The information contained in this report was obtained from sources deemed to be reliable. Every effort was 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 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. © 2019 Marcus & Millichap. All rights reserved.
Multifamily investments outperformed expectations last year as elevated demand maintained a sub-5 percent vacancy, despite concerns of oversupply. Changing demographics such as increased diversity and rising single-person households have raised the propensity to rent for many newly formed households, bolstering apartment absorption above historical levels. This boost to absorption nationally has kept demand in line with new supply additions; however, some pockets of oversupply do exist, particularly in urban submarkets where concentrations of Class A development have muted rent growth. Yet, rental rates outside of these few pockets remain above the long-term trend and highlight the overall strength of the sector.

Tax reform will play a significant role in the institutional apartment market in 2019. The increased standard deduction and reductions to state and local tax deductions on federal taxes will restrain homebuying, keeping more people in rentals longer. In addition, Opportunity Zones could divert billions of dollars from other investment classes into the commercial real estate sector, increasing market liquidity and accelerating development in targeted zones. Underwriting on Opportunity Fund investments will be markedly different as the deferral and reduction of capital gains are factored into the yields, creating new options for institutional funds. The pursuit of yield will be another factor driving institutional investment in 2019 as portfolio managers broaden acquisition criteria to meet yield targets. Steady economic and apartment performance gains in secondary markets have increased the appeal of large assets in smaller markets, particularly considering the compressed yields attainable in primary metros. The flow of institutional capital to these areas has increased steadily in recent years and the flow should continue, barring the onset of a recession.

The vibrant employment market combined with positive demographic drivers are reinforcing apartment demand and present further upside investment potential for the coming year. Furthermore, given the increased volatility in equity markets and slowing international growth, multifamily real estate could offer a safe harbor for new investor capital. We hope this report provides useful insights that will help investors navigate the changing landscape. As you recalibrate your strategies, our investment professionals look forward to assisting you in meeting your goals.

Sincerely,

JEFFERY J. DANIELS
Senior Vice President
National Director, IPA Multifamily

JOHN CHANG
Senior Vice President/National Director
Research Services
# National Perspective

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*Developed by IPA Research Services. The Capital Markets section was co-authored by David Shillington, president of Marcus & Millichap Capital Corporation. Additional contributions were made by IPA Investment brokerage professionals nationwide.*
National Multifamily Index (NMI)

- Minneapolis-St. Paul climbed four spots to head this year’s Index. It is the only Midwest market to stay in the top 20. San Diego also inched up four notches on solid rent growth to claim second place.
- New York City (#3) registered the largest advances in this year’s NMI, leaping 10 places with the lowest vacancy rate nationally and accelerating household formations while Miami-Dade (#20) dropped 11 spots out of the top 10 from the midyear index for the largest decline.

National Economy

- Accelerated job creation in 2018 drove the unemployment rate of young adults between 20 to 34 years old to a 48-year low of 4.5 percent. With two-thirds of this age group living in rentals, they are a dominant force supporting apartment demand, and the strong job market has empowered more of them to move out on their own.
- The monthly payment on a median-priced home increased by $175 last year to nearly $1,700 per month, dramatically widening the disparity between a mortgage payment and the average monthly rent. This widening payment gap, together with tighter underwriting, has restrained young adults’ migration into homeownership, reducing the under-age 35 homeownership rate to 37 percent, down from the peak of 43 percent in 2007. This confluence of factors will likely carry into 2019, sustaining young adults’ preference for rental housing.
- Though consumption and corporate investment will support economic growth in 2019, trade imbalances and a likely weaker housing market will weigh on momentum. Job creation, facing an ultra-tight labor market, will dip to the 2 million range, but wage growth should push above 3 percent.

National Apartment Overview

- As new households are formed next year, much of the rental demand will center on apartments that serve the traditional workforce: Class B and C properties.
- New inventory largely caters to more affluent renters. As a result, Class A vacancy is expected to rise to 5.8 percent while Class B apartment vacancy remains relatively stable at 4.7 percent. The most affordable segment of the market, Class C apartments, faces strong demand and vacancy for these rentals is expected to tighten to 3.9 percent, its lowest year-end level in 19 years.
- While primary markets such as Boston, Los Angeles, the Bay Area and New York City are expected to see the largest dollar rent increases, smaller metros are generating faster increases on a percentage basis. Metros across the Southeast and Midwest in particular are generating outsize employment growth and housing demand.

Capital Markets

- Upward pressure on short-term yields has increased concern an inverted yield curve could occur. A potential inverted yield curve will weigh on confidence levels and could possibly erode consumption and stall the growth cycle. The typical onset time of a recession following an inversion is about one year, but there have been two false positives in which a recession did not follow an inversion.
- Most lenders, particularly Fannie Mae and Freddie Mac, have adapted to a more fluid financial climate. When Treasury rates increased in the third quarter, many lenders tightened their spreads to cushion volatility. Lenders remain cautious, adopting tighter underwriting standards but aggressively competing to place capital into apartment assets.

Investment Outlook

- Strong demand drivers supporting long-term yield models will counterbalance much of today’s market volatility, encouraging investors to look beyond any short-term turbulence.
- As multifamily yields have compressed, the increasing portion of mobile capital acquiring assets priced over $15 million has migrated to secondary and tertiary markets.
Yield Range Offers Compelling Options For Investors; Most Metros Demonstrate Strong Appreciation

2008-2018 Average Price per Unit Appreciation and Current Average Cap

2019 Pricing Quadrant

Pricing and Valuation Trends Summary

Ten-year appreciation favors high-growth markets. Benchmarked from the end of 2008 as the U.S. economy began its rapid tumble into recession, appreciation has generally been strongest in tech, growth and Texas markets. Because Texas experienced a much softer downturn, assets there had to recover less lost value during the growth cycle. Interestingly, markets like Denver, Nashville, Orlando and Baltimore generated stronger-than-average value gains that reflect substantive economic and employment growth. Several Midwestern markets, which were trading at cycle highs in late 2008, faced significant value loss during the recession and only recently surpassed their prices of 10 years ago.

Capital pursues yield to smaller metros. Although Midwestern markets have taken longer to generate appreciation relative to the near-peak pricing achieved in late 2008, they have offered investors particularly high yields. Comparatively, the Bay Area and Seattle provide low yields but have higher-than-average appreciation. The most favored primary markets, New York City, Southern California and Washington, D.C., have generated lower-than-average appreciation over the last 10 years. This reflects the flight to safety in late 2008 that kept pricing in these markets stronger than many others.

Average Price per Unit Range (Alphabetical order within each segment)

<table>
<thead>
<tr>
<th>Price Range</th>
<th>Cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>$50,000 - $74,999</td>
<td>Cincinnati, Kansas City, Austin, Detroit</td>
</tr>
<tr>
<td>$75,000 - $107,999</td>
<td>Cleveland, Las Vegas, Columbus, Milwaukee</td>
</tr>
<tr>
<td>$100,000 - $159,999</td>
<td>Columbus, Louisville, Baltimore, Charlotte</td>
</tr>
<tr>
<td>$150,000 - $249,999</td>
<td>Miami-Dade, Sacramento, Phoenix, Orlando</td>
</tr>
<tr>
<td>$200,000 - $450,000</td>
<td>Jacksonville, Houston, New Haven-Fairfield County, Los Angeles</td>
</tr>
</tbody>
</table>

* 2008-2018 Average annualized appreciations in price per unit

Sources: IPA Research Services, CoStar Group, Inc.; Real Capital Analytics
U.S. Multifamily Index

Midwest Metro Rises to Claim First Place; Coastal Markets Fill Remainder of Top Rungs

Cinderella market knocks off the heavyweights. After cracking the top 5 in the midyear index, Minneapolis-St. Paul has moved from fifth place into the top spot for the 2019 Index, driven by a sub-3 percent vacancy forecast amid robust apartment demand that outpaces the moderate supply additions and rent growth that is twice the national rate. The metro edged out another midsize market, San Diego (#2), which climbs four places while following the similar story line of a low and declining vacancy rate with the added benefit of soaring single-family prices keeping rental demand ahead of new apartment deliveries. New York City (#3), which has the lowest vacancy rate nationally, significantly elevated home prices and accelerating household formations, had the largest movement as it jumped 10 spots over the past six months. Rising household formations have helped neutralize concerns about completions, which aided significantly in the upward movement. Los Angeles (#4) dropped three notches from the top ranking at midyear as a rising vacancy rate outweighed the positive of elevated single-family prices. Seattle-Tacoma (#5) rounds out the top five markets with one of the strongest employment markets driving robust in-migration and lofty demand for apartments. Orlando (#6) and Riverside-San Bernardino (#7) fill the next two positions as balanced supply and demand dynamics maintain sub-4 percent vacancy rates and rent growth that significantly outpaces the nation. Just outside of the top 10, Tampa-St. Petersburg (#11) advanced by five places with a low vacancy creating upward pressure on rent growth.

Two states moving in different directions. Columbus (#21) and Houston (#25) represent two markets in states that over the past six months have gone in totally different directions. All the Texas metros advanced as the Ohio markets moved downward. Dallas/Fort Worth (#26) and Houston each climbed one notch with the help of excellent employment and household growth. Houston was also supported by a large deceleration of deliveries for 2019. Austin (#27) leaped four points in the Index due to a combination of households expanding and a high propensity to rent by the 20- to 34-year-old age cohort. Lastly, San Antonio (#29) improved from the bottom of the midyear index by three points, helped by declining vacancy and increasing rents. All three Ohio metros declined by six places. Single-family affordability combined with weak household growth caused the declines in Cincinnati (#30) and Cleveland (#31), while excellent rent growth projected for Columbus was unable to help offset weakness caused by supply additions.

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.

<table>
<thead>
<tr>
<th>Market Name</th>
<th>Rank 2019</th>
<th>Rank 2018</th>
<th>“18-“19 Change</th>
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<tbody>
<tr>
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<td>1</td>
<td>5</td>
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<td>Los Angeles</td>
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<td>-3</td>
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<tr>
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<td>6</td>
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</tr>
<tr>
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<td>Northern New Jersey</td>
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<tr>
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</tr>
<tr>
<td>Baltimore</td>
<td>32</td>
<td>30</td>
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</tr>
</tbody>
</table>

1 See National Multifamily Index Note on Page 76.
Tight Labor Market, Waning Confidence Challenge Economic Momentum; Climate Remains Favorable

Exceptionally low unemployment levels invigorate household formation. Accelerated job creation in 2018 drove the unemployment rate of young adults between 20 to 34 years old to a 48-year-low of 4.5 percent. With two-thirds of this age group living in rentals, they are a dominant force supporting apartment demand, and the strong job market has empowered more of them to move out on their own. Record-high consumer confidence in 2018 reinforced these positive dynamics, inspiring young adults to form new households. These trends should carry into 2019, though confidence has begun to ease back from peak levels and total job additions will likely taper. Labor force shortages will weigh on companies’ ability to fill positions, creating an increasingly competitive hiring climate that pushes wage growth above 3 percent for the first time in more than 10 years. Increased compensation and rising disposable income will sustain rising retail sales and apartment tenants’ ability to absorb escalating rents. However, wage gains will also place upward pressure on inflation, causing the Federal Reserve to tap the brakes on the economy by raising rates.

Rising interest rates weigh on home sales, favor rental demand. Inflation remained in the 2 to 3 percent range through much of last year, but increasing wage growth and the potential inflationary impact of tariffs have elevated caution at the Federal Reserve. The Fed exerted upward pressure on interest rates through quantitative tightening and by raising the overnight rate, resulting in a substantive 90-basis-point increase in mortgage rates in 2018. Higher loan rates converged with rising home prices, a shortage of entry-level homes for sale and changing lifestyle preferences to reduce home sales activity by 4 percent. The monthly payment on a median-priced home increased by $175 last year to nearly $1,700 per month, dramatically widening the disparity between a mortgage payment and the average monthly rent. This widening payment gap, together with tighter underwriting, has restrained young adults’ migration into homeownership, reducing the under age 35 homeownership rate to 37 percent, down from the peak of 43 percent in 2007. This confluence of factors will likely carry into 2019, sustaining young adults’ preference for rental housing.

2019 National Economic Outlook

- Economic growth to ease as benefits of tax stimulus fade. Though consumption and corporate investment will support economic growth in 2019, trade imbalances and a likely weaker housing market will weigh on momentum. Job creation, facing an ultra-tight labor market, will slacken to the 2 million range, but wage growth should push above 3 percent.

- International trade and capital flows complicate outlook. Trade tensions with China, the strengthening U.S. dollar and floundering European economies could pose economic risks in 2019. Raising tariffs could accelerate inflation and weigh on consumption, resulting in slower economic growth. More significantly, a strengthening U.S. dollar could hamper foreign investment in the U.S. and disrupt international debt markets, increasing financial market stress.

- Federal Reserve closely monitoring inflation. Rising wages and tariffs are leading the way toward higher inflation risk, but the Federal Reserve has maintained a cautious stance, increasing short-term interest rates to ward off the trend. Long-term interest rates, however, have remained range-bound near 3 percent as stock market volatility and low international interest rates restrain upward movement. A yield-curve inversion, when short-term rates rise above long-term rates, is a commonly perceived sign of an upcoming recession, and a potential inversion could weigh on confidence levels.
Economy Delivers Elevated Apartment Demand; Aggressive Building Nudges Top-Tier Vacancy Higher

Housing market remains tight as household formation accelerates. Steady job creation and exceptionally low unemployment will boost household formation in 2019, supporting a third consecutive year of national sub-5 percent vacancy levels. Much of the new demand will center on apartments that serve to the traditional workforce: Class B and C properties. Although new apartment completions will reach their highest level in more than 25 years with the delivery of more than 315,000 units, the new inventory largely caters to more affluent renters. As a result, Class A vacancy is expected to rise to 5.8 percent while Class B apartment vacancy remains relatively stable at 4.7 percent. The most affordable segment of the market, Class C apartments, face strong demand and vacancy for this segment is expected to tighten to 3.9 percent, its lowest year-end level in 19 years. These trends will support consistent rent gains averaging 3.7 percent in 2019, led by momentum in secondary and tertiary markets.

Smaller metros step to forefront. While primary markets such as Boston, Los Angeles, the Bay Area and New York City are expected to see the largest dollar rent increases, smaller metros are generating faster increases on a percentage basis. Metros across the Southeast and Midwest in particular are generating outsized employment growth and housing demand. For the seventh consecutive year, secondary markets will lead in percentage rent growth, followed closely by tertiary markets. This reflects the concentration of new supply additions in primary markets, which is raising competition for renters and suppressing rent gains. Another important factor has been the migration of millennials to more affordable smaller cities. Many tech firms and other industries have pursued the millennial labor force to these smaller metros, boosting local job creation. In addition to having higher than average job growth, cities such as Orlando, Phoenix, Indianapolis and Salt Lake City are expected to generate outsized rent gains. Many investors, in pursuit of higher yields, have already expanded their search for assets in these metros, increasing the market liquidity and boosting values.

2019 National Apartment Outlook

- **Tax reform boosts rental demand.** The new tax law is having a substantive impact on rental demand as several tax benefits of homeownership have been altered. The doubling of the standard deduction to $12,000 for singles and $24,000 for couples means fewer homeowners will benefit from itemizing mortgage interest deductions. In addition, a $10,000 cap on state and local taxes will reduce homeowners' ability to deduct property taxes. These changes will weigh on first-time homebuyers in high-tax states the most, keeping young adults in the rental pool longer.

- **Suburbs invigorated by changing lifestyles.** A surge in new inventory and much higher rents in the urban core are diverting more renters to the suburbs. As a result, vacancy in suburban submarkets nationwide remain below the rate in downtown submarkets for the third consecutive year. Older millennials, now entering their late 30s, are starting to form families. As this trend plays out, the lower rents of suburban areas and the generally higher-quality schools have begun to win out over the urban lifestyle.

- **Potential housing shortage despite record development.** Elevated completions in 2019 will bring the total apartment additions since 2012 above 2.1 million units, a net inventory gain of approximately 13 percent over eight years. Despite this cycle’s delivery of the most apartments since the 1980s, vacancy is forecast to remain at just 4.6 percent in 2019. With rising labor and materials costs, tighter lending, and a shortage of skilled construction labor available, the pace of construction should begin to ebb in 2020.
Fed Balances International Headwinds With Domestic Optimism; Elevated Liquidity Supports Active Market

Fed walking a tightrope. The Federal Reserve has been battling the inflationary pressure created by wage gains and increased trade protectionism with raises of short-term interest rates and quantitative tightening. The efforts, however, have run into the stubbornly low 10-year Treasury that has not responded to the Fed’s prodding. Slowing international economic growth and the exceptionally low bond yields offered by most other high-credit countries have drawn international investors to the higher yields and safety of U.S. Treasurys. The international buying activity together with other factors such as stock market volatility has held U.S. long-term rates down. This combination of events has placed the Fed in an awkward position and their decision to raise rates in December has placed additional upward pressure on short-term yields. Should short-term interest rates rise above long-term rates, a yield curve inversion forms, and this is a commonly known sign of an impending recession. The inverted yield curve will weigh on confidence levels and could potentially erode consumption and stall the growth cycle. The typical onset time of a recession following an inversion is about one year, but there have been two false positives in which a recession did not follow an inversion.

Conservative underwriting balances abundant capital. Debt financing for apartment assets remains widely available, with sourcing led by Fannie Mae and Freddie Mac in addition to a wide array of local, regional and national banks and insurance companies. Loan-to-value (LTV) ratios have tightened, with maximum leverage typically in the 55 to 75 percent range depending on the borrower, asset and location. Lenders have been reluctant to lend on future revenue growth through value-add efforts, resulting in increased use of short-term mezzanine debt and bridge loans to cover the span until improvements deliver the planned returns. Construction lending has also tightened as developers deliver record numbers of new units into the market. Higher borrowing costs and questions about the durability of the growth cycle have widened bid/ask spreads. Rising capital costs and increased down payments are eroding buyer yields, while sellers continue to seek premium pricing based on ongoing robust property performance.

2019 Capital Markets Outlook

- Investors wary of interest rate surge. While the 10-Year Treasury has traded in a relatively tight range near 3 percent recently, on two occasions it has rapidly surged and stalled investor activity. The 90-basis-point jump in late 2016 and the 80-basis-point surge in late 2017 both strained liquidity, widened bid/ask spreads and stalled transactions as investors recalibrated their underwriting. Given the volatility of financial markets, investors must remain prepared for a rapidly changing climate.

- Lenders remain nimble in dynamic climate. Most lenders, particularly Fannie Mae and Freddie Mac, have adapted to the more fluid financial climate. When Treasury rates increased in the third quarter, many lenders tightened their spreads to cushion volatility. Lenders remain cautious and they have adopted tighter underwriting standards, but they are also aggressively competing to place capital and apartment assets are a favored investment class.

- Tightened yield spreads erode positive leverage. Multifamily cap rates have remained relatively stable on a macro level, with yields in primary markets flattening while secondary and tertiary market cap rates have continued to trickle lower. Rising interest rates, however, have tightened the spread between cap rates and lending rates, reducing investors’ ability to generate positive leverage. Though this trend could put some upward pressure on yields, elevated capital flows into apartments will likely mitigate the upward pressure.
Investors Seeing Yield and Strength in Secondary Metros
As Private Buyers Remain Most Active Capital Source

Long-term investment opportunities are buyers’ preference. The mature economic expansion will remain supportive of the apartment investment market in 2019, though buyers’ and sellers’ expectations will likely need to adjust to a rising interest rate climate. Stock market volatility and prospects of a flattening yield curve will weigh on sentiment but the underlying performance of apartments remain positive. Furthermore, strong demographic momentum combined with the shift away from ownership supports the long-run positive multifamily outlook, which should counterbalance market volatility by encouraging investors to look beyond short-term turbulence.

While the bid/ask spread could widen for transactions in primary locations where the gap between interest rates and cap rates is narrowest, capital could take advantage of higher cap rates found in suburban locations as well as secondary markets. The spread in average cap rates between primary to secondary markets has tightened but remains at approximately 80 basis points. In addition to the attraction of a higher cap rate, many secondary markets have witnessed robust economic expansions, creating rent growth above the national average. Similarly, the increased desirability for suburban assets also revolves around rent growth exceeding most urban submarkets. Over the past three years, suburban rent growth outperformed urban locations by 220 basis points and this trend should continue in the coming year.

Influx of non-traditional capital could boost transaction activity. Apartment sales volume have reached levels above the historical average but remain stable, and the trend should carry into 2019 as new capital enters commercial real estate. Recently passed tax reform included the creation of opportunity zones, which offer the ability to defer and reduce capital gains from other investment types by placing the gains into these zones, thus creating the potential to draw new capital into multifamily assets. This influx of new capital could offset any slowing of sales from the maturing growth cycle and add to the already-strong base private investors have in the multifamily transaction market. Private capital over the past three years increased its buying substantially. Early in the expansion private investors accounted for roughly 30 percent of transaction volume but as REITs retreated from the acquisition market, private capital has filled that void and more. Last year, almost 60 percent of purchases above $20 million were by private sources. Furthermore, given the current volatility in stock and bond markets, the potential for stable long-run returns offered by private syndicated multifamily investments should continue to attract capital for placement.

2019 Investment Outlook

• Pursuit of yield drives capital beyond the core. As multifamily yields have compressed, an increasing portion of “mobile capital” acquiring assets priced over $15 million has migrated to secondary and tertiary markets. Whereas in 2010 nearly 60 percent of the dollar volume was focused in primary markets, in 2018 the share of capital invested with 60 percent of the capital flowing to secondary and tertiary markets. This trend will likely be sustained in 2019.

• Portfolio diversity increasingly important to private investors. A range of localized risks such as natural disasters, metro-level economic downturns, and the rise of state or metro-level policy decisions such as rent control have inspired investors to more carefully consider geographic diversification. Following the spate of recent hurricanes across Texas and the Southeast as well as the recent Proposition 10 vote in California, interstate buyer activity has risen.

• Increased investor caution may elevate expectation gap. Stock market volatility, rising interest rates, trade tensions and the implications of a flattening yield curve will weigh on buyer sentiment and inspire increasingly cautious underwriting. Sellers, focusing on positive performance metrics, may price assets more aggressively and the resulting expectation gap could weigh on transaction timelines.
Housing Demand Outpacing New Supply

2010

U.S. Available Housing Units per Additional Household = 6.5

U.S. Housing Units Available = 1.87 Million / U.S. Household Formation = 0.28 Million

2019

U.S. Available Housing Units per Additional Household = 1.2

U.S. Housing Units Available = 2.03 Million / U.S. Household Formation = 1.62 Million

Number of Available Housing Units per New Household

(Single-Family Completion + MF Completion and Existing Available Units)/New Household Formation

Sources: IPA Research Services, Moody's Analytics, RealPage, Inc.; U.S. Census
Decline in Homeownership Underpins Lowering Apartment Vacancy

Eight-Year Change 2010-2018

Homeownership Change by Market 2010 to 2018 (Third Quarter Comparison)

U.S. — 230-Basis-Point Change

Homeownership Decline/Growth Basis-Point Change

-1,350 to -1,200

-700 to -280

-200 to -70

20 to 1,120

Top 10 Markets by Homeownership

<table>
<thead>
<tr>
<th>Lowest Homeownership</th>
<th>3Q 2018</th>
<th>3Q 2010-3Q 2018 Apt. Vacancy BPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles-Long Beach-Anaheim</td>
<td>47.3%</td>
<td>-180</td>
</tr>
<tr>
<td>New York City-Newark-Jersey City</td>
<td>48.8%</td>
<td>-140</td>
</tr>
<tr>
<td>Austin</td>
<td>54.0%</td>
<td>-80</td>
</tr>
<tr>
<td>San Francisco-Oakland</td>
<td>54.1%</td>
<td>-40</td>
</tr>
<tr>
<td>San Jose</td>
<td>54.4%</td>
<td>-20</td>
</tr>
<tr>
<td>Orlando</td>
<td>55.4%</td>
<td>-430</td>
</tr>
<tr>
<td>Miami-Fort Lauderdale-West Palm Beach</td>
<td>57.0%</td>
<td>-100</td>
</tr>
<tr>
<td>San Diego</td>
<td>59.3%</td>
<td>-200</td>
</tr>
<tr>
<td>Seattle-Tacoma</td>
<td>61.3%</td>
<td>-120</td>
</tr>
<tr>
<td>Portland</td>
<td>61.3%</td>
<td>-30</td>
</tr>
<tr>
<td>U.S.</td>
<td>64.4%</td>
<td>-220</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Highest Homeownership</th>
<th>3Q 2018</th>
<th>3Q 2010-3Q 2018 Apt. Vacancy BPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleveland</td>
<td>69.5%</td>
<td>-130</td>
</tr>
<tr>
<td>Minneapolis-St. Paul</td>
<td>68.9%</td>
<td>-190</td>
</tr>
<tr>
<td>Phoenix</td>
<td>67.4%</td>
<td>-510</td>
</tr>
<tr>
<td>Cincinnati</td>
<td>65.9%</td>
<td>-90</td>
</tr>
<tr>
<td>Atlanta</td>
<td>64.9%</td>
<td>-480</td>
</tr>
<tr>
<td>Riverside-San Bernardino</td>
<td>64.7%</td>
<td>-260</td>
</tr>
<tr>
<td>Baltimore</td>
<td>64.5%</td>
<td>-40</td>
</tr>
<tr>
<td>San Antonio</td>
<td>63.4%</td>
<td>-160</td>
</tr>
<tr>
<td>Tampa-St. Petersburg</td>
<td>63.4%</td>
<td>-450</td>
</tr>
<tr>
<td>Columbus</td>
<td>62.9%</td>
<td>-380</td>
</tr>
</tbody>
</table>

Sources: IPA Research Services; U.S. Census
**Broad Growth Attracts New Residents; Elevated Yields Pulling In Capital**

**Several bustling industries support apartment demand.** Atlanta remains one of the top markets in terms of job creation in 2019 as corporate expansions and the growing film and trade industries drive hiring. This healthy employment growth will continue to lure new residents with an estimated 88,000 individuals expected to move to the metro this year. The influx of new residents will support household formation above the national rate of growth, underpinning housing demand. Households who desire to live in popular areas, like Midtown and Buckhead, will turn to rentals as high home prices in these locales make homeownership difficult. Others will look to apartments in suburban areas near outlying employment hubs where more affordable rents than often found inside the perimeter exist. Vacancy rates in many outlying suburbs rest below 4 percent with effective rents between $600 and $800 per month lower than inside I-285. Strengthening demand in these areas will support further vacancy improvement this year.

**Deep inventory and attractive cap rates keep investors engaged.** Positive market fundamentals remain the key to upholding expanded transaction activity for institutional priced assets throughout the Atlanta marketplace this year. Strong in-migration is driving household growth that doubles the national average and fuels apartment demand. This will maintain investors keeping the metro a top acquisition target for the coming year. Furthermore, the ability to underwrite rent growth above the national average mitigates some of the downside effects of cap rates compressing over the past two years due to the strong influx of capital into the market. The depth of Atlanta’s apartment inventory and solid construction pipeline will allow acquisition activity to be sustained close to current levels. Recently stabilized development properties in urban locations will remain highly sought by institutional advisers and REITs. Private capital will continue focusing on existing garden assets with value-add opportunities and freshly renovated units near northern employment centers or with easy highway access.

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**Housing Affordability Gap**

<table>
<thead>
<tr>
<th>Mortgage Payment</th>
<th>Effective Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Payment</td>
<td>$775</td>
</tr>
<tr>
<td>$1,050</td>
<td></td>
</tr>
<tr>
<td>$1,325</td>
<td></td>
</tr>
<tr>
<td>$1,600</td>
<td></td>
</tr>
</tbody>
</table>

**Supply and Demand**

<table>
<thead>
<tr>
<th>Year</th>
<th>Completions</th>
<th>Absorption</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>2016</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>2017</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>2018</td>
<td>18*</td>
<td>14*</td>
</tr>
<tr>
<td>2019</td>
<td>19**</td>
<td>16*</td>
</tr>
</tbody>
</table>

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* Forecast ** Through 2Q
* 2017: 25+ years old

**20.7%** 2018 share of local population between 20 and 34 years old

**36.1%** of local population hold bachelor’s degree or higher

**$220,041** 2018 median home price

*Sources: Marcus & Millichap Research Services, RealPage, Inc.*
2019 Investment Outlook

Demand in the Key Performance Index advanced one notch in the past six months, reflecting the fact that employment and household growth continue to outpace the national averages, expanding renter households. Supply stays balanced and rent growth’s position highlights its current outperformance compared with the nation.

The metro’s liquidity remains one of the highest and underlines the robust investor demand for Atlanta properties as yields sit higher than primary coastal markets. These factors will keep transaction volume high across all asset types in 2019.

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

2019 Market Forecast

- **NMI Rank**: 17
- **Employment**: 49,000 jobs
  - **Metro**: 1.7%
  - **U.S.**: 1.3%
- **Construction**: as % of inventory
  - **Metro**: 2.1%
  - **U.S.**: 1.8%
- **Vacancy**: Down 20 bps
  - **Metro**: 6.0%
  - **U.S.**: 5.8%
- **Rent**: $1,649 per month
  - **Metro**: 3.5%
  - **U.S.**: 3.2%
- **Investment**: 3-yr. avg. activity
  - **Deals**: 164
  - **Volume**: $6.7 billion
  - **3-yr. avg. activity**: $20+ million

**Vacancy By Class**

<table>
<thead>
<tr>
<th>Class</th>
<th>2019 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A</td>
<td>1%</td>
</tr>
<tr>
<td>Class B</td>
<td>5%</td>
</tr>
<tr>
<td>Class C</td>
<td>9%</td>
</tr>
</tbody>
</table>

**Rent Growth By Class**

<table>
<thead>
<tr>
<th>Class</th>
<th>10-Year Average</th>
<th>2019 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Class B</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>Class C</td>
<td>9%</td>
<td>11%</td>
</tr>
</tbody>
</table>

* Forecast  † Class A
* Arrow reflects completions trend compared with 2017
Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
**Home Prices Positively Impact Demand; Transaction Activity Poised for Rebound**

Apartment vacancy remains tight as residents extend stays. Steady hiring in Austin since 2009 has resulted in the creation of more than 300,000 jobs, attracting thousands of new residents over the past several years. The positive net in-migration of an average 40,000 individuals during each of the past five years has placed additional strain on the housing market as single-family and multifamily developers have struggled to keep pace with rising demand. Single-family home prices have swelled more than 40 percent since 2013 to a median over $300,000, widening the gap between the monthly mortgage payment on a median-priced home and the monthly average apartment rent by $700 from five years ago to $1,200 in 2018. Many would-be homebuyers have been sidelined as the transition into homeownership has become more costly, resulting in low apartment vacancy throughout the metro. New home construction and multifamily deliveries are anticipated to dip during 2019, while strong demand factors remain in place. As a result, vacancy will stay below 6 percent this year, marking a decade below this threshold.

Rebounding Class A results will drive increased transaction activity. Excellent economic growth combined with strong demographic trends keep Austin a primary acquisition market for institutional and private capital. Rebounding rent growth amid strong absorption and moderating supply additions in 2019 set the stage for renewed transaction activity. Conservative underwriting of rent-growth projections caused a number of owners to hold off dispositions, especially for newly built projects. Strengthening Class A rent growth in the second half of 2018 should change market perceptions for prospective buyers. The changing positive market insights should give current owners a strong incentive to move forward with listing stabilized assets. This would allow them to take advantage of the upswing in performance investors have been waiting for to restart acquisitions. Newly developed assets coming to market in or near downtown will see elevated interest and a strong bidding environment.
2019 Investment Outlook

Austin’s Key Performance Index for supply and demand both rose by one point since midyear. Moderating supply additions combined with increasing demand will restore market balance. Rent growth remains stable at 4 but could see upside potential over the next six months.

The liquidity and yield indexes did not move from their positions six months ago. Liquidity remains solid and the potential for more balanced fundamentals raises the prospect of listings rising as the year progresses. Increased listings would be met with strong investor demand.

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

2019 Market Forecast

- **NMI Rank**: 27
- **Employment**: 28,000 jobs, Metro 2.6%, U.S. 1.3%
- **Construction**: as % of inventory, Metro 3.1%, U.S. 1.8%
- **Vacancy**: Up 10 bps, Metro 6.1%, U.S. 5.8%
- **Rent**: $1,854 per month, Metro 4.1%, U.S. 3.2%
- **Investment**: 3-yr. avg. activity, $20+ million, Deals: 66, Volume: $2.5 billion

Vacancy By Class

<table>
<thead>
<tr>
<th>Class</th>
<th>2019 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A</td>
<td>5.0%</td>
</tr>
<tr>
<td>Class B</td>
<td>7.5%</td>
</tr>
<tr>
<td>Class C</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

Rent Growth By Class

- **10-Year Average**
- **2019 Forecast**

* Arrow reflects completions trend compared with 2017

Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
Market’s Declining Vacancy and Rising Values Lift Investor Interest

Consistent household growth, shrinking construction pipeline sustain vacancy compression. During each of the past two years, stout demand for Baltimore apartments supported new leases totaling more than 4,000 units, negating the impact of elevated construction activity. In 2019, strong absorption will persist and apartment deliveries will moderate, allowing the metro’s vacancy rate to reach its lowest point in more than 10 years. Fueling this continued demand for rentals is steady hiring by federal agencies, defense contractors and higher-education institutions, which encourages healthy rates of income growth and household formation. Additionally, home prices have reached a 10-year high, underpinning more residents’ choice to rent. Those seeking units opening in 2019 will search within neighborhoods adjacent to downtown off Interstate 83 or around the Inner Harbor. An overall lack of suburban construction should warrant limited vacancy and above-average rent growth in areas along the Interstate 695 Loop.

Investors searching for value see strong upside in Baltimore. Institutional, REIT and private capital buyers recognize the positive drivers for the overall market along with the ability to purchase assets with cap rates up to 50 basis points higher than primary East Coast markets. Recent sales have recorded cap rates averaging in the low- to mid-5 percent range. The value proposition helped accelerate the transaction market last year and that momentum should continue in 2019 as more buyers see the potential offered in Baltimore. Because the market was off the radar throughout much of the cycle, a deep pool of asset types are available, including highly sought value-add opportunities. The increased demand for assets has pushed down cap rates quickly and piqued owners’ interest in pursuing dispositions to take advantage of increasing valuations. Developers with recently stabilized assets could also tap the strong investor demand and rising valuations to list these properties for sale.

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* Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services; RealPage, Inc.
2019 Investment Outlook

Rising fundamentals in Baltimore’s Key Performance Index should further increase institutional investor demand for assets in the metro. Supply jumped three notches as deliveries have decelerated and demand rose two places over the past two quarters. Rent growth remained at 4 but likely could rise in 2019.

The search for yield keeps Baltimore in the sights of new investors coming into the metro and has increased the competitiveness of bidding for available properties. This has the yield index at 3, which 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.

2019 Market Forecast

- **NMI Rank**: 32
- **Employment**: 18,000 jobs
  - *Metro*: 1.3%
  - *U.S.*: 1.3%
- **Construction**
  - as % of inventory
  - *Metro*: 0.9%
  - *U.S.*: 1.8%
- **Vacancy**: Unchanged
  - *Metro*: 5.7%
  - *U.S.*: 5.8%
- **Rent**: $1,741 per month
  - *Metro*: 0.6%
  - *U.S.*: 3.2%
- **Investment**
  - 3-yr. avg. activity
  - *Metro*: $20+ million
  - *Volume*: $1.9 billion
  - **Deals**: 34

Key Performance Index

- Supply
- Demand
- Rent Growth
- Liquidity
- Yield

Vacancy By Class

- **Class A**: 4%
- **Class B**: 5%
- **Class C**: 6%

Rent Growth By Class

- **Class A**: 3%
- **Class B**: 2%
- **Class C**: 1%

Note: The Forecast reflects completions trend compared with 2017.
Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
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 downpayments 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 completed developments driving sales expansion. Demand for institutional-quality assets in Boston has always outstripped the limited number of deals that come to market each year. The recent rise in the development pipeline, however, has offered a growing source of properties coming available for acquisition. In the last two years, 50 properties with more than 100 units were completed and the majority of these were midrise designs. Just over half of sales above $20 million in 2018 were recently finished developments with cap rates typically in the mid-4 percent range. Due to the extended development process in the Boston metro, many developers tend to build for long-term holds. However, the higher number of newly completed projects combined with strong bidding for recently traded properties has increased the potential number of completed deals that could be marketed in 2019. Institutional buyers are most focused on Intown Boston and Cambridge locations but close-in suburbs with easy transit access will be targeted.

22.3% 2018 share of local population between 20 and 34 years old

44.9% of local population hold bachelor’s degree or higher

$486,864 2018 median home price
2019 Investment Outlook

Boston’s Key Performance Index fundamentals jumped noticeably since midyear with demand up three notches to 9 while supply rose two points. As supply has been an ongoing concern, this rise should reassure investors to upside improvements in the market, especially with demand forecast to outpace supply additions this year.

Liquidity and yield did not move over the last two quarters, remaining at 6 and 2. However, demand for assets always seems to outstrip the supply of available properties for acquisitions. This creates a competitive bidding environment for listed assets and maintains the low yield index.

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

2019 Market Forecast

- **NMI Rank**: 8
- **Employment**: 35,000 jobs
  - Metro 1.2%
  - U.S. 1.3%
- **Construction**: as % of inventory
  - Metro 1.4%
  - U.S. 1.8%
- **Vacancy**: Unchanged
  - Metro 4.8%
  - U.S. 5.8%
- **Rent**: $3,445 per month
  - Metro 4.2%
  - U.S. 3.2%
- **Investment**
  - Deals: 39
  - Volume: $2.6 billion
  - 3-yr. avg. activity
  - $20+ million

Boston’s Key Performance Index fundamentals jumped noticeably since midyear with demand up three notches to 9 while supply rose two points. As supply has been an ongoing concern, this rise should reassure investors to upside improvements in the market, especially with demand forecast to outpace supply additions this year.

Liquidity and yield did not move over the last two quarters, remaining at 6 and 2. However, demand for assets always seems to outstrip the supply of available properties for acquisitions. This creates a competitive bidding environment for listed assets and maintains the low yield index.
Tech Firms Expand in Loop, Boosting Incomes and Fueling Apartment Demand

Downtown vacancy tightens despite elevated completions. Corporate expansions and relocations to Downtown Chicago and surrounding neighborhoods are boosting incomes and supporting household formation. Tech companies, including Google and Facebook, are growing their footprints and increasing hiring. Software firm Salesforce is also considering expanding its presence downtown, potentially bringing 5,000 jobs to the area. Many professionals are renting in the city’s dense urban areas as high costs in these neighborhoods make homeownership difficult. As a result, apartment vacancy in the city of Chicago began to improve in late 2018 at a faster rate than in the suburbs despite elevated construction. This year, completions will remain high, potentially reaching a cyclical peak. The considerable number of new apartments underway will place some slight upward pressure on metrowide vacancy as space begins to lease.

Investment advantages coming to light. Investor confidence in Chicago keeps expanding as fundamentals advance against the backdrop of higher cap rates than can be sourced in primary coastal markets. Investors with strategies focused on live-work-play urban cores have deployed increased capital into the Loop. High-rise transactions in and around the Loop have become a major focus for institutional capital for both established properties and newer developments. High-rise cap rates should remain in the mid- to high-4 percent range. As recently completed deals stabilize, developers will have to decide whether to take advantage of the high investor demand and solid valuations or hold to take advantage of the positive market conditions. The Loop’s importance also translates into the suburban strategy as investors focus on locations next to or with easy access to Metra stations and rail lines. Well-located garden assets with recently completed renovations will also be highly sought for long-term holds.

$259,567 2018 median home price

20.9% 2018 share of local population between 20 and 34 years old

35.6% of local population hold bachelor’s degree or higher*

* Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services; RealPage, Inc.
2019 Investment Outlook

Chicago’s Key Performance Index points to overall stability in its fundamentals. Supply and demand did not move but owners appeared more confident as rent growth rose one point. The supply index could be an area of apprehension for investors at 3, but stable demand and the rise in the rent index should overcome concerns.

Traditionally liquidity has been tempered but with the yield index at 4, more investors may capitalize on higher cap rates compared with coastal markets. Some owners could also decide to take advantage of the elevated demand for assets and list more assets for disposition.

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

2019 Market Forecast

NMI Rank 23

Employment 30,000 jobs

Metro 0.6%
U.S. 1.3%

Construction as % of inventory

Metro 1.3%
U.S. 1.8%

Vacancy Up 30 bps

Metro 6.7%
U.S. 5.8%

Rent $2,216 per month

Metro 2.2%
U.S. 3.2%

Investment 3-yr. avg. activity $20+ million

Deals: 75
Volume: $4.3 billion

Vacancy By Class

<table>
<thead>
<tr>
<th>Class</th>
<th>2019 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A</td>
<td></td>
</tr>
<tr>
<td>Class B</td>
<td></td>
</tr>
<tr>
<td>Class C</td>
<td></td>
</tr>
</tbody>
</table>

Rent Growth By Class

<table>
<thead>
<tr>
<th>Class</th>
<th>2019 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A</td>
<td></td>
</tr>
<tr>
<td>Class B</td>
<td></td>
</tr>
<tr>
<td>Class C</td>
<td></td>
</tr>
</tbody>
</table>

* Arrow reflects completions trend compared with 2017
Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
Amazon to Further Compress Vacancy; Limited Listings Holding Back Transactions

Demand for Class B/C space spearheads declining vacancy. Steady hiring activity will continue to power the Cincinnati rental market, particularly Class B/C product as much of the metro’s employment growth consists of lower-wage positions including retail jobs and warehouse workers. Furthermore, Amazon recently chose the Cincinnati/Northern Kentucky International Airport for its next air cargo hub, where the company will generate 2,700 new jobs over the next several years. These demand drivers help keep rent gains solid, maintaining a growth rate above 3 percent for the fourth consecutive year. In addition, market vacancy is expected to dip below 5 percent by year end, headlined by vacancy rates in the low-4 and mid-3 percent bands for Class B and C units, respectively. New apartment development will counter the metro’s compressing vacancy as more than 1,000 units are completed this year, with areas along the Northern Kentucky riverfront as well as neighborhoods near the University of Cincinnati receiving the bulk of units.

Lack of for-sale assets leaving capital on the sidelines. Limited listings continue to hinder enthusiastic investor interest in deploying capital into the Cincinnati region. Outside investors see the metro as an excellent opportunity to acquire assets in a secondary market with stable rent growth, no oversupply issues and higher yields. Existing owners, however, appear content to maintain a long-term hold strategy. The construction pipeline could offer a potential inroad for investors with 22 projects completed and stabilized over the past two years. Developers could take advantage of the elevated levels of capital trying to be deployed and protect their downside in a rising-interest-rate environment by pursuing dispositions this year. Besides new product, the I-275 loop should remain a strong target location for existing assets while the majority of new supply additions have been focused closer to downtown.

19.9% 2018 share of local population between 20 and 34 years old

31.2% of local population hold bachelor’s degree or higher*

$175,749 2018 median home price
2019 Investment Outlook

Supply jumped two places over the past six months and now resides at 5. Demand also rose one notch and settled at 8. Both indexes sit higher than those of most metros nationally. Rent growth slipped slightly from 6 to 5 but the improved fundamentals should overcome this decline by midyear.

Liquidity moved up one point since midyear as existing owners appear to be slowly responding to the elevated investor demand. At 5, the yield index offers a strong reason for investors to stay focused on acquisition opportunities in the coming year.

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

2019 Market Forecast

NMI Rank

30

Employment

17,500 jobs

Metro 1.6%

U.S. 1.3%

Construction

as % of inventory

Metro 0.7%

U.S. 1.8%

Vacancy

Up 10 bps

Metro 5.7%

U.S. 5.8%

Rent

$1,447 per month

Metro 2.5%

U.S. 3.2%

Investment

3-yr. avg. activity

$20+ million

Deals: 9

Volume: $223 million

2019 Market Forecast

Vacancy By Class

Class A

Class B

Class C

Rent Growth By Class

10-Year Average

2019 Forecast

Supply ▲

Demand ▲

Rent Growth ▲

Liquidity ▲

Yield ▲

NMI Rank

30

Employment

17,500 jobs

Metro 1.6%

U.S. 1.3%

Construction

as % of inventory

Metro 0.7%

U.S. 1.8%

Vacancy

Up 10 bps

Metro 5.7%

U.S. 5.8%

Rent

$1,447 per month

Metro 2.5%

U.S. 3.2%

Investment

3-yr. avg. activity

$20+ million

Deals: 9

Volume: $223 million
Employers Transition From Suburbs To Downtown as Urban Renewal Progresses

Downtown Cleveland the epicenter of metro’s improving apartment sector. A rejuvenated urban core continues to power Cleveland’s rental market. The construction of new units and the repurposing of underperforming commercial real estate assets into apartments is helping fulfill tenant demand in the city center. Subsequently, some employers like Nationwide Insurance are choosing to transition their suburban locations to downtown spaces, often selecting floor plates in the submarket’s new mixed-use developments. With growing intrigue surrounding the urban core, builders will remain focused on the area throughout 2019, likely pushing the locale’s vacancy up slightly as supply outweighs demand. Metrowide vacancy, meanwhile, is expected to decrease despite back-to-back years of 1,500-plus completions for the first time this century. Declining market vacancy should be driven by bolstered demand for Class A units moving forward as vacancy for this product type is in the low-4 percent range; however, rent gains are likely propelled by Class B/C supply.

Demand for urban assets surpassing availabilities. Investors are following residents and developers with a determined focus on acquiring assets in the urban core and along the lakeshore. The area has been one of the most active for recent transactions above $20 million but demand for purchases far outstrips the supply of properties on the market for disposition. Recently completed and current projects under construction in and around downtown, however, could offer investors a handful of acquisition opportunities in the coming year. Over the past two years, 11 projects were completed in the city and three are under construction. Developers may decide to take advantage of high investor interest and strong pricing for new product leveraging the live-work-play environment being established around the city’s core. Across the rest of the market, sales could also be constrained due to scarce listings. Patience and determination will be the key for buyers to find deals in the Cleveland metro this year.
2019 Investment Outlook

The rise in demand and rent growth in the Key Performance Index by one point since July reflects the steadily improving fundamentals in the metro’s apartment market. Demand remained stable at 5 but as supply moderates, the positive impact on rent growth should be building.

Even though yield dropped one notch since the summer, Cleveland maintains the highest yield index nationally and this has begun to push up liquidity significantly. Liquidity jumped three points, highlighting the increased activity in the transaction market.

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

2019 Market Forecast

- **NMI Rank**: 31
- **Employment**: 29,000 jobs
- **Construction** (as % of inventory): 
  - Metro: 1.0%
  - U.S.: 1.8%
- **Vacancy**: Down 20 bps
- **Rent**: $1,291 per month
- **Investment**: Deals: 5
  - Volume: $150 million

**Source**: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

* Arrow reflects completions trend compared with 2017

Key Performance Index

Vacancy By Class

Rent Growth By Class

Metro 2.7%
U.S. 1.3%

Metro 6.2%
U.S. 5.8%

Metro 0.1%
U.S. 3.2%

* Forecast * Class A
Columbus

Investors Capitalize on Strong Apartment Demand and Secondary Market Status

Job creation drives downtown development. Columbus vacancy will remain one of the lowest rates among major U.S. metros this year. Though demand for all rentals is robust, Class C units is the strongest as this niche’s vacancy sits in the mid-2 percent band, more than a full percentage point below the other asset classes. This is highlighted by notably tight conditions in the metro’s northern suburbs like Hilliard and Westerville. Consequently, these areas received several hundred units each last year, with more construction expected in 2019, particularly in Westerville. However, the bulk of this year’s projects will once again occur in the urban core as developers rely on healthy employment gains in Downtown Columbus to help fill units. Recently, Root Insurance announced plans to add nearly 500 jobs over the next several years at a new downtown location, while healthcare software company CoverMyMeds is seeking a new headquarters in the adjacent Franklinton neighborhood, which would include 1,000 additional positions. The inflow and expansion of firms in the market will continue to boost tenant demand in 2019, supporting another year of robust rent growth.

An expanding secondary market entices new capital sources. Until recently, private capital dominated the $20 million-plus transaction market in Columbus but investors’ perceptions have begun to change and institutional buyers have been expanding into the ownership pool. The widening search for yield and assets has opened Columbus up to new investors and for good reason. The state government, the university and a well-known list of expanding major employers create an excellent long-term base for apartment ownership. The existing inventory tilts heavily to suburban garden complexes and thus those assets have dominated sales activity until recently. The construction pipeline has been strongly focused in the city of Columbus with midrise assets in higher-density locations, which offer a whole new product type to buyers with core infill strategies at cap rates 50 to 75 basis points higher than primary markets. Last year, 26 new apartment properties were completed and another 14 are scheduled to be finished this year, offering a potential deep collection of target acquisitions for institutional capital.

22.2% 2018 share of local population between 20 and 34 years old

34.2% of local population hold bachelor’s degree or higher*

$199,420 2018 median home price

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* Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services; RealPage, Inc.
2019 Investment Outlook

With a one notch rise in demand to 9 and rent growth holding steady at 8, Columbus has one of the best underlying fundamentals combinations of any metro over the past six months. The supply index also saw a one point rise as unit additions began to moderate, which will only strengthen the overall apartment market.

Transaction metrics did not deviate since midyear and both sit at highly attractive points, encouraging further investment in Columbus. With the yield index sitting at 5, the market offers higher cap rates than primary markets. The liquidity index’s 6 shows a healthy transaction market.

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

2019 Market Forecast

NMI Rank

Employment

Metro 1.9%
U.S. 1.3%

21,400 jobs

Construction as % of inventory

Metro 2.3%
U.S. 1.8%

Vacancy

Up 10 bps

Metro 4.8%
U.S. 5.8%

Rent

$1,269 per month

Metro 2.0%
U.S. 3.2%

Investment

3-yr. avg. activity

$20+ million

Deals: 17

Volume: $577 million

Key Performance Index

Vacancy By Class

Class A

Class B

Class C

Rent Growth By Class

10-Year Average

2019 Forecast

0%

2%

4%

6%

8%

10%
Dallas/Fort Worth

Robust Construction Pipeline Met With Steady Housing Demand

Strong job growth propels Metroplex apartment demand, construction pipeline. The Dallas/Fort Worth area remains a national leader in job creation again this year, producing strong housing demand. The number of households in the Metroplex is set to rise by approximately 60,000 for a second consecutive year, and apartment developers are on track to meet a sizable share of this demand. While rental deliveries remain heaviest just north of downtown Dallas and in the suburbs of Frisco, Prosper, Allen and McKinney, areas around Fort Worth will see a sizable increase in additions during 2019. Downtown Fort Worth, in particular, is on track to receive nearly 3,200 units this year, compared with 4,000 apartments delivered since 2013. While some softening is anticipated as vacancy ticks up, positive net absorption remains near a historical high, encouraging a steady pace of effective rent growth.

Investors shift product focus but high-reward prospects possible. Dallas/Fort Worth’s institutional market liquidity remains one of the highest in the nation and deal volume in 2019 should continue near levels witnessed over the past two years. Most sales this year will likely be of existing garden assets. The dearth of Class A supply additions has weakened pro forma rents and occupancy forecasts dramatically and tepid interest for this asset class persists. Investors’ focus has shifted to Class B opportunities, either stabilized properties or those available for value-add repositioning, as rent growth in this space remains solid and demand robust. However, a contrarian strategy could be employed to target newly completed developments by merchant builders concerned about valuations slipping in the rising interest rate environment and offering an exit price at an acceptable return rate. Also, another strategy could be reaching out to institutional owners who purchased early in the cycle at relatively higher cap rates and are looking to capitalize on current valuations, even if that means selling earlier than intended.

Employment Trends

Housing Affordability Gap

Supply and Demand

21.2% 2018 share of local population between 20 and 34 years old

32.7% of local population hold bachelor’s degree or higher

$261,139 2018 median home price

* Forecast ** Through 2Q

* 2017: 25+ years old

Sources: Marcus & Millichap Research Services, RealPage, Inc.
2019 Investment Outlook

The Dallas/Fort Worth Key Performance Index’s fundamentals have remained stable over the past six months. While demand and rent growth sit at respectable levels in the middle of the index at 6 and 5, supply endures as the downside risk in the market as it stays at 2.

Shifting focus within the transaction market has resulted in sales moving away from the top rent tier toward lower-rent properties. This has kept the liquidity index at 7, one of the highest nationally.

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

2019 Market Forecast

<table>
<thead>
<tr>
<th>Metric</th>
<th>Class A</th>
<th>Class B</th>
<th>Class C</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMI Rank</td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>Metro 2.8%</td>
<td>U.S. 1.3%</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Metro 3.5%</td>
<td>U.S. 1.8%</td>
<td></td>
</tr>
<tr>
<td>Vacancy</td>
<td>Metro 6.8%</td>
<td>U.S. 5.8%</td>
<td></td>
</tr>
<tr>
<td>Rent</td>
<td>Metro 1.5%</td>
<td>U.S. 3.2%</td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>Deals: 195</td>
<td>Volume: $7 billion</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Arrow reflects completions trend compared with 2017
Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
Denver

Urban Core Drawing Institutional Investors As Private Capital Focuses on Suburbs

High-quality jobs proliferate as corporate expansions boost employment growth. A talented labor pool is bringing many new companies to the Colorado Front Range and they are creating a number of well-paying positions. Cloud-based software firm Xero recently opened its new headquarters in LoDo, while VF Corp., a worldwide apparel and footwear company, has plans to open its global headquarters in downtown Denver in 2020. The inflow of degreed positions is sparking demand for Class A and B units, pushing vacancy rates for these asset classes into the lower-5 and mid-4 percent bands, respectively. As the number of available apartments declines, developers will be adding more than 14,000 rentals to the market, many of which will be luxury units. The urban core will receive a sizable portion of the new supply, particularly the Five Points neighborhood where more than 1,000 units will be finalized in 2019. In addition, Capitol Hill will witness the completion of nearly 400 apartments as the area’s revitalization efforts progress. As demand for apartments remains strong in 2019, the average effective rent will rise by more than 3 percent.

Long-term capital finding an excellent home. The strength and positive outlook for the Denver multifamily market is evident in the number of REITs entering the market and purchasing newly developed assets in multiple submarkets across the metro. The expanding tech and business services employment sectors have spurred significant in-migration of educated and highly skilled workers that represent a highly coveted renter profile for institutional investors. In addition, the supply pipeline has produced a deep pool of midrise properties in the urban core of Denver or near transit hubs that provide a live-work-play environment with high walk scores sought by long-term buyers. And while cap rates have compressed amid the elevated transactional activity, they remain higher than comparable asset types in primary coastal markets. Private investors will remain focused on value-add purchases in the city of Denver and close-in suburbs. The powerful combination of robust institutional and private capital inflows will keep Denver’s liquidity one of the highest nationally.

* Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services; RealPage, Inc.

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### 2018 Median Home Price

$452,930

### 2018 Share of Local Population

- *22.5%* between 20 and 34 years old
- *40.7%* of local population hold bachelor’s degree or higher*

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### Employment Trends

- Total Nonfarm Jobs (thousands)
- Year-over-Year % Change
- Absolute Change

### Housing Affordability Gap

- Mortgage Payment
- Effective Rent

### Supply and Demand

- Completions
- Absorption

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*Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services; RealPage, Inc.
2019 Investment Outlook

The two-point jump in Denver’s demand metric from 4 to 6 helped keep rent growth stable at 5 but does not alter the glaring supply issue that hangs over the market. The supply metric did not change over the past six months and remains at 1, the lowest of any metro in the index.

Liquidity, however, continues to hold back the supply downside risk as not only has it not moved since midyear, but it highlights one of the most liquid transaction markets in the nation. Potential buyers see long-term demand upside while existing owners are taking advantage of the index yield at 2, which represents strong valuations.

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

2019 Market Forecast

NMI Rank 19

Employment 36,000 jobs

Metro 2.4% U.S. 1.3%

Construction as % of inventory

Metro 4.8% U.S. 1.8%

Vacancy Unchanged

Metro 6.3% U.S. 5.8%

Rent $1,875 per month

Metro 4.0% U.S. 3.2%

Investment 3-yr. avg. activity $20+ million

Deals: 97 Volume: $6.2 billion

* Forecast ** Class A

* Arrow reflects completions trend compared with 2017

Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
Fort Lauderdale

Tech Workers’ Active Lifestyle Aligns With Flexibility That Apartments Provide

High mobility of young professionals a benefit for new luxury units. Fort Lauderdale’s job market has diversified in recent years, attracting more national and regional headquarters and growing the presence of tech companies substantially. With a robust and healthy job market, aided by a favorable business and tax climate, domestic migration into Broward County remains strong, driving a need for more housing options. The single-family home market remains challenging for many first-time buyers and barriers to ownership will increase this year amid rising interest rates and reduced tax incentives, keeping demand for rental housing elevated. Fort Lauderdale is quickly becoming a place where more young professionals want to live, drawn by lower prices and highly amenitized complexes in close proximity to employment hubs, nightlife and restaurants. The newly opened Virgin Trains rail system and the expansion of Tri-Rail directly into Downtown Miami are making it easier for people to get around in a region notorious for bad traffic, which could boost the number of residents commuting to jobs outside of Broward County every day.

Building up becomes a key investment strategy. Steady deliveries have been a driving force for the $20 million-plus multifamily transaction market. With the county tapped out for westward greenfield construction, investors will continue to view newly developed infill properties as solid long-term acquisition opportunities. While downtown Fort Lauderdale was the kickoff location for new midrise properties, developers have begun spreading these projects to suburban submarkets and have garnered significant interest from both institutional and private capital. Coral Springs, Pompano Beach and Sunrise have all seen recently completed midrise properties trade hands, reflecting the current strength of this asset type and the positive long-term growth potential seen in these locations. The transaction market appears well poised to maintain its current level of activity. Older garden properties will round out the remainder of the activity in the county as both stabilized properties and those with renovation opportunities remain available.

### Employment Trends

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Nonfarm Jobs (thousands)</th>
<th>Y-O-Y % Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>21</td>
<td>3%</td>
</tr>
<tr>
<td>2016</td>
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<td>2017</td>
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<tr>
<td>2018</td>
<td>21</td>
<td>1%</td>
</tr>
<tr>
<td>2019</td>
<td>28</td>
<td>0%</td>
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</table>

### Housing Affordability Gap

<table>
<thead>
<tr>
<th>Year</th>
<th>Mortgage Payment</th>
<th>Effective Rent</th>
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</thead>
<tbody>
<tr>
<td>2009</td>
<td>$1,000</td>
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<td>2010</td>
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<td>2018</td>
<td>$5,100</td>
<td>$6,000</td>
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### Supply and Demand

<table>
<thead>
<tr>
<th>Year</th>
<th>Completions</th>
<th>Absorption</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2016</td>
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<tr>
<td>2017</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2018</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2019</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

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* Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services, RealPage, Inc.
2019 Investment Outlook

Over the past six months fundamentals in Fort Lauderdale’s Key Performance Index did not change, reflecting the solid balance seen in market conditions currently. With demand remaining at 6, the downside risks of the supply metric at 2 continue to be neutralized by absorption. This has also maintained rent growth at 5.

The transaction indexes also saw no changes and remain balanced. Liquidity firmly standing at 6 reflects the elevated investor interest for assets. The yield index’s 3 reading keeps owners engaged to capitalize on strong valuations.

* Forecast  z Class A  v Arrow reflects completions trend compared with 2017

Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

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

2019 Market Forecast

NMI Rank  16

Employment  19,000 jobs

Metro 2.2%
U.S. 1.3%

Construction  as % of inventory*

Metro 1.9%
U.S. 1.8%

Vacancy*  Down 80 bps

Metro 5.5%
U.S. 5.8%

Rent*  $2,251 per month

Metro 3.3%
U.S. 3.2%

Investment  3-yr. avg. activity $20+ million

Deals: 29
Volume: $1.8 billion

* Forecast  z Class A

* Arrow reflects completions trend compared with 2017

Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
Energy Sector Recovery Fuels Job Growth, Invigorates Apartment Demand in Houston

Apartment development pipeline filling again as demand drivers strengthen. Houston is expected to lead the nation in job creation for a second consecutive year in 2019 as the economy bounces back from a slowdown in the oil and gas industry. Strengthening employment growth will invigorate housing demand, but residents will face limited housing options. The apartment construction pipeline thinned significantly during the energy industry downturn, and this year’s completions fall to one-third of last year’s total. Downtown Houston and the Spring and Tomball areas will see the sharpest dips in supply additions from 2018, while deliveries remain steady in Katy and the Heights area. Demand will outweigh completions, resulting in declining vacancy for only the second time in a five-year span. The brightening economic outlook spurred rising multifamily permit issuance last year, and an expanding planning pipeline suggests higher deliveries could be anticipated after 2019 to meet the rising housing needs.

Investment market has turned the corner. The turnaround in Houston’s $20 million-plus multifamily transaction market over the past year has been spectacular and the outlook for 2019 sees enduring positive conditions. The market finally shook off the 2014 crash of oil prices and got a shot in the arm from rebuilding efforts following Hurricane Harvey to return high on the list of target acquisition markets for both institutional and private capital. Pro forma rent forecasts above the national average have pushed cap rates to their lowest level in the cycle and per unit prices have hit a peak. The rising valuations have highly incentivized owners to pursue dispositions to meet the robust demand for assets. Investors will direct most of their focus on assets in the urban core and westward into the Energy Corridor. However, some buyers have also expanded their location searches and have found Southeast submarkets worthy of investment given strong operational results.

### Supply and Demand

<table>
<thead>
<tr>
<th>Year</th>
<th>Completions</th>
<th>Absorption</th>
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<tbody>
<tr>
<td>15</td>
<td>9</td>
<td>18</td>
</tr>
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<td>18*</td>
<td>6</td>
<td>27</td>
</tr>
<tr>
<td>19**</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>

### Housing Affordability Gap

<table>
<thead>
<tr>
<th>Year</th>
<th>Mortgage Payment</th>
<th>Effective Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>09</td>
<td>$500</td>
<td></td>
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<tr>
<td>10</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>18*</td>
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</tbody>
</table>

### Employment Trends

**Total Nonfarm Jobs (thousands)**

- **Absolute Change**
- **Y-O-Y % Change**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Nonfarm Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>4.0</td>
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<tr>
<td>16</td>
<td>4.5</td>
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<tr>
<td>17</td>
<td>5.0</td>
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<tr>
<td>18*</td>
<td>5.5</td>
</tr>
<tr>
<td>19**</td>
<td>6.0</td>
</tr>
</tbody>
</table>

### Housing Affordability Gap

**2018 share of local population between 20 and 34 years old**

**30.8%**

**2018 median home price**

**$240,743**

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*Forecast ** Through 2Q

* 2017: 25+ years old

Sources: Marcus & Millichap Research Services; RealPage, Inc.
2019 Investment Outlook

The deceleration of deliveries in the Houston metro skyrocketed the supply metric by four points over the past six months from 5 to 9. This is the highest of any metro and emphasizes a unique opportunity at this point in the cycle for a traditionally low-barrier-to-entry market. Demand moved up one notch, supporting excellent fundamentals for the year.

Investors have taken notice of the positive market conditions and pushed up transaction market activity, resulting in liquidity rising one point to 7. The yield index remained stable at 4 and gives both buyers and sellers positive reasons to transact.

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

2019 Market Forecast

- **NMI Rank**: 25
- **Employment**: 110,000 jobs
  - **Metro**: 3.5%
  - **U.S.**: 1.3%
- **Construction**: as % of inventory
  - **Metro**: 0.6%
  - **U.S.**: 1.8%
- **Vacancy**: Down 10 bps
  - **Metro**: 6.4%
  - **U.S.**: 5.8%
- **Rent**: $1,561 per month
  - **Metro**: 2.0%
  - **U.S.**: 3.2%
- **Investment**: 3-yr. avg. activity
  - $20+ million
  - Deals: 113
  - Volume: $3.7 billion

Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

* Forecast  * Class A

Arrow reflects completions trend compared with 2017

**Vacancy By Class**

- **Class A**
- **Class B**
- **Class C**

**Rent Growth By Class**

- **10-Year Average**
- **2019 Forecast**

Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
Robust Leasing Highlights Rental Demand; Investment Opportunities Shifting

Absorption paces elevated construction level. Over the past five years, more than 40,000 apartments were delivered in Los Angeles County, yet robust absorption held the metro's vacancy rate below 4 percent throughout this period, reaching a cycle-low level last year. In 2019, construction activity will further elevate as nearly 15,000 additional rentals are completed, the third largest annual total among U.S. metros. Amid this century-high volume of deliveries, the county's vacancy rate remains below 4 percent, aided by consistent hiring within the tech, entertainment and defense sectors, which has encouraged the formation of 35,000 new households. The widening gap between a mortgage payment and average monthly rent also favors demand for apartments, with the median home price nearing $600,000. Residents looking to lease newly built units this year will find the most opportunities in Greater Downtown Los Angeles, where more than 8,000 apartments are slated for finalization. An uptick in completions also occurs in the San Fernando Valley, where an extended period of tight vacancy has created pent-up demand.

Investment focus shifts to capitalize on Class B positioning. With Proposition 10 being defeated, the investment market appears poised to renew the acceleration witnessed in 2018. While some capital sources waited on the sidelines for the election results, many investors appeared unfazed as transaction volume for $20 million-plus sales hit a cycle peak last year. Increased capital placements from institutional and cross-border sources played a major role in the strength of the investment market and should remain primary drivers this year. The elevated sales activity has compressed the average cap rate, which has created an excellent valuation backdrop for owners to realize solid returns on listed properties. Furthermore, buyers' focus appears to be shifting toward existing older assets and newly developed projects outside of the downtown core. With the Class B sector outperforming the top tier and a $900 rent delta between Class A and Class B rents, investors should see strong upside growth potential for well-located Class B assets.

23.1% 2018 share of local population between 20 and 34 years old
32.1% of local population hold bachelor’s degree or higher*
$585,075 2018 median home price

* Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services, RealPage, Inc.
The Los Angeles Key Performance Index took a huge hit since last summer with rent growth tumbling from 9 to 5 as supply dropped one notch. While the rent growth drop was significant, demand did not move and points to the underlying strong drivers for rental housing.

Liquidity declined by one point, reflecting the limited availability of assets for purchase. Yield stayed at 1, which mimics other primary coastal markets with similar strong investor outlooks.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.
Investors Revitalize Aging Assets as Miami Emerges as a Regional Tech Hub

Strong in-migration and employment outlook sustain demand. A favorable tax climate, international business ties and one of the nation’s largest coworking markets, has rapidly evolved Miami’s tech ecosystem, attracting more young entrepreneurs and startups to boost household formation this year. Many of these young professionals prefer to rent as the lifestyle provides greater mobility and the ability to live and work in the same neighborhood, taking in nearby restaurants and entertainment. Heavily congested streets and minimal parking build on this trend as millennials are eager to walk from home to work. Developers have their sights on Downtown Miami and the immediate neighborhoods of Wynwood and Brickell, areas that are highly desired by the younger cohort. Pockets beyond the urban core are transforming quickly as well with renters seeking out the greater affordability that West Miami and Hialeah can provide, yet with demand outpacing supply growth, rents are quickly rising toward the market average. Vacancy will soften marketwide, though, as completions reach a cycle high this year.

Elevated investor confidence raising competition for assets. The lack of available assets for sale has heightened an already-competitive bidding environment with cap rates compressing and the average price per unit rising steadily over the past two years. Solid demand for new high-rise and midrise properties in Dade County will propel the $20 million-plus transaction market in 2019 as investors’ pro forma rents continuing to outperform the national rate. With demand for assets outstripping supply, cap rates for newly developed assets are targeted in the mid-4 to high 4 percent range. Developers have stabilized the 14 projects completed in 2018 and 24 projects will be completed in 2019. The intense bidding atmosphere could encourage developers to take advantage of favorable pricing to list assets for disposition. Given the abundance of institutional capital seeking placement in core assets within supply-restricted markets such as Miami, both sellers and buyers appear ready to capitalize on these excellent transaction conditions.

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20.4% 2018 share of local population between 20 and 34 years old
30.5% of local population hold bachelor’s degree or higher*
$357,840 2018 median home price

* Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services, RealPage, Inc.
2019 Investment Outlook

Miami’s Key Performance Index fundamentals all registered weakening totals in the past six months as rent growth plummeted three points while demand and supply each declined by one. The market appears to be adjusting for an increase in supply deliveries for the coming year and despite demand ticking down slightly, it remains a positive indicator.

Liquidity slipped one point as available listings have declined, which moderated acquisition activity. Yield held steady at 3, keeping it solidly in the middle of the pack nationally.

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

2019 Market Forecast

NMI Rank

Employment

Construction

Vacancy

Rent

Investment

Metro 2.0%

Metro 2.6%

Metro 6.2%

Metro 2.2%

3-yr. avg. activity

24,000 jobs

as % of inventory* Up 20 bps

$2,179 per month

Deals: 21

NMI Rank 20

Notes:

* Arrow reflects completions trend compared with 2017
Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

Key Performance Index

Vacancy By Class

Rent Growth By Class
Minneapolis-St. Paul Remains Among Lowest-Vacancy Markets in U.S.

**Slowdown of new development to drive falling vacancy.** Sustained employment gains continue to draw additional residents to the Twin Cities region, including young professionals in the prime renter cohort. The influx of people coupled with rapidly rising home prices will contribute to the need for rentals this year. A temporary slowdown in deliveries during 2019 will squeeze vacancy to the lowest level of the cycle by year end, although not all submarkets will fare equally. In the downtown Minneapolis and University of Minnesota areas, roughly 5,000 apartments have been added over the last five years and nearly 1,200 units are expected in the area during 2019. These deliveries will keep supply above demand with more rental towers slated to break ground as the year progresses. Luxury apartments in the area will face increased competition from condo deliveries. Marketwide, tight vacancy and strong demand will push the average effective rent up 5.7 percent, reaching a new high.

**Development pipeline offers potential outlet for acquisition capital.** The lowest vacancy in the Midwest combined with rent growth that is forecast to be two times the national rate for the coming year has institutional investors highly motivated to acquire assets in the Twin Cities. On top of the excellent fundamentals, inbound yields are higher compared with primary markets; however, investor demand far outstrips the available supply of assets for sale. Many owners in the region favor a long-term hold strategy, which historically keeps transaction volumes in Minneapolis significantly lower than is witnessed in metros of comparable size and with similarly strong market dynamics. The construction pipeline offers the best opportunity for institutional capital to acquire assets in the coming year. Over the previous two years, 64 projects were completed. With the threat of rising interest rates combined with the average cap rate at the lowest level of the expansion, developers could see the upside of the current valuation strength and list stabilized projects for disposition.

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*Forecast ** Through 2Q
** 2017: 25+ years old
* Sources: Marcus & Millichap Research Services, RealPage, Inc.
2019 Investment Outlook

The demand metric advanced one point over the past two quarters and now stands at 10. Minneapolis is only one of two markets to hit the highest demand index possible. Rent growth also exhibits one of the highest index levels at 8, where it stood throughout last year.

The liquidity and yield indexes held steady for the past six months. The strong fundamentals combined with the yield index at 4 keeps institutional capital highly engaged for acquisitions and should encourage owners to seriously consider dispositions.

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

2019 Market Forecast

- **NMI Rank**: 1
- **Employment**: 30,000 jobs
  - Metro: 1.5%
  - U.S.: 1.3%
- **Construction**: as % of inventory
  - Metro: 1.7%
  - U.S.: 1.8%
- **Vacancy**: Down 80 bps
  - Metro: 4.4%
  - U.S.: 5.8%
- **Rent**: $1,708 per month
  - Metro: 2.5%
  - U.S.: 3.2%
- **Investment**: 3-yr. avg. activity
  - $20+ million
  - Deals: 28
  - Volume: $1.2 billion

---

Key Performance Index

- Supply
- Demand
- Rent Growth
- Liquidity
- Yield

Vacancy By Class

- **Class A**: 0%
- **Class B**: 2%
- **Class C**: 4%

Rent Growth By Class

- **10-Year Average**
- **2019 Forecast**

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- **Minneapolis-St. Paul**
- **Employment**: 30,000 jobs
- **Construction**: as % of inventory
- **Vacancy**: Down 80 bps
- **Rent**: $1,708 per month
- **Investment**: 3-yr. avg. activity
- **Deals**: 28
- **Volume**: $1.2 billion

* Arrow reflects completions trend compared with 2017
* Forecast
* Class A
Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
Amazon, Google Expansions Driving Apartment Demand Across Boroughs

Announcements by tech giants set stage for next phase of growth in New York City. Following the recent announcements by Google and Amazon to undertake vast expansions of their office footprint and workforce, the New York City metro has set the stage for robust growth stemming from the tech sector. While Google will be expanding in Lower Manhattan, Amazon has opted for Long Island City in Queens, bolstering demand for housing throughout the city. Developers have taken note, swelling the pipeline for new rentals in core neighborhoods of Manhattan, as well as several prominent locations in Brooklyn and Queens. Additionally, the size and scope of projects remains exceptional, highlighted by the redevelopment of the Domino Sugar factory in Williamsburg into a mixed-use structure and 5Pointz in Long Island City, a two-building, 1,115-unit undertaking. While construction remains elevated, supply growth has rolled over from the cycle high reached in 2016, allowing rent growth to reaccelerate, particularly in Manhattan and western Brooklyn along the East River. Vacancy remains extremely tight as well, set to remain below 2 percent this year.

Closing of the bid/ask spread creating sales rebound. The acceleration of sales activity last year points to increased investor and owner confidence in market fundamentals. This has caused a narrowing of the bid/ask spread, which is releasing pent-up transaction activity. The outlook for the coming year appears solid as Class A rents has reversed course and turned positive, allowing improved underwriting assumptions. Investors’ positive outlook can also be seen in the changing composition of buyers. After transaction volume peaked in 2015, private capital dominated purchasing activity. More recently, however, the profile has become more balanced between institutional advisors, private investors and cross-border capital, highlighting the improved outlook for asset performance. Disposition activity for recently completed development deals has also increased noticeably. With the construction pipeline adding new units at the fastest pace in years, the deep pool of newly built properties in Manhattan, Brooklyn and Long Island City offers excellent opportunities for long-term capital placements.

24.6% 2018 share of local population between 20 and 34 years old

37.6% of local population hold bachelor’s degree or higher

$562,141 2018 median home price
2019 Investment Outlook

Demand sits at the zenith of the index, unmoved from its position at midyear. New York City is only one of two markets in the Key Performance Index to register a 10 for any metric. Rent growth held steady at 5 while supply dipped two notches as supply additions remained above the historical average.

Liquidity maintained a solid 5 index, showing that investor confidence in acquiring assets in New York City has not wavered. Furthermore, the yield metric dropped one point, reflecting the competitive sale environment for available properties.

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

2019 Market Forecast

NMI Rank 3

Employment 55,000 jobs

Metro 1.2% U.S. 1.3%

Construction as % of inventory

Metro 1.2% U.S. 1.8%

Vacancy Unchanged

Metro 6.0% U.S. 5.8%

Rent $4,053 per month

Metro 3.0% U.S. 3.2%

Investment 3-yr. avg. activity $20+ million

Deals: 165 Volume: $8 billion

* Forecast ** Class A

Arrow reflects completions trend compared with 2017

Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

Key Performance Index

10

8

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Supply Demand Rent Growth Liquidity Yield

Vacancy By Class

Class A Class B Class C

Rent Growth By Class

10-Year Average 2019 Forecast

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Slowing Supply Accelerating Rents, Raising Transactions Throughout the Metro

Fewer completions outside Hudson County improve operations. The rising costs of homeownership maintain demand for apartments in Northern New Jersey. Construction activity continues to expand, led by more openings in Hudson County. In Jersey City and Hoboken, numerous additions are placing upward pressure on Class A vacancy as properties take time to lease. More concessions are being offered, curbing how fast monthly rates appreciate. That is especially true for upgraded Class B buildings, which are competing with both recent local finalizations and more affordable options farther inland. Outside of Hudson County, development is slowing, enabling lower availability in many parts of the market and driving improved revenue. Sub-2 percent vacancy in the city of Newark translates to the minimal use of concessions, aiding rent gains. The net impact of these trends on the region’s overall rent growth is a moderate advancement compared with last year. By the same token, the market-wide vacancy rate will rise slightly in 2019 but remain below the national level.

Transactions rising on competitive pricing. After several years of demand for properties outstripping the supply of $20 million-plus assets for sale, the transaction market accelerated in 2018 and signs point to that momentum carrying over into 2019. Sales of older properties in southern submarkets targeted by private capital drove the rise in volume last year and could foster more owners to explore dispositions given the strong closing valuations assets have recorded. Several larger asset sales near the Hudson River or close to transit hubs favored by institutional or REIT buyers closed recently and saw highly competitive pricing. Investors seek to take advantage of higher-yielding assets in Northern New Jersey compared with similar product in New York City. Newly completed development deals in Jersey City and neighboring cities also offer a potential deep pool of core assets for acquisition if developers decide to make the most of current valuations.

20.3% 2018 share of local population between 20 and 34 years old
38.8% of local population hold bachelor’s degree or higher*
$375,267 2018 median home price

* Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services, RealPage, Inc.
2019 Investment Outlook

The fundamentals in Northern New Jersey’s Key Performance Index saw an uptick in demand from 7 to 8, reflecting the solid long-term necessity for multifamily housing while supply and rent growth held to their same levels from six months earlier. While many investors focus on supply concerns, the index shows that demand should match supply additions.

With the yield index holding at a 3 since the summer, Northern New Jersey has the highest yield metric in the Northeast and that fact has not escaped investors. That can be readily seen in liquidity rising from 3 to 4 as transaction activity edged upward.

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

2019 Market Forecast

**NMI Rank**
- 22

**Employment**
- Metro 0.6%
- U.S. 1.3%
- 13,000 jobs

**Construction**
- Metro 2.9%
- U.S. 1.8%
- as % of inventory

**Vacancy**
- Metro 6.7%
- U.S. 5.8%
- Up 20 bps

**Rent**
- Metro 2.2%
- U.S. 3.2%
- $2,873 per month

**Investment**
- Deals: 16
- Volume: $954 million
- 3-yr. avg. activity
- $20+ million

**Vacancy By Class**
- Class A
- Class B
- Class C

**Rent Growth By Class**
- 10-Year Average
- 2019 Forecast

* Forecast

* Arrow reflects completions trend compared with 2017

Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
Downtown Oakland Construction Boom Creates Rental Arbitrage Opportunities

Supply growth nearly quintuples as builders target urban core.
Capitalizing on the rent spread that can easily exceed $800 per month between San Francisco and Oakland, developers are targeting numerous deliveries inside the urban core of Oakland this year. Locations along the BART, particularly between I-880 and I-580 along Broadway, have proved extremely popular with tenants, encouraging a construction boom in core urban neighborhoods, where more than 80 percent of this year’s supply will open for leasing. While completions will jump to nearly 5,000 units this year, tenants will be highly interested in new Class A apartments due to the considerable discounts relative to San Francisco. This will limit vacancy increases to marginal upticks in the most heavily impacted neighborhoods. Meanwhile, a lack of construction outside of Oakland will invigorate operations in commuter suburbs along the I-880 between San Leandro and Fremont. These locations maintain vacancy well below the metro average, which will accelerate already robust growth in the average effective rent.

Increased listings finding a deep pool of investors able to close.
Compressing cap rates combined with the highest forecast rent growth in the Bay Area for the coming year have ignited the transactions market. After a long period of limited listings, owners now are capitalizing on the deep capital sources searching for assets and the positive valuation environment. At the end of 2018, cap rates hit their lowest level of the current expansion with an average of 4.7 percent. This is the largest average among the three Bay Area metros and the higher yield keeps private capital sources engaged in the Oakland market as a value strategy for the region. These private investors are focused on existing garden assets in suburban locations, especially along the I-680 corridor and cities near the southern border with the San Jose Metro.

21.1% 2018 share of local population between 20 and 34 years old
40.8% of local population hold bachelor’s degree or higher*
$860,662 2018 median home price

* Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services, RealPage, Inc.
2019 Investment Outlook

Oakland’s supply metric fell dramatically from 8 to 2 over the past two quarters as unit additions will see a cycle peak this year. Rent growth and demand also slipped. Rent growth fell two points but a greater concern amid rising supply is the dip in demand from 7 to 6.

The high level of competition for assets throughout the Bay Area has Oakland’s yield index holding at the lowest level, 1, since the summer. Liquidity also did not change and holds a slight advantage over neighboring metros.

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

2019 Market Forecast

- **NMI Rank**: 9

- **Employment**: 22,000 jobs
  - Metro 1.8%
  - U.S. 1.3%

- **Construction**: as % of inventory
  - Metro 2.4%
  - U.S. 1.8%

- **Vacancy**: Up 30 bps
  - Metro 4.6%
  - U.S. 5.8%

- **Rent**: $3,101 per month
  - Metro 4.9%
  - U.S. 3.2%

- **Investment**: 3-yr. avg. activity $20+ million
  - Deals: 30
  - Volume: $1.4 billion

Oakland’s supply metric fell dramatically from 8 to 2 over the past two quarters as unit additions will see a cycle peak this year. Rent growth and demand also slipped. Rent growth fell two points but a greater concern amid rising supply is the dip in demand from 7 to 6.

The high level of competition for assets throughout the Bay Area has Oakland’s yield index holding at the lowest level, 1, since the summer. Liquidity also did not change and holds a slight advantage over neighboring metros.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.
Cycle-Low Vacancy Enables Metro To Absorb Third Crop of New Supply

Market conditions bode well for luxury rental demand. Entering 2019, Orange County’s median home price has reached $820,000, with the gap between a mortgage payment and average monthly rent sitting at $2,600 per month. While these values make homeownership unobtainable for many residents, low unemployment and median income nearing $90,000 suggest many households can afford higher-priced rentals. Spanning the past two years, nearly 9,000 such units were delivered, with the metro’s overall vacancy rate declining by 20 basis points during that time. Sensing an additional need for luxury apartments, developers will finalize more than 4,000 rentals for the third straight year in 2019. Projects adjacent to Angel Stadium or directly off Interstates 5 and 405 in Laguna Niguel and Irvine account for more than half of this delivery volume. Overall, demand for new units and more affordable Class B and C apartments will translate to nearly 3,900 new leases this year, maintaining vacancy at a mid-3 percent level.

Rising valuations offer opportunity for expanding acquisitions. Despite Orange County being one of the top acquisition target markets for institutional investors, a lack of available listings has continued limiting transaction opportunities. However, current owners of existing properties and developers of recently completed projects may have a good reason to consider moving forward with potential dispositions. Valuations rose last year due to high investor demand and accelerating fundamentals. The average cap rate for sales above $20 million has reached a cycle low while the average price per unit has peaked. The excellent pricing conditions and the defeat of Proposition 10 sets the stage for owners to take advantage of the robust demand for properties, especially from institutional capital sources. Older garden-style properties have been the most actively traded over the past three years. Yet, several recently developed midrise properties have changed hands and could signal a changing outlook for more new core assets coming to market for sale.

Supply and Demand

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Employment Trends

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Housing Affordability Gap

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* Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services, RealPage, Inc.
2019 Investment Outlook

A jump in the demand metric in Orange County’s Key Performance Index since summer by three points, from 5 to 8, reflects the overall strength of multifamily units in market with limited and expensive housing options. The uptick in supply to 4 reflects the difficulty in adding new properties due to limited development sites and tight regulation.

The transaction portion of the index had no movement over the last two quarters. Yield remains at 1, reflecting that the metro is a coastal market location with long-term supply constraints. Liquidity held firm at 6 due to persistent investor demand.

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

2019 Market Forecast

- **NMI Rank**: 15
- **Employment**: 17,000 jobs
  - Metro: 1.0%
  - U.S.: 1.3%
- **Construction**: Metro: 1.6%
  - U.S.: 1.8%
- **Vacancy**: Down 10 bps
  - Metro: 4.3%
  - U.S.: 5.8%
- **Rent**: $2,411 per month
  - Metro: 2.8%
  - U.S.: 3.2%
- **Investment**: Deals: 27
  - Volume: $1.5 billion
  - 3-yr. avg. activity: $20+ million

* Arrow reflects completions trend compared with 2017
Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
Tight Vacancy and Robust Rent Growth
Produce One of the Top Rental Markets

Dynamic employment growth and favorable quality of life are a boon to the rental market. Job gains that are more than triple the national level amid tight unemployment are producing significant migration into the metro and generating a surge in housing demand. Nearly 65,900 new residents will reside in Orlando during 2019, boosting rental demand. Even though apartment completions will hover near the five-year average, demand will outpace new inventory this year, tightening vacancy to one of the lowest rates in the nation. Deliveries will be widespread with nearly every submarket receiving new units. Many of the projects are mixed-use apartment buildings with ground-floor retail in walkable neighborhoods favored by young renters. As vacancy tightens and additional units are placed into service during 2019, the average effective rent will jump more than 7 percent for a third consecutive year, one of the highest growth rates in the U.S.

Restrained new supply and attractive cap rates heightening investor demand. Orlando has been and will remain at the top of many institutional investors’ target list for acquisition. With rent growth and vacancy forecasts outperforming the nation, pro forma revenue and NOI projections for the coming year will remain highly attractive across all asset types in the metro. Lofty expectations in underwriting assumptions last year compressed cap rates but Orlando’s returns remain higher than primary East Coast markets and the metro has stronger rent growth projections. Furthermore, supply additions have remained tempered, which keeps rent growth for top-tier properties strongly positive, resulting in robust transactional activity for newly completed assets. Developers of recently stabilized projects have been taking advantage of the elevated pricing and strong demand for core assets by liberally putting projects into the disposition market, which should continue for the coming year.

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**Employment Trends**

- Absolute Change
- Y-O-Y % Change

**Housing Affordability Gap**

- Mortgage Payment
- Effective Rent

**Supply and Demand**

- Completions
- Absorption

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* Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services; RealPage, Inc.
2019 Investment Outlook

Robust in-migration combined with a continuing high propensity to rent in Orlando advanced the demand index from 8 to 9, reflecting that it is one of the strongest multifamily markets in the nation. Tempered supply additions combined with elevated demand increased rent growth three points to 9, the highest of any market.

Investors see the lofty fundamentals and have responded by aggressively pricing available assets, which pushed down the yield index by one point to 3. The increased valuations, however, have not affected liquidity as it remains at a high level.

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

2019 Market Forecast

NMI Rank
6

Employment
65,000 jobs

Metro 4.9%
U.S. 1.3%

Construction
as % of inventory
Metro 2.7%
U.S. 1.8%

Vacancy
Down 30 bps

Metro 3.9%
U.S. 5.8%

Rent
$1,639 per month

Metro 7.4%
U.S. 3.2%

Investment
3-yr. avg. activity
$20+ million

Deals: 72
Volume: $3.2 billion

Vacancy By Class

Class A
Class B
Class C

Rent Growth By Class

10-Year Average
2019 Forecast

* Forecast
# Class A

* Arrow reflects completions trend compared with 2017
Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
Robust Hiring Sustains Superb Demand, Driving Aggressive Rent Growth

Diverse job creation fueling elevated construction across the metro.

Corporate expansions are becoming more frequent in the Valley as Deloitte and Voya Financial are collectively creating 3,500 jobs over the next few years. In addition, employment growth in the medical sector should be more prevalent moving forward as there are several healthcare projects taking place, headlined by the large expansions of the Mayo Clinic and Chandler Regional Medical Center. Jobs at these facilities will help bolster the market’s already-robust rental demand; however, vacancy is expected to rise this year as builders finalize more than 10,000 apartments, the highest delivery total since 2000. This period of supply infusion should subside in the coming years as demand catches up to the metro’s accelerated pace of construction. Downtown Phoenix will continue to log an influx of units this year, while employment gains near Tempe Town Lake prompt new development along the Loop 202 and Rio Salado Parkway. Despite elevated levels of construction, rent growth remains notably strong, pushing rents over the $1,100 mark.

Rising valuations point to further upside growth. The transaction market’s explosive growth in 2018 will be difficult to replicate this coming year but investors are signaling that Phoenix remains in their sights for acquisitions. All investment metrics point to continued positive upside growth for multifamily properties as the expanding regional economy spurs soaring in-migration, which has created record demand for rental housing. Underwriting projections will remain highly confident this year and with the average cap rate hitting its lowest level in the expansion, owners of existing or recently completed developments have a solid valuation base to sell into. The wide pool of asset types for acquisition also allows the region to tap into multiple capital sources. Private buyers remain focused on value-add opportunities in 1980- and 1990-vintage assets while institutional or cross-border investors seek new core assets in high-density locations such as Central Phoenix or Northern Tempe.

### Supply and Demand

<table>
<thead>
<tr>
<th>Unit (thousands)</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18*</th>
<th>19**</th>
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<td>Completions</td>
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<td>6</td>
<td>3</td>
<td>9</td>
<td>12</td>
</tr>
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<td>Absorption</td>
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<td>9</td>
<td>6</td>
<td>12</td>
<td>14</td>
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### Employment Trends

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<tr>
<th>Total Nonfarm Jobs (thousands)</th>
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<th>75</th>
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<td>Absolute Change</td>
<td>0</td>
<td>2%</td>
<td>4%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>Y-O-Y % Change</td>
<td>0%</td>
<td>2%</td>
<td>4%</td>
<td>6%</td>
<td>8%</td>
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</tbody>
</table>

### Housing Affordability Gap

<table>
<thead>
<tr>
<th>Mortgage Payment</th>
<th>Effective Rent</th>
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</thead>
<tbody>
<tr>
<td>Monthly Payment</td>
<td>Monthly Payment</td>
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<tr>
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<td>$1,500</td>
</tr>
<tr>
<td>$2,000</td>
<td>$2,000</td>
</tr>
</tbody>
</table>

### 2018 share of local population between 20 and 34 years old

20.9%

### 2018 median home price

$271,784

Sources: Marcus & Millichap Research Services, RealPage, Inc.
2019 Investment Outlook

Demand was the only indicator to move in Phoenix’s Key Performance Index over the past two quarters. The strong in-migration has been expanding housing needs significantly and it pushed demand up two points to 8. With rent growth steady at 7, the market’s current strengths make it a standout in the Southwest.

High liquidity remains a prominent feature of Phoenix’s transaction market as it matches the highest rating across all markets at 8. The yield metric at 3 points to the continued value the markets offers, especially compared with coastal metros.

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

2019 Market Forecast

- **NMI Rank**: 12
- **Employment**: 80,800 jobs
- **Construction**: Metro 3.0% U.S. 1.8%
- **Vacancy**: Up 10 bps
- **Rent**: $1,381 per month
- **Investment**: Deals: 116 Volume: $4.7 billion

Vacancy By Class

Rent Growth By Class
Elevated Housing Costs Favor Rentals; Investors Focus Attention on Suburbs

City weighs changes to inclusionary zoning. A lack of low-cost housing in Portland will continue to sustain demand for Class C apartments in 2019. The monthly mortgage payment in the metro is roughly $1,000 per month more than the average effective rent, supporting apartment demand. Vacancy in Class C apartments, in particular, has remained at or below 3 percent since the first quarter of 2014. As high demand adjusts market rents upward, some tenants cannot find units at a price point they can afford. The city’s inclusionary zoning policy was made in an effort to provide housing for more lower-income households. Few incentives for developers, however, are making it difficult to generate enough revenue to cover rising construction costs, cutting the number of multifamily permits considerably. To encourage development, voters recently passed an affordable housing bond that will allow the city to build 1,300 apartments for lower-income households.

Higher yields pulling in capital. Positive apartment fundamentals combined with higher yields than other West Coast markets draw investors to the Portland metro. In addition, the market stands out as one of the few nationally with a sizable pool of available value-add properties. Beaverton and Hillsboro will be heavily targeted for these opportunities given their deep pool of 1980s- and 1990s-vintage assets. The development pipeline’s strong focus in the city of Portland caused sales activity there to slow dramatically over the past year. However, absorption has matched or exceeded the new units coming online and vacancy for Class A properties has begun to decline. This offers an opportunity for some higher-risk investors to target recently stabilized properties. Developers would be able to exit in the more favorable cap rate environment, reducing their exposure to rising interest rates while the purchaser could take advantage of the upside rental growth potential once the pipeline decelerates in 2020.
2019 Investment Outlook

The demand index jumped two points from 6 to 8 over the past six months, showcasing expanding multifamily housing in the metro. Supply and rent growth held steady. Overall, the fundamentals in the Key Performance Index reflect a healthy and stable market with further upside demand potential.

Transaction metrics in the Key Performance Index remained secure with liquidity at 6 and yield steady at 2. With the majority of West Coast markets seeing a yield index of 1, Portland’s higher yield index will keep investors who seek elevated returns targeting the metro for acquisitions.

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2019 Market Forecast

- **NMI Rank**: 10
- **Employment**: 19,000 jobs
- **Metro**: 1.6%
- **U.S.**: 1.3%

- **Construction**: 2.5%
- **Metro**: 2.5%
- **U.S.**: 1.8%

- **Vacancy**: Down 60 bps
- **Metro**: 5.8%
- **U.S.**: 5.8%

- **Rent**: $1,711 per month
- **Metro**: 2.5%
- **U.S.**: 3.2%

- **Investment**
  - Deals: 35
  - Volume: $1.7 billion

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Key Performance Index

**Sources:** Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

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

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Vacancy By Class

- **Class A**
- **Class B**
- **Class C**

Rent Growth By Class

- **10-Year Average**
- **2019 Forecast**

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**Arrow reflects completions trend compared with 2017**

**Sources:** Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
Cycle-Low Vacancy and Surging Rent
Growth Driving Investment Opportunities

Highly skilled talent pool draws businesses, creating jobs and rental demand. Steady employment gains have brought nearly 130,000 positions to the market over the past five years, helping lure residents to the region. This year, the addition of roughly 50,500 people will result in the formation of 22,000 new households, generating the need for housing options. Some new residents are students at the region’s world-class universities or young professionals who typically rent for several years. Many will find employment at the numerous tech companies that are expanding. In the city of Durham, the first mixed-use building completed in the Durham Innovation District offers office and lab space, bringing tech and life science jobs to downtown and generating apartment demand. Other phases of the 15-acre project will bring 300 residential units, retail space, additional office, a lab and restaurants. Throughout the market, substantial rental demand amid a slowdown in new inventory during 2019 will drop vacancy to the lowest rate since 2001, supporting a 5.7 percent surge in the average effective rent.

Rent forecast and renter profile drawing capital. Investors seeking higher yields on the East Coast are targeting Raleigh and the forces attracting capital into the metro will remain positive for the coming year. Cap rates have compressed over the past year yet sit close to 30 basis points higher than primary East Coast markets. In addition, rent growth forecasts for 2019 are twice the national rate. The strong rent growth projections will allow for cap rates to continue being priced at the cycle low and encourage owners to consider disposition for assets with debt coming due or not considered long-term holds to benefit from the strong current valuations. Newly developed assets that have stabilized will also represent excellent opportunities for acquisitions, especially those near the urban cores, the universities and Research Triangle Park. These locations offer institutional capital the core-type locations that appeal to their investor pools who seek live-work-play settings and access to the educated tech-worker renter profile.

21.5% 2018 share of local population between 20 and 34 years old
44.1% of local population hold bachelor’s degree or higher*
$286,864 2018 median home price

* Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services; RealPage, Inc.
2019 Investment Outlook

Positive upward movement was registered in the fundamentals portion of Raleigh’s Key Performance Index over the past two quarters, reflecting the continued growth in the metro’s multifamily market. Demand jumped three points and now sits at 8, which helped push rent growth from 6 to 8 as supply ticked up one on moderating unit deliveries.

Liquidity witnessed no change since midyear and Raleigh sits as one of the most liquid markets in the nation at an 8. Yield held at 2, which highlights investors’ competitive bidding on available assets.

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

2019 Market Forecast

NMI Rank

Employment

Construction

Vacancy

Rent

Investment

Metro 3.1%

Metro 2.4%

Metro 6.0%

Metro 5.0%

Deals: 50

U.S. 1.3%

U.S. 1.8%

U.S. 5.8%

U.S. 3.2%

Volume: $2 billion

2019 Market Forecast

18

50,000 jobs

as % of inventory

Down 20 bps

$1,472 per month

3-yr. avg. activity

$20+ million

18

07 08 09 10 11 12 13 14 15 16 17 18* 19**

0% 3% 6% 9% 12%

Rent Growth By Class

Class A

Class B

Class C

10-Year Average

2019 Forecast

* Forecast  ¹ Class A

* Arrow reflects completions trend compared with 2017

Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

Key Performance Index

Supply

Demand

Rent Growth

Liquidity

Yield

0 2 4 6 8 10

Vacancy By Class

Class A

Class B

Class C

0% 3% 6% 9%

Vacancy Rate

0% 3% 6% 9% 12%

07 08 09 10 11 12 13 14 15 16 17 18* 19**

* Forecast  ¹ Class A

* Arrow reflects completions trend compared with 2017

Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

Raleigh

Employment

30,000 jobs

Construction

as % of inventory

Vacancy

Down 20 bps

Rent

$1,472 per month

Investment

3-yr. avg. activity

$20+ million

NMI Rank

18

Metro 3.1%

U.S. 1.3%

Metro 2.4%

U.S. 1.8%

Metro 6.0%

U.S. 5.8%

Metro 5.0%

U.S. 3.2%

Deals: 50

Volume: $2 billion

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Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.
Consistently Tight Vacancy Has Investors Eager to Expand Inland Portfolios

Diverse hiring, stable rental demand sustain minimal vacant stock. The completion of 45 million square feet of industrial space over a 24-month span ending in 2019 suggests robust warehouse and logistics job creation persists this year, supporting overall employment growth that doubles the national rate of increase. The expansion of the e-commerce sector, combined with an influx of health and construction jobs, maintains the Riverside-San Bernardino region as Southern California’s fastest-growing economy in 2019. The wealth of job openings this year will sustain a stout rate of household formation, generating a need for rentals during a period of strong single-family home price appreciation. Consistent demand for apartments in 2019 supports new leases exceeding 2,000 units for a second straight year, nearly negating the impact of increased supply. Developers will respond to limited availability by completing 10 projects this year that feature an average of 270 apartments.

Demand for assets far outstripping available listings. In terms of investment screening data points, Riverside-San Bernardino rises to the top compared with coastal Southern California metros with stronger employment and rent growth, plus cap rates averaging 50 basis points higher. These factors along with a limited construction pipeline have gained regional and out-of-state investor attention. However, a lack of available listing could continue hampering capital’s ability to be deployed this year unless some owners move away from their long-term hold strategy. The strong demand for property has increased competition for listed assets and pushed average cap rates to their lowest level in the investment cycle. Owners electing to proceed with dispositions should encounter a highly favorable valuation atmosphere and highly motivated capital sources eager for placement. Additionally, while few new properties being built maintained a low vacancy rate, investors are unable to tap this potential source of assets for acquisitions.
2019 Investment Outlook

All three of Riverside's fundamental indexes declined over the past two quarters. Supply posted the largest decline, going from 8 to 4, while rent growth dipped two points and demand retreated by one. Demand now sits at 8, which reflects the overall strength in Riverside's market. It should be the index investors focus the most on.

Transaction index variables showed no change with liquidity at 6 and yield at 2. It is important to note that Riverside's yield index is the highest of any California metro and a strong draw for investment capital.

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

2019 Market Forecast

NMI Rank
7

Employment
40,000 jobs
Metro 2.6%
U.S. 1.3%

Construction
as % of inventory
Metro 1.4%
U.S. 1.8%

Vacancy
Down 20 bps
Metro 4.4%
U.S. 5.8%

Rent
$1,900 per month
Metro 5.2%
U.S. 3.2%

Investment
3-yr. avg. activity
Volume: $1.5 billion

Key Performance Index

Vacancy By Class

Rent Growth By Class

* Forecast  * Class A
* Arrow reflects completions trend compared with 2017
Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
**Downtown Revitalization Breaths New Life Into San Antonio Apartment Market**

Supply growth migrates to downtown amid revitalization. City leaders are focusing efforts to bring jobs back to downtown San Antonio. Several companies have announced growth plans in the city’s core, and the University of Texas at San Antonio is planning a $90 million expansion that will form a new tech corridor in the city. Several mixed-use projects are planned or already underway nearby, and apartment deliveries are on track to rise in the area during 2019. Nearly 1,400 units are slated for completion downtown this year, compared with approximately 2,600 apartments that have been added to stock in this area over the past five years. The planning pipeline is likely to expand, with thousands of students and workers anticipated to move nearby as these projects come to fruition. New apartment development has been concentrated outside the core along Loop 1604 from SeaWorld San Antonio to Interstate 10 over the past five years, but tapering completions will lead to an overall decline in stock additions this year and a second consecutive year of tightening vacancy.

Value opportunities remain a strong draw for capital inflows. The search for higher yields in secondary markets has many investors strongly focused on San Antonio. With solid demographic trends and favorable liquidity, the market has seen transaction volume rise steadily for the past few years as private capital takes advantage of the value-add opportunities. The number of value-add properties has diminished as the cycle has progressed, and some investors have shifted their focus to newly developed garden properties, which offer cap rates starting 50 basis points higher than primary Texas markets and per unit pricing typically close to $150,000. The appeal of these properties will continue drawing capital into the metro and developments in the north and northwest submarkets are the preferred location for these acquisitions. Properties with recently completed renovations are also beginning to come to market and should offer opportunities for acquisition as owners seek to capitalize on the vigorous demand for assets.
2019 Investment Outlook

Supply and demand metrics rose over the second half of 2018. Supply increased from 4 to 6 as completions have begun moderating. Demand picked up one point and now sits solidly at 6 in the middle of the other Texas markets. Rent growth held steady at 5.

Liquidity moved up by one point to 8 and now stands as the highest in Texas. Yield remained unchanged at 4. These transaction metrics point to continued strength in the transaction market as both buyers and sellers see positive reasons to execute sales.

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

2019 Market Forecast

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San Diego

Unwavering Tenant Demand Pacing Aggressive Development Pipeline

Steady job growth and elevated home prices drive tight rental market. In the last five years, 17,900 new apartments were delivered in San Diego County, yet vacancy has remained below 4 percent. This trend of elevated construction and limited unit availability persists in 2019, as more than 3,200 rentals are completed and vacancy remains near a cycle-low level. Steady job creation represents one of the driving factors behind strong rental demand, with life science, tech and defense firms in need of additional IT, human resources and accounting professionals. Employment growth within the professional services sector has driven steady income growth, but home prices have outpaced income gains. Over the past year, the gap between a mortgage payment and average monthly rent widened by $500, limiting housing options for many households. Moving forward, a high concentration of completions in the city of San Diego should appeal to urban professionals. At the same time, with demand for rentals in more affordable areas of the county will likely outpace construction, causing vacancies in these areas to tighten.

Lack of assets for sale holding back transaction activity. Despite a high level of investor desire to deploy capital into the San Diego market, many investors remain on the sidelines due to limited properties listed for disposition. Rental growth and low vacancy rates keep investors highly engaged in bidding on any available institutional assets, which has maintained a robust pricing environment. Newly built midrise and high-rise developments in the city of San Diego remain highly sought by institutional capital; however, developers have been holding recently stabilized properties. Over the past two years, 32 new properties have been delivered but only a few have traded hands. This leaves a deep potential pool of assets that would attract significant investor attention for acquisition if developers decide to take advantage of the competitive pricing, especially for new core assets. Otherwise, most transaction activity for the coming year will be focused on the small number of suburban garden properties coming to market.

Unit (thousands)

Supply and Demand

Completions  Absorption

<table>
<thead>
<tr>
<th>Year</th>
<th>Completions</th>
<th>Absorption</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
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<td>16</td>
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<tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

* Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services, RealPage, Inc.

24.1% 2018 share of local population between 20 and 34 years old
35.9% of local population hold bachelor’s degree or higher*
$646,695 2018 median home price
2019 Investment Outlook

San Diego experienced upward momentum in the demand and supply indexes over the past two quarters. Demand rose one point to 7 while supply advanced one point also to 5. Both movements highlight the underlying positive forces driving the multifamily market. Rent growth slipped one notch to 6, which puts Riverside in a tie for the highest rent index metric in California.

Holding firm at 8, liquidity sits in the middle of the pack nationally but given the high level of investor interest, this could see upward movement this year. Yield remains firmly at a 1 like other coastal California markets.

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

2019 Market Forecast

NMI Rank
2

Employment
23,000 jobs

Metro 1.5%
U.S. 1.3%

Construction
as % of inventory
Metro 1.0%
U.S. 1.8%

Vacancy
Down 20 bps

Metro 4.6%
U.S. 5.8%

Rent
$2,483 per month

Metro 3.7%
U.S. 3.2%

Investment
3-yr. avg. activity
$20+ million

Deals: 30
Volume: $1.6 billion

San Diego experienced upward momentum in the demand and supply indexes over the past two quarters. Demand rose one point to 7 while supply advanced one point also to 5. Both movements highlight the underlying positive forces driving the multifamily market. Rent growth slipped one notch to 6, which puts Riverside in a tie for the highest rent index metric in California.

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2019 Market Forecast

NMI Rank
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Employment
23,000 jobs

Metro 1.5%
U.S. 1.3%

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San Francisco

Low Vacancy Limiting New Households As Scarce Listings Hold Back Transactions

Construction re-accelerates South of Market; housing shortage persists.
Rapidly expanding tech and biotech firms are generating significant economic growth throughout the San Francisco metro area. Unemployment has fallen under 2.5 percent, below levels last seen at the peak of the dot-com era. This has accelerated household income growth, which is on pace to surpass $120,000 annually by 2020. Despite the booming economy, household formation has been slowed by the lack of available housing throughout the metro, motivating more residents to move in together in an effort to reduce expenses. Developers are responding, with completions expected to reach 3,600 units, the highest level since 2016. Construction will be primarily in the urban core, with nearly two-thirds of this year’s supply growth coming to market in SoMa. While the volume and concentration of the new units could cause moderate upticks in vacancy in SoMa, development outside the core remains extremely limited relative to demand, reinforcing the continued housing shortage.

Capital remains sidelined due to limited sales inventory. A lack of institutional multifamily assets available for sale has stymied large numbers of investors seeking acquisitions in one of the most sought-after markets in the nation. The combination of elevated levels of capital searching for assets to purchase and limited available properties has created a highly competitive bidding state for those properties that enter the disposition process. San Francisco maintains the lowest average cap rate of the three Bay Area metros for this reason. The lack of newly developed properties coming to market holds back a large pool of untapped transaction-ready capital as most developers have chosen to hold at this time. Given the long and difficult development process in the market, a long-term hold strategy can make sense. However, with demand for assets far outstripping supply of properties for acquisition, this year seems like an excellent time for some developers to seriously consider taking advantage of current valuations and list recently stabilized developments for sale.
2019 Investment Outlook

All three fundamental metrics recorded declines in the past six months. Demand and rent growth both dropped two points and supply lost one point. Even with San Francisco’s supply metric now at 3, it remains the highest index for California markets. The adjustments to demand and rent growth align the market close to the other Bay Area metros.

Liquidity moved down by one point as transaction activity moderated over the second half of 2018. Yield, however, continues firmly planted at 1, reflecting one of the highest priced markets in the nation.

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

2019 Market Forecast

NMI Rank
14

Employment
22,000 jobs
Metro 1.9%
U.S. 1.3%

Construction
Metro 1.5%
U.S. 1.8%
as % of inventory

Vacancy
Metro 4.2%
U.S. 5.8%
Up 30 bps

Rent
Metro 2.0%
U.S. 3.2%
$4,018 per month

Investment
Deals: 22
Volume: $916 million
3-yr. avg. activity
$20+ million

Vacancy By Class

Rent Growth By Class

Key Performance Index

San Francisco
Mixed-Use Developments Near Mass Transit Highlight Transforming Silicon Valley

Booming tech industry powers extraordinary housing demand. The tremendous growth of numerous tech industries, including semiconductors, social media and cybersecurity, have underpinned an exceptional economic expansion for over a decade. Fueled by median home prices well out of reach of the average metro resident, these conditions have generated a severe housing shortage throughout the Bay Area. Developers have mostly focused on locations in North and Central San Jose along the VTA lines and urban Santa Clara. This year, the largest completion will be the second phase of Santa Clara Square, where more than 850 units will come online, joining retail and office space just off Highway 101. Despite considerable and rising supply growth, with overall deliveries reaching a new cycle-high this year, vacancy has remained extremely tight below 4 percent metro-wide. Average rents have soared, particularly in more affordable areas such as North San Jose and Milpitas, where monthly rates have risen nearly 50 percent in five years. Increasing supply will likely cause minor upticks in vacancy in the short term, yet the overall lack of housing in the metro will support rental gains throughout the year.

Rising valuations could lead to increased disposition opportunities. While San Jose has remained the most active transaction market in the Bay Area over the past few years, activity levels still trail those of similar-size primary markets. Pricing conditions heading into 2019, however, could offer owners a compelling reason to consider selling existing assets as average cap rates reach a cycle low and per unit prices hit their cycle peak. Strong rent forecasts for overall and Class A properties will support aggressive underwriting, especially for any new midrise properties coming to market. Institutional buyers and REITs view midrise assets as highly desirable acquisitions and bidding for such properties should be aggressive. Amid high demand for core product and potential robust valuations, some developers may be encouraged to list recently stabilized properties to capitalize on current pricing. Private buyers will remain concentrated on smaller properties and any remaining garden properties with value-add potential.
2019 Investment Outlook

Rent growth retreated to 4, the same level of a year ago, after a quick spike in midyear. Supply also saw a drop by one point to 2 but demand stayed strong at 8. The demand index should remain the focus for investors as the extremely high propensity to rent in San Jose will not diminish.

Transaction metrics did not see many movement over the past two quarters and the liquidity index at 5 points to balanced sales activity. High valuations remain a constant in the metro, which keeps yield steady at 1.

2019 Market Forecast

**NMI Rank**
- Class A

**Employment**
- Metro: 3.5%
- U.S.: 1.3%
- 40,000 jobs

**Construction**
- Metro: 2.9%
- U.S.: 1.8%
- as % of inventory

**Vacancy**
- Metro: 5.0%
- U.S.: 5.8%
- Up 40 bps

**Rent**
- Metro: 3.0%
- U.S.: 3.2%
- $3,658 per month

**Investment**
- Deals: 20
- Volume: $1.4 billion
- 3-yr. avg. activity: $20+ million

**Key Performance Index**

**Vacancy By Class**

**Rent Growth By Class**

*Forecast*  *Class A*

* Arrow reflects completions trend compared with 2017

*Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.*
Seattle’s Vibrant Employment Market Continues to Drive In-Migration

Fortune 500 companies expand their presence across the Puget Sound region. Following the strongest year of job gains since 1996, Seattle remains poised to be one of the nation’s top job creators in 2019. T-Mobile, Facebook, Google and many other companies have inked new leases across Seattle to take advantage of the local top-tier talent, driving more people in search of jobs to relocate to the metro. Seattle has been one of the strongest single-family housing markets in the nation, but rising interest rates, high home prices and comparably low rental rates have tamped down homebuyer enthusiasm, ensuring a strong renter pool this year. More than 12,000 apartments are slated for completion this year, a new high for the current cycle. Vacancy will soften with such a large influx of new units, leading to localized concession activity in areas where the most new units were added. Headlining deliveries this year is Hyde Square, a 617-unit complex in East Bellevue, in proximity to the Overlake Village light-rail station opening in 2023. Development will be greatest in Seattle’s urban core, though, where more than 5,000 units will be completed this year, followed by the Eastside with at least 4,600 apartments opening in 2019.

Positive outlook and high liquidity driving capital placements. As it is a top acquisition market for many institutional and private investors, Seattle has witnessed skyrocketing transaction volume and velocity growth over the past four years. The metro checks all the right demographic and economic boxes as a highly desirable long-term growth market for multifamily investment. In addition, the expansion of rental housing in and around the urban core plays into many institutional investors’ strategy to focus on higher-density live-work-play locations. These factors have triggered a decidedly competitive transaction marketplace, which has compressed average cap rates for $20 million-plus properties to their lowest level in the expansion. Outside the city of Seattle, private capital searching for value-add opportunities has spread into far southern and northern submarkets as few close-in opportunities remain. Some recently renovated properties have also been quickly returned to the disposition market to capitalize on current robust valuations and should see strong investor demand.

22.8% 2018 share of local population between 20 and 34 years old

39.6% of local population hold bachelor’s degree or higher*

$525,697 2018 median home price

*Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services; RealPage, Inc.
2019 Investment Outlook

Declines across the board in Seattle’s Key Performance Index fundamental metrics over the last two quarters show a market moderating but not declining. Demand and rent growth each moved down two notches, and supply dropped one. Overall the numbers are good and investors should adjust their expectations.

The adjusts seen in the fundamentals has not yet affected the transaction section of the index as yield dropped one point and matches other primary coastal markets. Liquidity also remains solid at 7 as transaction volume and velocity have reached cycle peaks.

Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.
Vacancy Nadir Drives Rent Acceleration, Lures Increasing Capital for Investment

Rental demand outpacing inventory additions. Apartment deliveries will remain above the 10-year average this year with more than half of the metro’s submarkets receiving new rentals. The greatest number of new units will be in Central Tampa. Here, a surge of mixed-use redevelopment projects are transforming underutilized sections of the core into walkable urban neighborhoods with amenities. Completions in the area will remain heightened over the next several years as rentals in the 50-acre Water Street development are finalized. Marketwide, new apartment inventory will not keep pace with rental demand this year, as population growth more than doubles the national average. Rental demand will be sustained as rising interest rates and home prices as well as a lack of for-sale starter homes keep more tenants from transitioning to homeownership. As a result, vacancy will dip below 4 percent for the first time, pushing the average effective rent to a new high.

Favorable pricing driving rising capital inflows. All signs point to a further acceleration of the transaction market heading into 2019. Investor confidence appears strong with 2019 rent forecasts significantly outpacing the national averages and pushing solid valuations. Even though cap rates have compressed over the past year, they remain higher than Southeast Florida coastal markets, which has encouraged capital searching for greater yields to find a home on the sunset coast. The compressing cap rates also should encourage existing owners to selectively dispose of select properties in their portfolios to capitalize on current valuations, which would aid in satisfying the high demand for assets in the metro. With the supply of value-add opportunities almost exhausted, capital sources have begun to view recently renovated properties as a solid alternative for investment. Furthermore, newly delivered infill midrise developments offer added potential targets for purchase, especially for institutional capital and REITs with a core live-work-play acquisition strategy.

* Forecast ** Through 2Q
* 2017: 25+ years old
* Sources: Marcus & Millichap Research Services, RealPage, Inc.

18.7% 2018 share of local population between 20 and 34 years old

27.6% of local population hold bachelor’s degree or higher*

238,444 2018 median home price
2019 Investment Outlook

The upward movement of all fundamental metrics in Tampa's Key Performance Index highlights strong market conditions across the board. Demand jumped two points from 7 to 9 as household growth added significant housing demand. Rent growth and supply moved up one point each as supply moderates and tightness pushes up rents.

Liquidity held firm at 6 through the last two quarters of the year, allowing capital inflows to rise. These inflows have increased valuations over the past year as the yield index dropped two points and now resides at 3.

* Forecast

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

2019 Market Forecast

**NMI Rank**

11

**Employment**

32,000 jobs

**Metro 2.3%**

**U.S. 1.3%**

**Construction**

as % of inventory

**Metro 1.4%**

**U.S. 1.8%**

**Vacancy**

Down 10 bps

**Metro 5.0%**

**U.S. 5.8%**

**Rent**

$1,669 per month

**Metro 6.8%**

**U.S. 3.2%**

**Investment**

3-yr. avg. activity

$20+ million

**Deals: 57**

**Volume: $2.2 billion**

**Vacancy By Class**

[Bar chart showing vacancy rates for Class A, B, and C]

**Rent Growth By Class**

[Bar chart showing rent growth for 10-Year Average and 2019 Forecast]

Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
Developers Refocus on Capital Riverfront
As Sales Activity Hits Cycle Peak

Class C apartments drive rent growth as elevated completions raise vacancy. Construction cranes remain a mainstay of the District skyline as the development pipeline for the greater D.C. metro area expands to a five-year high in 2019. The focal points of construction are shifting from submarkets such as Central D.C. and Tysons Corner to others including East Alexandria and North Arlington. The number of upcoming arrivals is also accelerating along the Capital Riverfront and in downtown Silver Spring. The greater number of openings will weigh mildly on vacancy in the short term. Amazon’s expansion into Crystal City will improve demand for top-tier apartments in the submarket as the company begins to hire for its new headquarters. High-end rentals are rapidly leasing in Navy Yard as well, but in other areas with numerous completions, Class A concession use is rising. These leasing incentives will slow growth in overall effective rents this year. Above-market appreciation will occur primarily among Class C apartments, as vacancy for these rentals falls below 1 percent in some parts of D.C. and Maryland.

Soaring investment demand poised for continuation. As one of the most liquid transaction markets in the nation over the past year, Washington, D.C., will continue to see strong capital inflows during 2019 as it offers a wide range of investment options and opportunities. In addition, the metro attracts one of the most balanced mixes of capital sources from private partnerships, institutional advisors, REITs and cross-border funds to capitalize on all possible property types for investment. The elevated acquisition activity has pushed down average cap rates to their lowest level of the cycle. Existing owners and developers are taking advantage of the strong valuations and keeping the disposition pipeline high enough to match the capital inflows. Arlington and Alexandria saw significant sales activity during 2018 and amid the Amazon HQ2 placement in Crystal City, investors will be taking an even closer look in these submarkets for prospective acquisitions.

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21.4% 2018 share of local population between 20 and 34 years old
48.7% of local population hold bachelor’s degree or higher*
$425,493 2018 median home price

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* Forecast ** Through 2Q
* 2017: 25+ years old
Sources: Marcus & Millichap Research Services; RealPage, Inc.
2019 Investment Outlook

A three-point jump in demand from 4 to 7 wasn’t enough to keep rent growth stable over the past two quarters as it dropped two notches down to 4. Persistent unit additions also lowered the supply metric one point to 3. Overall, the positive demand forces have been unable to overcome the supply imbalance represented in the market.

Investors continue targeting the market for acquisition, which pushed up liquidity by one point in the second half of the year as transaction volume reaches a cycle peak. The large capital inflow has maintained the yield index at 2.

* Forecast  † Class A
v Arrow reflects completions trend compared with 2017
Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

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

2019 Market Forecast

NMI Rank 24

Employment 42,000 jobs

Metro 1.3%
U.S. 1.3%

Construction as % of inventory

Metro 2.3%
U.S. 1.8%

Vacancy Down 20 bps

Metro 6.0%
U.S. 5.8%

Rent $2,422 per month

Metro 2.2%
U.S. 3.2%

Investment 3-yr. avg. activity $20+ million

Deals: 80
Volume: $6 billion

Vacancy By Class

Rent Growth By Class

Key Performance Index

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

* Forecast  † Class A
v Arrow reflects completions trend compared with 2017

Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
**Young Workers Being Drawn to the County As It Emerges as Hub for Tech Innovation**

West Palm Beach beginning to shed its retirement community image. Home to some of the nation’s fastest-growing businesses, West Palm Beach is transforming into a hub for technology companies, attracting more young professionals to the area. Palm Beach County leads South Florida in domestic migration, not only due to the growing retiree population but from the expanding younger cohort as well, changing the perception of the area and breathing new life into local communities. Drawn to amenity-rich complexes in proximity to local employers, restaurants and nightlife, millennial renters have been flocking to Boca Raton, Delray Beach and Boynton Beach, supporting a declining vacancy rate for two straight years in 2019. Older adults are also fueling apartment demand, choosing to downsize and move to an urban setting that offers more experiences and walkability. With interest rates rising and tax incentives no longer in place, homebuyer enthusiasm has been tamped down, ensuring a broad renter pool this year, particularly as many are drawn to the mobility and lifestyle that renting provides.

**South Florida’s smallest market matching its larger neighbors.** While traditionally the smallest transaction market of the three south Florida metros, West Palm Beach recently has been matching its southern neighbors in terms of transaction volume and sales velocity. Part of the reason for this change has been the metro’s ability to draw on institutional and private capital, in addition to an available sales inventory of the two most sought asset types: value-add properties and newly developed core assets. Private capital continues seeking value-add opportunities throughout the county and while more difficult to find than earlier in the cycle, prospects are still being located. In addition, a handful of newly completed properties traded last year. And while supply additions will taper in 2019, the 10 new properties completed last year illustrated sound absorption at the top end of the market, setting up the possibility that developers could take advantage of the high demand for these assets and list recently stabilized properties.
2019 Investment Outlook

The supply index skyrocketed four points upward to an 8 over the past six months as projected deliveries this year drop dramatically. Rent growth also moved up one point to 5 while demand held steady at 6. Overall the fundamentals in the Key Performance Index show solid market conditions.

The transaction metrics of the index didn’t change in the second half of the year as both liquidity and yield showed indications of a positive transaction environment. With the yield index at 3, both buyer and owners can find upside opportunity in current valuations.

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

2019 Market Forecast

NMI Rank 28

Employment
12,000 jobs

Metro 1.9%
U.S. 1.3%

Construction
as % of inventory
Metro 0.4%
U.S. 1.8%

Vacancy
Down 30 bps

Metro 6.4%
U.S. 5.8%

Rent
$2,017 per month

Metro 4.6%
U.S. 3.2%

Investment
3-yr. avg. activity
$20+ million

Deals: 24
Volume: $1.3 billion

Key Performance Index

Supply Demand Rent Growth Liquidity Yield

Vacancy By Class

Class A Class B Class C

Rent Growth By Class

10-Year Average 2019 Forecast

* Forecast  # Class A

* Arrow reflects completions trend compared with 2017
Sources: Marcus & Millichap Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics
1National Multifamily Index Note: Employment and apartment data forecasts for 2018 are based on the most up-to-date information available as of December 2018 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 December 2018. 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 August 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.

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<th>Completions (Units)</th>
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* Estimate ** Forecast  See Statistical Summary Note on Page 76.
The information contained in this report was obtained from sources deemed to be reliable. Every effort was 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 guaranty 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.

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