden properties near transit stations will garner strong investor attention if put on the market for disposition. In addition to the strength of the regional economy, investors will further be drawn to the Denver region given the higher cap rates compared with primary West Coast markets. Even as Denver's average cap rates have compressed with the elevated transaction activity of the past few years, they remain up to 50 basis points higher than in Seattle or Portland.



The Key Performance Index's fundamentals section held steady across all three variables compared with the midyear totals, reflecting the stable and balanced market conditions. Deliveries remain elevated compared with historical totals, but demand keeps matching any increases.

The rising rent growth index should add further investor interest as liquidity remained stable at 7 and has room to rise. Yield slipped a point as the average cap rates remains at a cycle low.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













Stable household formation and sound hiring lift demand for rental

housing. Fort Lauderdale remains a popular destination for retirees because of its favorable tax and weather climate. The metro is one of the leading destinations for retirees 65 and older in the nation. Young professionals are also increasingly drawn to Broward County for its mix of major corporations including American Express, Citrix and AutoNation along with rental rates below those in Miami and West Palm Beach. Both the young adults and retirees are fueling rental demand as it offers flexibility, amenities and quality locations proximate to services. Renters are being drawn to rapidly transforming areas of the market like Flagler Village, which caters to millennials with trendy restaurants and nightlife while being a short distance to mass transit. Dania Beach is in the early stages of a major revitalization of its city center as well as Dania Pointe nears completion and other projects are in the works.

Investors see the upside to high barrier to entry. Fort Lauderdale offers investors a wide inventory mix to meet numerous investment strategies based on either product or location. This diverse asset collection has allowed the investor pool to run the gamut from institutional and private capital sources to cross-border groups. The combination of these factors has made Fort Lauderdale the transaction leader for \$20 million-plus sales in South Florida with the highest volume and velocity in the region. Institutional buyers will remain focused on newer mid-rise developments east of I-95, especially in Fort Lauderdale, but newly built product in Sunrise or Pembroke Pines could also make the target list. As one of the true high-barrier-to-entry markets in the nation, the market draws these institutional investors with prospects of consistent rent growth above the national average due to the limited downside risk from oversupply. The second most sought property type will remain value-add opportunities; private capital investors will continue searching for the few remaining properties with the most upside potential. Overall, pricing will remain highly competitive across all asset types for the coming year as asset demand will remain high.



* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Stable deliveries in the 2019 and the forecast for the coming year kept the supply index level at 3, which aided in holding the rent growth index stable at 5. Demand also didn't move since midyear and the overall fundamentals are stable and balanced.

No movement happened over the past six months for the liquidity index but at 5, it remains one of the lower numbers nationally. High demand for assets and competitive bidding have pushed yield down one point, but it remains higher than primary East Coast markets.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













Building of Vertical Concepts Continues; Value-Add Strategies Maintain Momentum

Houston transitioning to higher-density development as urban core strengthens. Creating a more dense and vertical urban core remains top of mind for developers as apartment construction will stay concentrated in central Houston and surrounding neighborhoods. The inflow of millennials and empty nesters to the core seeking walkable communities will support the addition of 5,000 new units to the metro's urban submarkets in 2020, highlighted by four 20-plus story complexes. Development will also be strong west of the core in Katy where 2,700 garden units will be delivered as builders attempt to keep stride with robust household formation. Katy sports one of the tightest vacancy rates in the metro at 5 percent, trailing several northern suburbs such as Cypress, Conroe and The Woodlands. Vacancy in these suburban cities will also likely remain compressed this year as construction in these areas remains limited.

Off-the-charts demographic growth keeping investors' attention.

Phenomenal population and household growth rates due to strong inmigration will keep Houston as one of the fastest expanding metros in the nation. These drivers combined with solid employment growth forecasts will maintain elevated long-term multifamily demand prospects for the region and keep investors focused on Houston as a top acquisition market for the coming year. Aiding in filling the transaction pipeline is a deep pool of properties built in the 1980s and 1990s that offer private capital numerous value-add opportunities. Institutional buyers will direct their attention to newly completed projects. However, unlike other markets in which mid- and high-rise assets dominate new deliveries, Houston garden developments have accounted for almost half of all new projects and these new garden properties have dominated closings for recently completed properties. Look for this trend to continue as institutional capital looks to take advantage of the higher cap rates for these new garden properties and lower per unit pricing. The downside risk to the transaction market in the coming year appears to be a widening bid/ask spread as a number of owners are holding out for peak valuations despite rising uncertainty over insurance costs and changes to tax assessments that new owners will face.



* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

A three-point decline in the supply index points to a more normalized development pipeline returning to the Houston market. However, demand sits at a 7, which points to fundamentals being well balanced, which helped maintain rent growth at a solid 5.

The second half of they year saw no changes in the transaction side of the Key Performance Index. Both liquidity and yield sit at levels highlighting the market's capital inflows and competitive yield environment.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast












* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

High Ownership Costs Sustain Rental Demand But Supply Additions Overwhelm

Tight conditions preserved amid wave of supply additions. In each of the previous three years rental demand in Los Angeles outpaced elevated levels of construction activity, compressing vacancy to a cycle-low level entering 2020. Limited unit availability occurs at an opportune time, as the county's rental inventory will swell by an additional 14,000 units this year, the third largest total among major U.S. metros. While core Los Angeles continues to record the largest influx of new apartments, deliveries are more evenly distributed between Downtown Los Angeles, Mid-Wilshire and Hollywood than in previous years. Elsewhere, the San Fernando Valley will record a large increase of new units, welcoming more than 4,000 rentals, 40 percent of which are in Woodland Hills. Throughout the county, projects in lease up will benefit from steep home prices and income growth, but concessions usage will increase as developers seek to achieve stabilization in under a year. With solid demand drivers in place, the overall impact of cycle-high delivery volume will be moderate, with metro vacancy rising to 4.0 percent.

Investors assess valuation impacts and strategy due to new legislation.

Rent control has once again entered into the transaction market after the California Legislature passed a statewide cap on rental rate increases. After investors shook off the potential threat from Proposition 10, which was defeated by voters in November 2017, the new cap on rental rate increases for properties 15 years or older has caused a pause in the sales activity. Investors are busy attempting to understand the long-term potential impact to valuations and reassessing their strategies as well as how to underwrite future rent growth with the new caps in place. One potential outcome of the new regulation could be an increased focus on newly developed assets as these properties are immune to the rent restrictions until they are 15 years old. Furthermore, economic research has shown that properties not covered by rent control in rent-controlled markets actually see higher rent growth than if no rent restrictions were in place. Thus, owners could see outsized revenue expansions for these newer properties, which could positively impact current underwriting and valuations. The steadily rising construction pipeline offers a deep potential pool of acquisition targets. The highest rental rate increases have been occurring in the Class C space, where vacancy rates are the tightest and the largest impacts to valuations could be seen in this subset of the transaction market.



Demand slid two points from 8 to 6 since over the past six months. Most likely the drop in demand will prove temporary as the high propensity to rent in Los Angeles and long-run drivers should overcome short-term demand bumps. However, rent growth also lost a notch, so these variables should be watched closely.

Limited assets for disposition hold back the transaction market, which keeps liquidity stable to finish the year. Yield moved down two points in the second half of the year and sits at the lowest level nationally.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast











Select Submarkets Stand Out With Strong Upside Potential and Healthy Demand

Renter pool remains full with little relief from the single-family housing market. Warm weather and tax benefits are attracting more residents to

Miami-Dade County from out of state, driving housing demand and powering the apartment sector through 2020. Job growth in the market remains healthy going into the next decade, supported by a maturing tech ecosystem and strong international business ties that beckon young professionals. Land constraints and high construction costs have led to one of the most challenging single-family housing markets in the nation for first-time buyers. The median home price was more than six times higher than the median household income at the end of 2019, contributing to a robust apartment development pipeline as builders work to meet demand. Construction is elevated in some of Miami's suburbs including the Coral Gables/South Miami area and West Miami/Doral, neighborhoods that have been undersupplied and contain rapidly growing segments of the population.

Elevated institutional buying highlights market's upside potential.

Transaction volume for \$20 million-plus assets has remained steady over the past three years. However, in order for 2020 sales to increase, buyers and sellers must bridge the gap on valuations. Sellers see the low-interestrate environment maintaining as they seek the maximum value for their properties. Buyers, on the other hand, believe in the Miami investment thesis but have been cautious regarding purchasing at the top of the market. A positive sign of a possible closing of the pricing gap could be the recent purchases by institutional firms and REITs reaffirming the positive longterm outlook. Investors will still be primarily focused on purchases in the city of Miami with infill locations near downtown plus northern and western neighborhoods. In addition, with supply peaking this year, a stabilization of Class A rents should follow and allow developers an excellent opportunity to capitalize on the strong demand for new product, especially in higherdensity locations preferred by institutional capital. The key, however, will be whether developers keep their pricing expectations in line with the overall sale comparables.

2019 share of local population

between 20 and 34 years old



27.8% of local population hold bachelor's degree or higher*
 \$378,573 and 2019 median home price

20.2%

* Estimate ** Forecast [●] Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

The Key Performance Index created more balance for multifamily fundamentals in the second half of 2019 as both demand and rent growth advanced. Rent growth now firmly stands at 5 and points to the upside growth potential still available for property revenues expanding in 2020.

Investor demand still outstrips available properties for acquisition, which is why the liquidity index held steady at 5, the second lowest level nationally. Yield declined two points, reflecting the high investor demand for assets and positive pro forma forecasts.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Low Vacancies and High First-Year Yields Draw Institutional Capital to the Twin Cities

Headwinds mounting as demand drivers shift. For most of the past decade, Minneapolis-St. Paul has maintained one of the tightest vacancy rates among major U.S. metros. This trend will continue into 2020, although a surge in construction amid a softening employment sector will nudge the vacancy rate higher and slow rent growth. The metro's tight labor market is making it more difficult for employers to find workers. Last year, the region posted the weakest job growth since 2009, leaving many jobs unfilled, which will likely suppress household gains in the quarters ahead. While demand drivers are not as robust as previous years, deliveries in 2020 are poised to reach the highest level in more than 20 years, with nearly every submarket receiving new apartments. The additional inventory of market-rate units should assist in easing the shortage of rental options; however, the need for low-cost apartments will remain acute.

Capital inflows muted by limited dispositions. All available investment possibilities in the Twin Cities are closely vetted and examined by the investment community. Multiple capital sources wish to take advantage of one of the lowest vacancy rates in the nation combined with rent growth well above the national average and abundant demand to absorb new supply deliveries. In addition to the robust market performance, investors seeking higher yields see cap rates in Minneapolis ranging up to 50 basis points higher than compared with primary coastal markets for similar product and want those elevated yields in their portfolios. Nevertheless, the transaction market historically suffers from a significant imbalance of properties for disposition compared with the amount of capital that wishes to be deployed. Given the difficult acquisition environment property owners tend to focus on a long-term holding strategy. However, the rewards once a deal is secured outweigh the considerable effort to source opportunities and maintain capital's engagement. A potential possibility for increasing the disposition pool this year could come from the upward trending construction pipeline. Developers may see the strong demand for assets and decide to bank solid returns by selling recently delivered properties.



Rent growth did not move since the summer despite one-point declines in the supply and demand components of the Key Performance Index. However, demand remains at one of the highest totals nationally at 8, which should support rent growth holding at its current lofty position.

Yield dipped one point in the past six months, reflecting the strong demand and underwriting by investors for assets. Liquidity held steady at 6 with room to expand given the solid desirability of firms to deploy more capital into the metro.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













^{*} Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Technology Firms Foretell Renter Demand; Investors Respond to Legislative Reforms

New tenant leases outpace supply keeping vacancy near its lowest

practical level. An expanding technology presence in New York City, with Amazon, Google and Facebook opening sizable offices in the near future, will help continue diversifying the market's economy. The new job opportunities will add to the metro's extensive housing needs, both within Manhattan and across the surrounding boroughs. While the market is poised to welcome new sources of renter demand, the pace of completions is moderating. Fewer units will open in 2020 than in any year since 2015. Though many apartments will arrive in Manhattan, Brooklyn will receive the largest share of deliveries, as has been the case for the past three years. Across all five boroughs, reduced supply growth will keep vacancy at a near-20-year low of 1.5 percent this year. Virtually full occupancy is contributing to higher rent growth among marketrate units. That trend may be aided by declining competition from new value-add projects as recently imposed restrictions have effectively halted the conversion of rent-regulated units to market-rate apartments.

Demand for assets still outstrips supply, but dispositions could be on the rise.

Increased institutional capital inflows for \$20 million-plus assets in New York City during 2019 combined with a potential rise in listings cast a positive outlook for activity. Given the difficulty in acquiring assets in the market, many investors hold properties for the long run, which keeps disposition activity lower than one might expect given the depth of the multifamily inventory. However, the coming year could see an increase in sales volume as some long-term owners are considering selling amid the changing regulatory environment and the potential for new legislation being discussed at the state level regarding good-cause evictions. Demand for assets remains high as new capital sources view New York's investment dynamics as too strong to pass up the opportunity to acquire assets in one of the top multifamily markets in the nation in terms of long-term revenue growth and capital appreciation. Manhattan will remain the most active borough for institutional capital but buyers have also shown strong interest for Brooklyn assets, especially newly developed projects, which has caused per unit pricing to narrow over the past few years for similar types of properties. Furthermore, as the construction pipeline has moderated after its peak in 2017 and Class A rents have once again turned positive, some developers may now view it an opportune time to tap the elevated demand for assets by moving forward with dispositions.



Demand held at the highest index nationally over the past six months at 10. In addition, the supply index rose two points as deliveries continue moderating from their cycle high in 2017. Rent growth remained at 5 but the improving supply index could see upward rent movement by midyear.

A two-point rise in liquidity points to a rebound for investment volume after two years of decline and the coming year could see further upside growth. Yield retreated to the same level a year ago and sits at the lowest index level.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













^{*} Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Demand Pushes Vacancy to New Low as Supply Increases Near the Waterfront

Ardent renter demand drops vacancy to record low despite elevated

completions. A slow-but-steady influx of new jobs continues to expand the number of households in Northern New Jersey, where the high cost of homeownership prompts many to rent. Apartment demand in the region is further enhanced by the inflow of renters priced out of Manhattan, which will help reduce vacancy in 2020 to its lowest rate in at least two decades. Residents are particularly interested in Hudson County multifamily housing, supporting elevated construction activity in Jersey City and Hoboken this year. Monthly rates for luxury units in these neighborhoods now often surpass \$3,100, which will lift the regional average effective rent above the \$2,000 threshold for the first time. Potential tenants seeking lower payments are looking farther west, where new developments are also underway. More than 1,000 apartments will open in Union County this year, where previously no more than 700 rentals had opened within one year. These upcoming deliveries will add options to a submarket where Class A vacancy hovers near 2 percent.

A healthy construction pipeline offers long-term capital placement

opportunities. Investors continue to see the advantages of deploying capital in the Northern New Jersey apartment market given the higher yields and lower pricing per unit for similar-type assets across the Hudson River in New York City. Cap rates can average 30 to 50 basis points higher on the New Jersey side of the river, which has institutional and REIT buyers consistently searching for acquisition opportunities, especially for properties near the waterfront or transit hubs coming into Manhattan. These locations attract a highly educated profession tenant profile greatly sought after by long-termhold capital sources for their high salaries, which support above-average underwriting projections. The robust investor demand has pushed the average cap rate near its cycle low. The current valuation environment offers existing owners and developers of recently stabilized projects an opportunity to take advantage of the capital wanting to be deployed and achieve strong returns by listing properties for disposition. The robust construction pipeline of the last few years plus current projects under construction should offer potential acquisition targets. Waterfront cities alone have 26 properties scheduled for completion this year with an additional 40 farther inland.

20.1%	8	2019 share of local population between 20 and 34 years old
39.4%		of local population hold bachelor's degree or higher*
\$379,449		2019 median home price

Demand moved up from 8 to 9 and highlights the strong position the market sits in going into 2020. The leveling of deliveries also helped improve the supply index, which moved from a 1 to 2 and should help support rent growth recovery and possibly improve its one-point decline by summer.

Limited transaction growth holds liquidity at 5 once again but the high demand for assets helped cap rates compress further in the second half of 2019, lowering the yield index by one notch to 3.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Blossoming Tech Scene Breathing More Life Into Oakland; Downtown Seeing Benefits

Tech firms like Square setting stage to boost Oakland/East Bay presence. Apartment availability in the East Bay remains tight, staying near 4 percent as sustained job creation in the urban core drives marketwide rental demand. Mobile payment processor Square recently moved into a 356,000-square-foot building in downtown Oakland with the capacity to hold 2,000 employees, putting even more pressure on the area's already-tight apartment vacancy rate. This move could spur more relocations to Oakland as companies seek lower business costs in a market with high growth potential. Additional employment growth is supported by increased venture capital investment into Oakland-based startups, providing these firms with more power to expand and create opportunities for job seekers. To account for the expected pool of new jobs, developers are elevating their interest in the East Bay as 4,600 units are on tap for 2020, the highest annual total this millennium. Much of the focus will be on the urban core, where a variety of 200-plus-unit complexes are on track for finalization, although neighborhoods around the University of California, Berkeley will also witness substantial construction activity.

Expanding core assets and value-add opportunities will lead transactions. The East Bay's investment climate has shifted in the last few years as both individuals and companies have migrated into the metro to avoid the much higher costs of living and doing business in neighboring metros. As this migration trend has included both major tech firms and the employees that work at them, institutional multifamily capital has taken notice. The city of Oakland now draws increased numbers of professional renter households that are targeted heavily by core investors, which in turn makes the area attractive for acquisition. In addition, the potential pipeline for newly developed core assets looks strong as 26 properties are scheduled for completion over the next two years in high-density Oakland neighborhoods. In addition, the new rent control caps do not apply to properties less than 15 years old, which should allow for underwriting that reflects the true market conditions for high-quality rentals in the urban core. Not to be left out, suburban garden properties with renovation upside will also remain exceedingly sought by private buyers seeking to capitalize on well-located properties in the Dublin/Pleasanton and northeast Contra Costa submarkets. Overall, the East Bay appears well positioned to continue seeing investment capital inflows to take advantage of higher yields and the steady growth of apartment fundamentals.

20.9%	8	2019 share of local population between 20 and 34 years old
42.5%		of local population hold bachelor's degree or higher*
\$800,834		2019 median home price

46

Little change in Oakland's Key Performance Index over the past six months emphasizes the overall stability and balance of the market's fundamentals. Rent growth did slip one notch but given that the supply and demand indexes remain steady, this most likely will prove temporary.

A combination of strong investor interest and the growing availability of assets for sale pushed up liquidity by one point since midyear. Competitive bidding for assets also pushed down yield one notch but Oakland remains the highest yield index for the Bay Area.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

High Home Prices and Income Disparity Create Foundation for Long-Term Demand

Supply additions dip amid tight conditions. Apartment availability adjusted nominally over the past six years as newly penned leases outpaced the delivery of 21,000 units over that span. In 2020, the metro's median household income will approach \$100,000, but a significant gap between a mortgage payment and average monthly rent exists. The high income will continue to aid leasing activity at newly built complexes, while strong leisure and hospitality hiring with typically lower-paying jobs will sustain demand for Class B and C apartments. With Class A vacancy at its lowest point this cycle, an influx of new rentals is needed, yet delivery volume trails the prior five-year average by 1,400 units. Upcoming properties are large in nature, averaging 300 doors, with supply additions concentrated in Santa Ana, Irvine and Anaheim. In these locales, vacancy could rise on a short-term basis; however, the metro's overall vacancy rate holds at or below 4 percent for a seventh straight year, ranking Orange County as one of California's tightest markets.

Restrained transaction market could benefit from rent control measures.

Orange County remains one of the top targeted acquisition markets in the nation. The long-term multifamily dynamics all line up, supporting strong NOI growth with a vacancy rate consistently below the national average, restrained supply additions and high single-family home prices. Yet, a limited disposition pipeline continues holding back potential transactions, and since hitting a sales volume peak in 2016, volume has declined each year. Up to now, owners seemed perfectly content to take advantage of all the reasons that new investors want to purchase: future upside from both rising valuations and strong cash flow. The recent rent regulations that have passed, which cap rent increases to 5 percent plus CPI, could prod some private owners not interested in dealing with the added administrative oversight of their properties to sell. They could capitalize on the fact that the average cap rate for assets above \$20 million sits at an all-time low and the average price per unit has been holding steady close to its all-time high. The proceeds could then be redeployed to higher cap rate markets outside of California. Without question any property coming to market would see highly competitive bidding even after buyers have adjusted their underwriting to reflect the new limitations on rental increases.



Orange County's Key Performance Index fundamentals sit well balanced after supply rose from 5 to 6 as the overall strong rental fundamentals remain solidly in place. Demand's high index at 8 should promote solid support for the rent growth index rising in the coming year.

A limited disposition pipeline further eroded liquidity in the market and pushed that index down two points in the last six months. Robust investor demand for acquisitions has created a highly competitive bidding setting for all available properties and pushed the yield index down to a 1, matching the other coastal California markets.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













^{*} Estimate ** Forecast [•] Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Robust Job Gains, Favorable In-Migration Trends Produce Vibrant Rental Outlook

Apartment market flourishes amid strong demand drivers. Orlando will retain its top spot in the nation for employment growth during 2020 as organizations add positions at a pace that is nearly triple the U.S. rate. Job opportunities coupled with the metro's quality of life and a favorable tax climate attract workers and retirees to the region. This year, 28,000 households are expected to be formed, a gain that generates a margin of increase more than double that of the nation. Many of these households will favor the flexibility, amenities and affordability of renting. The monthly cost of housing is a mounting concern in the market as rent growth has outpaced the U.S. rate since 2013. As a result, vacancy in Class C units has been below 2 percent since mid-2017, driving up rent in this class much faster than the metro average. A surge in market-rate deliveries this year will assist in providing additional housing but will do little to alleviate the growing need for lower-cost apartments, holding vacancy extremely tight in Class C rentals.

Exceptional outlook driving competitive pricing and shifting investor

mindset. Investment capital's view of Orlando has shifted dramatically in the last few years as rent growth has significantly outpaced the national average and yearly absorption has matched or more commonly exceeded newly delivered units. Regard for Orlando has increased so much this cycle that the average cap rate now equals those posted in the Southeast Florida markets. Previously, investors saw higher yields for Orlando assets as necessary to balance the elevated risks and lower long-term average rent growth associated with the market. The recent performance of the market over the last few years, however, has erased that historical trend as investors view the multifamily market's long-run trends as robust or maybe slightly stronger than other Florida metros. The high influx of institutional and cross-border capital into the market will continue into 2020 especially given the large number of newly developed properties trading hands, which aligns with the acquisition criteria of these investors. Private buyers will continue searching for potential value-add opportunities, although they are becoming scarcer. Overall, expect underwriting assumptions to remain solid, keeping pricing highly competitive for all disposition assets.



Orlando's demand and rent growth indexes combine for one of the best-ranked markets in the nation at 9 and 8, respectively. Look for rent growth to continue outperforming the nation as supply additions have leveled off.

Liquidity has witnessed a slight pullback, declining one point in the second half of the year, but investors will continue finding potential acquisitions during 2020. The strong fundamentals in conjunction with growing investor demand pushed yield down a point; it now sits at 2.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Migration to Phoenix Highest in the Nation, Driving Continued Housing Demand

Positive business and lifestyle climates draw new residents and companies to the Valley. Phoenix stands out this year with one of the nation's fastestgrowing economies as firms are drawn to the favorable business environment, lower expenses and an increasingly educated workforce. Many businesses are moving operations out of high-cost markets and into the Valley, tapping into the deep roots that finance, insurance and software firms have grown. This will propel Phoenix to the top spot in net migration in 2020, adding more than 77,000 new residents, many of which being young professionals. The Valley is a prime example of activity picking up in secondary markets at this point in the cycle as the single-family sector has been unable to meet the needs of an expanding metro. Reflective of this is the exceptionally limited availability of traditional workforce housing as the Class B and C vacancy rates sit in the mid-3 percent and high-2 percent ranges, respectively. This will restrain absorption this year, resulting in the majority of new leases stemming from luxury apartments.

Liquidity soaring as investors see further upside growth. Skyrocketing investment sales activity for properties above \$20 million has placed Phoenix as one of the highest transacting metros in the nation and investor enthusiasm shows no sign of slowing down. The market fundamentals are driving strong underwriting assumptions, which combined with robust demand for assets has created a highly competitive bidding environment for all asset types and locations. Cap rates have compressed to historical lows and the average price per unit sits at an all-time high. Newly developed properties will be the primary focus of institutional buyers, especially for projects in Scottsdale, Tempe and Central Phoenix with strong live-work-play emphasis. These locations tend to attract highly valued professional renter profiles coveted by institutional capital. In addition, capital seeking value-add properties will be expanding their search parameters into new submarkets and neighborhoods radiating out from central Phoenix and East Valley cities as most closer in opportunities have been exhausted. Buyers will also begin noticing the excellent growth potential for the western suburbs as rent growth matches or exceeds the overall market. Without a doubt, both buyers and sellers view current pricing as highly advantageous with pro forma rent growth staying well above the national average and creating one of the highest liquidity markets for the next 12 months.

21.0%	8	2019 share of local population between 20 and 34 years old
29.8%		of local population hold bachelor's degree or higher*
\$285,677		2019 median home price

Phoenix's Key Performance Index highlights it as one of the nation's top markets for rent growth. With a current rent growth index of 9 and demand signaling no immediate concern regarding the ability to fill units being delivered, the fundamentals for the coming year appear solid.

The liquidity index for Phoenix sits at the peak level for all metros, highlighting the strong transaction market as both buyers and sellers are capitalizing on the positive fundamentals outlook. The yield index dropped a point but still remains highly attractive at 3.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













^{*} Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Healthy Local Economy Maintains Investor Sentiment Despite New Rent Cap

Competition for talent motivates strong migration trends. The Portland apartment sector enters the next decade on solid footing as an influx of new residents call the metro home, many being young professionals drawn by a large corporate presence. A highly skilled workforce encourages tech titans Amazon, Google and Apple to increase their hiring efforts in the metro on top of large contributions to the employment base by Nike, Adidas and Under Armour. In addition to a healthy job outlook and growing economy this year, young workers are enticed by a lower cost of living in contrast to other West Coast metros, bolstering demand for rental housing. Many of these are choosing to lease an apartment longer as they are not ready to commit to a 30-year mortgage, motivating developers to boost apartment inventory substantially as the market contends with a shortage of housing. More than 9,000 market-rate units were underway at the onset of 2020, with the greatest focus placed on areas near major employers and transit access including Central and East Portland.

Transaction activity rebound primed for takeoff. As the state of Washington was the first in 2019 to make significant changes to its rentcontrol laws, multifamily investors focused on Portland paused to await the potential impact on valuations. As owners and investors digested the new rent regulations and market rent growth continued outpacing the national average in the first half of 2019, underwriting forecasts firmed up and a new comfort level was obtained for capital placements. Transaction activity rebounded in the second half of the year and that momentum should carry over into 2020. Investors appear once again focused on the underlying positive demand drivers for multifamily absorption and higher yields than other West Coast markets. The pause in transactions last year also could create a situation in which pent-up dispositions create more buying opportunities than typically witnessed, especially for new core product as the construction pipeline over the past few years has been robust. With much of the new supply coming online in the city of Portland, these locations are highly prized by institutional investors looking to capitalize on live/work/ play submarkets and the highly educated renter profile that typically comes with them.



The rise in the demand matrix of Portland's Key Performance Index by one point helped maintain rent growth's steady placement despite supply's current low level. The outlook for demand appears positive for 2020 but supply additions will remain a downside risk.

Yield moved down one point over the past six months as high investor demand made a competitive pricing environment even more so by compressing cap rates further. Liquidity held steady at 6 with upside potential in the coming year.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast











Job Additions Lure Residents; Optimistic Trends Boost Investment Activity

Employment and household growth exceed national average, bolster

rental market. The region's world-class universities provide the foundation for a highly educated workforce that is drawing companies to the region. Additionally, Xerox recently announced plans to build a Center of Excellence in Cary that will create 600 new well-paying jobs. Since 2015, more than 100,000 positions have been created throughout the metro and this year's gain will hold it in the top 10 nationwide in terms of the percentage increase among major markets. The abundance of employment opportunities, a favorable quality of life and a more affordable cost of living are enticing more residents to the region. Over the past five years, household gains that average more than 16,800 annually have placed the metro among the fastest growing in the U.S. This trend will continue in 2020, generating demand for the many rentals underway, which will keep vacancy on its downward trajectory. As a result, rents will advance, eclipsing \$1,200 per month for the first time.

Outstanding fundamentals and attractive pricing keeping investors

focused on acquisitions. Three years of increasing purchases by institutional capital sources for assets above \$20 million have the outlook for Raleigh's transaction market looking solid. The powerful combination of strong multifamily demand drivers, above-national-average rent growth and cap rates higher than primary East Coast markets will keep drawing investment capital into apartment properties across the region. Institutional capital's focus on the highly educated employment base between the universities and high-tech firms in the Research Triangle Park will keep capital inflows strong as firms search for opportunities to capitalize on this highly coveted resident profile. Assets with locations offering easy access to these employers will remain the most sought after. As transaction activity has increased, cap rates have compressed in the exceedingly competitive sales atmosphere but continue to offer higher yields than in coastal locations. In addition, due to lower land and construction costs, new developments can be purchased at lower prices per unit compared with similar product in other Southeastern region markets.



between 20 and 34 years old
44.6% of local population hold bachelor's degree or higher*
\$298,393 and 2019 median home price

21.4%

2019 share of local population

* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

The rent growth index leaped three places over the past six months and now sits at the highest level nationally at 10. Demand held steady at its already-solid 8 position, which sets up Raleigh with one of the best demand and rent growth combinations going into 2020.

A large drop in the yield index from 6 to 3 points to the strong investor demand and continued cap rate compression since the summer. However, even with this decline in yield, Raleigh cap rates remain higher than primary East Coast markets. Liquidity held steady at 7 with upside potential in the coming year.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













* Estimate ** Forecast [•] Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

2020 Vacancy Reaches New Low Amid Widespread Demand for Rentals

Healthy job creation and an expanding residential base maintain tight conditions. Ranking as Southern California's top metro for employment growth last year, Riverside-San Bernardino is on solid footing entering 2020. Robust demand for industrial space and unwavering population gains will fuel strong hiring velocity for distribution and logistics employers as well as healthcare services this year. Many of these new positions will be filled by individuals that relocate to the metro as organizations are forced to recruit from outside the region with greater frequency amid historically low unemployment. A steady inflow of new residents heightens demand for rentals of various quality at a time of cycle-low vacancy. Those seeking newly built Class A apartments will find limited options in San Bernardino County, where deliveries are lacking outside of Redlands. They will find 1,100 new units concentrated in the city of Riverside and neighboring Moreno Valley. These apartment completions in areas with high rental demand will allow vacancy to decline moderately in 2020, holding unit availability below 4 percent for a fourth consecutive year.

Rent control measures could shift disposition pipeline toward newer properties. Riverside's region-leading rent and employment growth compared with the coastal Southern California metros has drawn significant investor attention for acquisition. In addition, cap rates can average up to 50 basis points above similar product along the coast, which has also increased investor demand for assets throughout the metro. However, aggressive underwriting of rent growth based on the strong market fundamentals in some cases must be moderated given the recently passed rent control law that limited increases to 5 percent plus CPI. The new law will most likely impact pro formas for Class B/C assets the most as over the past four years, these properties have been witnessing the largest rent growth due to their extremely tight vacancy rates. The overall impact to valuations for new Class A assets should be minimum given that the rent cap does not apply to properties less than 15 years old. Thus we could see a shift in the composition of the disposition pool with more newly developed properties coming to market in order to take advantage of the average cap rates at a cycle low and no limits on rental increase for a number of years. Value-add opportunities, on the other hand, could see transaction activity diminish as the full impact of the rent control on valuations of older properties will take time to calculate.

21.6%	8	2019 share of local population between 20 and 34 years old
20.4%		of local population hold bachelor's degree or higher*
\$383,838		2019 median home price

With the demand index holding a solid 9, Riverside-San Bernardino has the highest indexed demand of the four Southern California markets and the underlying drivers to stay there throughout the coming year. Rent growth declined from 7 to 5 but remains in line with its neighbors.

Liquidity rose one point in the past two quarters and at 7 also tops Riverside's neighboring markets as the highest. Vigorous investor demand combined with expanding pro forma rents pushed yield down 1 point but the metro remains highly attractive for acquisitions.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast











San Antonio Apartment Performance Gains Momentum as Wave of Supply Abates

Workforce fueling strong lease-up performance. Six consecutive years of at least 5,000 units delivered annually ended in 2019, and this abatement will continue in 2020. As the metro is no longer facing profound supply headwinds, lease-ups will overshadow deliveries and contract vacancy into the mid-5 percent range after hovering near the high-6 percent area for the majority of this decade. Demand is buoyed by consistent employment growth, primarily within working-class fields. Wholesale and retail trade jobs are being created at a faster rate than the national average, as corporations establish strategic logistical facilities inland from Gulf of Mexico ports and within the NAFTA corridor. Additionally, the inflow of retirees is boosting the need for leisure and healthcare workers. The working-class population segment will remain a tailwind for budget-friendly rentals, holding vacancies in the mid-5 percent range for Class B/C properties, helping maintain the positive growth trajectory of rental costs.

Texas economic growth plus higher yields drawing national attention.

With higher yields than other major Texas markets and excellent economic growth driving strong apartment absorption, San Antonio has attracted attention from national investors, which will supplement regional capital inflows for acquisitions. The increased number of investors actively searching for purchases should help maintain the transaction activity level seen in 2019 for the coming year. San Antonio offers investors two highly in-demand product types: newly developed properties and value-add opportunities. The twist for newer properties in San Antonio, however, is that most of them are garden properties at higher cap rates and lower per unit pricing, allowing investors seeking higher yields downside protection from rising capital expenditure outlays. Value-add buyers will remain strongly engaged in the Northwest submarket but opportunities have become harder to find. This could create a shift into the Northeastern area of the metro, which has a large inventory of older assets with upside renovation potential. Given the elevated attention level from national buyers combined with a 2020 rent forecast above the national average, expect competitive pricing across the board for disposition assets.



* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.



One-point increases in demand and rent growth highlight San Antonio's solid Key Performance Index results over the last six months. Moderating completions combined with the demand index residing at 7 allowed continued strong results from the rent growth index, which rose to 9.

Liquidity held steady at 8 as transaction volume for \$20 million-plus properties remains near the cycle high as capital continues seeking acquisitions throughout the metro. The high demand for assets pushed down yield by a point to 3 but that remains an attractive entry point for capital inflow.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast











Apartment Performance Supporting Rents; Limited Listings Sideline Capital Inflows

Rental demand paces elevated construction. San Diego County represented a model of consistency over the past five years as rental demand matched supply growth, preserving tight conditions. The metro's diversified economy, highlighted by a blend of tech firms, research institutes and defense contractors, and a sizable millennial population contributed to the steady absorption of units. Appreciating home prices also played a role, as the gap between the metro average apartment rent and median home payment further boosts rental demand. These drivers will remain in place during 2020, warranting the delivery of more than 4,000 rental units. Approximately 70 percent of these will be built in the city of San Diego, largely spread between downtown and Del Mar Heights. Supply will also be concentrated along the Highway 78 corridor and Chula Vista. While construction activity remains elevated for a sixth consecutive year, rapid household formation has buoyed rental demand. These factors will deliver a balanced market, preventing a notable shift in vacancy from occurring.

Lack of disposition assets keeping capital on the sidelines. The lack of properties listed for disposition remains the biggest challenge for investors wishing to capitalize on the positive market dynamics of the San Diego metro. Investors see rent growth consistently outpacing the national average combined absorption more than meeting any supply addition as strong reasons for capital placements in the market. Yet, investors struggle to find purchase opportunities above \$20 million as listings have dwindled, especially for newly developed projects in the city of San Diego. Institutional capital focused on core strategies highly covet these new properties in urban locations and the lack of such product sidelines significant capital inflows to the metro. Unless developers change course soon and list recently completed projects, the transaction market in the coming year will be dominated by private capital buyers. Private buyers will stay focused on value-add opportunities or existing suburban garden assets in eastern or northern submarkets such as El Cajon or Oceanside as closer-in submarkets have mostly been depleted of properties with upside renovation potential.

23.8%

36.7%

2019 share of local population

of local population hold bachelor's

between 20 and 34 years old

degree or higher*

2019 median home price



* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

With all three fundamental indexes holding steady over the past six months, San Diego's Key Performance Index points to solid results for the coming year. Supply additions have leveled off, which helped keep supply at 3 and should maintain rent growth above the national average.

Limited properties available for sale contuse to mute the transaction market and holds the liquidity index at just 5. The lack of disposition assets has kept pricing highly competitive in the market and helped pushed down yield by two points. It now matches the other primary coastal California markets.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast











Household Income Growth Powering Class A Segment

Builders stay active, keeping pace of development far above last cycle's level. Apartment construction in San Francisco will remain historically elevated in 2020 as 3,600 units are set for delivery, with developers focusing heavily on the Mission District and SoMa neighborhoods. This cycle's annual average completions are nearly 4,000 units, more than double that of the previous cycle as builders capitalize on the area's growing renter pool and exceptional economic growth. San Francisco will lead the nation in household income growth this year, rising 5.4 percent to \$132,300, fueled by the unwavering creation of high-wage jobs. Residents taking these jobs will continue to help fill the influx of new luxury apartments, where the average effective rent hovers around \$4,000 per month. Over the past five years, Class A assets have led the market in rent growth, climbing 21 percent, while the Class B and C segments posted 14 percent and 18 percent gains, respectively.

Rent-control measures could create valuation upside for new assets.

The rise in transaction activity witnessed in the second half of 2019 has a good chance of continuing during the coming year due to an exemption in the recently passed statewide rent-control legislation. Properties 15 years or newer are not included in the rent cap of 5 percent plus CPI. Empirical economic research has found that in rent control markets, properties not covered by the rent controls see their rents rise faster than if there was no rent control implemented. Therefore, newly built Class A assets have the potential to see rent increases at higher levels than had been previously forecasted, raising the potential valuations for those owners. In addition, given that the clock is ticking on how long these properties could see inflated rent growth before coming under the controls, the sooner they sell, the higher the potential proceeds and returns could be. In addition, institutional capital and REITs have already signaled their willingness to make Class A purchases after the rent-control measures were passed. Thus, if developers of newly built assets decided to sell, there appears to be a deep pool of buyers readily available to purchase.



* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

An improving rent growth index, up one point in the second half of 2019, underscores the potential for rents further expanding and sturdy fundamentals underpinning the San Francisco multifamily market this year. Especially helpful will also be moderating supply, which held that index at 4.

Liquidity held steady at 7 emphasizing the long-term holding nature of most owners, which acts as a governor on the transaction market but doesn't hold back the robust investor interest to deploy capital into the market. The yield index strongly reflects the high investor demand for assets and competitive pricing that ensues for disposition assets.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



NMI Rank 17 **Employment** Metro 2.5% 30,000 jobs U.S. 1.0% Construction Metro 1.6% as % of inventory* U.S. 1.7% **Class A Vacancy** Metro 6.5% Up 10 bps U.S. 5.3% **Class A Rent** Metro 2.8% \$4,208 per month U.S. 3.3% Investment 3-yr. avg. activity Deals: 17 Volume: **\$1.2 billion** \$20+ million





* Estimate ** Forecast * Arrow reflects completions trend compared with 2019 Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

2020 Market Forecast







^{*} Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Transit Networks Increasingly Key for Development and Investment Strategies

Mountain View captivating builders, driving development to record high. Apartment construction will be abundant this year as 5,500 units are slated for delivery — the highest total this millennium. Northern sections of Sunnyvale will get much-needed supply amid sub-3 percent vacancy, while downtown San Jose will also witness significant development as builders focus on areas that align with public transit routes. Mountain View will post the strongest supply growth, adding more than 1,500 units, as developers seek to keep pace with the steady job creation of nearby tech firms. The influx of supply will outstrip the expected absorption of 3,700 apartments, putting short-term pressure on marketwide vacancy as it's pushed to the low-4 percent range. Some areas such as East San Jose will retain limited apartment availability, keeping local rent growth among the strongest in the market. Over the past five years, the average effective rent in East San Jose has risen 29 percent, the most of any submarket within the metro.

Rent-control caps causing investors to adjust underwriting. Over the past few years, as its neighbor to the north saw a huge imbalance between investment demand and properties trading hands, San Jose enjoyed a more reasonable balance between investor capital and the supply of properties for purchase. However, in the second half of 2019 the San Jose market registered a deceleration in sales activity that could carry over into the new year. The recent passage of statewide rent control regulations has caused confusion and uncertainty regarding current valuations. A potential silver lining, however, exists in the new rent law exempting properties less than 15 years old. Developers with recently or soon-to-be completed projects could leverage this loophole by pointing out that rental increase restrictions would not kick in for years and list their properties for disposition. This would then take advantage of the strong demand for core assets by institutional capital or REITs. Meanwhile, private capital's search for higher-yielding value-add opportunities will require creativity and patience in the coming year as the rental rate caps could hamper the ability to fully raise rents to cover the renovation costs of updated properties. Value-add owners may need to scale back the scope and depth of rehab plans in order to make sure that the capped rental increases will be able to hit their underwritten returns.



Decreases in the demand and rent growth indexes during the second half of 2019 dented the fundamentals of the Key Performance Index but the downside impacts could be short lived as San Jose's new housing additions will likely not meet ultimate demand. The supply index held firm and might also aid in the rent growth index rebounding quickly.

No expansion in capital inflows in the past six months kept liquidity capped at 5 in the transaction section as the number of listed assets has not grown. However, for those deals that do come to market, pricing remains aggressive, which pushed down yield down back to 1.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Tech Firm Influx Bolsters Employment Growth, Fueling Demand Across Seattle

No slowdown in sight for Puget Sound region as tech firms compete for talent. Seattle stands out as one of the nation's most robust economies moving into the next decade, maintaining a healthy employment outlook that continues to drive rental demand. The metro created approximately 65,000 jobs last year, the strongest annual increase in more than two decades as firms competed for top-tier talent. Deep tech roots motivate a long list of tech titans to grow their workforce in Seattle's South Lake Union neighborhood and on the Eastside as the local infrastructure is strained and commutes into the city remain a challenge. Sound Transit's Link light-rail expansion will connect the Eastside to downtown Seattle and other parts of the metro in 2023, bringing some relief to the region. Developers have moved forward with major apartment projects near future stations across the metro, contributing to a large pipeline that at the end of 2019 had more than 18,000 units underway. Much of the new supply targets higher-income renters in the urban core, driving more middle-income renters to areas of Everett, Kent and Federal Way, where rent gains are outpacing the market average.

Transaction market hitting on all cylinders. Seattle remains firmly in the top tier of investors' list of target acquisition markets for the coming year. The market will maintain a deep and diverse investor profile, especially with institutional, cross-border and REITs highly focused on purchasing newly developed mid- and high-rise properties in or near downtown. In addition, Amazon's recent expansion plans for Bellevue should raise these similar investors' attention level to the Eastside. These neighborhoods contain the highly prized professional and tech employed renter profile living in walkable locations that leverage the live-work-play setting institutional buyers strongly desire. The sustained demand for assets has kept competition for assets strong and average cap rates for properties selling above \$20 million sitting near cycle lows. The current valuations have owners' and developers' attention, which has created a robust disposition pool to satisfy the elevated demand for acquisitions. The search for higher yields, however, will push private capital sources into the farther north and south submarkets seeking either value-add opportunities or properties near major employers in Everett or Tacoma. Overall, the transaction market enters the new year with significant positive momentum carrying over that should be preserved due to the healthy underlying market fundamentals.



Rising supply and demand indexes over the last six months of 2019 appear to place Seattle in position to continue producing solid operational results going into 2020. Rent growth remained at 4 while supply moved up one notch to 3. Demand rose to 7 and remains strong enough to support the overall fundamentals.

The expanding pool of buyers in the market appears well covered as liquidity edged up one point and now resides at 7. The increased investor pool, however, has also pushed down the yield index from 3 to 2 as a competitive bidding marketplace.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













^{*} Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Demand Soars as Construction Thins; Institutional Investor Activity Rising

Corporate headquarter prominence, a strong financial sector and an expanding tech center produce solid job gains. Employment opportunities are contributing to the population expanding at a rate double that of the U.S. and the added residents will create almost 22,000 households, generating a need for additional housing. To meet the increased demand, deliveries rose above the five-year average last year, yet vacancy continued to tighten. This year, the construction pipeline thins, further lowering vacancy and driving rents higher. After investors concentrated in the urban core during recent years, rising construction and land costs, as well as the need for cost-conscience rental options, drew them farther from the central cities. During 2020, the western portion of Pasco County will receive its largest inventory supply since 2002 with more than 660 units scheduled for delivery. Throughout the market, rising rents are generating robust demand for lowercost housing. Vacancy in Class C units has sat below 3 percent for more than a year, producing sizable rent growth.

Attractive yields and property performance keeping acquisition capital

flowing. After hitting a cycle high of \$20 million-plus multifamily transaction volume last year, investor demand will remain elevated as forecasts predict strong rent growth combined with solid absorption continuing into 2020. The excellent performance metrics and demand drivers show no indications of slowing, which will keep pro forma rents rising and pricing highly competitive. Valuations have been slowly rising as the average cap rate has compressed over the past two years, which should continue encouraging existing owners to selectively dispose of non-long-term hold properties in their portfolios to capitalize on current pricing. This, in turn, has also aided significantly in satisfying the high demand for properties in the metro by a deep pool of potential buyers. The depth of the buyer pool also reflects positively on the outlook as institutional and cross-border capital have been expanding their purchases and should remain highly active. Furthermore, despite the recent cap rate compression, Tampa remains the highest-yielding major metro in Florida, which keeps potential investors engaged for all possible opportunities, from value-add properties to newly completed midrise or garden-style developments.



Tampa-St. Petersburg's fundamentals in the Key Performance Index represent one of the most balanced indexes nationally after seeing a rise in supply of two points and rent growth holding steady at 7. Demand's solid 8 index did not move since midyear and could drive rent growth higher in the new year.

Sustained investor demand kept liquidity holding at 7. Capital inflows seek to take advantage of the strong fundamentals and elevated return conditions even with the yield index declining from 4 to 3.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast













* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Multifamily Development Nudges Higher As Vacancy Reaches Cycle Low

Elevated renter demand in Navy Yard filling newly delivered apartments.

After two years of declines, Washington, D.C.'s development pipeline will expand in 2020. The focal point of construction is in the Navy Yard and along the Capital South Waterfront, where more than 4,000 apartments will be completed by year end. New entertainment options, including the opening of Audi Field in 2018, have bolstered renter demand in the area. Deliveries will also rise in multiple Arlington submarkets, encouraged by the establishment in National Landing of Amazon's second headquarters. Housing needs are expected to increase in surrounding areas moving forward, as hiring at the e-commerce giant's new offices ramps up this year. The number of upcoming arrivals, particularly in the Navy Yard, will weigh on local vacancy in the short term, but fewer apartment additions in other parts of the market, such as Central D.C. and Downtown Silver Spring, will support an overall drop in availability in 2020. Tighter vacancy is in turn sustaining rent growth, particularly among Class B units.

Investors looking for economic downside protection consider

Washington, D.C. The depth and diversity of the Washington, D.C., inventory will drive the investment sales market and keep it one of the most liquid in the nation. Numerous investment strategies can be executed throughout the region, which also maintains a balanced buyer pool. Private and institutional capital are leading in terms of dollar volume but cross-border investors and REITs are keeping active investments. While the Amazon HQ2 announcement at the end of 2018 put significant focus on Northern Virginia for transaction activity, investors still view the entire region in a positive light for acquisitions. The addition of Amazon to the list of positive multifamily demand drivers will add a little more upward momentum to growth forecasts but as talk of an economic slowdown has heated up lately, Washington, D.C., can also offer multifamily investors the potential for one of the most recession-proof markets in the nation. During the Great Recession, Washington, D.C.'s apartment market maintained full-year positive rent growth. This possible downside risk protection during a recession is just another of the many reasons investors will support strong acquisition activity throughout the marketplace in the coming year.



Demand's upward movement from 7 to 9 represents a significant acceleration in the outlook for the Washington, D.C., market. Supply additions have been holding back rent growth as demand matched but did not exceed new deliveries.

Investors' positive outlook has maintained transaction activity measured by the liquidity index at 6 over the past six months. This positive outlook has also translated into the yield index dropping two points as cap rates compressed slightly in the second half of last year.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2020 Market Forecast











Supply and Demand - Completions Absorption 4 (spuspoy) 2 1 0 16 17 18 19* 20**

* Estimate ** Forecast * Through 3Q

* 2019: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.

Wave of New Residents Relocate to Palm Beach County, Lifting Rental Demand

Revitalized corridors and steady hiring support rental demand. Florida's favorable tax structure and a warm climate make Palm Beach County a haven for retirees, leading to some of the strongest in-migration trends in the nation this year as slightly over 30,000 will move to the county. On top of robust growth of the 65 and older cohort, the market has become increasingly attractive to young professionals as West Palm Beach continues to draw more major companies and tech firms. The 20- to 34-year-old cohort, a substantial driver to the apartment sector, is anticipated to grow at a greater rate here than the rest of South Florida as revitalized areas of the market, modern rentals and job opportunities beckon new residents. In response to healthy demographics and stable rental demand, developers remain active in the market as they were underway on nearly 4,000 units at the onset of 2020. Boynton Beach and Delray Beach are prime targets of new development for their rapidly transforming downtown districts along with recording balanced supply gains this cycle.

Solid fundamentals driving increased investors interest. Institutional capital purchases in West Palm Beach appear poised to remain a driving force for the coming year as solid rent and demand growth drive robust underwriting forecasts. The previous two years witnessed a notable rise in institutional purchases with both newly developed and well-located garden properties heavily targeted in southern submarkets such as Boca Raton and Boynton Beach. With easy access to employment centers, these sites offer long-term capital sources the potential for growing value. In addition, approximately half of the current development pipeline will deliver in the southern submarkets, offering quality assets in higher-density locations. This could offer further acquisition opportunities for the institutional buyer profile. Private buyers focused on value-add properties are finding fewer and fewer possibilities in the southern section of the market and may want to shift attention to northern submarkets, which have largely been ignored in this cycle. However, no matter the product pursued, competitive pricing will persist given the higher focus for institutional investors the market has recently attracted.



Declines in the supply and demand indexes over the past six months took some of the strength out of West Palm Beach's fundamentals as rent growth got dragged down. Supply saw the larger drop, going from 6 to 4, while demand and rent growth both moved down one point.

Investor attention, however, remains strongly focused on the higher yield index seen in the northern most South Florida metro. Even with a onepoint decline since mid-year 2019, the current 4 rating remains higher than the market's southern neighbors, keeping liquidity stable.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.













Growing Tech Sector Attracts Renters, Investors To Edmonton's Apartments

Rise in deliveries, slowdown in demand nudge vacancy higher. A favorable tax structure, an educated workforce, as well as more affordable living and business costs compared with other major Canadian cities make Edmonton an attractive destination for startups. As a result of these factors the GEA is diversifying from the dominant petrochemical and government sectors into a burgeoning research and tech hub. Already more than 400 tech firms are located in Edmonton, most notably Google DeepMind. Additional employment opportunities in the research and tech sector will help boost the need for apartments near the city core where a live-work-play lifestyle desired by many young professionals is offered. The delivery of 1,600 purpose-built rentals throughout the GEA in 2020 will outpace demand moving vacancy up by year end, tempering rent growth.



2020 Market Forecast

Rent Growth up 1.3%

Investment

After a 2.2 percent gain last year, the average rent advances to \$1,195 per month in 2020, while vacancy rises 50 basis points to 5.2 percent.

Lower entry costs and the potential for higher returns will keep investors interested in Edmonton apartments. The average cap rate in the low-4 percent range is up to 100 basis points higher than larger Canadian markets.

Greater Montreal Area



Sales Trends C\$150 C\$125 C\$75 C\$50 16 17 18 19*

Heightened Development Presses on Decade-Low Vacancy; Buyers Eye Assets in Trendy Neighborhoods

Immigrants and a blossoming technology sector hold vacancy tight, facilitating a full

construction pipeline. Vacancy eased 20 basis points to 1.7 percent in 2019, reaching the lowest level in 15 years. Tight conditions are aided by incoming immigrants, specifically well-educated technology personnel. Encouraging immigration has been a catalyst for the strengthening economy anchored in the aerospace, artificial intelligence and life sciences sectors. A 15-year-low vacancy rate has enticed builders to significantly ramp up apartment development. In 2020 roughly 13,000 rentals will be finalized, more than doubling the annual average posted over the trailing 10 years. This uptick in deliveries will put upward pressure on vacancy, though it will remain extremely tight at 2.0 percent, as positive demographics will be a tailwind in absorbing the large incoming supply.

2020 Market Forecast

Rent Growth up 3.4%

Investment

The average rent will increase to \$855 per month in 2020, following a 3.8 percent gain in the previous year.

Priced well below Toronto, Class C assets are obtainable to a wide variety of investors. Buyers pay higher entry costs for apartments in Ville-Marie and Le Plateau-Mont-Royal, which have been top choices for millennials seeking stylish locales.

* Estimate; ** Forecast;

Sources: Altus Data Solutions; Statistics Canada

Marcus & Millichap Real Estate Investment Services Canada Inc., Brokerage

- Y-O-Y % Change

Young Population Prefers Rentals Over Homeownership For Affordability and Access to Urban Amenities

Expanding labour market fosters population gain and elevates tenant demand; apartment

development in the core builds up. Toronto's global economic presence continues to attract skilled labor internationally, encouraging corporations to expand or establish a presence in the Greater Toronto Area. Similar to the past four years, in 2020 approximately 100,000 people are expected to enter the market, filling the expanding opportunities. Many young professionals in particular desire to be nearby live-work-play neighborhoods, thus driving apartment demand near employment and entertainment hubs. With the cost of a house now exceeding \$900,000 on average, builders are actively developing apartments to meet the demand. Several 300-plus unit high-rise complexes will be finalized in 2020, including two Yorkville projects bringing a combined 1,500 units.

3,800 Vonfarm Jobs (thousands) 3,400 3.000 2,600 2,200 11 12 13 16 17 10 14 15 18 19* 20

Employment Trends

Total Employment



2020 Market Forecast



Building on the 5.1 percent gain logged in 2019, the average rent will move up to \$1,510 per month this year. Tight vacancy, robust demand and luxury deliveries will facilitate the increase.

Investment

Institutional buyers target affluent neighborhoods in Old Toronto, Scarborough, and Mississauga. Those priced out seek obtainable assets in suburbs along Lake Ontario such as Oshawa.

Greater Vancouver Area

Global Workforce Moves In, Generating Need for Cost-Effective Housing Southeast of Downtown

International tech firms ramp up expansion plans. In the Greater Vancouver Area, Amazon, Microsoft and other firms are working to accelerate hiring and retention efforts. Drawn by streamlined immigration policies, access to talent and comparatively low operating costs, Amazon will bring over 2,000 workers to the metro. Strong hiring and population growth will keep vacancy tight and place upward pressure on rent. This will continue to push renter demand to more affordable locations throughout the metro, but most notably in Burnaby. Older transit-oriented sites in the GVA are being targeted by developers to be converted into multifamily communities. This live-work-play trend has seen a rise in demand among renters due to strategic location, modern amenities, and accessibility to a variety of local office and retail venues.



Employment Trends



^{*} Estimate; ** Forecast; Sources: Altus Data Solutions; Statistics Canada

Marcus & Millichap Real Estate Investment Services Canada Inc., Brokerage

2020 Market Forecast

1

•

Rent Growth up 5.9% The average effective rent will grow similarly to the past five-year average rate of growth, rising to \$1,567 per month. This is building on a 6.2 percent rent increase in 2019.

Investment

The metro's competitive bidding environment elevates already high prices, guiding investors with a smaller pool of capital to suburban locations toward New Westminster, Burnaby, and Surrey.

Institutional Property Advisors (IPA) - Multifamily

Jeffery Daniels

Senior Vice President Director, IPA Multifamily (212) 430-6127 jdaniels@ipausa.com

National Research Team

John Chang | Senior Vice President, National Director Peter Tindall | Vice President, Director of Data & Analytics James Reeves | Publications Director Connor Devereux | Research Engagement Manager Kevin Carreon | Research Associate Luis Flores | Research Associate Benjamin Kunde | Research Associate Michael Murphy | Research Analyst Chris Ngo | Data Analyst Brandon Niesen | Research Analyst Adam Norbury | Data Analyst Nancy Olmsted | Senior Market Analyst ${\bf Cameron \ Poe} \ | \ Research \ Associate$ Spencer Ryan | Senior Data Analyst Lonna Sedam | Research Associate Cody Young | Research Analyst Maria Erofeeva | Graphic Designer Marette Flora | Senior Copy Editor Jacinta Tolinos | Research Administrator

Hessam Nadji

President and CEO Marcus & Millichap Real Estate Investment Services (818) 212-2250 hnadji@ipausa.com

Contacts:

John Chang Senior Vice President, Director Research Services 4545 E. Shea Blvd., Suite 201 Phoenix, AZ 85028 (602) 707-9700 | jchang@ipausa.com

Jay Lybik

Vice President, IPA Research Services 2398 E. Camelback Road., Suite 300 Phoenix, AZ 85016 (602) 687-6684 | jlybik@ipausa.com

Media Contact:

Gina Relva Public Relations Director 555 12th Street, Suite 1750 Oakland, CA 94607 (925) 953-1716 | gina.relva@marcusmillichap.com

Capital Markets Contact:

Richard Katzenstein Senior Vice President, Director IPA Capital Markets (212) 430-5100 rkatzenstein@ipausa.com

'National Multifamily Index Note: Employment and apartment data forecasts for 2020 are based on the most up-to-date information available as of December 2019 and are subject to change.

² Statistical Summary Note: Metro-level employment, vacancy and effective rents are year-end figures and are based on the most up-to-date information available as of December2019. Effective rent is equal to asking rent less concessions. Average prices and cap rates are a function of the age, class and geographic area of the properties trading and therefore may not be representative of the market as a whole. Forecasts for employment and apartment data are made during November 2019 and represent estimates of future performance. No representation, warranty or guarantee, express or implied may be made as to the accuracy or reliability of the information contained herein. This is not intended to be a forecast of future events and this is not a guaranty regarding a future event. This is not intended to provide specific investment advice and should not be considered as investment advice.

Sources: Marcus & Millichap Research Services; American Council of Life Insurers; Blue Chip Economic Indicators; Bureau of Economic Analysis; Commercial Mortgage Alert; CoStar Group, Inc.; Experian; Fannie Mae; Federal Reserve; Freddie Mac; Moody's Analytics; Mortgage Bankers Association; National Association of Realtors; Real Capital Analytics; RealFacts; RealPage, Inc; Standard & Poor's; The Conference Board; Trepp; TWR/Dodge Pipeline; U.S. Bureau of Labor Statistics; U.S. Census Bureau; U.S. Securities and Exchange Commission; U.S. Treasury Department.

© Marcus & Millichap 2020

2020 U.S. Multifamily Investment Forecast

Market Name	Em	ploym	ent Gro	wth ²	Completions (Units) ²			Class A Vacancy Rate ²				Class A Effective Monthly Rate ²				\$15M+ Average Price/Unit ²			Market Name	
	2017	2018	2019*	2020**	2017	2018	2019*	2020**	2017	2018	2019*	2020**	2017	2018	2019*	2020**	2017	2018	2019*	
Atlanta	2.1%	2.1%	1.8%	1.7%	13,200	7,600	9,500	9,800	6.4%	5.6%	5.5%	5.6%	\$1,530	\$1,613	\$1,700	\$1,780	\$129,000	\$147,800	\$141,960	Atlanta
Austin	3.3%	2.5%	2.0%	2.3%	8,700	8,800	6,300	9,200	6.2%	5.2%	5.1%	6.0%	\$1,734	\$1,847	\$1,921	\$2,028	\$139,780	\$135,700	\$177,940	Austin
Baltimore	0.8%	1.4%	1.1%	0.6%	4,200	2,600	2,000	2,200	6.0%	5.4%	4.4%	5.0%	\$1,724	\$1,760	\$1,832	\$1,922	\$159,670	\$145,580	\$173,830	Baltimore
Boston	1.2%	0.5%	1.1%	0.7%	8,900	6,000	6,500	9,700	4.5%	4.7%	4.0%	4.4%	\$3,081	\$3,217	\$3,384	\$3,557	\$353,830	\$217,850	\$298,890	Boston
Chicago	0.8%	1.4%	0.7%	0.6%	8,700	9,100	9,100	7,400	7.1%	6.0%	5.6%	6.0%	\$2,117	\$2,222	\$2,361	\$2,462	\$197,000	\$199,880	\$214,800	Chicago
Cincinnati	1.4%	1.7%	2.0%	0.9%	1,500	1,600	800	1,700	6.4%	5.1%	6.2%	6.0%	\$1,350	\$1,426	\$1,497	\$1,568	\$104,450	\$86,750	\$101,650	Cincinnati
Cleveland	0.4%	1.0%	0.8%	0.6%	1,200	1,600	700	1,100	5.6%	5.3%	4.8%	5.0%	\$1,257	\$1,237	\$1,301	\$1,369	\$169,570	\$83,790	\$92,880	Cleveland
Columbus	1.3%	1.6%	1.0%	0.9%	3,400	4,000	2,800	3,100	4.1%	4.6%	5.2%	5.0%	\$1,210	\$1,256	\$1,315	\$1,361	\$91,160	\$90,600	\$93,820	Columbus
Dallas/Fort Worth	2.3%	2.6%	2.9%	2.2%	23,900	23,700	24,800	21,400	6.3%	6.1%	5.8%	6.0%	\$1,365	\$1,413	\$1,486	\$1,533	\$120,800	\$114,760	\$128,140	Dallas/Fort Worth
Denver	2.6%	1.9%	1.7%	1.3%	8,100	9,300	9,700	8,800	6.6%	5.7%	5.2%	5.3%	\$1,718	\$1,809	\$1,903	\$1,976	\$237,910	\$222,830	\$242,280	Denver
Fort Lauderdale	1.7%	2.1%	1.6%	1.6%	3,200	3,200	2,800	3,500	6.2%	6.2%	6.4%	6.3%	\$1,893	\$2,013	\$2,086	\$2,157	\$205,600	\$192,230	\$207,310	Fort Lauderdale
Houston	1.7%	2.3%	2.6%	2.0%	16,200	7,400	6,500	11,800	5.2%	6.9%	6.0%	6.4%	\$1,506	\$1,536	\$1,586	\$1,624	\$111,960	\$111,540	\$103,310	Houston
Los Angeles	1.6%	0.9%	1.1%	0.9%	5,800	7,400	8,900	14,100	4.7%	4.1%	4.0%	4.7%	\$2,866	\$2,936	\$2,999	\$3,059	\$398,060	\$329,490	\$380,930	Los Angeles
Miami-Dade	1.5%	1.8%	2.5%	1.8%	4,800	5,000	6,000	6,200	5.4%	5.9%	6.2%	5.8%	\$2,038	\$2,142	\$2,206	\$2,258	\$183,040	\$204,020	\$259,020	Miami-Dade
Minneapolis-St. Paul	1.4%	0.6%	0.0%	0.6%	5,300	3,700	4,300	6,300	5.0%	5.3%	4.1%	4.4%	\$1,646	\$1,695	\$1,771	\$1,847	\$191,580	\$165,200	\$196,710	Minneapolis-St. Paul
New York City	2.1%	1.9%	1.6%	1.4%	24,700	20,800	18,900	15,200	5.3%	3.7%	2.6%	2.6%	\$4,100	\$4,223	\$4,363	\$4,481	\$491,250	\$359,230	\$494,320	New York City
Northern New Jersey	1.2%	0.8%	0.6%	0.6%	9,400	7,800	8,100	8,300	8.2%	7.7%	6.2%	5.8%	\$2,742	\$2,811	\$2,896	\$2,984	\$267,850	\$199,020	\$294,360	Northern New Jersey
Oakland/East Bay	2.0%	1.4%	1.6%	1.1%	1,900	1,400	3,700	4,600	4.9%	4.4%	5.2%	5.5%	\$2,894	\$2,982	\$3,098	\$3,162	\$324,600	\$316,920	\$403,550	Oakland/East Bay
Orange County	2.0%	1.2%	1.1%	0.8%	4,200	2,400	2,900	2,300	4.4%	4.4%	4.2%	4.4%	\$2,277	\$2,344	\$2,418	\$2,484	\$269,750	\$356,330	\$347,120	Orange County
Orlando	3.5%	3.4%	3.7%	2.9%	8,000	6,400	6,300	7,100	4.4%	4.8%	4.5%	4.5%	\$1,442	\$1,483	\$1,556	\$1,631	\$145,130	\$160,710	\$186,390	Orlando
Phoenix	3.3%	3.3%	2.5%	1.8%	6,800	8,000	7,800	9,000	5.9%	5.0%	4.7%	5.3%	\$1,205	\$1,341	\$1,482	\$1,616	\$136,230	\$147,290	\$171,340	Phoenix
Portland	2.9%	1.7%	1.7%	1.2%	5,500	4,100	3,700	5,600	7.2%	6.8%	6.1%	5.9%	\$1,631	\$1,676	\$1,731	\$1,783	\$241,570	\$226,190	\$258,090	Portland
Raleigh	2.3%	1.1%	2.4%	1.9%	5,200	5,200	5,500	5,500	6.3%	5.4%	5.3%	5.2%	\$1,368	\$1,426	\$1,494	\$1,596	\$146,280	\$144,620	\$155,670	Raleigh
Riverside-San Bernardino	4.1%	2.3%	2.4%	2.2%	1,000	1,300	2,600	2,100	4.4%	4.3%	4.6%	4.6%	\$1,685	\$1,751	\$1,825	\$1,894	\$166,700	\$201,340	\$230,820	Riverside-San Bernardino
San Antonio	1.6%	1.7%	2.4%	1.6%	7,000	5,000	3,400	3,700	7.0%	6.2%	5.9%	6.0%	\$1,156	\$1,212	\$1,278	\$1,350	\$116,950	\$118,050	\$111,190	San Antonio
San Diego	2.0%	1.9%	1.8%	1.1%	2,700	3,100	4,000	4,200	4.8%	4.4%	4.5%	4.7%	\$2,252	\$2,383	\$2,474	\$2,532	\$279,030	\$286,000	\$328,680	San Diego
San Francisco	2.2%	3.7%	3.4%	2.5%	5,100	3,800	4,300	3,600	8.7%	4.4%	6.4%	6.5%	\$3,725	\$3,955	\$4,094	\$4,208	\$513,400	\$488,720	\$602,360	San Francisco
San Jose	2.3%	1.6%	2.6%	1.7%	2,900	1,400	2,700	5,500	5.5%	5.5%	5.4%	6.2%	\$3,254	\$3,414	\$3,571	\$3,670	\$460,140	\$494,330	\$453,430	San Jose
Seattle-Tacoma	2.3%	2.6%	3.1%	2.3%	10,000	8,600	10,000	10,300	5.9%	5.3%	4.3%	5.0%	\$2,044	\$2,089	\$2,136	\$2,181	\$265,410	\$247,830	\$296,830	Seattle-Tacoma
Tampa-St. Petersburg	1.6%	2.4%	1.8%	1.7%	4,200	5,500	5,600	3,100	5.6%	5.3%	5.7%	5.5%	\$1,448	\$1,595	\$1,668	\$1,752	\$126,830	\$129,820	\$160,250	Tampa-St. Petersburg
Washington, D.C.	0.9%	1.0%	1.1%	1.0%	13,100	10,700	9,900	11,600	5.3%	4.6%	4.4%	4.2%	\$2,296	\$2,385	\$2,463	\$2,527	\$232,450	\$217,010	\$243,830	Washington, D.C.
West Palm Beach	1.5%	2.4%	2.3%	1.6%	3,200	2,000	1,200	1,900	5.6%	5.4%	5.7%	6.0%	\$1,887	\$2,007	\$2,113	\$2,177	\$254,950	\$191,970	\$196,730	West Palm Beach
United States	1.5%	1.8%	1.3%	1.0%	311,300	267,900	280,000	300,000	5.5%	5.1%	4.8%	5.3%	\$1,704	\$1,781	\$1,856	\$1,917	\$179,980	\$171,530	\$190,390	United States

2020 U.S. Multifamily Investment Forecast

* Estimate ** Forecast ² See Statistical Summary Note on Page 78.

CONNECTING THE RIGHT INVESTORS WITH THE RIGHT OPPORTUNITIES

IPA embraces a new world of commercial real estate with institutional connectivity and a versatile platform. We are constantly evolving our process, exceeding expectations, and delivering results.

RESEARCH SERVICES

4545 E. Shea Boulevard, Suite 201 Phoenix, AZ 85028 602.707.9700

Offices Throughout the U.S. and Canada

INSTITUTIONAL PROPERTY ADVISORS

IPA

INSTITUTIONAL PROPERTYADVISORS.COM

The information contained in this report was obtained from sources deemed to be reliable. Diligent efforts were made to obtain accurate and complete information; however, no representation, warranty or guarantee, express or implied, may be made as to the accuracy or reliability of the information contained herein. This is not intended to be a forecast of future events and this is not a guarantee regarding a future event. This is not intended to provide specific investment advice and should not be considered as investment advice. The reader is advised to perform their own investigation and to consult their independent financial, tax, and legal advisors regarding any investment decision. Institutional Property Advisors, IPA, and Marcus & Millichap are service marks of Marcus & Millichap Real Estate Investment Services, Inc. © 2020 Marcus & Millichap. All rights reserved.

JEFFERY J. DANIELS

Senior Vice President Director, IPA Multifamily 212.430.6127 jdaniels@ipausa.com

JOHN CHANG

Senior Vice President/Director Research Services Division 602.707.9700 jchang@ipausa.com

JAY LYBIK

Vice President IPA Research Services 602.707.9628 jlybik@ipausa.com