IPA INSTITUTIONAL PROPERTY ADVISORS

2023 MULTIFAMILY

NATIONAL INVESTMENT FORECAST

TO OUR VALUED CLIENTS

Multifamily vacancy rates started 2022 at a record low, but drifted higher over the course of the year as robust multifamily development and weakening consumer sentiment weighed on fundamentals. Property performance nevertheless stands well-ahead of where it was prior to the health crisis, with average effective rents nearly 26 percent higher than they were three years ago. In addition, the longer-term prospects of the sector remain positive with a broad-based housing shortage still in place.

The Federal Reserve's aggressive interest rate increases in response to elevated inflation has driven a surge in the cost of capital and forced a recalibration of underwriting. Transaction flow slowed in the second half of 2022 as more institutional commercial real estate investors adjusted portfolios, with many stepping to the sidelines. But entering 2023, it appears the Federal Reserve may adopt a more moderate approach, allowing financial markets to re-balance.

The investment climate for large, professionally managed multifamily properties faces a dynamic period ahead. While continued price appreciation during the health crisis is compelling, how much that momentum carries forward this year is less certain. A record 400,000 units are expected to deliver, while housing demand could remain sluggish as the risk of recession rises. Most economists are suggesting, however, that any impending recession will be quite modest. Multifamily investors who focus on the recovery that will follow any impending downturn may find unique investment opportunities, supported by an ongoing structural housing shortage.

To help institutional commercial real estate investors capitalize on the unique nuances of the investment climate, Institutional Property Advisors presents the 2023 National Multifamily Investment Forecast. As always, our investment brokerage and financing specialists across the U.S. and Canada are at your disposal, providing street-level investment guidance to empower your decisions.

Thank you and here's to your continued success,

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

National Multifamily Index (NMI)

- Major markets throughout the Sun Belt claim several of the top spots in this year's National Multifamily Index. Southeast Florida neighbors Fort Lauderdale and Miami-Dade both hold a spot in the top five, due to nation-leading rent and job growth projections. Similarly, a trio of Texas markets — Dallas-Fort Worth, Austin and Houston — rank in the top 10, fueled by employment gains, household creation and widening affordability gaps.
- The middle segment of the Index is largely dominated by the West Coast. Pacific Northwest metros Seattle-Tacoma and Portland are slightly above a range of California markets. Nonetheless, the primary metros in California like Los Angeles, Orange County and Oakland outrank most of their gateway peers on the East Coast. The bottom of the Index is characterized by Midwest and Northeast markets with sizable construction pipelines relative to demand expectations.

National Economy

- Robust fiscal and monetary policy support during the pandemic allowed business and consumer demand to return well ahead of supply, leading to a prolonged period of elevated inflation that is still lingering. With the Federal Reserve raising interest rates in the hopes of tempering price jumps, consumers are expected to be highly circumspect this year, and businesses have already responded to the anticipated drop in spending by re-evaluating staff levels.
- Economic uncertainty, paired with higher expenses, is weighing on household formation after a surge in 2021 that carried into 2022. Given the rapid rise in mortgage rates, this downshift will trim the single-family buyer pool and could curtail upward movement in home prices. Challenges for young adults entering the workforce may also coax some to live with family or friends, rather than form a new household.

National Apartment Overview

- Multifamily is on the heels of one of the strongest stretches of rental demand on record. However, the sector started to retreat in the middle of last year as inflation and higher interest rates led to a demand normalization faster than many anticipated. Supply headwinds are emerging for the luxury tier, tied to the historic sector performance and construction delays in 2022, creating an all-time high delivery slate for this year amid waning apartment demand.
- The difference between a monthly payment on a median-priced house versus an average apartment rent doubled year-over-year in 2022. Steep barriers to homeownership are encouraging higher-income residents to remain in apartments, likely growing the Class A and B renter pools over time. Given that a cascade of millennials are entering a life period that often correlates with household expansion, longer-term multifamily tailwinds are fermenting.

Capital Markets

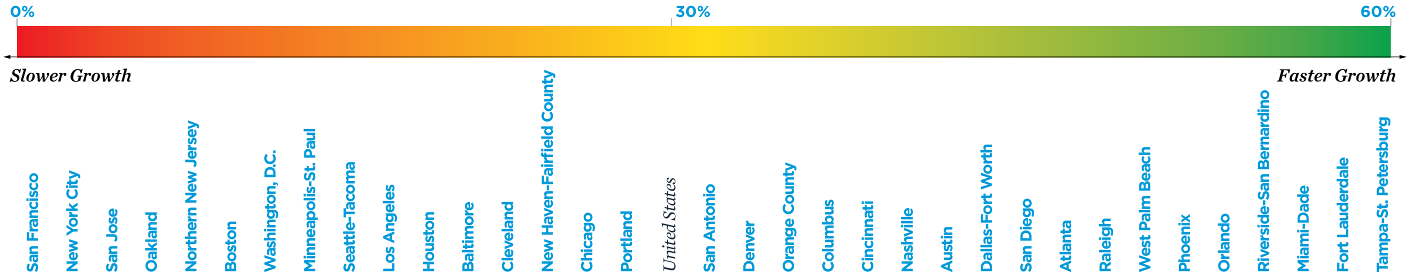
- After being exceedingly accommodative during the pandemic, the Federal Reserve rapidly tightened monetary policy last year in order to counter elevated inflation. As a result, yields on two-year and 10-year Treasuries rose to their highest levels since the global financial crisis. The Fed's goal is to bring interest rates to a level that sufficiently softens the labor market and confines consumer demand, then hold there without engendering a broader recession.
- An aggressive monetary policy has created a challenging near-term capital markets environment for the multifamily sector. The main hindrance is not a lack of capital available to lend, but rather the greater cost now required to borrow. Given higher rates, lenders are taking a more cautious approach, tightening underwriting. Conditions are expected to improve over the course of the year however once the Fed settles on rates.

Investment Outlook

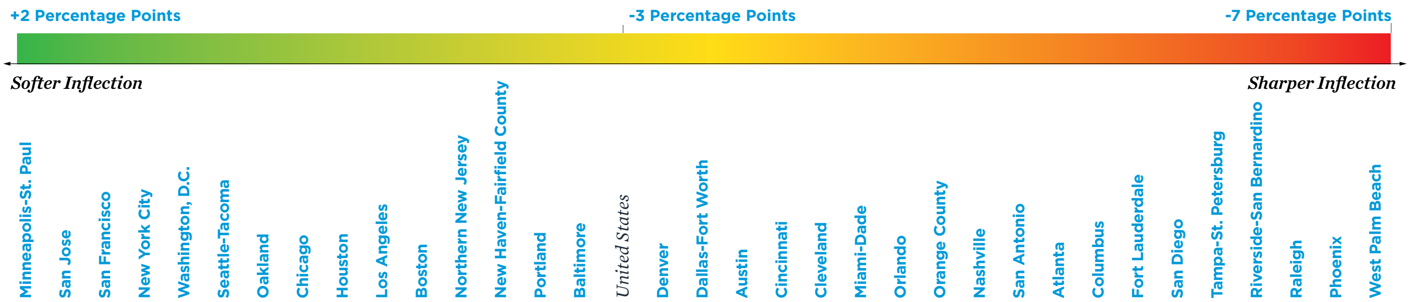
- Unless an institution is supplying its own financing, the margin between implied returns and debt service costs has become unfavorable. While elevated rent growth helped deals close last year, those projections are slowing now, and the expectations gap between buyers and sellers has widened to a point that many transactions have not been able to move forward. Once rate hikes from the Fed subside, however, conditions are expected to improve.
- Sales activity has gained traction in central business districts as more residents return to urban lifestyles. Amid tight financing margins and a softer overall outlook, investors are looking for dynamic options in areas with infrastructure improvements that could spark strong localized urban core rent growth. The higher living costs and compressed cap rates of primary markets have spurred both renters and investors to target tertiary markets as well.

Metros That Led in Rent Growth During Pandemic Now Having Sharpest Comedown

Total Change in Rent From 2019 to 2023*



Rent Inflection in 2023 vs. Pandemic-Period Average*



Note: Rent Inflection is equal to the 2023 rent change forecast minus the average annual rent change for the period 2019-2023. All rents are effective rents.

Top 10 Markets by Rent Change

Fastest Growth	Rent Change Since 2019	Rent Change Inflection (% points)
Tampa-St. Petersburg	57.3%	-5.6
Fort Lauderdale	54.3%	-5.1
Miami-Dade	49.6%	-3.8
Riverside-San Bernardino	48.9%	-5.8
Orlando	48.1%	-3.9
Phoenix	47.4%	-6.6
West Palm Beach	45.0%	-6.7
Raleigh	42.2%	-5.9
Atlanta	41.5%	-4.3
San Diego	40.0%	-5.1

Slowest Growth	Rent Change Since 2019	Rent Change Inflection (% points)
San Francisco	2.0%	1.2
New York City	8.5%	0.7
San Jose	12.0%	1.3
Oakland	15.5%	-0.1
Northern New Jersey	16.3%	-2.2
Boston	17.0%	-1.8
Washington, D.C.	17.7%	0.1
Minneapolis-St. Paul	17.7%	1.9
Seattle-Tacoma	21.2%	0
Los Angeles	24.4%	-1.3
U.S.	**29.6%**	**-2.8**

2023 Performance Characteristics

- **Fast Growth/Sharp Inflection:** Markets that recorded the most robust rent growth since the end of 2019 are now poised for sharper inflections this year, where rates will grow by a much smaller margin than has been typical since the pandemic began. These metros are predominantly in the Sun Belt and were popular relocation destinations, even before the health crisis. The resulting surge in housing demand, however, has eroded some of the living cost advantages that have historically driven these moves, contributing to a more substantial recalibration.

- **Middle of the Pack:** A wide variety of metros have posted solid rent growth about in line with the U.S. average, and are now cooling in conjunction with that national trend. These markets include larger cities in the popular relocation areas, such as Miami-Dade and Dallas-Fort Worth, as well as top performers in more challenged regions of the country — including New Haven-Fairfield County and Baltimore in the Northeast. Both have regional living cost advantages.

- **Slow Growth/Soft Inflection:** A handful of markets — including those in the Bay Area, as well as New York City, Seattle-Tacoma and Washington, D.C. — were more impacted by the pandemic and have taken longer to recover economically. This has translated into softer rent growth as these metros move along their recovery paths. Because the monthly rates in some other markets have climbed more quickly of late, the prospect of continuing to live in these prominent cities has improved as their rents rise at a more measured pace.

** Forecast*
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.

U.S. Multifamily Index

Demographic Drivers and Supply Dynamics Have Core Roles in Rankings as Property Performance Normalizes

Migration-fueled markets reinforced by advantageous local characteristics. Major markets throughout the Sun Belt claim several of the top spots in this year's National Multifamily Index. While many of these places are undergoing significant labor market slowdowns after hot stretches during the pandemic, the foundations for economic growth endure, and these metros are poised to be prime hiring hubs once again after uncertainty subsides. Corporate relocations to these areas underscore recruitment efforts from outside the market, which, when paired with quality-of-life considerations like warm weather and tax-friendly environments, should continue to compel people to move to these locations. Texas and Florida epitomize these characteristics, with several of the states' major markets grabbing high spots in the Index. Southeast Florida neighbors Fort Lauderdale (#1) and Miami-Dade (#4) both score very well, due to nation-leading rent and job growth projections. Similarly, a trio of Texas markets — Dallas-Fort Worth (#2), Austin (#6) and Houston (#8) — hold positions in the top 10 of the 2023 Index, fueled by employment gains, household creation and widening affordability gaps between renting and owning a single-family home. Other markets in the region like Atlanta (#7) and Phoenix (#10) have high marks for these same factors, particularly the affordability component after robust net in-migration squeezed local housing stock and drove up home prices substantially. At the same time, some Sun Belt markets benefiting from these same demand drivers rank slightly lower, such as Raleigh (#12) and Nashville (#22), as they face noteworthy pressure from new supply this year.

Convergence of lofty construction and mild housing demand denote lower-ranked metros. The middle segment of this year's Index is largely dominated by the West Coast. Pacific Northwest metros Seattle-Tacoma (#13) and Portland (#14) are slightly above a range of California markets, due to relatively stronger household creation and rent growth projections. Nonetheless, the primary metros in California like Los Angeles (#17), Orange County (#19) and Oakland (#20) outrank most of their gateway peers on the East Coast, benefiting from an extremely high propensity to rent amid sky-high home prices and comparatively reduced population attrition. Meanwhile, the bottom 10 of the National Multifamily Index is characterized by Midwest and Northeast markets with sizable construction pipelines relative to demand expectations this year. Minneapolis-St. Paul (#26), Columbus (#27), Northern New Jersey (#31) and Boston (#33) will all have supply expansions above the national pace in 2023, but rank in the bottom half for job growth and household creation.

Index Methodology

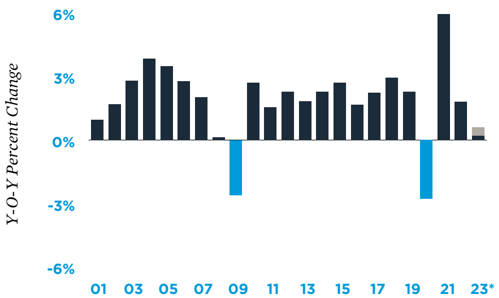
The NMI ranks 34 major markets on a collection of 12-month, forward-looking economic indicators and supply and demand variables. Markets are ranked based on their cumulative weighted average scores for various indicators, including projected job growth, vacancy, construction, housing affordability, rents, historical price appreciation and cap rate trends. Weighing the history, 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, the NMI is an ordinal Index, and differences in rankings should be carefully interpreted. A top-ranked market is not necessarily twice as good as the second-ranked market, nor is it 10 times better than the 10th-ranked market.

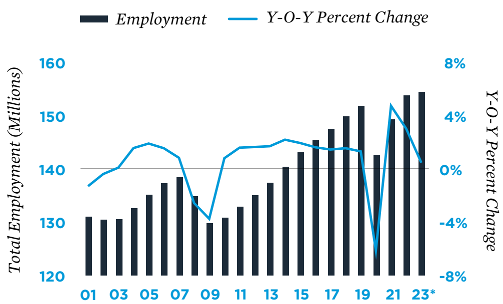
Market Name	Rank
Fort Lauderdale	1
Dallas-Fort Worth	2
Orlando	3
Miami-Dade	4
Tampa-St. Petersburg	5
Austin	6
Atlanta	7
Houston	8
West Palm Beach	9
Phoenix	10
Riverside-San Bernardino	11
Raleigh	12
Seattle-Tacoma	13
Portland	14
Denver	15
San Diego	16
Los Angeles	17
San Antonio	18
Orange County	19
Oakland	20
Washington, D.C.	21
Nashville	22
New York City	23
San Jose	24
San Francisco	25
Minneapolis-St. Paul	26
Columbus	27
Chicago	28
Cincinnati	29
Baltimore	30
Northern New Jersey	31
New Haven-Fairfield County	32
Boston	33
Cleveland	34

[1] *See National Multifamily Index Note on Page 80.*

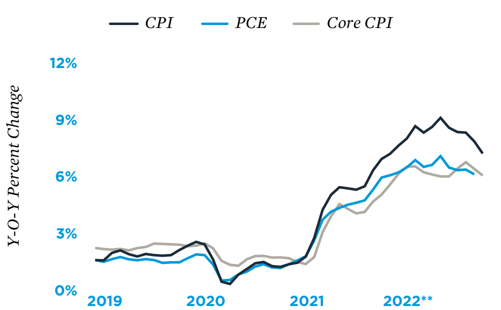
GDP Growth Trending Down



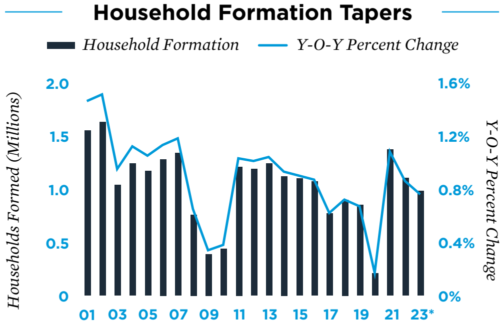
Hiring to Notably Slow in 2023



Key Inflation Measures All Elevated



Household Formation Tapers



* Forecast
** CPI and Core CPI through November, PCE through October

In Wake of an Emphatic Rebound, Future Economic Growth Obstructed by Several Potential Roadblocks

Businesses and consumers assume defensive postures. The economy has made a resounding recovery over the past two years following the impacts of COVID-19, although those gains have not come without costs. Robust fiscal and monetary policy support during the pandemic allowed business and consumer demand to return well ahead of supply, leading to a prolonged period of elevated inflation that is still lingering. As prices have climbed, spending by organizations and households in real terms has faltered. While some inflationary pressures are abating, such as shortages of certain materials, other more structural factors persist. The costs for key necessities, like food, housing and medical care, are all going up. While some households are pulling from additional savings accumulated during the pandemic, not all individuals were able to set aside funds and are now borrowing more. Those debt service costs have hiked up as well, with the Federal Reserve raising interest rates in the hopes of tempering price jumps. As such, consumers are expected to be highly circumspect this year, and businesses have already responded to the anticipated drop in spending by re-evaluating staff levels. A fourth quarter 2022 survey by The Conference Board revealed that 98 percent of CEOs were preparing to face a recession over the next 12 to 18 months.

Labor dynamics inverting after a lengthy time as a job seekers' market. Since May 2021, the number of open positions has exceeded the number of people looking for work, but this dynamic is changing course. Employers across a range of fields have pulled back on hiring or reduced staff amid the subdued outlook, while more Americans are looking for second jobs to help shore up household budgets. Employment losses in some periods of 2023 with other stretches of renewed payroll growth mixed in could produce a mild annual job gain, while still lifting unemployment as the number of people joining the labor force outstrips hiring. This will have a corresponding cooling effect on wages, which climbed by an above-average rate of nearly 5 percent last year. Less upward movement on pay should help balance out real income over time by reducing inflation pressure. The labor market could also contract in 2023 if inflation remains high longer than expected, the war in Ukraine escalates, financial markets become more volatile, or another black swan event occurs.

2023 National Economic Outlook

- **Household formation slows.** Economic uncertainty, paired with higher expenses, is tempering household formation after a surge in 2021 that carried into 2022. Given the rapid rise in mortgage rates, this downshift will trim the single-family buyer pool and could curtail upward movement in home prices. Challenges for young adults entering the workforce may also coax some to live with family or friends, rather than form a new household, hindering demand at lower-tier apartments.
- **Mortgage rate surge puts home market in new lane.** Rising interest rates, while instigated by the Federal Reserve to ease inflation, pose other risks. The lengthy span of low borrowing costs, both before and during the pandemic, aided asset value appreciation that may need to be reconciled this year. This is especially evident in the single-family home market. While housing needs are acute, mortgage rates reached a two-decade high in 2022, warranting some financial realizations.
- **New construction and engineering roles may be a partial jobs counterbalance.** The Infrastructure Investment and Jobs Act has boosted U.S. construction spending, putting an emphasis on both talent retention and new training. Markets with major improvement projects could benefit from this source of job creation, although the process will take time.
- **Fuel cost increases could resurface.** While the cost of oil and gas in the U.S. trended downward late last year, that trajectory could change. Strategic reserves are finite, and global supplies remain threatened by the war in Ukraine and OPEC production cutbacks.

Cooling Period Coincides with Historic Supply Wave; Long-Term Tailwinds Outshine Temporary Hurdles

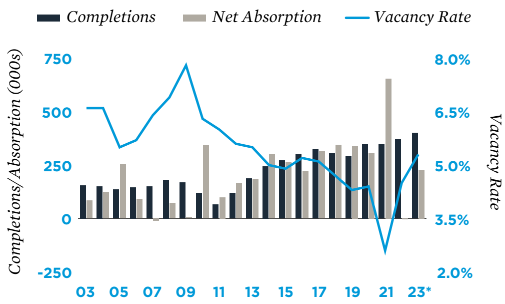
Weighty construction amid sector recalibration dims near-term outlook. The multifamily sector is on the heels of one of the strongest stretches of rental demand on record, with about three years of typical net absorption squeezed into a span of just 21 months. This depleted vacant stock to a 21st century low and created a competitive market for tenants, supporting heightened rent growth. However, the sector started to retreat in the middle of last year as inflation and higher interest rates ushered in by the Federal Reserve in response led to a demand normalization faster than many anticipated. Broad-based uncertainty will moderate hiring activity this year, weighing on household formation and by relation, rental demand. Meanwhile, supply headwinds are emerging for the luxury tier, tied to the historic performance and construction delays in 2022, creating an all-time high delivery slate for this year amid waning apartment demand. The impacts are expected to stretch across the housing continuum, although mid-tier rentals may be slightly more insulated. Class A faces the greatest supply pressure, while the Class C tenant base is less likely to have excess savings to weather the storm. As a result, longer stabilization timelines could prompt increased concessionary activity. Multifamily project starts and permits began to trend down late last year, however, indicating a supply correction could happen beyond 2023. At the same time, steep barriers to homeownership are encouraging higher-income residents to remain at apartments, likely growing the Class A/B renter pool over time, allowing demand to catch up to supply in the mid- to long-term.

Emerging housing trends will structurally reorient demand. Homebuying activity slowed abruptly last year as decade-high mortgage rates compounded elevated prices. This resulted in a slight softening in single-family sale prices, but relief for buyers has been offset by rising debt costs. The national affordability gap — the difference between the monthly payment on a median-priced house versus average apartment rent — doubled year-over-year to $904 in the third quarter of 2022, even after inching down from a record high as home values dropped. This much wider cost differential serves as an important consideration at a time when inflation has eroded household budgets. Another factor underscoring the long-term outlook for apartment demand is demographics. An elevated number of millennials are now approaching the median age for a first home purchase, and given elevated barriers to homeownership, more demand will shift to multifamily options. Even after economic headwinds abate, these considerations will direct more residents to apartments and encourage tenants to rent longer into their lives, fermenting longer-term multifamily tailwinds.

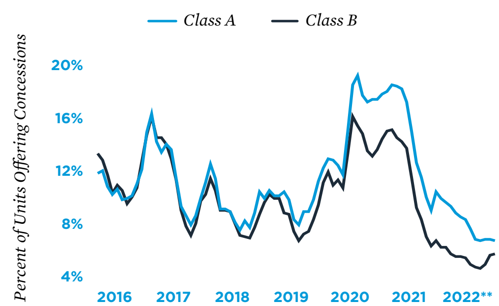
2023 National Apartment Outlook

- **Hottest pandemic markets see notable inflections.** In response to historic demand during the health crisis, locations like Austin, Nashville, Raleigh and Phoenix will register local inventory expansions exceeding 4 percent this year. The new rentals are warranted longer term, as these markets remain favored migration destinations with foundations for robust economic growth. In the near term, however, it may create supply and demand imbalances in certain areas.
- **Some primary metros could be less impaired.** Sub-2 percent inventory growth in New York City, San Francisco, San Jose and Oakland will help these markets rank among the top six major metros for smallest vacancy rises in 2023. These locations had relatively less drastic availability drops in 2020-2021, however, also factoring into the smaller magnitude of increases anticipated in 2023.
- **Affordable housing in the spotlight.** The Housing Supply Action Plan aims to reduce the nation's affordability concerns created by an ongoing housing shortage, by filling some gaps in lower-income segments. The plan could be more practical than local rent control measures, which have largely discouraged development and created new challenges, as seen in St. Paul last year.

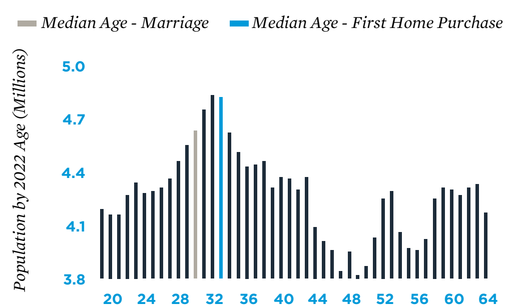
Supply and Demand Trends Normalize



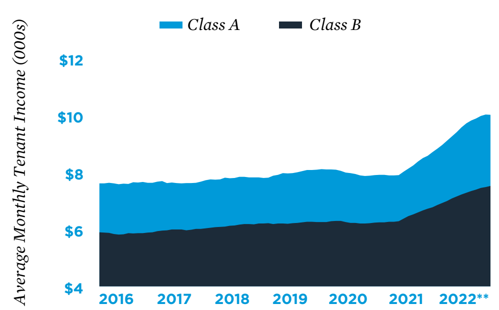
Concession Usage Low Entering the Year



Millennials Face Homeownership Barriers



Higher Income Residents Choosing Rentals



* Forecast
** Through October
Note: Tenant incomes are a trailing-12-month average

Return of Higher Interest Rates a Disruption For Capital Markets Until Conditions Stabilize

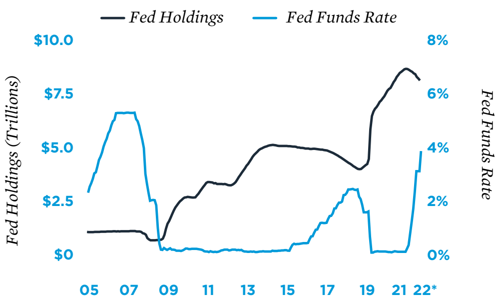
Fed seeking soft landing to its disinflation journey. After being exceedingly accommodative during the pandemic, the Federal Reserve rapidly tightened monetary policy last year in order to counter elevated inflation. The Federal Open Market Committee raised the target range on the federal funds rate from a lower bound of zero at the start of 2022 to above 4 percent by year-end — the fastest pace of rate hikes since the early 1980s. The Fed also began reducing its balance sheet in a quantitative tightening process, taking more than $500 billion out of its portfolio last year. Both actions have successfully applied upward pressure to short- and long-term interest rates. Yields on two-year and 10-year Treasuries rose to their highest levels since the global financial crisis, while SOFR also climbed. As the central bank has stated its intention to hike rates further in order to drive down inflation, any downward movement is not expected in the near future unless the economy rapidly deteriorates. Instead, the goal is to bring interest rates to a level that sufficiently softens the labor market and steers general consumer demand closer in line with supply, then hold there without engendering a broader recession.

Despite available capital, several hurdles must be cleared to close deals. The Fed's aggressive monetary policy has created a challenging near-term capital markets environment for the multifamily sector. The main hindrance is not a lack of capital available to lend, but rather the greater cost now required to borrow. Closing out last year, lending rates for apartments were in the high-5 percent zone or above. For core assets in major gateway markets and luxury-tier properties in secondary metros, average cap rates have been well below these new lending rates in recent years. Given these considerations, lenders are taking a more cautious approach and tightening lending criteria, with a heavy emphasis on debt service coverage, ensuring that operating incomes can cover debt costs. This has brought loan-to-value ratios down by roughly 10 percentage points from what they would have been in early 2022. Amid these tighter lending requirements, investors are having to undertake less leverage when pursuing trades. Buyers and sellers are also having greater trouble aligning expectations with one another given the new financing reality. Conditions are expected to improve over the course of the year, however, and once the Fed settles on rates, the bid-ask spread among investors should start to narrow, allowing lenders to more accurately determine valuations.

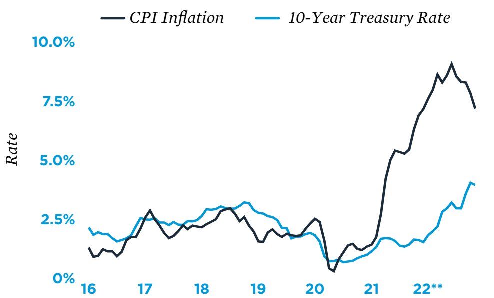
2023 Capital Markets Outlook

- **Agencies less active at present.** Agency lenders Freddie Mac and Fannie Mae have historically been major capital sources for multifamily properties. Neither agency lent out its full allotment last year, however, as both focused on their mission of providing financing to housing with an affordability component. As the share of agency lending among trades has dipped, banks and investor-driven funds have taken on larger portions of an overall tempered volume of recent sales.
- **Construction lending constrained.** Capital available for multifamily construction has retracted alongside that for investment sales of existing assets. Combined with rising material and labor costs, as well as an uncertain near-term economic outlook, the result will be fewer multifamily construction starts this year. While the current active pipeline is sizable, the pace of deliveries will likely begin to drop off in the latter half of 2024. Opportunities for development partnership deals could be attractive to institutional buyers in select areas with shrinking construction pipelines.
- **Dual factors spotlight multifamily appeal.** While starting to trend down, high inflation continues to underscore the advantages of the typical one-year apartment lease term. Beyond the short-term ability to adjust rents more frequently, a structural housing shortage continues to highlight the long-term value proposition of apartments.

Monetary Policy Rapidly Tightening

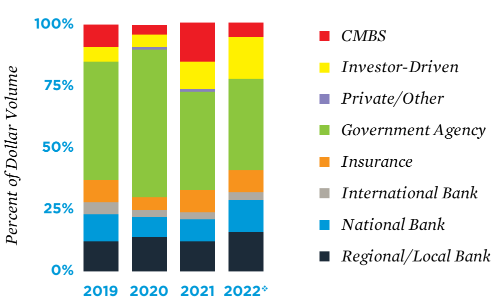


Inflation Eases, Interest Rates Still High



Treasury Yields All Elevated

Apartment Lender Composition



* Through Dec. 14
** Through November
✧ Estimate

Institutional Capital Positioned to Jump Back in Upon a Clear Rate Hold Signal From the Federal Reserve

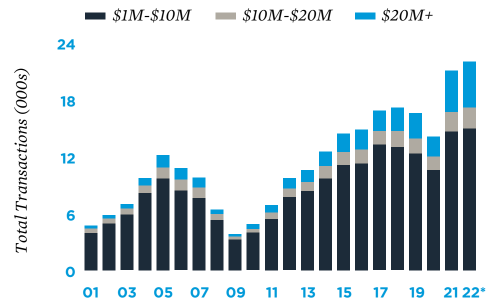
Tight cap rates, rising debt costs momentarily move investors to the sidelines. The vital role that apartments play in the nation's housing continuum has translated into substantial price appreciation over the past two decades. The resulting compression to cap rates placed yields in an unfavorable position as the Fed began to radically lift lending rates last year. Despite this complication sales activity in the $20 million-plus price tranche remained above historical norms in 2022, even while marking a notable retreat from the record set in 2021. The complexities that began to appear last year are unlikely to go away in 2023, however. Unless an institution is supplying its own financing, the margin between implied returns and debt service costs has become unfavorable. While elevated rent growth helped deals close last year, those projections are slowing now, and the expectations gap between buyers and sellers has widened to a point that many transactions have not been able to move forward. Once rate hikes from the Fed subside, however, investors and financiers will be better positioned to calibrate the market and stabilize pricing expectations. Institutional capital is also accumulating on the sidelines and is ready to be deployed once the clouds of uncertainty subside.

Opportunities will emerge, but various factors are constraining deal flow. Many multifamily institutions have entered 2023 in a defensive posture, with a selective mindset toward potential acquisitions amid capital markets flux. The stock market weakening has also impacted institutions' portfolio compositions, with some viewing themselves as overweight in real estate after a near-20 percent drop in the S&P 500 last year. This imbalance of capital holdings could stunt the motivation to pursue multifamily assets in 2023. At the same time, apartment holders could look to the price appreciation that has occurred in just the past five years, at roughly 37 percent nationally, and opt to realize that value. For investors with financial obligations coming due, higher interest rates may also prompt them to transition out of the asset, instead of incurring additional debt costs. Those that feel interest rates could climb further may wish to execute on deals in the short term, while others may be willing to incur the expenses now, with an eye toward refinancing down the line. Development partnership opportunities could also arise amid a record volume of new supply set to come online.

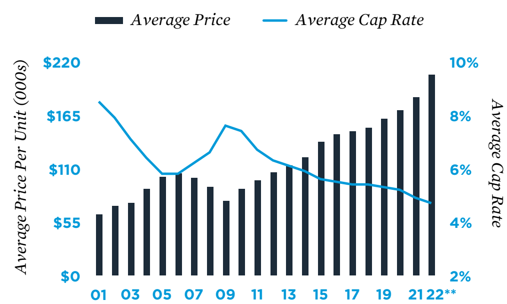
2023 Investment Outlook

- **Smaller markets capturing more attention.** Transaction activity in the $20 million-plus price tranche in tertiary markets rose from 9 percent in 2000 to 31 percent in 2019. That trend accelerated during the pandemic. In 2022, about 38 percent of institutional-level trades were in these smaller cities. The higher living costs and compressed cap rates of primary markets have spurred both renters and investors to target these locations. Standout tertiary metros for institutional deal flow last year include San Antonio, Raleigh and several other Sun Belt markets.
- **Investors hunt for outlier rent growth upside.** Sales activity has improved across central business districts, returning to pre-pandemic levels last year. Amid tight financing margins and a softer overall outlook, investors are looking for dynamic options. Stadium developments, neighborhood revitalizations, or new transit hubs could spark strong core rent growth, which aids nearby assets. For institutions focused on primary markets, Southeast Florida, Dallas-Fort Worth and Chicago are expected to have some of the strongest metrowide rent gains this year.
- **Focus on U.S. dollar may benefit investment.** Less aggressive actions by the European Central Bank have led to a slide in the value of the euro against the dollar. This could spark investment by Europeans in dollar-denominated assets, including commercial real estate. In general, European investment in U.S. CRE is about 15 percent higher when the euro is falling against the dollar.

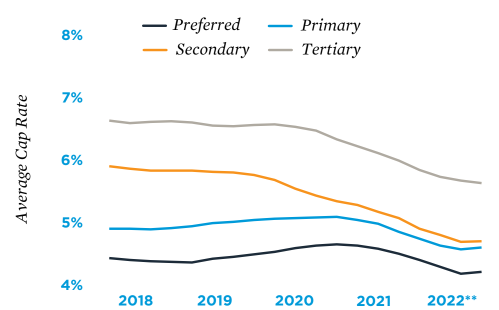
Apartment Transaction Activity



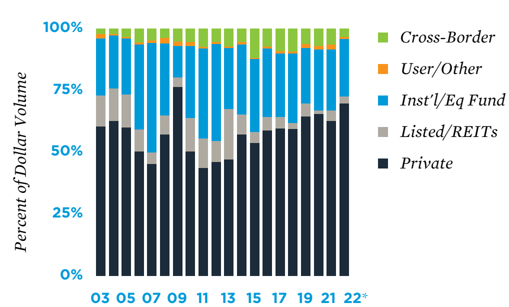
Price vs. Cap Rate



Cap Rate by Market Type



Apartment Buyer Composition

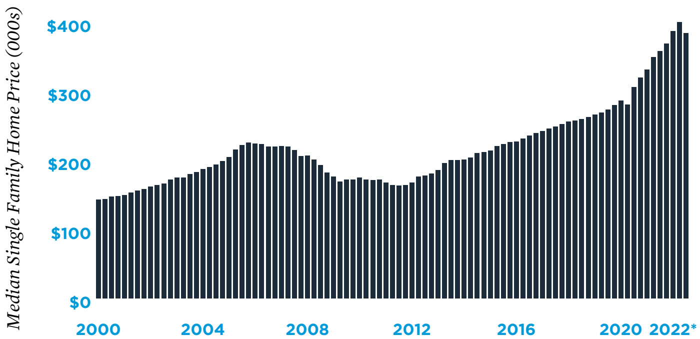


** Trailing 12-months through 3Q*
*** Estimate*
Note: Preferred markets include: Boston, Los Angeles, New York City, Orange County, San Diego, San Francisco, San Jose, Seattle-Tacoma, Washington, D.C.

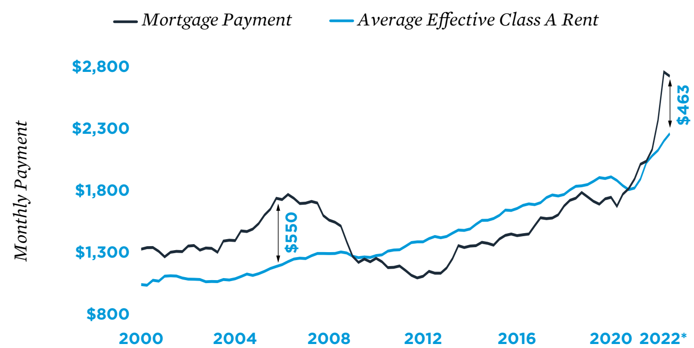
Luxury-Tier Rentals Offer Cost-Saving Benefits Relative to Homeownership

Challenges of Purchasing a Home will Systemically Alter Housing Demand

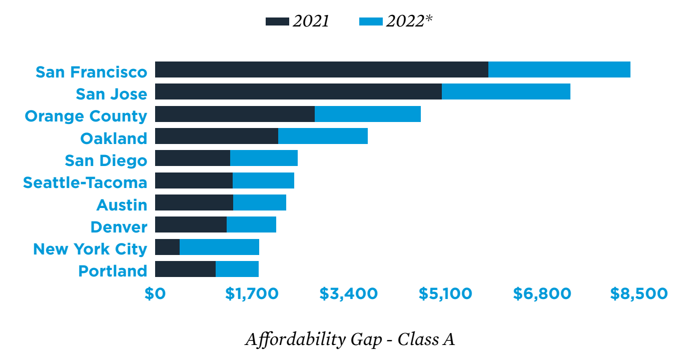
Home Prices Capping Off Record Run



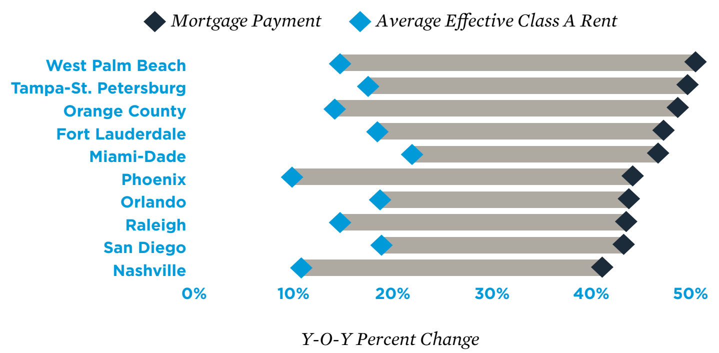
National Affordability Gap Became Much Wider



Top 10 Markets - Widest Gap



Top 10 Markets - Largest Mortgage Payment Rise*



2023 Housing Outlook

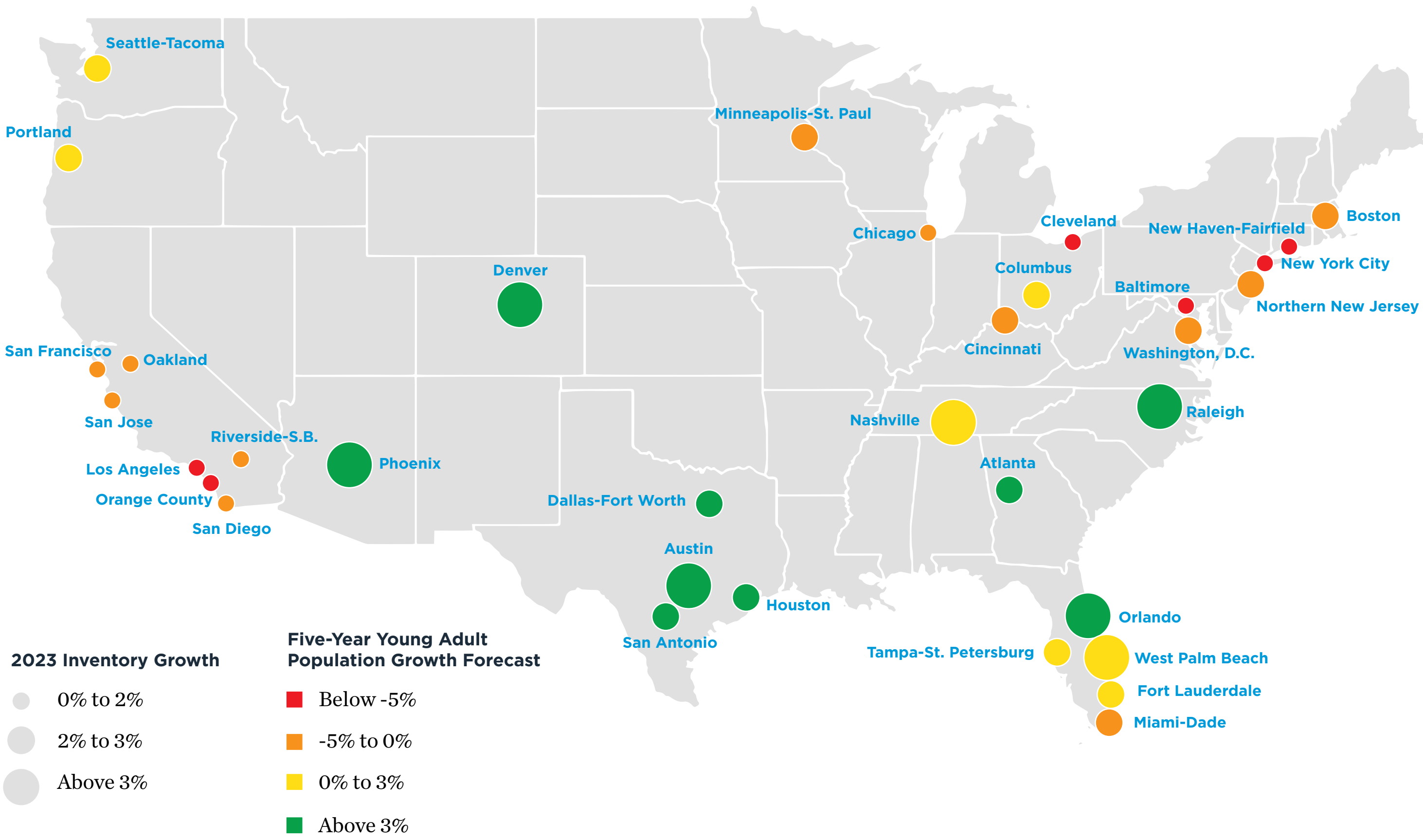
Prospective homebuyers face steep hurdles. Rapid upward movement in borrowing costs have compounded the home price run-ups catalyzed by pandemic trends. When the average 30-year fixed-rate mortgage climbed to the highest level since the Global Financial Crisis last year, buyers moved to the sidelines and home values retreated. However, the median home price in late 2022 was still more than 35 percent above 2019's peak, and a major correction is not expected, given the underlying dynamics. The number of home listings remains well below historic averages, and will likely stay limited as people stay put in 2023, with economic uncertainty and mild hiring activity depleting the motivations to relocate. Additionally, many owners are locked in to lower rates and have little incentive to replace that mortgage in the new environment. The market is shifting in favor of buyers after a period of seller advantage, but meeting the financial criteria to purchase a house is a lofty hurdle for many young adults.

Millennials and Gen Z will be more inclined to rent. Broad-based inflation and career advancement uncertainty are leading many U.S. residents to tighten up their household budgets. Meeting the lender requirements and saving for a down payment are substantial obstacles for young adults in the pursuit of first-time homeownership. From a cost-saving aspect, apartments have become more attractive. In the Bay Area, Southern California and long-time migration favorites, such as Austin, Seattle-Tacoma and Denver, the difference between renting a Class A apartment and owning a home now exceeds $2,000 per month on average. Meanwhile, robust in-migration to Florida and the greater Sun Belt has diminished single-family housing stock in most markets, driving up prices and making apartments comparatively more affordable, despite robust rent growth in the luxury tier. These trends will intrinsically change living preferences and create a more renter-disposed society, favoring the cost-saving benefits, flexibility and lifestyle advantages.

** As of 3Q 2022*
Mortgage payments based on quarterly median home price for a 30-year fixed rate mortgage, 90% LTV, taxes, insurance, and PMI
Sources: IPA Research Services; National Association of Realtors; RealPage, Inc.; Moody's Analytics; U.S. Census Bureau

Record Construction Mostly Aligned with Long-Term Demand Tailwinds

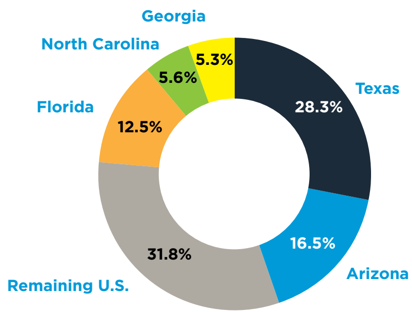
2023 Inventory Growth vs. 2023-2027 Young Adult Population Growth*



2023 Demand/Supply Outlook

- Historic rental demand across the Sun Belt during the pandemic encouraged developers to pick up the pace prior to last year's normalization. This response, paired with projects delayed in 2022, created gigantic delivery slates. Several locations with sizable inventory gains in 2023 could endure near-term oversupply. Strong young adult population growth trends, however, will help absorb the new units once the economy is on solid ground.
- Single-family rentals have rapidly grown in popularity over the past few years, serving as a middle ground for those looking to move out of apartments but unable to become homeowners. This could present mild competition for tenants in places where build-to-rent pipelines are substantial, like Texas, Arizona and Florida. Still, single-family rentals are only expected to siphon a minuscule share of demand, largely from Class A.
- Incentivizing affordable housing construction is a priority for the Biden administration. Development of these dwellings is the strongest in places with extreme affordability gaps and very tight Class C vacancy rates, offering relief rather than a significant source of competition. This focus on shoring up affordability barriers at the lower-end of the housing spectrum could also subdue rent control movements in some markets.

Single-Family Build-to-Rent Pipeline



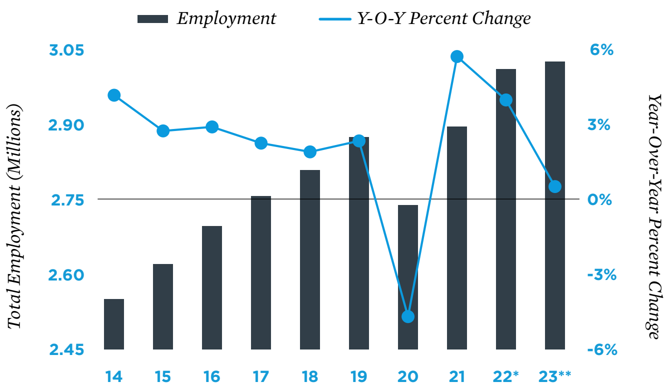
** Forecast*
Sources: IPA Research Services; CoStar Group, Inc; Moody's Analytics; RealPage, Inc.; U.S. Census Bureau

Life Science Epicenter Bolsters Atlanta's Pool of Young Professional Renters

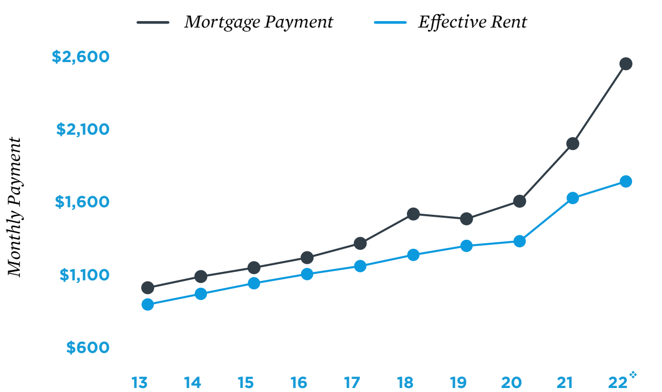
Resilient demand drivers keep vacancy under long-term average. Atlanta lands among the top five major markets for household creation this year, as lower living costs and a growing life science sector attract many young professionals from Northeastern markets. Balancing this growing demand, the metro is set to break records in 2023 for units completed, which will somewhat alleviate the current housing shortage. North Gwinnett is set to receive the greatest number of new apartments, aligning with the suburban area's accelerating population growth, due in part to a relatively short commute and proximity to Emory University. The campus, east of Midtown, is already home to the CDC headquarters, and is attracting biotech companies like Moderna, which plans to establish a regional headquarters in the area. Atlanta's immense existing talent pool may also help bring in more bio-centric companies, further aiding local housing demand. Elsewhere, other North Atlanta submarkets, such as Clarkston-Tucker, will likely retain low vacancy. These areas will hold onto renters who are delaying homeownership amid a rapidly widening affordability gap. Overall, the difference between a typical mortgage payment on a median-priced home and the average rent for an Atlanta apartment nearly quadrupled over the past two years, expanding the metro's renter pool.

Oncoming headwinds can create opportunities. The metro's robust growth trends that are expected to persist amid cost-of-living advantages have captured the attention of institutional investors across the country. Since the onset of 2021, more trades in the $20 million-plus category have been completed than in the previous three years combined. As a broader range of buyers tuned in, sale prices soared and cap rates tightened. However, this relationship is changing as lending criteria adjusts to rapid upward interest rate movement. Some institutions have moved to the sidelines to await stability, but others continue to scour the metro for opportunities. Southeast Atlanta's well-regarded school districts, nearby family entertainment, and proximity to the inner city fueled a level of renter demand that led to a housing crunch over the last five years, supporting record-setting rent gains in 2022. Additional focal points for institutions include suburbs spanning the northern band of the perimeter like Cumberland and Sandy Springs, which are desirable to renters that want distance from the urban core, but plentiful retail and dining options.

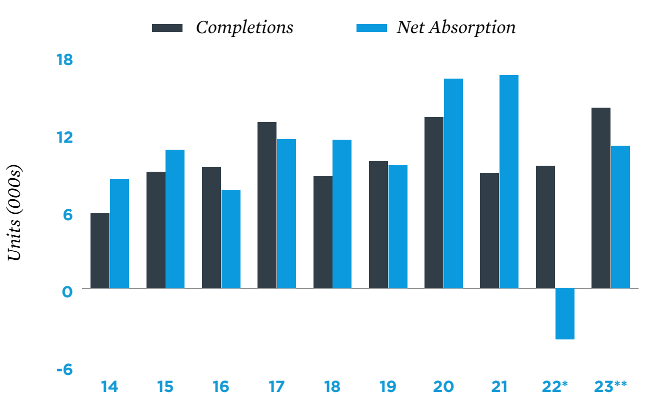
Employment Trends



Housing Affordability Gap



Supply and Demand



20.8% *2022 share of local population between 20 and 34 years old*

36.0% *of local population hold bachelor's degree or higher⌘*

$358,900 *2022 median home price✧*

** Estimate ** Forecast ✧ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

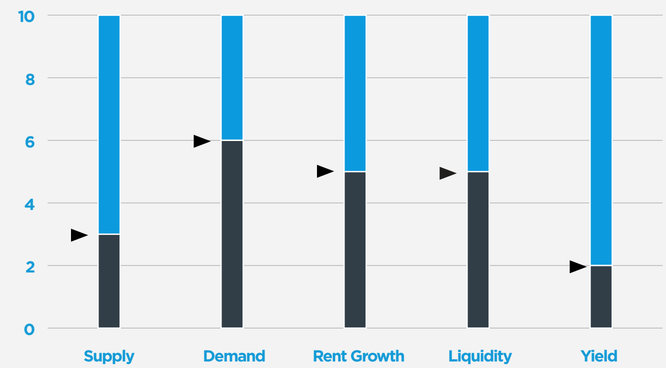
2023 Investment Outlook

Atlanta ranks in the top 15 major U.S. markets for smallest vacancy change and highest rent growth this year. These fundamentals are bolstered by sustained net in-migration and job gains, helping the market score a 6 on the demand segment. The supply figure of 3 is slightly below last year.

In 2022, the metro grabbed the highest possible ranking on the liquidity Index. However, like the rest of the country, that number dropped significantly for 2023 amid transaction hurdles. The yield score of 2 represents another challenge to getting deals done.

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

Key Performance Index



2023 Market Forecast

NMI Rank ▶ **7**

Employment
15,000 jobs
Metro **0.5%**
U.S. **0.5%**

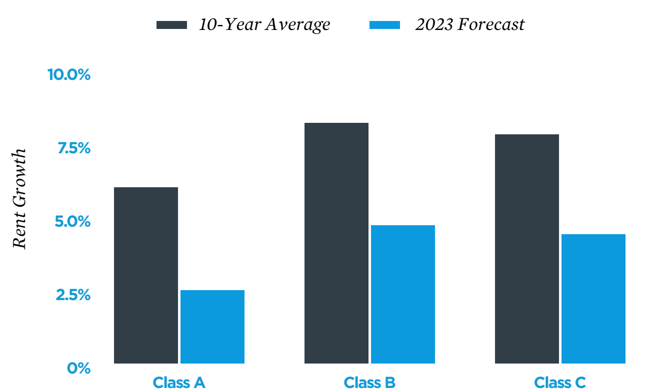
Construction
as % of inventory❖
Metro **2.6%**
U.S. **2.1%**

Class A Vacancy
Up 60 bps
Metro **6.2%**
U.S. **6.1%**

Class A Rent
$2,163
per month
Metro **2.5%**
U.S. **1.5%**

Vacancy By Class

Rent Growth By Class



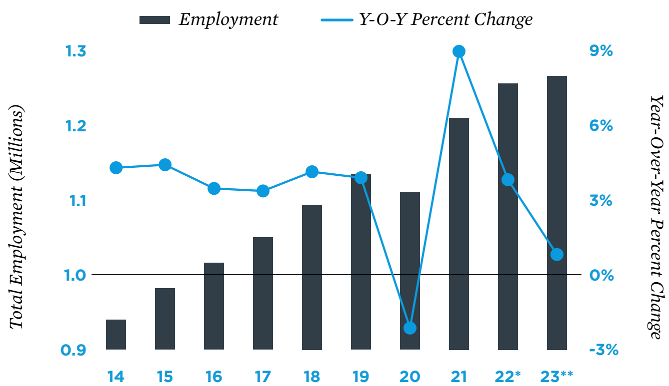
** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

In-Migration and Challenging Home Market Mitigate Apartment Supply Pressure

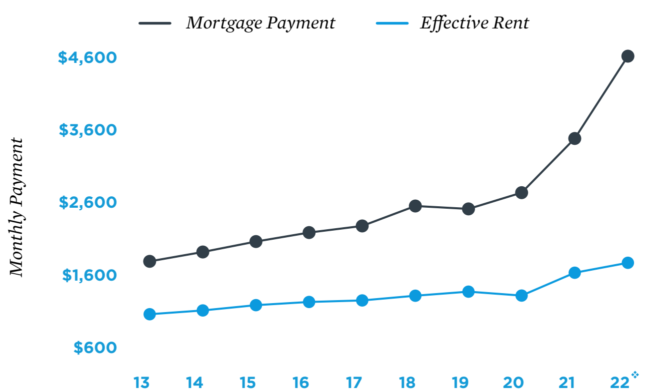
Barriers to homeownership help moderate vacancy decompression. In 2023, the metro is expected to see the sixth-largest volume of new residents among major U.S. markets, supporting the local labor force. Even with some companies rebalancing staff counts amid economic turbulence, higher-wage personnel from Austin's growing tech industry may favor high-end apartments amid elevated local home prices. The metro's affordability gap — the difference between the mean monthly mortgage payment on a median priced home and an average effective apartment rent — is the seventh-largest in the U.S., highlighting some of the benefits of staying in the renter pool. Technology firms are also still making long-term commitments to Austin. Apple begins construction on a 133-acre campus this February to house 5,000 employees on completion of the initial phase. Population and employment gains will, however, be slightly offset as Austin ties for third among major U.S. markets for its rate of inventory expansion in 2023. Following significant household formation during the preceding two years, local apartment availability in the metro will slacken as construction outpaces net absorption. Economic uncertainty is also contributing to slower household creation and increasingly frequent renter consolidation, placing upward pressure on near-term vacancy.

Tech company expansions aid submarkets with sparse pipelines. Moderating expectations for rent growth amid an influx of supply have coaxed institutions to focus on Class A and B properties in employer-dense areas of the market. Northwest Austin is one such locale, with the submarket's workforce set to become even more robust, following PayPal's announcement that it would be relocating 500 employees here by spring 2023 after signing a 10-year lease. Suburbs with few units slated for delivery and strong household formation, such as Far West and Northwest Austin, may note deal flow as well. Meanwhile, the fast-growing Interstate 35 Corridor, including San Marcos, saw persistently tight Class A vacancy last year, appealing to investors targeting new builds. This southern band of Austin should generate heightened attention in the years to come as the market blends with San Antonio, attracting residents from both metros seeking lower costs of living. For institutions maintaining a focus on core-located assets, university-adjacent properties should offer a demand backbone amid some economic headwinds.

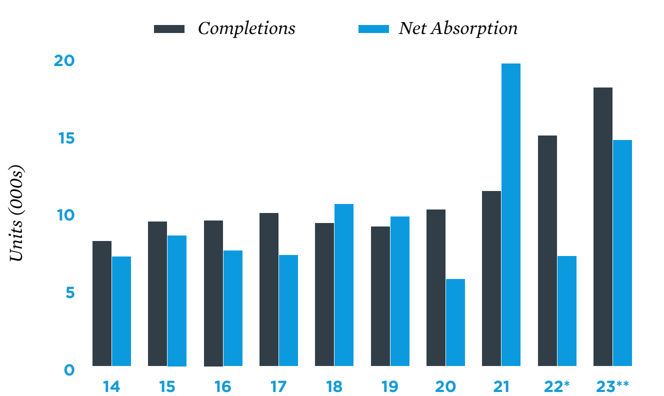
Employment Trends



Housing Affordability Gap



Supply and Demand



24.2% 2022 share of local population between 20 and 34 years old

41.7% of local population hold bachelor's degree or higher⌘

$565,600 2022 median home price✢

* Estimate ** Forecast ✢ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

2023 Investment Outlook

The pace of inventory growth in Austin is among the fastest in the nation, pushing the metro's supply score down to 1 this year. However, the market receives better rankings on the demand and rent growth portions of the Index, underpinned by robust local economic expansion.

Austin's liquidity metric is well above the U.S. major market average for 2023. Nevertheless, a 5 on the Index trails last year's score of 7. Investor appetite should remain strong, but the market's low yield ranking amid higher interest rates insinuates potential asset trading roadblocks.

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

Key Performance Index

2023 Market Forecast

NMI Rank ▶ **6**

Employment *10,000 jobs* — *Metro* **0.8%** *U.S.* **0.5%**

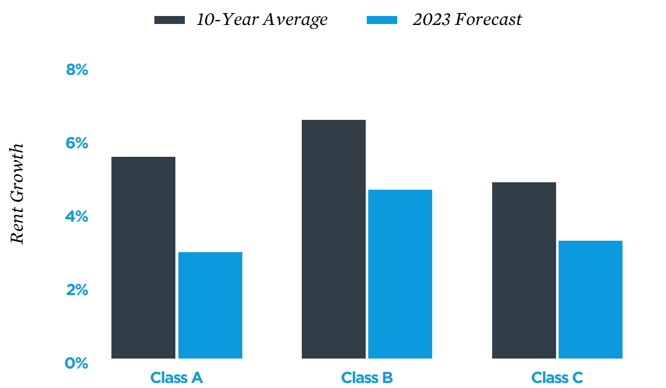
Construction *as % of inventory*❖ — *Metro* **6.3%** *U.S.* **2.1%**

Class A Vacancy *Up 110 bps* — *Metro* **7.1%** *U.S.* **6.1%**

Class A Rent *$2,285 per month* — *Metro* **2.9%** *U.S.* **1.5%**

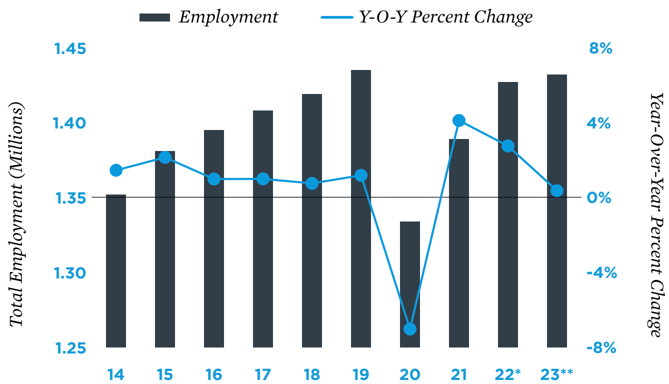
Vacancy By Class

Rent Growth By Class

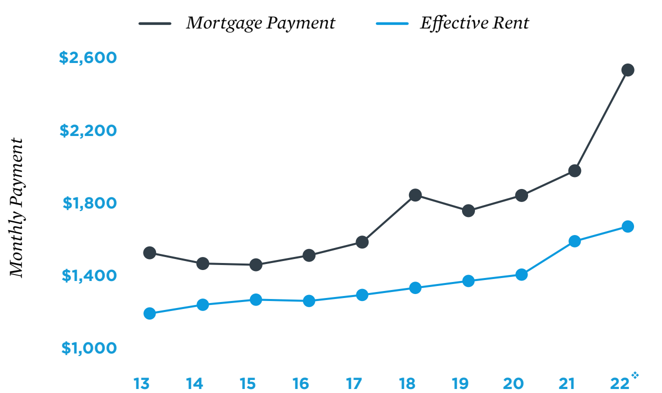


* Estimate ** Forecast
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

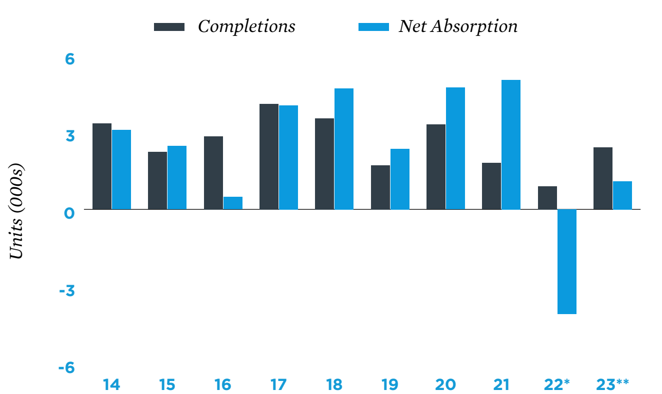
Employment Trends



Housing Affordability Gap



Supply and Demand



** Estimate ** Forecast ✣ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Economic Development Initiatives May Provide Tailwinds for Baltimore Rentals

Market conditions to remain relatively healthy. Similar to most other major U.S. markets, renter demand in Baltimore softened over the past few quarters, as falling consumer sentiment and widespread inflation slowed the rate of household formation. Still, even as vacancy recorded a significant rise last year, the rate remained 10 basis points below the pre-pandemic level entering 2023. The market's Class A and B availability metrics also held below their respective long-term averages, in part due to the mild pace of new supply at the time. Looking ahead, Baltimore's unique employment base, which includes federal government agencies, world-class health care providers and a rapidly-growing logistics sector, should provide some stability during times of economic uncertainty. The Maryland Chamber of Commerce has also recently expanded the Baltimore Enterprise Zone, increasing the number of potential businesses that can receive economic support as new jobs are added. This could spur a rise in company relocations and expansions, which would benefit the local multifamily sector. However, forecasts suggest apartment deliveries in 2023 will more than double last year's pace, and many hotel/office-to-apartment conversion projects are expected to move forward in the coming quarters. As a result, vacancy will continue to inch up in 2023, with the sharpest increase anticipated in the luxury segment this year.

Regionally high returns could put Baltimore in institutions' scope. Lower entry costs and the potential for higher yields relative to other major East Coast markets help attract institutions to the metro's multifamily sector. Challenges on the transaction market from the rapid interest rate surge could put some eyes on a high cap rate metro like Baltimore, where economic initiatives also underscore upside in select areas. In 2022, the metro noted significant out-of-state buyer interest, in part due to these same factors, with many coming from California and Florida. These investors have been most prevalent in West Baltimore County, particularly the suburbs of Owings Mills and Pikesville, which boasted a Class B vacancy rate nearly 100 basis points below the metrowide average late last year. Institutions focused on the luxury tier will likely continue to scout the metro's affluent waterfront locales, such as Canton and Federal Hill, or Anne Arundel County, where median household incomes are among the highest in the metro.

20.4% *2022 share of local population between 20 and 34 years old*

37.2% *of local population hold bachelor's degree or higher⌘*

$374,800 *2022 median home price✣*

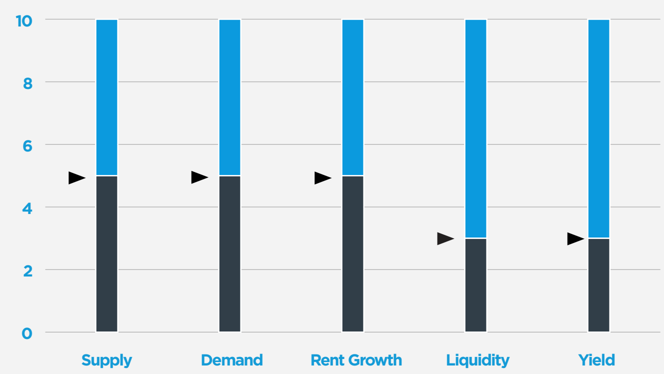
2023 Investment Outlook

Moderate development activity in Baltimore allows the metro to claim the second-highest score among all metros on the supply measure of the Key Performance Index. The market also grabs a 5 on the rent growth portion, which is an improvement from last year's ranking.

Baltimore's yield metric, standing at 3 this year, is above most other major markets in the region, which could encourage some institutions to scout opportunities here. However, liquidity will be dampened by capital markets' flux and general economic uncertainties.

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

Key Performance Index



2023 Market Forecast

NMI Rank 30

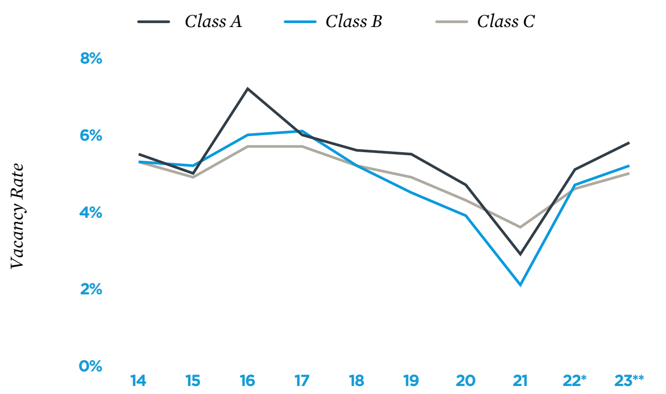
Employment *5,000 jobs* — *Metro* **0.4%** *U.S.* **0.5%**

Construction *as % of inventory*❖ — *Metro* **1.0%** *U.S.* **2.1%**

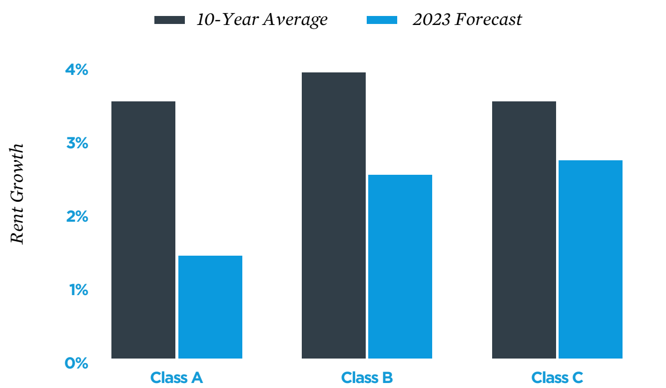
Class A Vacancy *Up 70 bps* — *Metro* **5.7%** *U.S.* **6.1%**

Class A Rent *$2,188 per month* — *Metro* **1.4%** *U.S.* **1.5%**

Vacancy By Class

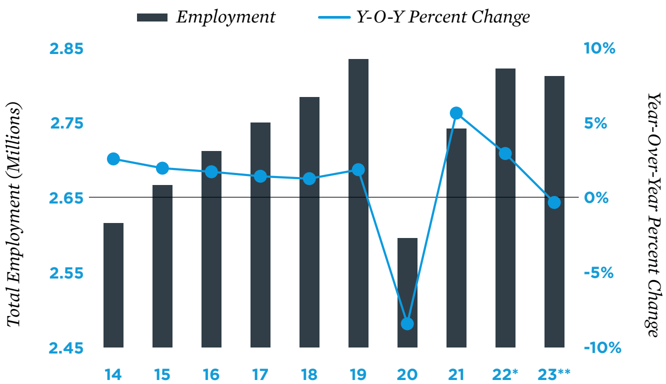


Rent Growth By Class

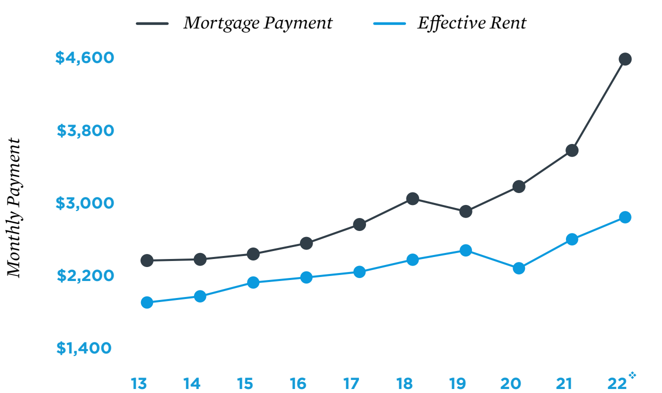


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

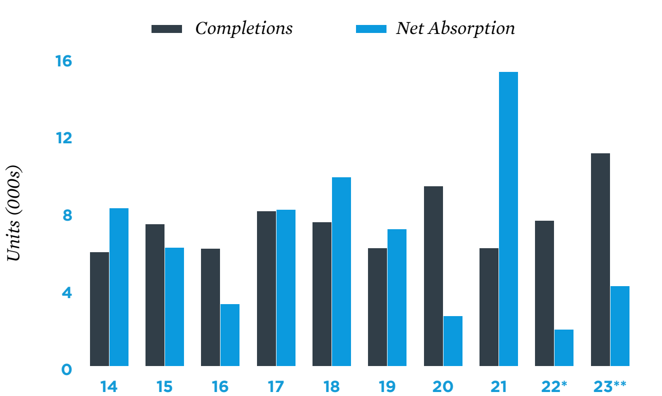
Employment Trends



Housing Affordability Gap



Supply and Demand



* Estimate ** Forecast ✣ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Rent Control Proposal Still a Longshot as Supply Wave Compounds Easing Demand

State and local policies influence construction trends. A late 2021 statewide zoning overhaul mandating land be set aside for multifamily housing in many western Massachusetts suburbs is already noticeably affecting development. Boston observed a record number of construction starts in the second quarter of last year, concentrated in exurban locales, soon after the legislation came into effect. In the near term, the 2.6 percent supply growth expected in 2023 will translate to a multiyear-high availability rate, helping to moderate rising rents after two years of robust gains. Nevertheless, the current pace of supply expansion falls well short of the near-200,000 additional units the Metropolitan Area Planning Council says are needed before 2030 to stabilize rents. Stock growth in the core could also be further constrained by rent control policy expected to be put forward by the Wu administration this year. While new restrictions could precipitate a further shift in supply gains to suburban zones, rent control has been illegal at the state level since 1994, presenting a significant hurdle for any price stabilization measures.

Boston proper regains prominence as denser zones come back to life. Rapidly shifting outlooks altered the investment landscape last year, with mounting uncertainty driving institutional buyers to well-performing assets. By late 2022, property vacancy at sale was observed at the lowest level in more than half a decade, illustrating this flight-to-quality trend. The buyer pool, in general, has also heavily shifted toward institutional investors, though interest rate instability has cooled activity among this cohort as well. Meanwhile, the ongoing debate over rent control has done little so far to stifle transaction velocity within Boston city limits, which constituted the largest proportion of metro trades in multiple years in 2022. Sentiment here has been buoyed by the return of economic activity in the core, as workers rent units close to reopened offices and young adults pursue urban lifestyles. Investors concentrating on $20 million-plus assets downtown most often seek 100- to 250-unit Class A or B complexes, with many proximate to the Massachusetts Turnpike. Institutions targeting the same product type frequently look just north to Revere and Cambridge as well, where academic facilities and healthcare-based employers bolster local rental demand.

22.3% — *2022 share of local population between 20 and 34 years old*

44.3% — *of local population hold bachelor's degree or higher⌘*

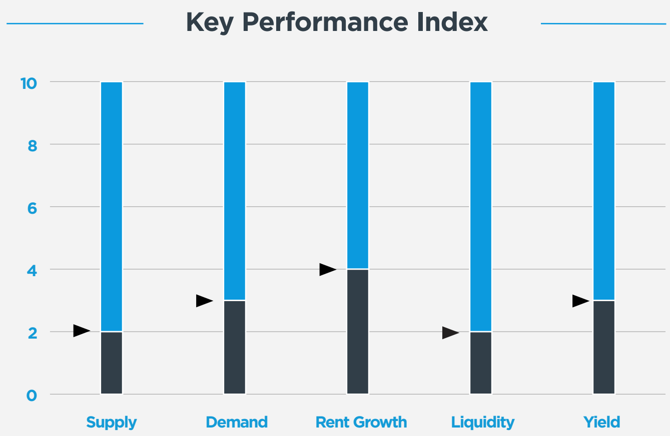
$676,200 — *2022 median home price✣*

2023 Investment Outlook

Boston's supply score is a notch below the overall Key Performance Index average, as the market's apartment stock will grow by a larger margin than the U.S. mean this year. The rent growth metric of 4 is below the metro's recording last year, limited by reduced demand.

In the 2023 Key Performance Index, the market's yield score is set at 3, which is a tick above most comparable primary metros. Boston's liquidity score drops from a 6 in 2022 down to a 2 this year, as deal flow is expected to be hindered by higher interest rates after last year's upward movement.

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



2023 Market Forecast

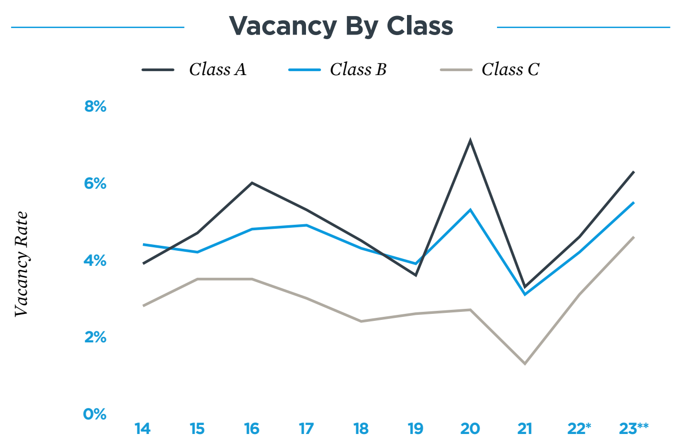
NMI Rank 33

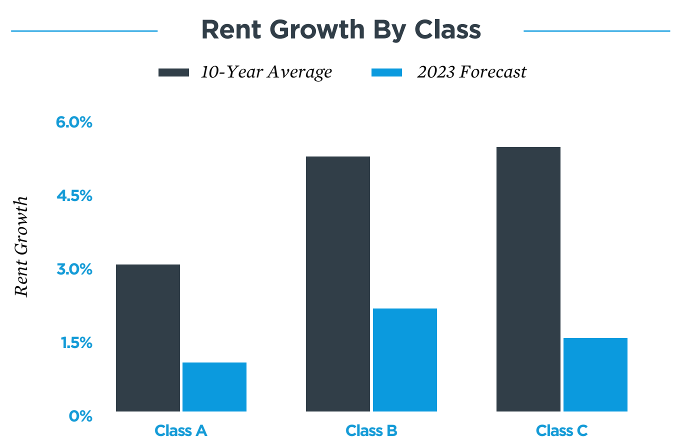
Employment *-10,000 jobs* — *Metro* **-0.4%** *U.S.* **0.5%**

Construction *as % of inventory*❖ — *Metro* **2.6%** *U.S.* **2.1%**

Class A Vacancy *Up 170 bps* — *Metro* **6.2%** *U.S.* **6.1%**

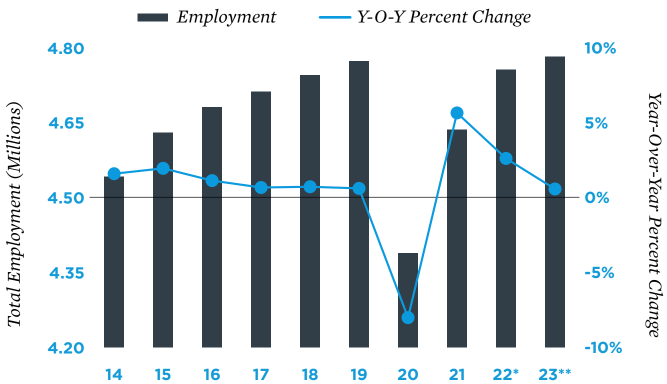
Class A Rent *$3,797 per month* — *Metro* **1.0%** *U.S.* **1.5%**



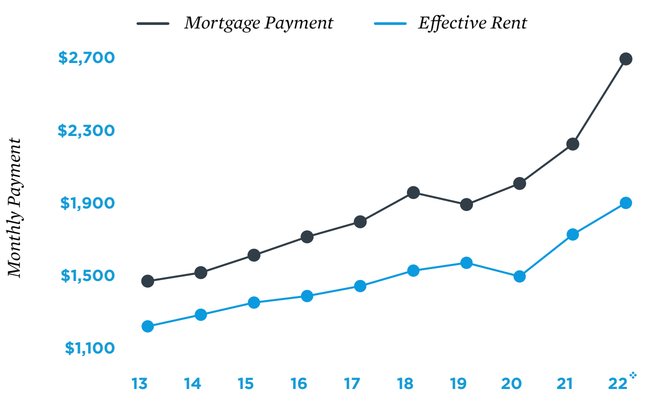


* Estimate ** Forecast
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services;
CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

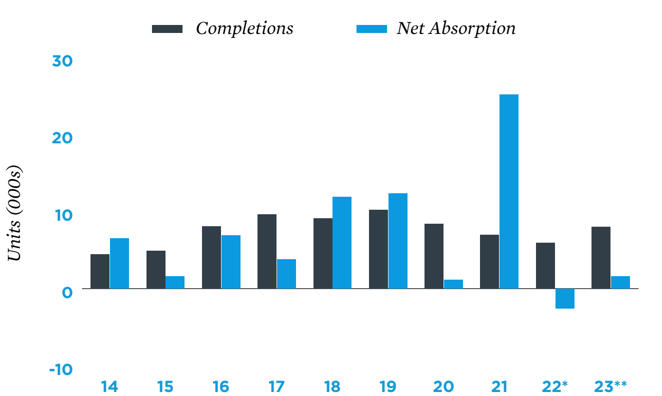
Employment Trends



Housing Affordability Gap



Supply and Demand



*Estimate ** Forecast ✧ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.*

Revival of Urban Lifestyles Gains Steam; Investor Focus Shifts to Close-in Areas

Popularity among renters returns to the Loop. Significant shifts in the metro's underlying dynamics will alter fundamental trends in the Windy City this year. Positive leasing activity in the CBD last year and a vacancy rate below the historic average indicate downtown living in the West Loop and Fulton Market areas has gained momentum. Contributing to this change is a return to office by employees. Entering 2023, Chicago had rebounded to roughly 50 percent of pre-pandemic office usage levels, ahead of some other major gateway metros. Gains in office space utilization are expected to continue, drawing in renters seeking a return to the live-work-play lifestyle. Substantial development in the River North and Fulton Market neighborhoods suggests concession usage here will likely exceed other submarkets, attracting luxury renters, but weighing on segment rent growth. The progression of CBD demand may adversely impact some suburban locales that experienced robust performance in recent years amid remote work flexibility, which enabled residents to live further from the office.

Performance, tax assessment draw investors to CBD-adjacent areas. Despite strong metrics in the inner city, investors maintain a preference for nearby submarkets to the north and south. Logan Square-Lincoln Park and the South Shore highlight the list of top destinations for capital deployment. Both should attract a diverse mix of investors, while above-average returns and marginal near-term inventory expansion persist. The restructured property tax assessment process has also had less of an impact on assets in these locales than buildings downtown. Whereas assessed values were found to have appreciated between roughly 20 percent and 50 percent in core-adjacent areas, values for properties in the Loop climbed by more than 120 percent on average over the prior 2018 evaluation. With tax implications based off the new assessment, comparatively lower overhead costs in these downtown-adjacent locations could benefit future returns. As a potential response, institutions have looked into these locales at a higher clip than in prior years. Buyers in the $20 million-plus tranche are not confining their searches to core-adjacent areas, however, with some coveting 200-plus unit complexes in further out suburbs like Naperville, Schaumburg and Palatine. Nonetheless, higher borrowing costs may temper overall activity.

20.7% *2022 share of local population between 20 and 34 years old*

35.3% *of local population hold bachelor's degree or higher⌘*

$337,100 *2022 median home price✧*

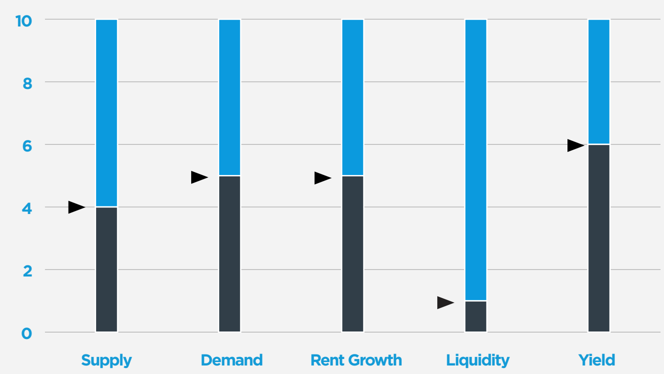
2023 Investment Outlook

Relative to last year's measures, the supply Index dips slightly and Chicago loses some ground on the demand segment, but matches its ranking on the rent growth portion. The reduction in demand is tied to national economic headwinds and softer household creation this year.

Chicago's score of 6 on the yield segment of the KPI is the highest of any major market, offering an average cap rate that notably exceeds most other primary metros in the country. This could potentially help attract investment. Still, the liquidity ranking of 1 is below the overall average.

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

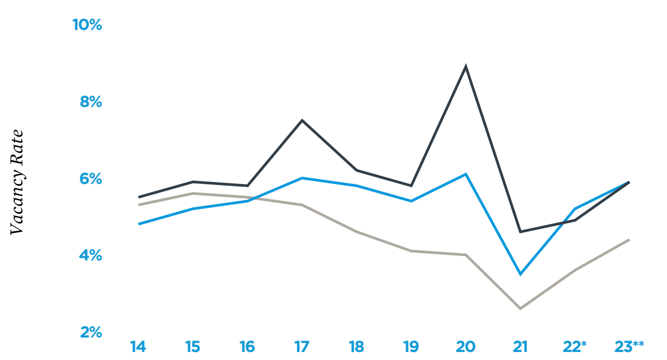
Key Performance Index



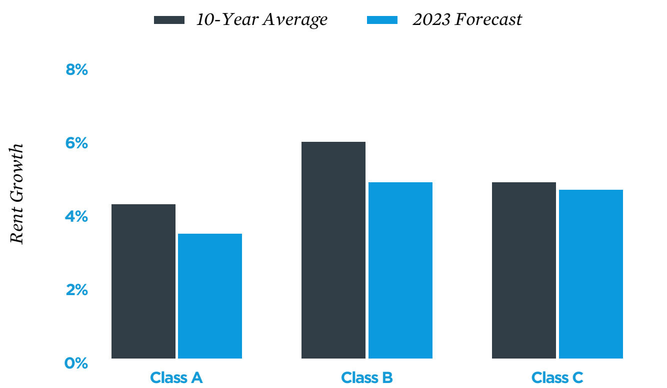
2023 Market Forecast

NMI Rank		28
Employment *26,000 jobs*	*Metro* 0.5%	*U.S.* 0.5%
Construction *as % of inventory*❖	*Metro* 1.1%	*U.S.* 2.1%
Class A Vacancy *Up 100 bps*	*Metro* 5.8%	*U.S.* 6.1%
Class A Rent *$2,713 per month*	*Metro* 3.4%	*U.S.* 1.5%

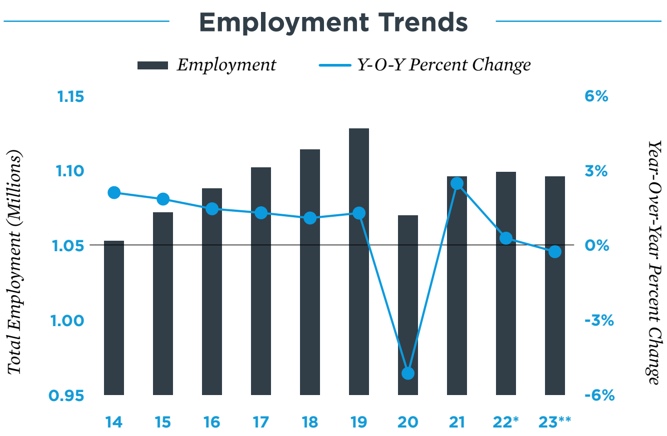
Vacancy By Class

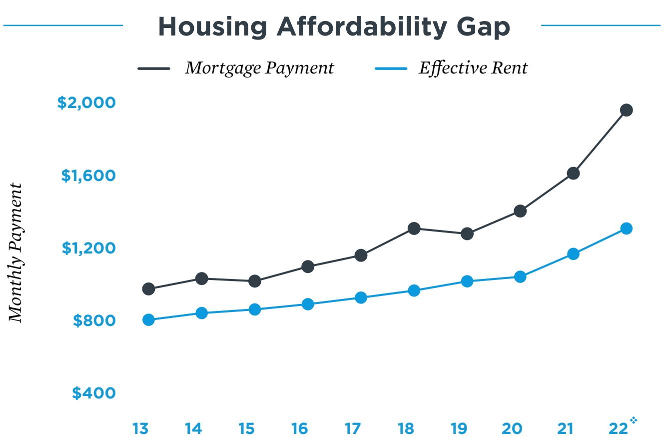


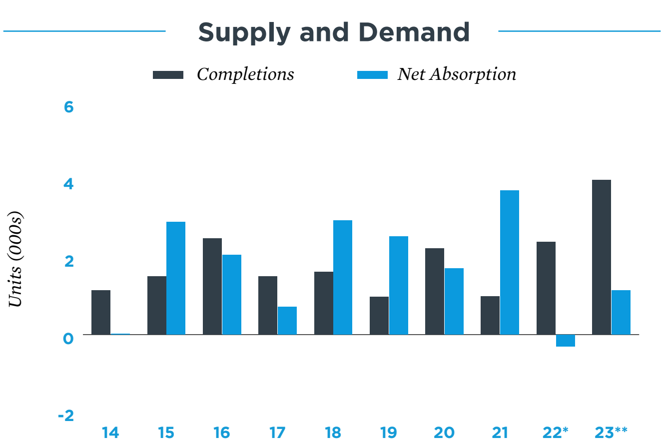
Rent Growth By Class



** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics







* Estimate ** Forecast ✧ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Robust CBD Demand and Locally High First-Year Returns May Diversify Buyer Pool

Downtown coming off a strong year, Honda presents suburban tailwinds. In 2022, Cincinnati climbed into the top 10 markets for year-over-year rent growth, the only Midwest metro to breach this list. These gains were predominantly driven by rising rents in the CBD, as Cincinnati had one of the least vacant downtowns in the nation throughout last year. Looking forward, construction in the urban core is expected to rise in 2023 to meet the existing high demand in the area. As a result of this supply growth, the pace of rent gains will align more closely with pre-pandemic trends as additional options and slowing economic growth temper leasing competition. Meanwhile, some suburban areas of the market will benefit from new corporate investment. Honda announced that construction will begin this year on an EV battery plant in Fayette County, situated between Cincinnati, Dayton and Columbus. The facility could potentially draw commuting employees to northeast Cincinnati apartments, particularly in Warren and Butler counties. These submarkets are slated to collectively receive less than 900 new units this year, guiding renters into existing properties and facilitating rent growth.

Mid-tier urban core assets offer higher-than-average returns. Following a record number of transactions in 2021, rising interest rates began to slow deal flow in the second half of last year. As this played out, investors targeted properties located in areas with sustained rent gains, such as Central and North Central Cincinnati. Both submarkets led in average effective rent growth over the latter half of last year. At the same time, cap rates in these areas are consistently above the metro average, sometimes reaching up into the mid-8 percent band. Amid a period of mounting capital costs, higher-yield mid-tier assets offered for a below-average per-unit price point will help alleviate financing hurdles, facilitating trades in this category. Institutional investors are likely to find higher first-year returns and a lower price per-unit than in most alternative major markets in the U.S., while still finding options for strong rent growth potential. Deal flow in the $20 million-plus range remains relatively limited, although mid-tier complexes with unit counts above 200 garner attention in suburbs just south of the river, like Newport. The supply wave downtown could also present development partnerships and new institutional-grade options in the years to come.

20.0% *2022 share of local population between 20 and 34 years old*

31.6% *of local population hold bachelor's degree or higher⌘*

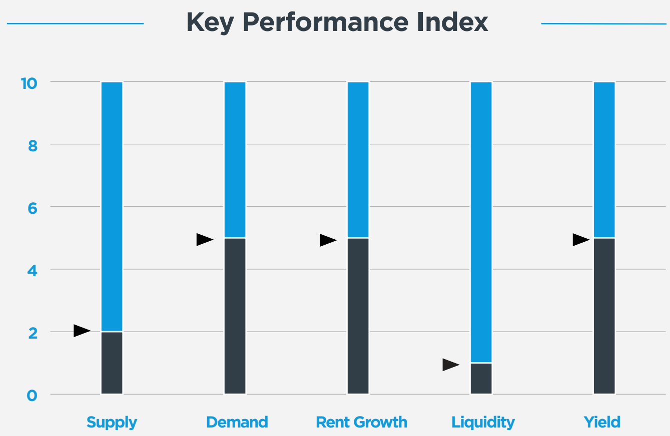
$255,300 *2022 median home price✧*

2023 Investment Outlook

Among the three major Ohio markets, Cincinnati grabs the lowest score on the supply Index, but ties for the highest mark on the rent growth portion. The near-term pressure presented by new supply is evident, but the metro has several economic tailwinds in place to help drive up rents.

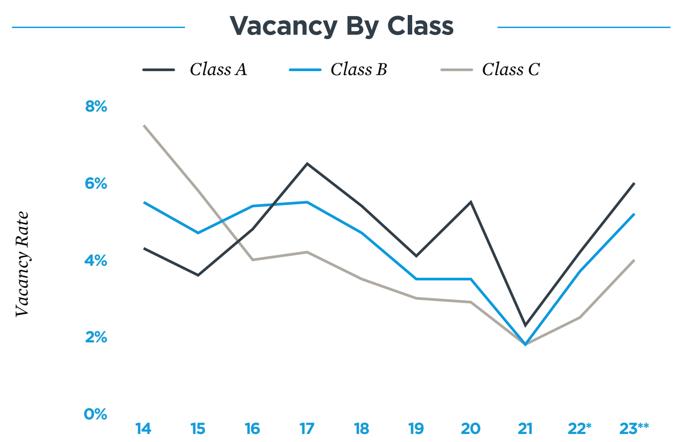
Cincinnati ties for the lowest ranking on the liquidity Index among the trio of major Ohio markets this year. It has posted smaller institutional-level trading volumes than these nearby markets in the past, but its yield score of 5 is tied for the highest of the group.

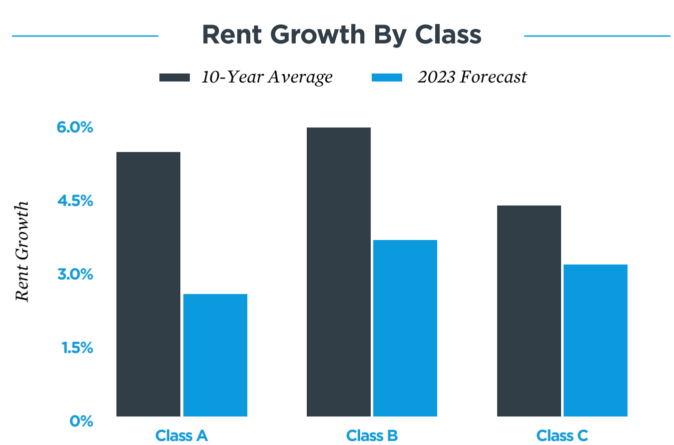
Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



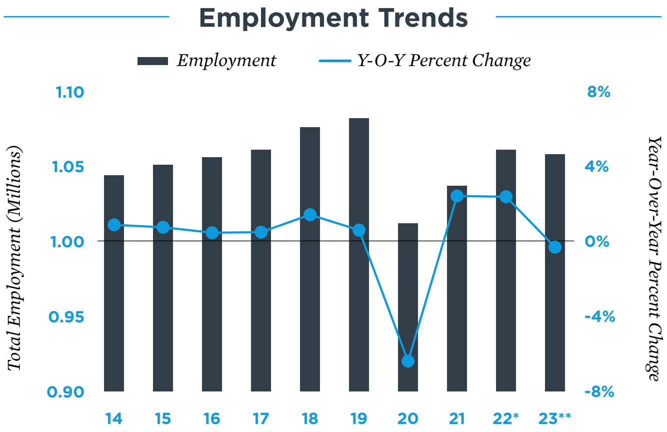
2023 Market Forecast

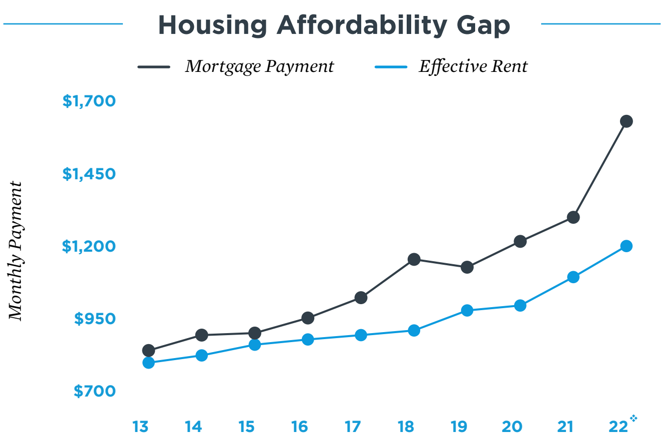
NMI Rank		**29**
Employment *-3,000 jobs*	*Metro* **-0.3%**	*U.S.* **0.5%**
Construction *as % of inventory❖*	*Metro* **2.4%**	*U.S.* **2.1%**
Class A Vacancy *Up 180 bps*	*Metro* **5.9%**	*U.S.* **6.1%**
Class A Rent *$1,816 per month*	*Metro* **2.5%**	*U.S.* **1.5%**

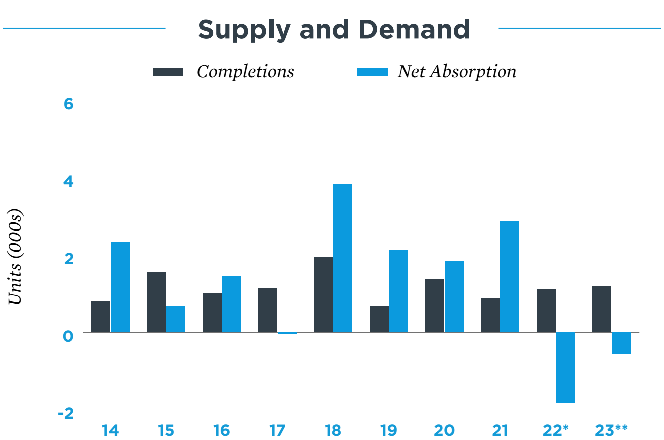




** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics







** Estimate ** Forecast ✢ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Company Expansion to Buoy CBD Demand; Redevelopment Prospects Spur Investment

Sherwin-Williams aids urban core, Ford to grow suburban staff count. A return of full-capacity sporting events and concerts has amplified the appeal of living downtown, where apartments can offer efficient access to these entertainment venues. Several local companies have also signaled an expected return to office in the CBD, and Sherwin-Williams has followed through on its commitment to build a global headquarters in the heart of Cleveland. While this office is not set to open until 2024, the company represents one of the metro's largest employers, and other businesses in the CBD are likely to follow suit with in-person schedules, drawing renters seeking to shorten their commutes. Meanwhile, at the end of last year, Ford announced it will expand its Ohio Assembly Plant in Lorain County, potentially doubling the company's current workforce in the area. The Westlake-North Olmsted-Lorain County submarket already reported the lowest multifamily vacancy rate in Cleveland entering this year, positioning it for long-term compression as renters on the expanding construction and manufacturing payrolls opt to move closer to the assembly plant. Despite these positive trends, however, market availability will rise this year as demand for luxury rentals subsides while the metro adds the largest number of new units in three years.

Suburban fundamentals encourage investment. Elevated borrowing costs could potentially draw some risk-tolerant institutions to Cleveland, which offers higher first-year returns and lower entry costs than most other major markets in general. Low vacancy in suburban areas, specifically, has enabled investors to mitigate uncertainty by targeting properties that are already highly occupied. Additionally, office conversions have become increasingly viable in Cleveland, a trend that is likely to persist as hybrid work solidifies. The former Ohio Bell building is a notable example. This vacant office space changed ownership last year, with the intentions of converting the property into high-end apartments by 2024. More traditional investment activity in the luxury rental tier remains scarce, and that is likely to continue amid financing challenges in 2023. However, larger-scale Class B assets in lake-side submarkets, such as Westlake-North Olmsted-Lorain County, could maintain buyer interest. This area held a mid-tier vacancy rate near 2 percent last year, enabling a double-digit percentage rent gain.

19.2% *2022 share of local population between 20 and 34 years old*

28.7% *of local population hold bachelor's degree or higher⌘*

$210,800 *2022 median home price✢*

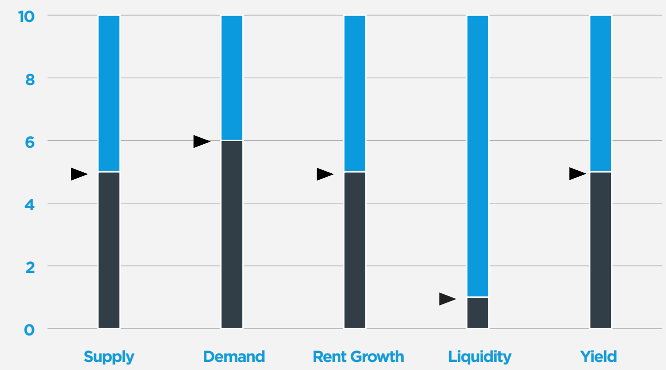
2023 Investment Outlook

Cleveland's aggregate of 16, when combining the supply, demand and rent growth metrics, is the third highest of any such total. This, however, does not tell the entire story for the market, which ranks near the bottom for household creation and has a relatively thin affordability gap.

Similar to other major markets in the region, Cleveland's number of institutional-level trades could dip in 2023, given financing complications and economic uncertainties. This supports a 1 on the liquidity Index, while the yield metric ties for the second highest at 5.

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

Key Performance Index

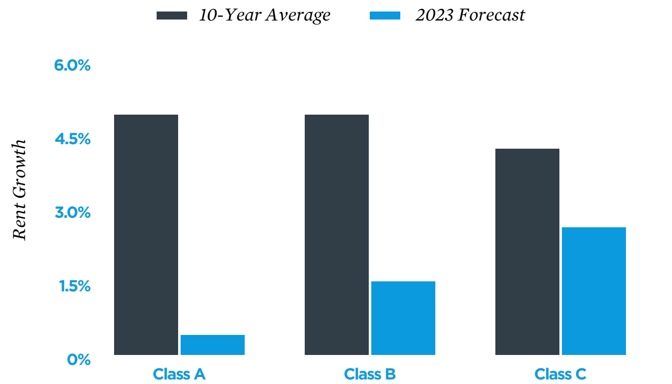


2023 Market Forecast

NMI Rank		34
Employment *-3,500 jobs*		*Metro* -0.3% *U.S.* 0.5%
Construction *as % of inventory*❖		*Metro* 0.7% *U.S.* 2.1%
Class A Vacancy *Up 120 bps*		*Metro* 6.3% *U.S.* 6.1%
Class A Rent *$1,850 per month*		*Metro* 0.4% *U.S.* 1.5%

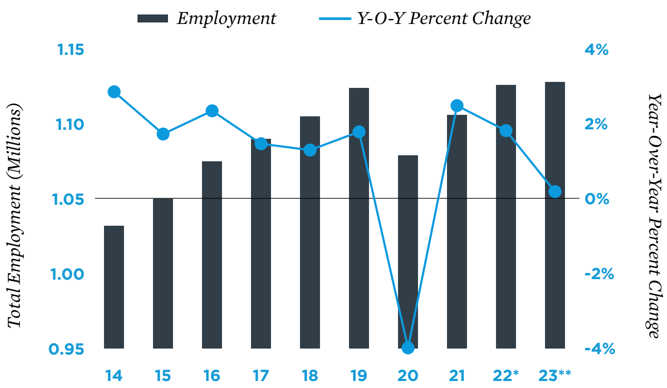
Vacancy By Class

Rent Growth By Class

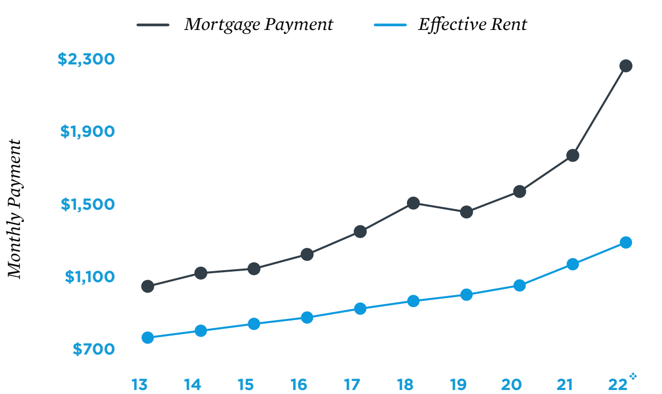


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

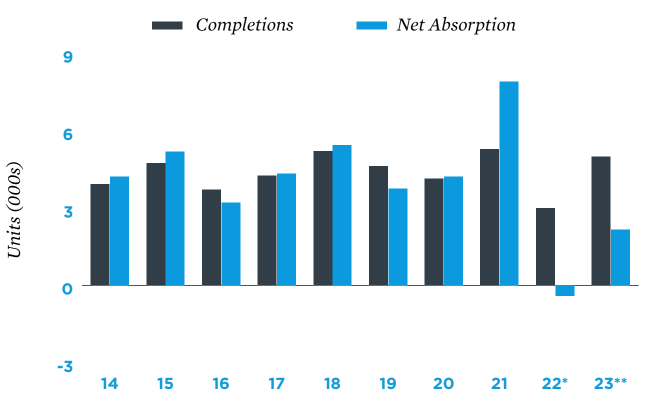
Employment Trends



Housing Affordability Gap



Supply and Demand



** Estimate ** Forecast ✧ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Intel's Move to New Albany Exemplifies Long-Term Momentum, Despite Slowdown

Major project groundbreaking a tailwind for demand in outer submarket. Columbus is expected to have the second-fastest rate of population growth among major Midwest markets in 2023. This expansion is slated to occur as Intel constructs two semiconductor plants and Amgen builds a biomanufacturing plant, both in New Albany. Individuals working at these construction sites may opt to move closer to shorten their commute times, decisions that are expected to improve local renter demand. While the multifamily pipeline in the Westerville-New Albany-Delaware submarket was minimal at the onset of this year, the anticipated boost in local demand may motivate developers to move forward with planned projects in the area or propose new developments. Elsewhere, the westside of Columbus could emerge as a more attractive locale for renters, as hydrogen-electric-focused Hyperion also plans to construct a manufacturing facility here, further elevating the metro's status as a Midwest tech hub. A potential economic downturn will, however, cause an uptick in overall metro vacancy and moderate rent gains in the near term.

Long-term corporate growth entices investors. Institutions were increasing their Columbus apartment footprints at an above-average rate prior to the onset of 2023, supporting what was a historically high number of $15 million-plus transactions. This momentum faces some roadblocks this year, as rapid upward movement in interest rates has momentarily pushed a range of investors to the sidelines. However, once rates become more stable and economic uncertainty fades, the trend of heightened institutional attention in Columbus should pick back up. The metro's roster of tech companies and startups is growing, fueling population and subsector job gains, particularly in Dublin and New Albany. At the same time, metrowide inventory has expanded by an eye-catching 27 percent over the past decade, bolstering the volume of institutional-grade assets in Columbus. Deal flow of this product built within the last 10 years has been dominated by non-local capital sources, with a recent preference for suburban apartments in Upper Arlington and Dublin-Hilliard. The backbone of Ohio State University and upside presented by company expansions make these attractive locales for institutions.

22.0% *2022 share of local population between 20 and 34 years old*

34.5% *of local population hold bachelor's degree or higher⌘*

$297,400 *2022 median home price✧*

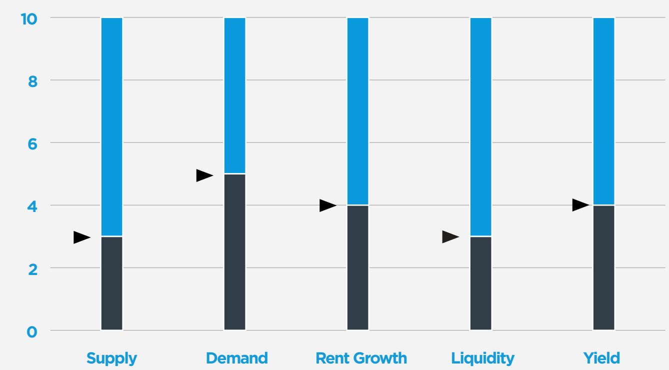
2023 Investment Outlook

Columbus' rent growth Index holds steady, with the 2022 recording at a 4 this year. However, momentum will be partially offset by a reduced demand figure of 5, as noteworthy inventory growth pushes the Class A vacancy measure above the national average.

Of the three major Ohio markets, Columbus is the most liquid for institutional-level trades, exemplified by a 3 on the Index and deal flow that historically outpaces the other two metros. This activity has also contributed to Columbus claiming the lowest yield score of the Ohio trio.

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

Key Performance Index



2023 Market Forecast

NMI Rank ▶ **27**

Employment
2,000 jobs
Metro **0.2%**
U.S. **0.5%**

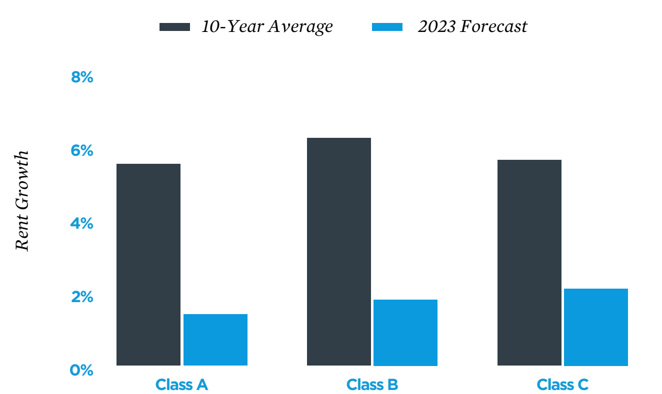
Construction
as % of inventory❖
Metro **2.5%**
U.S. **2.1%**

Class A Vacancy
Up 170 bps
Metro **6.3%**
U.S. **6.1%**

Class A Rent
$1,664 per month
Metro **1.4%**
U.S. **1.5%**

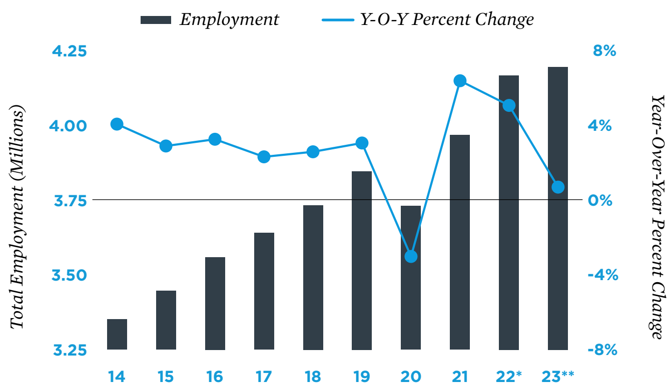
Vacancy By Class

Rent Growth By Class

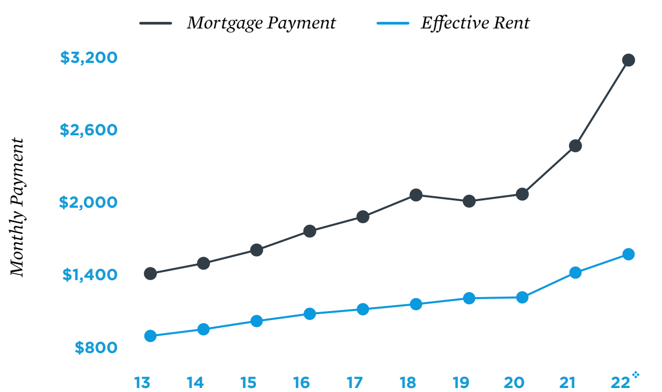


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

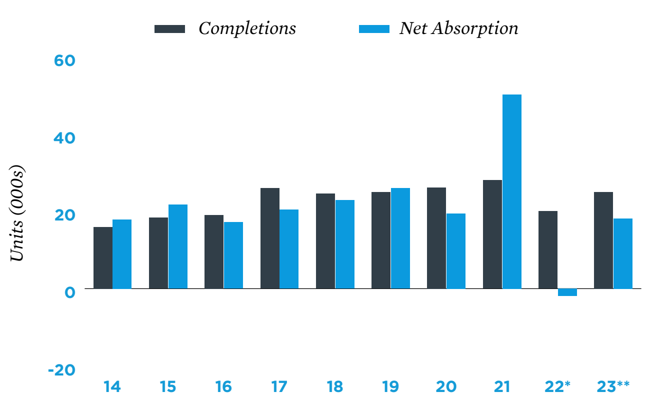
Employment Trends



Housing Affordability Gap



Supply and Demand



** Estimate ** Forecast ✧ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Sturdy Generational Fundamentals Will Drive Local Landscape Through Turbulence

Nation-leading household creation and apartment completions persist. Comparatively lower urban living costs, a central location allowing for quick flights to either side of the country and diverse job opportunities assist Dallas-Fort Worth in attracting the greatest net in-migration levels in the country. As these new residents move to the metroplex, a substantial share will opt for apartments, as the affordability gap between the average monthly rent and a typical mortgage payment on a median priced home has nearly doubled over the last two years. Many potential first-time homeowners could choose to renew their apartment leases amid high mortgage rates, also helping sustain rental demand. On the supply side, at least 25,000 new units will hit the market for the third time in four years, causing vacancy to climb amid a cooling economy and softer overall household formation. Nonetheless, over the longer term, this new construction does not pose a major threat, and a recent decline in permits suggests fewer completions beyond 2023. The metro has also been able to absorb sizable supply and bounce back quickly from headwinds in the past, like during the aftermath of the 2008 recession. Dallas-Fort Worth noted above-national inventory growth, yet still produced stronger vacancy compression than the country during the 2010-2016 period.

Housing dynamics and employment trends hold attention. Deal flow is slowing as rapid upward interest rate movement coaxes many sellers to postpone or renegotiate transactions. Nevertheless, metroplex assets will garner attention from a collection of investors, as last year's slower rent gains relative to rising home costs have longer-term structural impacts for housing considerations. Mid-city locales like Arlington, as well as North Dallas suburbs, are attractive to renters with children that are unable to make the leap to homeownership. The plethora of entertainment options in Arlington permits certain lifestyle advantages, while the quality of schools and outdoor amenities benefit the appeal of North Dallas. Additionally, lower-cost areas like Southern Dallas could sustain momentum, as local job growth and industrial construction aid smaller cities, such as Lancaster, Hutchins and Wilmer. Institutions honed in on core assets may favor the Uptown and Oak Lawn areas of Dallas this year, with recent office expansions and relocations in the area likely to generate rental demand from young professionals.

21.4% *2022 share of local population between 20 and 34 years old*

33.2% *of local population hold bachelor's degree or higher⌘*

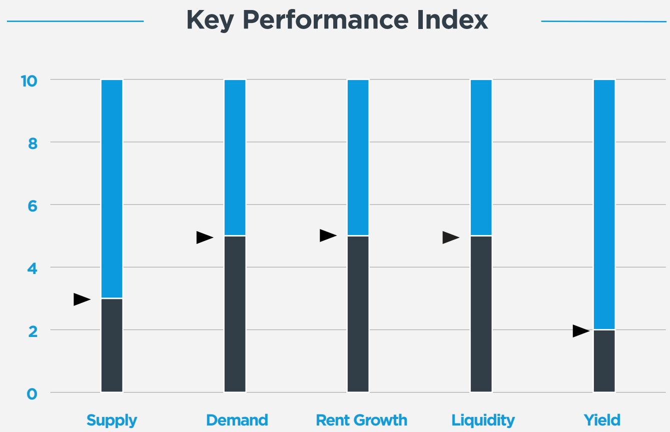
$386,000 *2022 median home price✧*

2023 Investment Outlook

The Dallas-Fort Worth Metroplex is projected to rank in the top 10 major U.S. markets for rent growth, employment gains and household creation this year. Apartment demand, fueled by a comparatively stable labor market, will help absorb the sizable wave of new supply set to deliver.

Last year, the market receieved a 7 on the liquidity Index. That measure declined to a 5 in the 2023 Key Performance Index, as robust buying activity in recent years compressed cap rates to a level that makes deals more difficult amid higher interest rates.

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



2023 Market Forecast

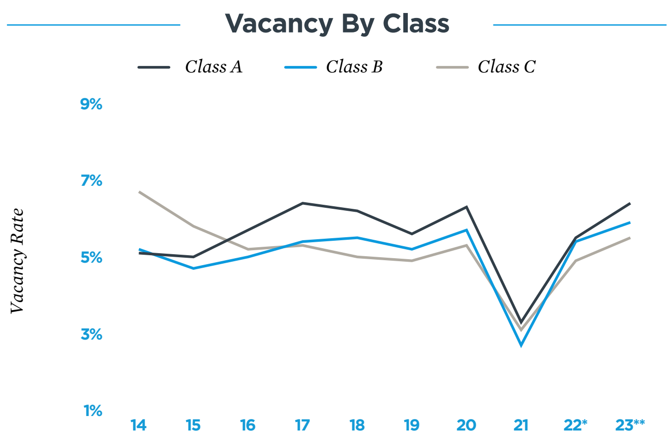
NMI Rank ▶ 2

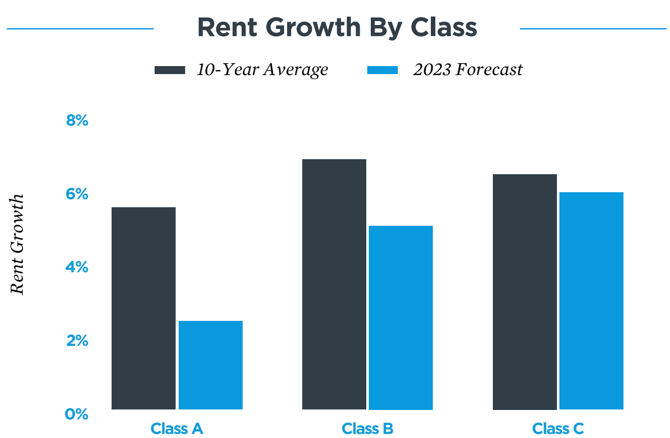
Employment
28,000 jobs
Metro **0.7%**
U.S. **0.5%**

Construction
as % of inventory❖
Metro **2.8%**
U.S. **2.1%**

Class A Vacancy
Up 90 bps
Metro **6.3%**
U.S. **6.1%**

Class A Rent
$1,928 per month
Metro **2.4%**
U.S. **1.5%**





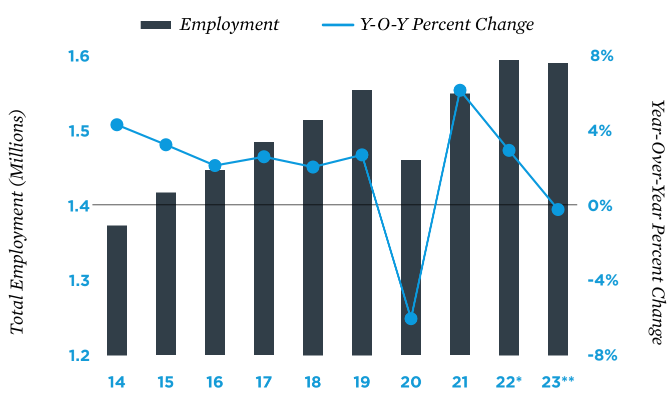
** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

Denver Passing Through an Inflection Point; Return to Urban Core Sparks Investment

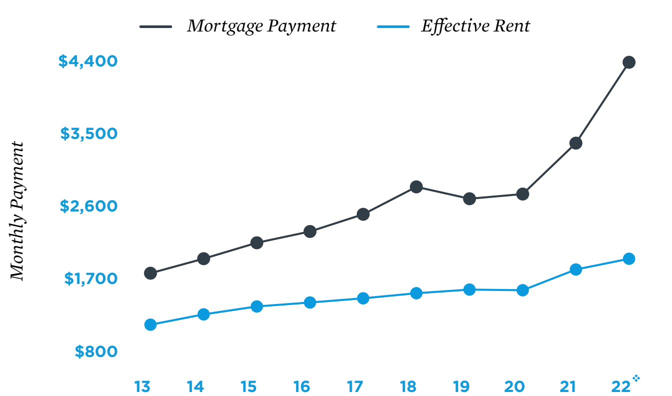
Heightened construction persists as performance eases. Like most markets across the country, apartment availability in Denver tightened significantly through early 2022, with both downtown and suburban vacancies falling to their lowest points since 2000. The metro now faces a historic number of upcoming completions at a time when apartment absorption is cooling. Anticipated net in-migration for 2023 will fall below 20,000 people for a fourth consecutive year, partially attributed to the slowdown in hiring and recruitment efforts. These factors will weigh on market fundamentals in 2023, with the metro's average effective rent expected to rise at a muted pace relative to the robust gains in recent years. The supply surge of Class A units amid slow lease-up could spark higher concessions for the year. Lower- and mid-tier suburban apartment performance, however, should be less impaired. Demand for budget-friendly housing options subsists in a period of ongoing economic headwinds that is coaxing households to reduce their living costs.

Millennial presence and homeownership hurdles nourish buyer attention. Economic uncertainty and rapid interest rate elevations continue to raise questions surrounding preferred investment opportunities. In the Mile High City, central historical neighborhoods have become a buyer favorite among private capital, due to strong yields and lower entry costs. Deal flow downtown continues to account for the most activity among Denver submarkets, at roughly one-quarter of all transactions last year. Institutions are cognizant of the metro's extremely wide affordability gap, or the difference between a typical monthly payment on a median priced home and an average apartment rent. This dynamic, paired with the market's sizable share of millennial households, will translate into extended renter lifecycles. Young professionals facing headwinds in the pursuit to first-time homeownership in Denver will likely maintain a preference for downtown rentals, where a live-work-play lifestyle is possible. In the coming years, however, additional millennial households could migrate outward to first-ring suburbs that offer a mix of urban amenities and suburban tranquility. Aurora, Arvada and Westminster highlight the list of suburbs generating institutional attention amid an anticipated millennial sprawl.

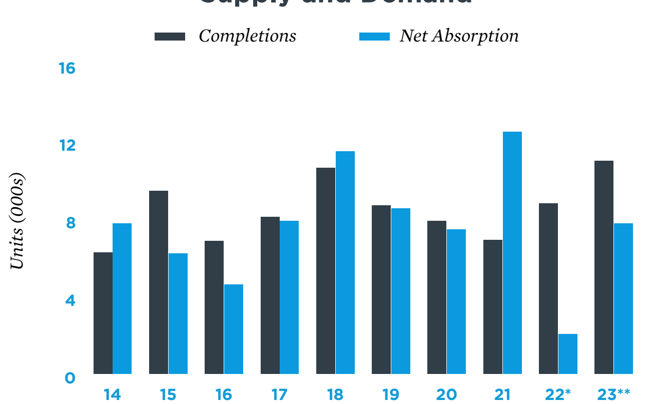
Employment Trends



Housing Affordability Gap



Supply and Demand



22.8% 2022 share of local population between 20 and 34 years old

41.3% of local population hold bachelor's degree or higher⌘

$661,300 2022 median home price✣

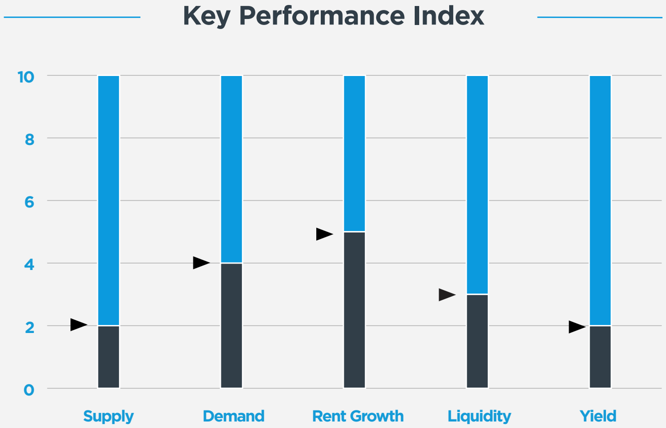
* Estimate ** Forecast ✣ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

2023 Investment Outlook

Denver has below-average supply, demand and rent growth scores in the 2023 Key Performance Index, but this is not indicative of a subpar longer-term outlook. The market's home price has skyrocketed, positioning it as a top metro in terms of the share of households that choose to rent.

The market's comparatively tight average cap rate results in a yield ranking of 2 this year, consistent with the 2022 Index. Meanwhile, the liquidity metric was sliced in half to 3 this year, with the metro's relatively low yields complicating transactions amid increased borrowing costs.

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



2023 Market Forecast

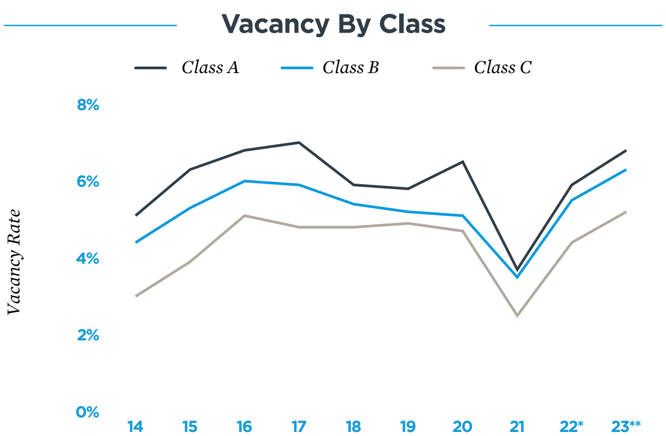
NMI Rank 15

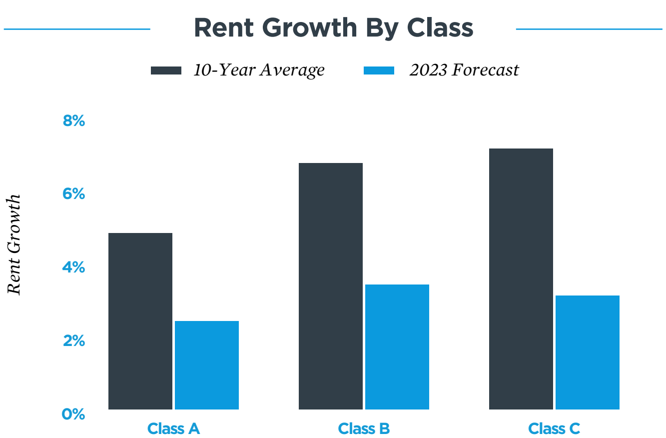
Employment *-4,000 jobs* — *Metro* **-0.3%** *U.S.* **0.5%**

Construction *as % of inventory*❖ — *Metro* **3.4%** *U.S.* **2.1%**

Class A Vacancy *Up 90 bps* — *Metro* **6.7%** *U.S.* **6.1%**

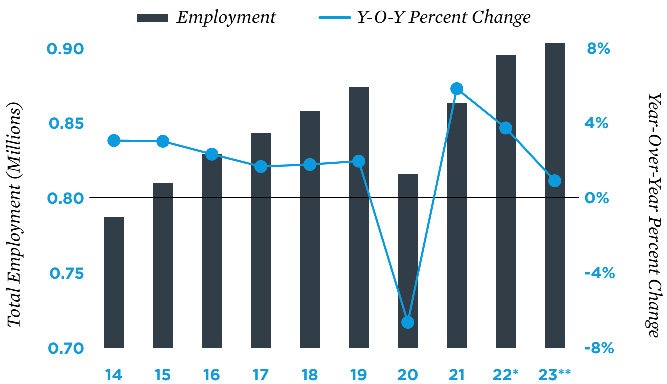
Class A Rent *$2,290 per month* — *Metro* **2.4%** *U.S.* **1.5%**



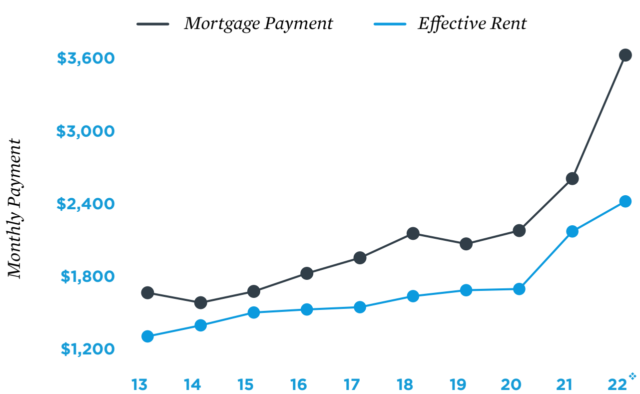


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

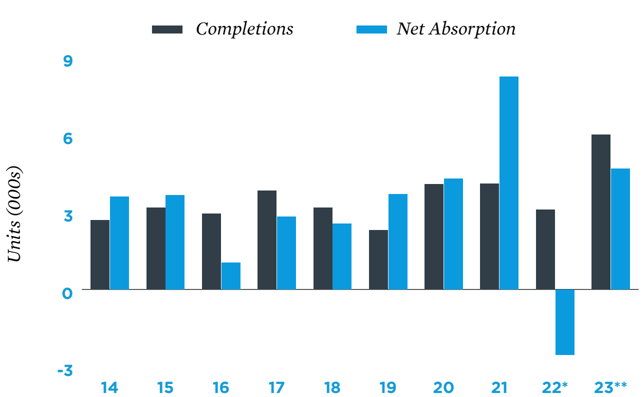
Employment Trends



Housing Affordability Gap



Supply and Demand



* Estimate ** Forecast ✢ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Tourism and Travel Industry Hiring Poised to Benefit Housing Demand

Rapid rent growth a factor behind slower household formation. In-migration to the region has prompted an unprecedented stretch of rent growth. The average effective rate in Fort Lauderdale has risen by more than 45 percent since the onset of the pandemic, outpacing all other major Southeast Florida markets. Many local residents felt sticker shock from the rapid increase during a period of widespread inflation, resulting in market conditions softening last year. This trend will likely persist in the near term, as a potential economic downturn is expected to temper apartment demand, resulting in slower rent growth and higher vacancy relative to levels observed during the health crisis. New supply will also be a factor, as 6,000 units are expected to deliver in 2023, marking an annual record. However, international travel is expected to accelerate this year, and notable cruise operators have reported that forward bookings for 2023 are above historical levels. Hiring in the leisure and hospitality segment may ramp up in response, and help offset job losses in other sectors like the tech industry. While overall vacancy is expected to inch up, renter demand in lower-cost areas of the metro should be comparatively sturdy in 2023.

Institutions intrigued by multifamily prospects in Fort Lauderdale. Since the onset of the health crisis, Broward County has been among the national leaders in effective rent growth and outperformed some larger markets in the region. This has caught the attention of institutional investors, encouraging many buyers to expand their Southeast Florida scope. In fact, almost 25 percent more assets changed hands in Fort Lauderdale for price tags of $20 million or greater since the start of 2020 than in Miami-Dade. Transaction velocity remained robust in 2022 amid rising interest rates, suggesting buyers are optimistic about local apartment demand drivers, despite near-term national economic headwinds. In Central Fort Lauderdale and Pembroke Pines-West Miramar, institutional buyers engaged in the market may find opportunities for newer builds, given significant local construction activity as of late. Meanwhile, institutions favoring highly-occupied assets could look to Margate-Coconut Creek-North Lauderdale, which had among the lowest Class A vacancy in the metro last year, or Pompano Beach-Deerfield Beach, which posted exceptionally tight Class B availability near the end of 2022.

18.9% *2022 share of local population between 20 and 34 years old*

29.4% *of local population hold bachelor's degree or higher⌘*

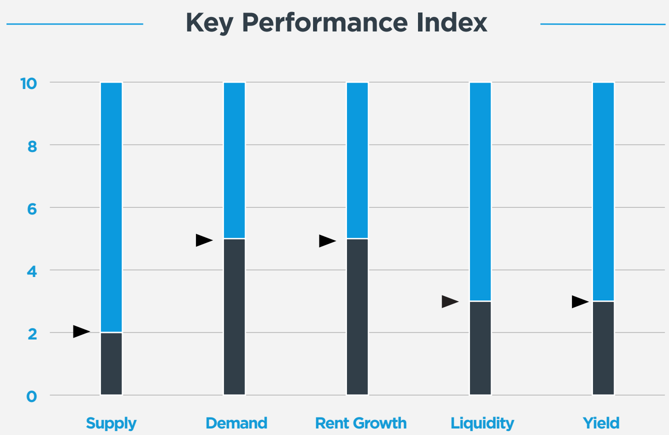
$524,300 *2022 median home price✢*

2023 Investment Outlook

The market will have one of the nation's strongest job gains in 2023, supporting a top 15 projection for fastest household creation among major U.S. metros this year. These factors help Fort Lauderdale secure solid scores on both the demand and rent growth segments.

Comparing the metro to other major markets, Fort Lauderdale is right on par with overall averages, with a liquidity ranking of 3 and yield measure of 2 this year. The drop in liquidity from a 7 in the 2022 Index is largely tied to national headwinds, rather than market specific hurdles.

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



2023 Market Forecast

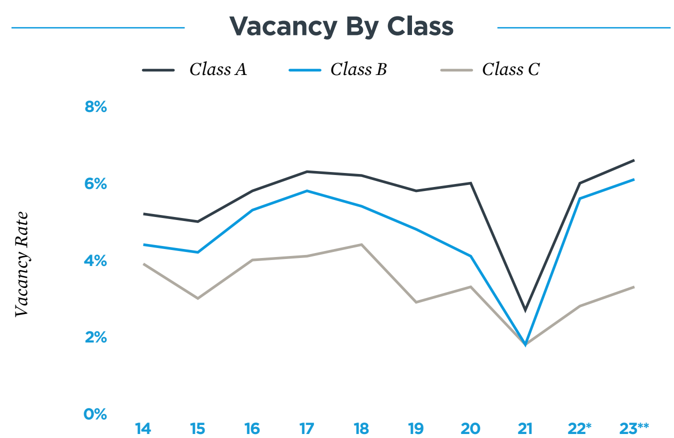
NMI Rank 1

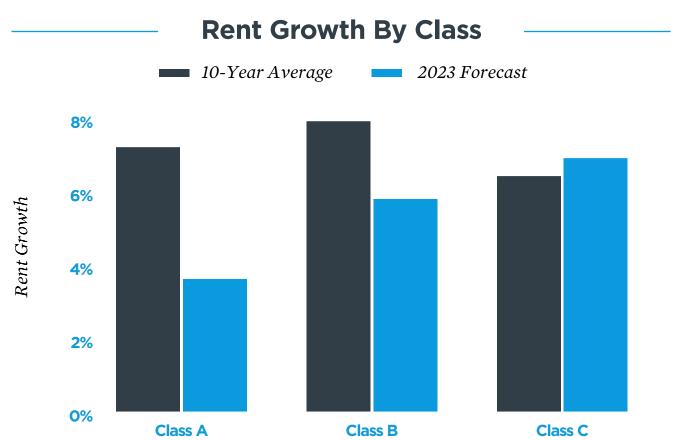
Employment
8,000 jobs
Metro **0.9%**
U.S. **0.5%**

Construction
as % of inventory❖
Metro **3.0%**
U.S. **2.1%**

Class A Vacancy
Up 60 bps
Metro **6.5%**
U.S. **6.1%**

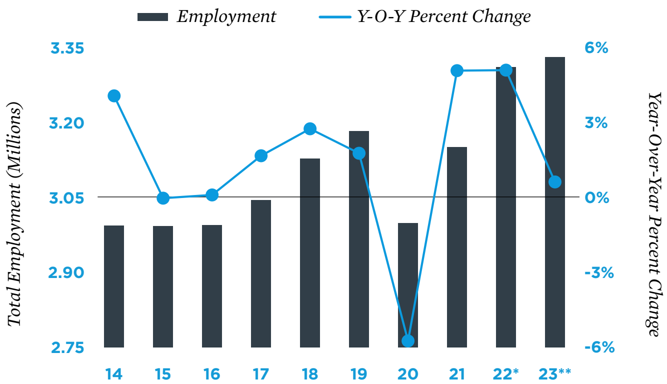
Class A Rent
$3,052 per month
Metro **3.6%**
U.S. **1.5%**



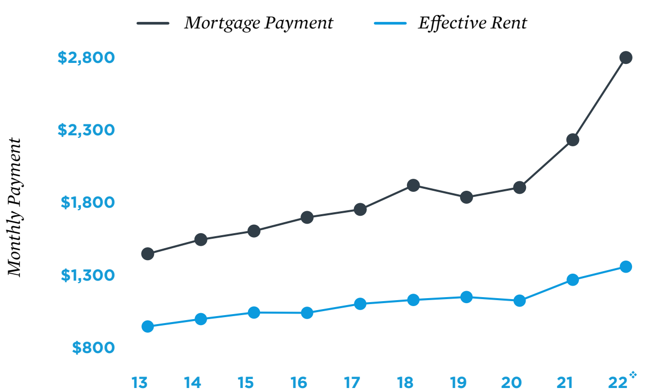


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

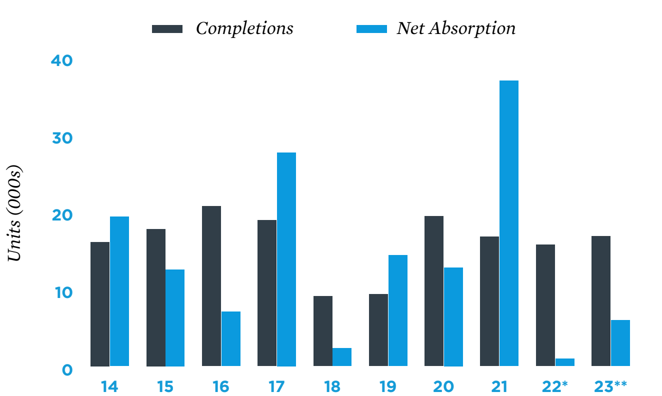
Employment Trends



Housing Affordability Gap



Supply and Demand



* Estimate ** Forecast ✣ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Local Economic Tailwinds in Place; Shifts in the Capital Landscape Sway Strategies

Population and wage growth backstop the performance pullback. Prior to the health crisis, Houston ranked within the top three major metros in total population expansion. That trend has accelerated since the onset of the pandemic and in 2023 the metro jumps up a spot, backed by the sixth-largest percentage increase of 20- to 34-year-olds, the age cohort that is most likely to rent. The median household income is also improving, set to expand over 4 percent in 2023, the largest gain among major U.S. markets. Bolstered by an emerging life science industry, Houston continues to offer career opportunities augmented by a relatively low cost-of-living, attracting relocations from young professionals. These in-migration tailwinds will help offset the broad-based slowdown in rental demand anticipated in 2023 amid a cooling national economy. Vacancy and rent growth, however, will continue their correction, as Houston's apartment delivery slate reaches a three-year high and outpaces absorption. Even so, the year-end vacancy rate and pace of rent growth will replicate historic market averages.

Rising interest rates create contrasting investment initiatives. Nationwide economic uncertainty is fostering disparity in investor sentiment. With deal flow likely to continue settling from a recent notable run, calculated risk management may support extended holding periods for some investors, while other long-term owners may opt to transition out, after robust price appreciation during the past decade. Properties in the outer suburban locales of Northwest and Southeast Houston are popular targets for institutions seeking 100-plus-unit properties, with first-year returns spanning a broad mid-3 percent to 7 percent range and prices that often exceed the $20 million mark. Particularly high-focus areas for institutional investors include Katy, Humble, Spring, Cypress and Conroe. Of these five suburbs, Cypress and Katy are the most exposed to supply pressure this year, while the construction pipelines are notably smaller in Spring and Humble. Favorable renter demand trends here and across the metro will encourage institutional capital to be deployed, despite this year's interest rate and supply hurdles. Houston's strong economic foundation and expanding employment pool allow investors to look beyond some near-term uncertainty.

21.2% — *2022 share of local population between 20 and 34 years old*

30.6% — *of local population hold bachelor's degree or higher⌘*

$338,600 — *2022 median home price✣*

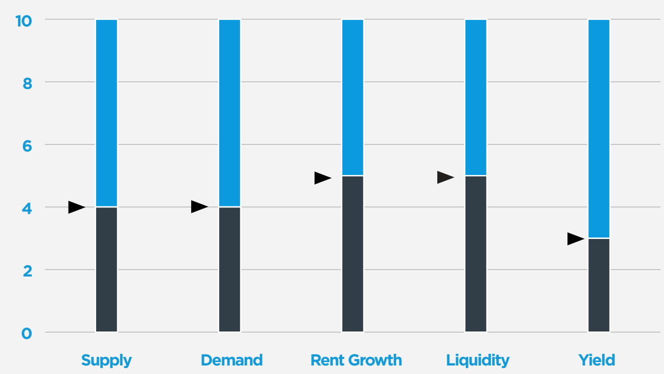
2023 Investment Outlook

Relative to the other three major markets in Texas, Houston ties for both the highest supply and rent growth rankings this year. Contributing to the solid rent growth metric, the metro will be in the top 15 major U.S. markets for employment gains and household creation this year.

Houston has a higher yield score than either Austin or Dallas-Fort Worth, but ties both of those metros with a liquidity ranking of 5. Typically, Houston generates robust institutional-level trading, but rapid upward interest rate movement has diverged buyer and seller expectations.

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

Key Performance Index

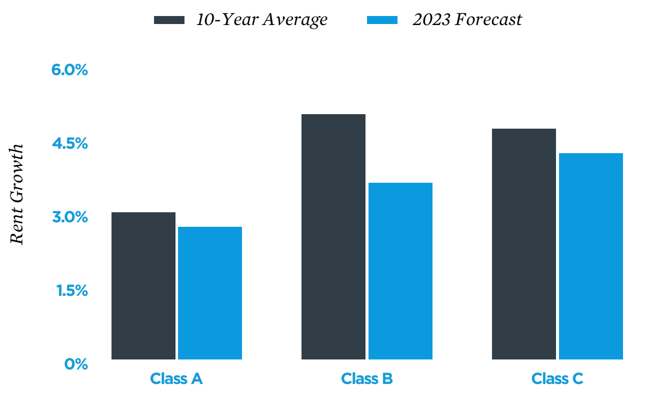


2023 Market Forecast

NMI Rank		8
Employment *20,000 jobs*	Metro **0.6%**	U.S. **0.5%**
Construction *as % of inventory*❖	Metro **2.3%**	U.S. **2.1%**
Class A Vacancy *Up 150 bps*	Metro **7.8%**	U.S. **6.1%**
Class A Rent *$1,834 per month*	Metro **2.7%**	U.S. **1.5%**

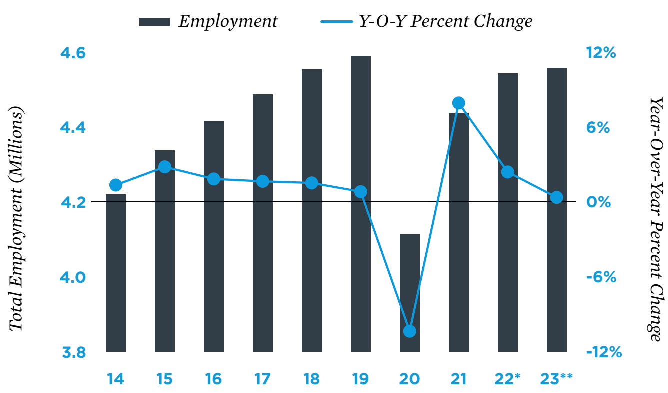
Vacancy By Class

Rent Growth By Class

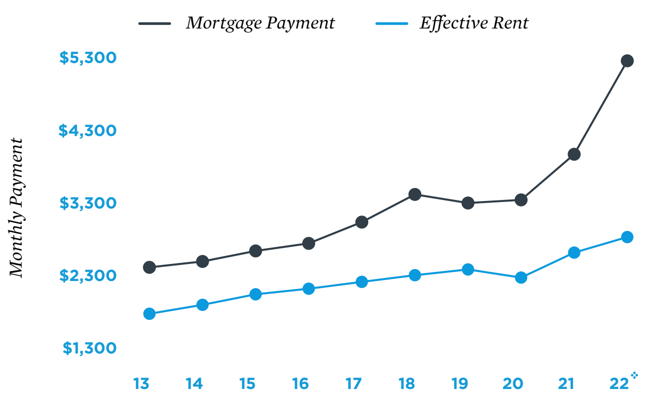


* Estimate ** Forecast
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

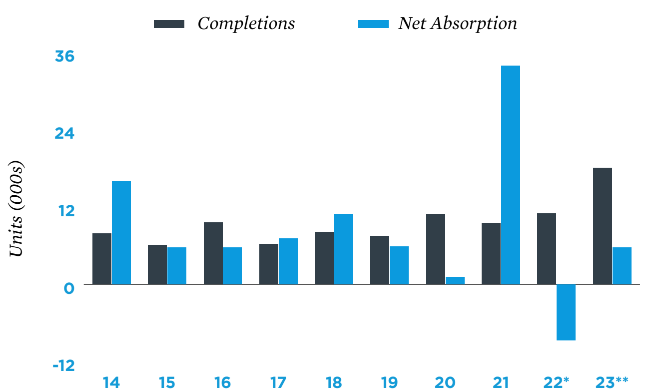
Employment Trends



Housing Affordability Gap



Supply and Demand



*Estimate ** Forecast ✣ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Impacts of Pandemic-Induced Decisions Felt; Institutions Weigh Supply Pressure

Completions climb as protections wane. Apart from broader economic headwinds, Los Angeles County's apartment sector faces several local happenings that will push year-end vacancy to its highest point since 2010. Beginning in February, tenants across Los Angeles proper must pay their current monthly rent to avoid eviction, with a requirement to pay back all outstanding obligations by August. While some tenant protections will remain, the expiration of the moratorium should place eviction activity beyond the pre-pandemic rate. Meanwhile, the volume of units slated for delivery in 2023 will rise by 7,000 on an annual basis. Greater Downtown Los Angeles is the epicenter of upcoming completions. Here, an estimated 10,000 apartments will be added at a time when local Class A vacancy is on par with the long-term average. This suggests downtown concessions usage and luxury availability will rise over the near term. Elsewhere, Westside Cities and the Greater San Fernando Valley should also feel some supply-side pressure, with each expected to add more than 2,900 units. The wave of rental additions noted across the metro should continue beyond 2023, as at least 50 conventional apartment projects broke ground last year.

Institutions shy away from top-tier deals, but remain operative. The recent approval of Proposition ULA — which places a 4.0 percent to 5.5 percent tax on the sale of properties valued at more than $5 million in the city of Los Angeles — could discourage some institutional-level investment. Nonetheless, buyers will scout opportunities beyond Los Angeles city limits. The pressure from new supply will abate interest for Class A assets, but the opportunity to acquire newer-built properties in Westside Cities, such as Venice Beach and Santa Monica, remains appealing. Institutions concentrating on mid-tier apartments find opportunities across Los Angeles County, including in the Greater San Fernando Valley — particularly Glendale and Studio City-North Hollywood — where pricing can exceed the $400,000 per unit mark. Institutions also seek out Class C complexes in the metro, a strategy that may be deployed this year, given higher interest rates and supply-side pressure on the luxury tier. These buyers are likely to gravitate to the market's lower-cost submarkets like the South Bay, Santa Clarita Valley and San Gabriel Valley, where renter demand could be more stable in 2023.

23.0% *2022 share of local population between 20 and 34 years old*

30.2% *of local population hold bachelor's degree or higher⌘*

$839,100 *2022 median home price✣*

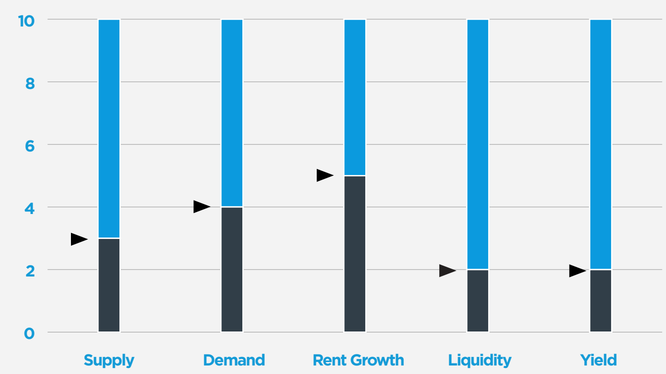
2023 Investment Outlook

Los Angeles has the lowest demand score of the four major markets located in the southern half of California, as the pressure from new construction will push up vacancy. The metro retains a very wide affordability gap, however, redirecting housing needs toward rentals.

The market's ranking of 2 on the liquidity scale matches the California major market average. Nonetheless, this is down from a 6 in the 2022 Index, as relatively low cap rates in Los Angeles create hurdles in the transaction market, with borrowing costs rising substantially.

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

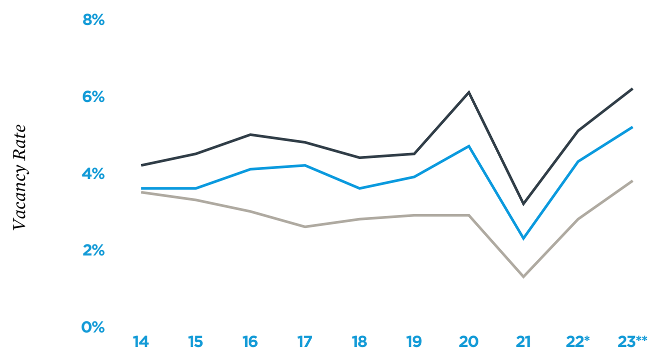
Key Performance Index



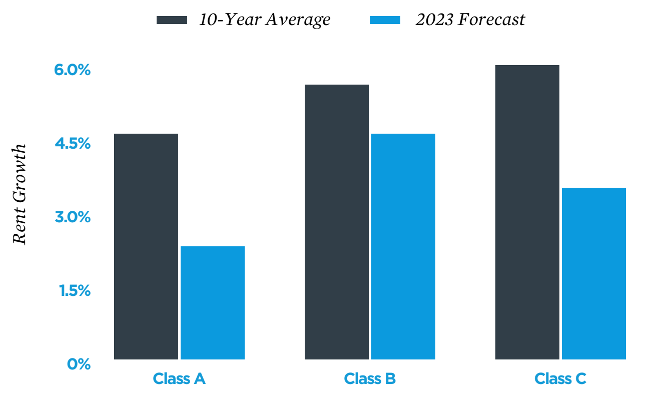
2023 Market Forecast

NMI Rank		17
Employment *15,000 jobs*	*Metro* **0.3%**	*U.S.* **0.5%**
Construction *as % of inventory*❖	*Metro* **1.6%**	*U.S.* **2.1%**
Class A Vacancy *Up 110 bps*	*Metro* **6.1%**	*U.S.* **6.1%**
Class A Rent *$3,645 per month*	*Metro* **2.3%**	*U.S.* **1.5%**

Vacancy By Class

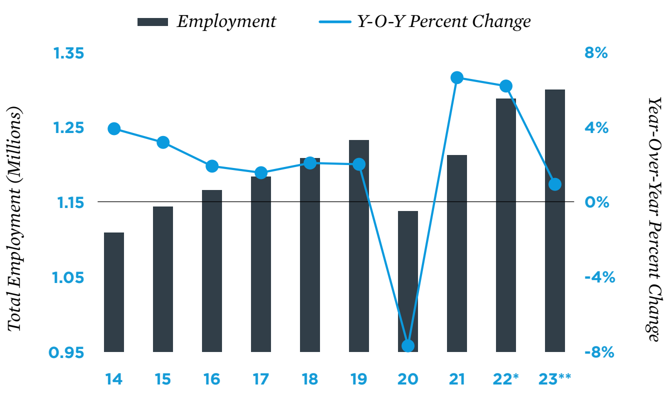


Rent Growth By Class

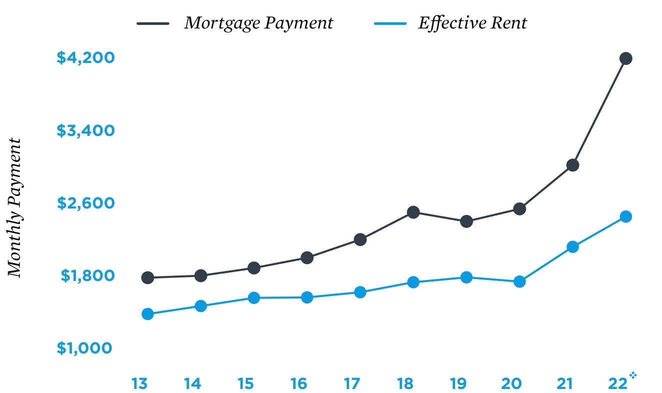


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

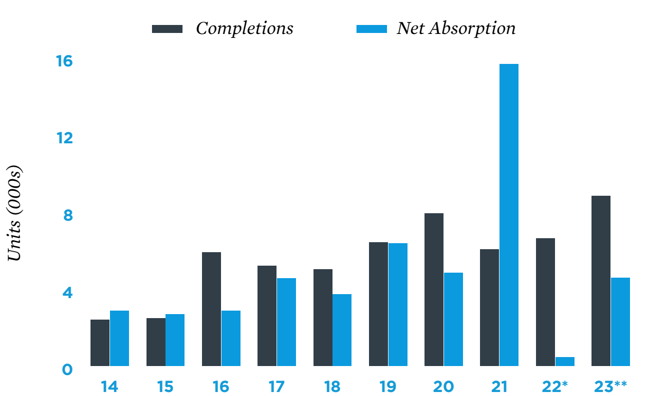
Employment Trends



Housing Affordability Gap



Supply and Demand



** Estimate ** Forecast ✧ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Tourism-Related Hiring Augments Relocations, Fortifying the Renter Pool

Historic renter demand spurs record supply wave. Passenger arrivals at Miami International Airport surpassed 50 million for the first time on record in 2022. To accommodate this massive influx of visitors, hiring in the leisure and hospitality sector surged over the past year, returning to levels seen prior to the pandemic. This job creation, and ultimately demand for housing, is providing an extra jolt for a market that already had several other tailwinds in place. No personal income tax, a warm climate and a business-friendly environment are enhancing employment opportunities in the metro through corporate relocations, facilitating robust net in-migration. With the median single-family home price ranking as the highest among major Florida metros, many of these incoming residents are being steered toward the multifamily market, bolstering demand for mid- and higher-tier apartments. However, luxury rentals will face heightened competition from new supply in the near term, with roughly 8,800 units expected to deliver this year. Vacancy will likely continue to rise in response, as the economy begins to slow and newly-completed communities enter their lease-up period.

Institutions are bullish on Miami's long-term outlook. Transaction velocity for multifamily assets in Miami reached an all-time high in 2022, outpacing the previous annual peak by more than 100 deals. This indicates that investors are optimistic in the long-term apartment demand drivers present in the region, despite some near-term supply and economic headwinds. Deal flow in the $20 million-plus tranche rebounded emphatically, following a lull during the pandemic. Trades in this category fell by 50 percent between 2019 and 2020, and have since surged to a record volume, remaining strong late last year even as interest rates rose. Institutional buyers selecting luxury product look to affluent locales like Downtown Miami, South Beach and Coral Gables, where entry costs frequently rise above $350,000 per unit. Newer-built assets have been coveted in the metro, with properties built within the past 10 years comprising roughly two-thirds of institutional-level trades last year. Given Miami-Dade's sizable construction pipeline, these types of deals should remain prevalent in 2023. Nonetheless, the likelihood of near-term oversupply and concessions in select areas of the market will lead institutions to closely examine potential deals.

19.8% *2022 share of local population between 20 and 34 years old*

26.9% *of local population hold bachelor's degree or higher⌘*

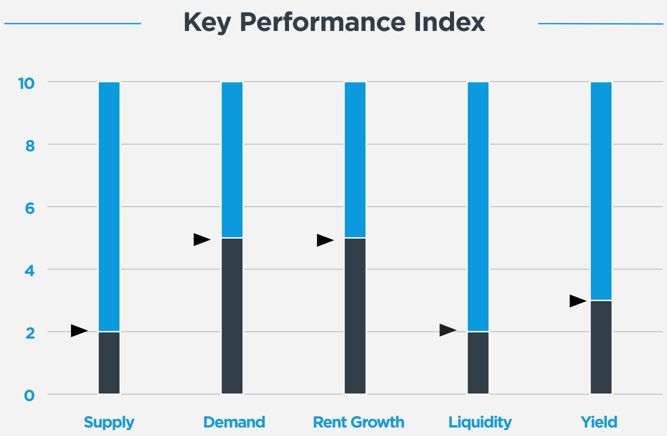
$607,600 *2022 median home price✧*

2023 Investment Outlook

Tailwinds for rental demand come from a variety of sources, including nation-leading job growth this year and a widening affordability gap that will direct new residents toward apartments. Despite some supply pressure, Miami-Dade notches healthy demand and rent growth scores.

The metro's liquidity score dropped by two points relative to last year's measure, as the uncertainties in the national economy and commercial real estate transaction market create challenges. Meanwhile, the yield metric held firm, matching the 2022 register at 3.

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



2023 Market Forecast

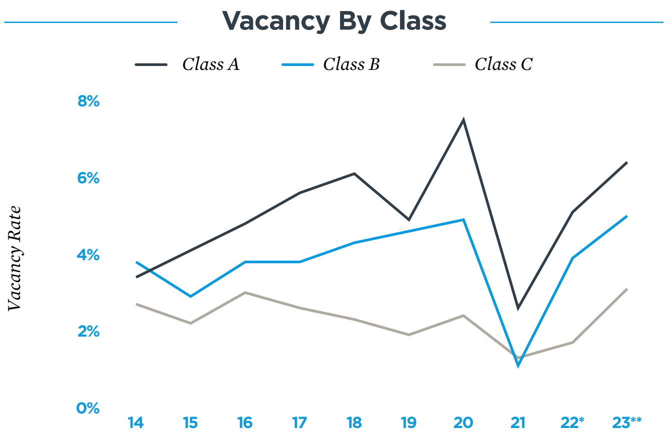
NMI Rank ▶ 4

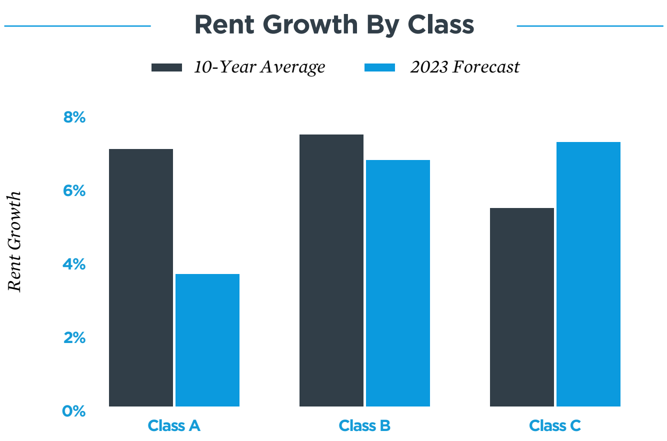
Employment
12,000 jobs
Metro **0.9%**
U.S. **0.5%**

Construction
as % of inventory❖
Metro **2.8%**
U.S. **2.1%**

Class A Vacancy
Up 130 bps
Metro **6.3%**
U.S. **6.1%**

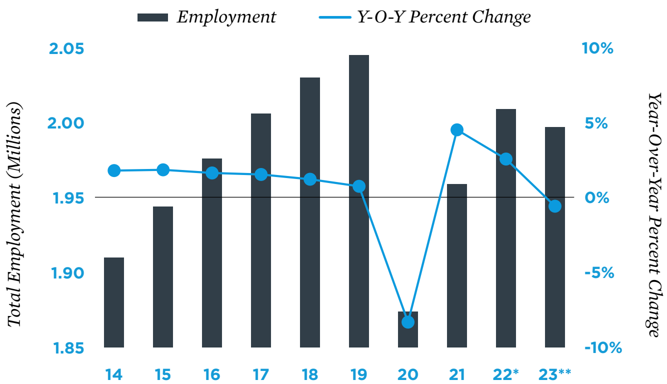
Class A Rent
$3,266 per month
Metro **3.6%**
U.S. **1.5%**



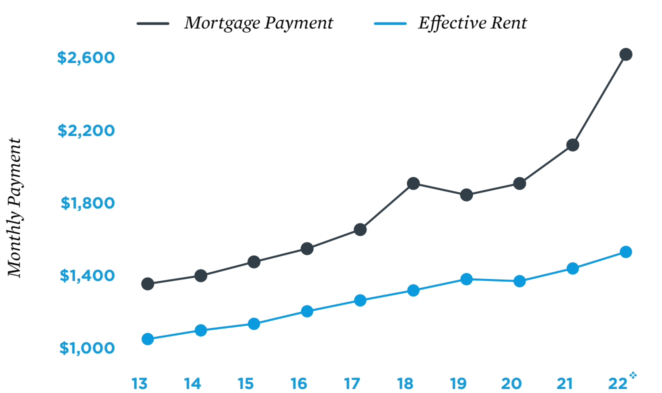


* Estimate ** Forecast
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

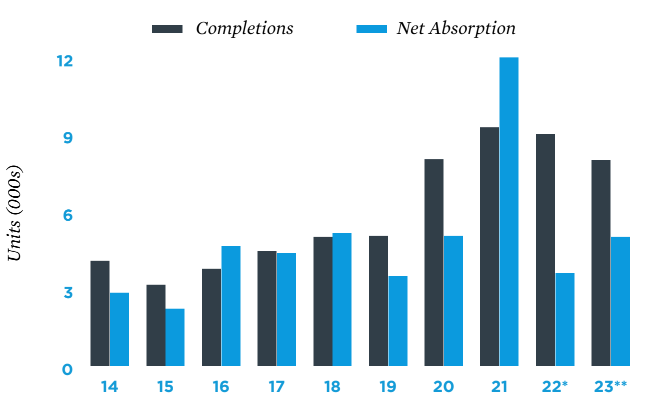
Employment Trends



Housing Affordability Gap



Supply and Demand



* Estimate ** Forecast ✣ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Development Readjusts to Rent Control Amendments; Deal Flow Disperses

Construction remains elevated, despite St. Paul's depleted pipeline. Heightened apartment additions since the onset of the health crisis were well-received in the midst of the post-lockdown surge in renter demand, contributing to tight availability early last year. Despite economic headwinds that have emerged, the Twin Cities is set to register another year of historically high apartment additions, pushing up vacancy as demand slows. The difference in 2023, however, is a lack of supply coming to St. Paul. Here, construction initiatives paused after the city's rent control legislation was enacted in late 2021. The effects of this are materializing, as rent gains in this portion of the metro have been substantially lower than on the Minneapolis side. Meanwhile, developers shifted their focus, producing inventory growth spikes in the Minnetonka and Plymouth-Maple Grove submarkets. Amendments made to the ordinance in 2022 allow for a 20-year exemption for new and existing properties, and increases the capped growth rate to 8 percent. As such, project proposals in St. Paul have picked back up recently, although they are still well below the city's typical supply expansion rate.

Deal flow shifting across the city and suburban west. Transaction velocity continues to settle, given the increasing cost of capital and uncertainty surrounding the 2023 economic outlook. Trading activity in St. Paul has been consistent with this downward trend, although the locale may still draw interest from risk averse investors, with the city offering comparatively lower pricing than the market average, cap rates in the mid-5 percent range and recently amended local legislation. Those looking for alternatives, however, may turn to Minneapolis-adjacent and far western suburbs, locales that accounted for nearly half of all deal flow last year. Institutions targeting $20 million-plus assets on this side of the Twin Cities focus on southern Interstate 35 Corridor locations like Bloomington and Burnsville, which offer a substantial stock of 250-plus-unit Class A and Class B complexes. Meanwhile, far western suburban trades are most popular in the Plymouth-Maple Grove, St. Louis Park, Minnetonka and Eden Prairie locales. Deals here frequently exceed the 100-unit mark, while outward household migration from the urban core and moderate supply growth strengthen renter demand and investor confidence in these areas.

20.4% *2022 share of local population between 20 and 34 years old*

39.3% *of local population hold bachelor's degree or higher⌘*

$363,000 *2022 median home price✣*

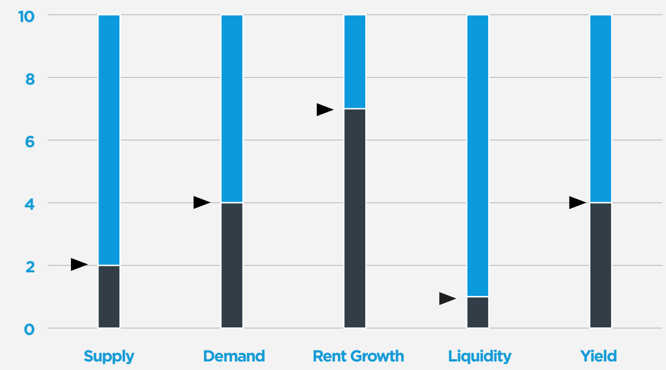
2023 Investment Outlook

Compared to the overall Key Performance Index averages, Minneapolis-St. Paul has lower supply and demand scores, but leads all markets in its rent growth measure of 7. The Twin Cities could lose some jobs in 2023, which will weigh on demand, but the new supply should help lift rents.

This year's yield score of 4 exceeds the 2022 metric, but the liquidity Index fell to a 1 amid ongoing transaction market complications. Minneapolis-St. Paul's comparatively high cap rates help facilitate deals, but softer rental demand and broad uncertainty may subdue trades.

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

Key Performance Index

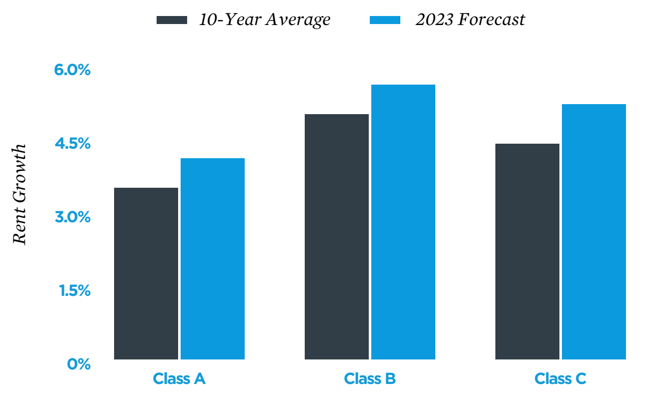


2023 Market Forecast

NMI Rank		26
Employment *-12,000 jobs*	*Metro* **-0.6%**	*U.S.* **0.5%**
Construction *as % of inventory*❖	*Metro* **2.5%**	*U.S.* **2.1%**
Class A Vacancy *Up 80 bps*	*Metro* **7.0%**	*U.S.* **6.1%**
Class A Rent *$1,940 per month*	*Metro* **4.1%**	*U.S.* **1.5%**

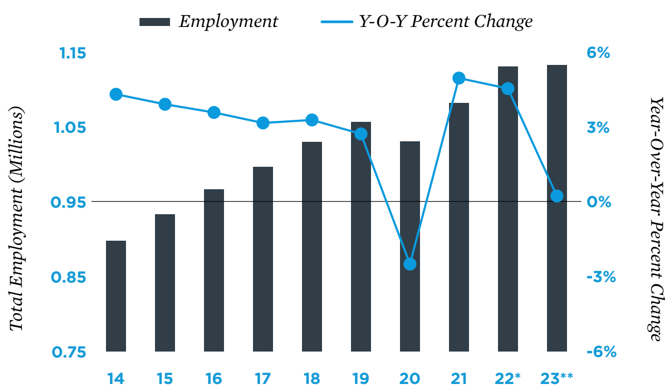
Vacancy By Class

Rent Growth By Class

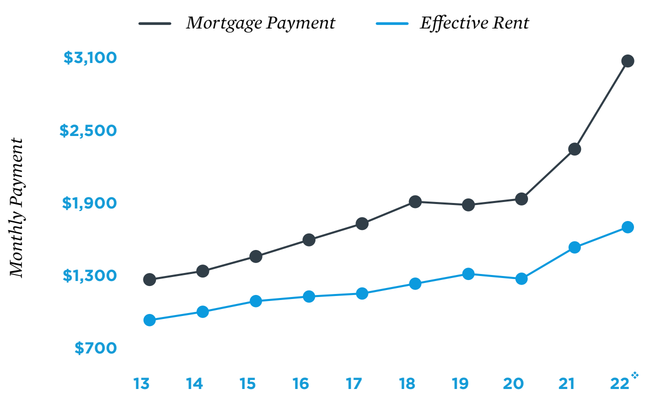


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

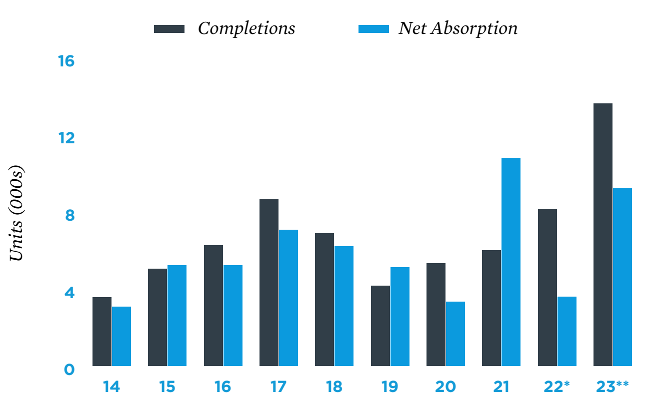
Employment Trends



Housing Affordability Gap



Supply and Demand



** Estimate ** Forecast ✣ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Market Enters Transitional Stretch as Chorus of New Supply Amplifies Vacancy

Metro's active pipeline is a national standout. Having enlarged by more than 130,000 residents over the past five years, Nashville's rising populace has spawned noteworthy apartment expansion, the peak of which may occur over the near term. After ranking near the top of all major U.S. markets for inventory growth last year, the metro is expected to claim the number one overall spot during 2023, as local rental stock increases by nearly 8 percent annually. Deliveries will be distributed throughout the metro, as a mix of close-in and suburban submarkets add at least 1,000 apartments. Central and North Nashville will note the largest influx of new supply, with local inventories rising by nearly 22 percent and 12 percent, respectively. While both areas are popular among younger, higher-earning professionals, each is likely to register a significant vacancy increase this year, with concessions utilized more frequently to stabilize projects. How these new units are received will alter the outlook for the Class A sector, as builders broke ground on at least 40 additional projects last year that will deliver units beyond 2023.

Investors alter gameplans in wake of recent rent surge. The composition of the local rental stock historically supports a notable share of large-scale property trades and exchanges of newer-built assets, translating to a sizable institutional buyer pool. While these trends may persist in 2023, the substantial increase in rent over the past two years — up nearly 34 percent — could influence active investors to favor mid-tier complexes, in anticipation of renters flocking to these assets to lower their costs of living. Neighborhoods popular among young professionals and areas with locally discounted monthly rates stand to receive institutional attention. Proximity to Vanderbilt University and Music Row make the West End a target locale for buyers seeking assets meeting this criteria in the CBD. Elsewhere, Antioch and other southeast suburbs may attract buyers searching for larger complexes, as the area is home to the metro's second-lowest average rent, which may attract some households relocating within the metro. Institutional investors will likely be less aggressive in Nashville than in recent years, weighing higher borrowing costs and the market's nation-leading supply expansion. Nonetheless, elevated construction supports increased opportunities to acquire institutional-grade stock in the years ahead.

22.2% *2022 share of local population between 20 and 34 years old*

33.6% *of local population hold bachelor's degree or higher⌘*

$405,200 *2022 median home price✣*

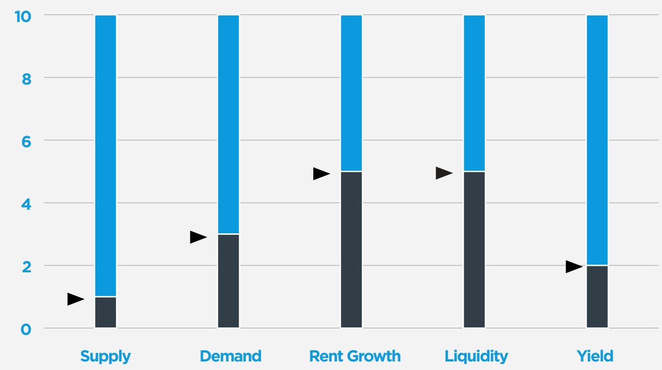
2023 Investment Outlook

The 1 on the supply portion of the Index is tied for the lowest across all major U.S. markets, as Nashville will record historic inventory growth this year. Near-term supply pressure will lift vacancy, but longer-term tailwinds are notable amid strong net in-migration.

Nashville's liquidity ranking is on the higher end of the spectrum this year, as the market has recorded robust institutional-level trading in recent years. However, a yield score of 2 signals challenges to getting deals done amid higher interest rates.

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

Key Performance Index

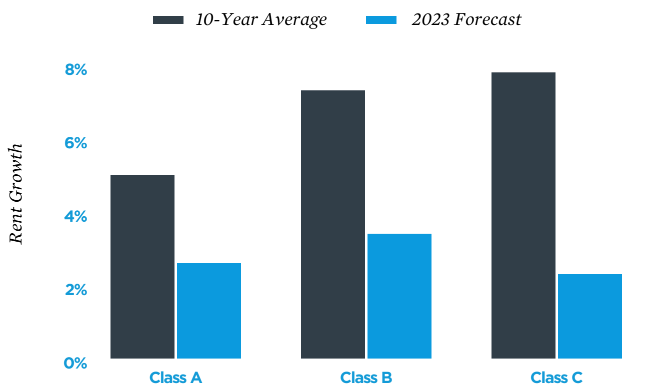


2023 Market Forecast

NMI Rank		22
Employment *2,500 jobs*	*Metro* **0.2%**	*U.S.* **0.5%**
Construction *as % of inventory*❖	*Metro* **7.9%**	*U.S.* **2.1%**
Class A Vacancy *Up 220 bps*	*Metro* **8.2%**	*U.S.* **6.1%**
Class A Rent *$2,154 per month*	*Metro* **2.6%**	*U.S.* **1.5%**

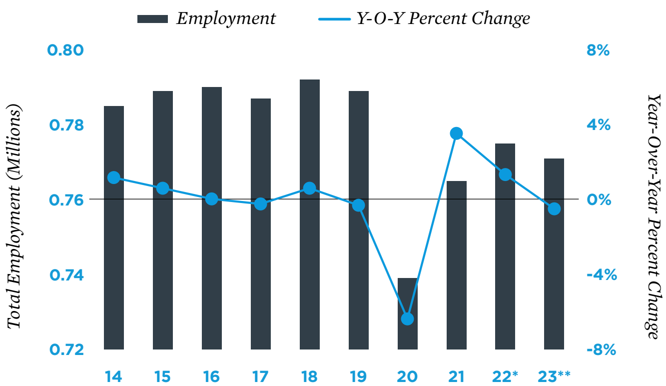
Vacancy By Class

Rent Growth By Class

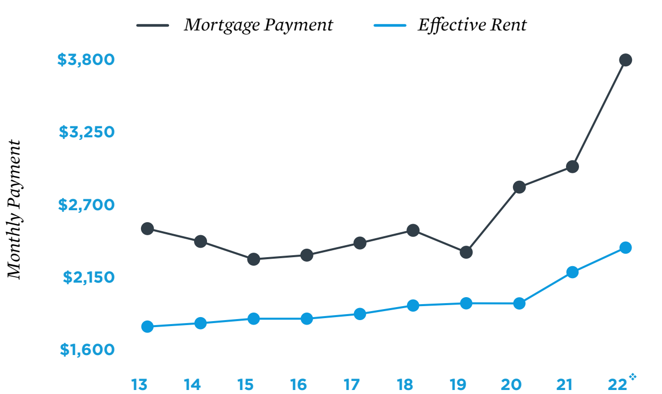


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

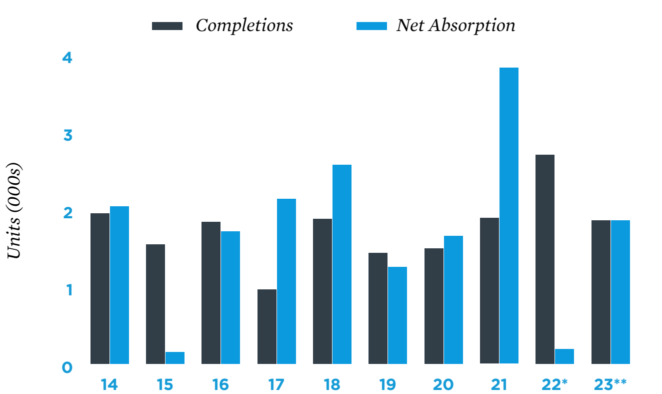
Employment Trends



Housing Affordability Gap



Supply and Demand



* Estimate ** Forecast ✢ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Hybrid Workplace Models Benefit Region's Rentals, Due to Unique Dynamics

Moderation lies ahead, but the market retains various demand drivers. While short-term hurdles will lead to rising availability in 2023, underlying fundamentals in southwestern Connecticut remain solid. The rise of hybrid work has become a persistent, positive demand factor in Fairfield County. Nearly 80 percent of Manhattan employers surveyed in late 2022 conveyed plans to use hybrid schedules as their predominant post-pandemic policy, boding well for properties near thoroughfares bridging Connecticut and New York. Reduced trips to the office are incentivizing some workers to pursue housing in farther-flung suburbs, where renters enjoy a lower cost-of-living, in addition to a mix of suburban and urban amenities. New Haven's academic base provides another backstop for demand in the market's eastern half, where Yale's ecosystem fosters a diverse renter base, bolstering all property tiers downtown. Furthermore, this region's growing biotech sector should furnish an additional source of luxury apartment demand in the long term.

Institutions remain passive, but opportunities are present. Despite mounting capital headwinds and increasing economic uncertainty, marketwide transaction velocity in 2022 outpaced the prior year. This could stem from the metro's notable yields — the region boasts the highest average cap rate among major northeastern markets. Elevated first-year returns can significantly ease the search for financing, facilitating a higher amount of trade activity. Private investors also historically make up a significantly larger proportion of capital inflows than nearby metros, and this investment cohort is typically less sensitive to changing interest rates than institutional actors, who have much narrower yield targets. Deal flow in 2023 will likely still be heavily composed of private investors, as many institutional parties moved to the sidelines until interest rate stability materializes. Nonetheless, institutions that are looking to expand their apartment portfolios into the region could find opportunities, given the aforementioned momentum from hybrid work schedules. Additionally, some rebalancing of rents could emerge in certain areas of the market, after the pace of Class B rent gains doubled Class A growth on a metrowide level in 2022.

19.0% *2022 share of local population between 20 and 34 years old*

37.8% *of local population hold bachelor's degree or higher⌘*

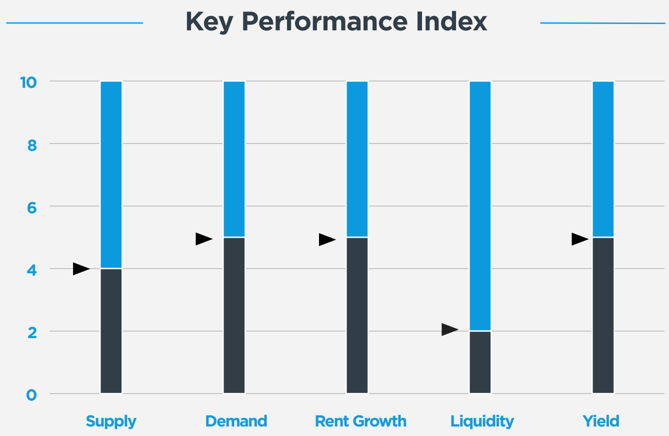
$493,600 *2022 median home price✢*

2023 Investment Outlook

New Haven-Fairfield County's supply score improved by 1 point relative to the 2022 Index, but the demand figure fell by 3 points. The metro is expected to shed some jobs this year, weighing on household creation and demand for apartments, but the limited new supply will help offset this.

Compared to last year's Key Performance Index, the liquidity measure fell to a 2 as trading activity is being impeded by higher interest rates, as well as buyer and seller disconnect. On the other hand, the yield metric at 5 is among the highest in the nation.

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



2023 Market Forecast

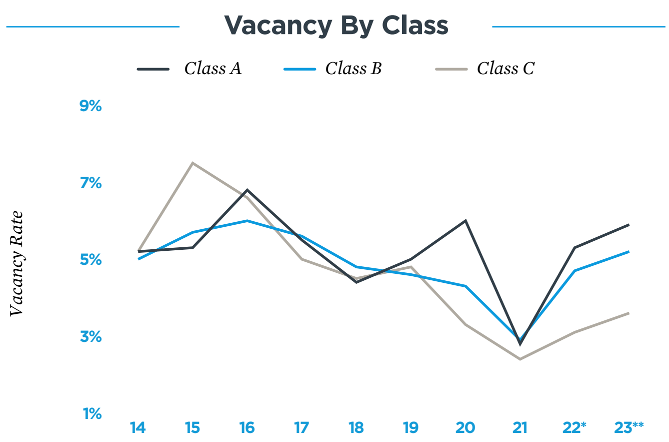
NMI Rank 32

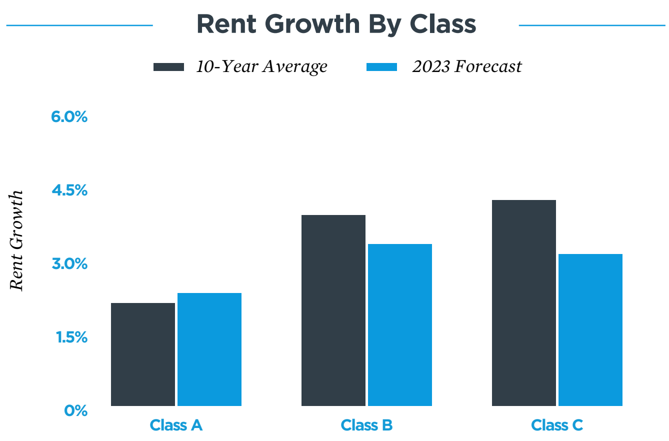
Employment *-4,000 jobs* — *Metro* **-0.5%** *U.S.* **0.5%**

Construction *as % of inventory*❖ — *Metro* **1.5%** *U.S.* **2.1%**

Class A Vacancy *Up 60 bps* — *Metro* **5.8%** *U.S.* **6.1%**

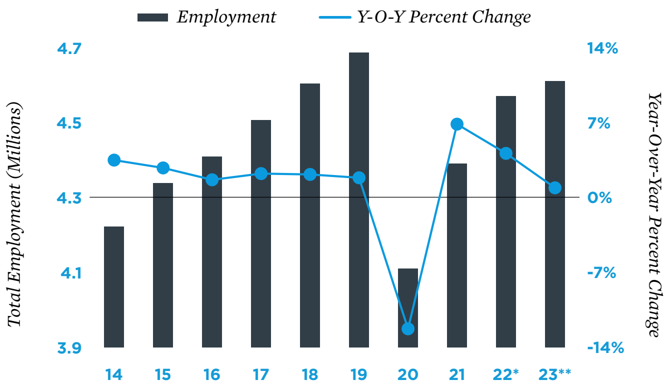
Class A Rent *$3,004 per month* — *Metro* **2.3%** *U.S.* **1.5%**



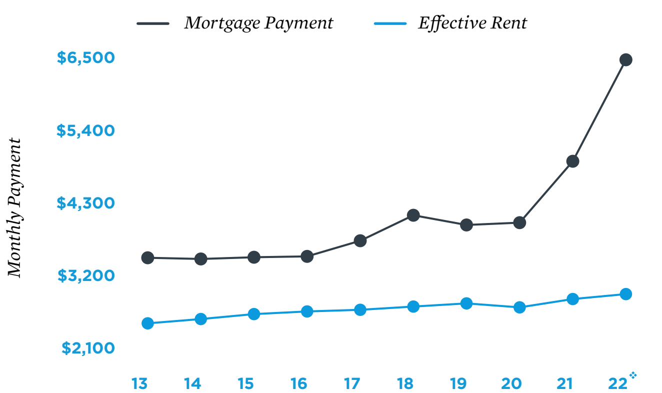


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

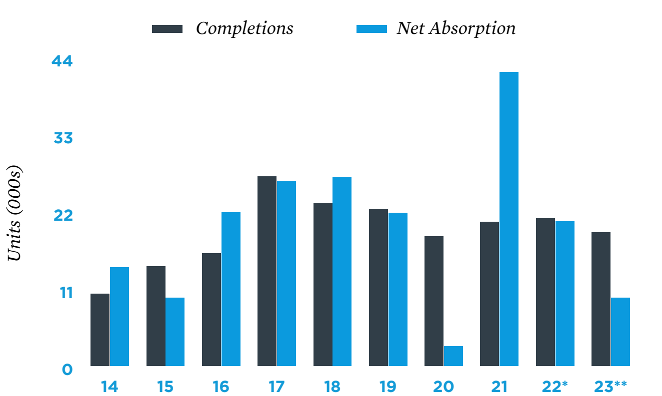
Employment Trends



Housing Affordability Gap



Supply and Demand



* Estimate ** Forecast ✧ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Rental Market Slackening Amid Consistent Supply; Investors Adapting to New Climate

Tempered Class A rent growth likely throughout 2023. New York's multifamily sector entered 2023 in a strong position, with last year's availability rate of 1.9 percent hovering just above a two-decade low. While the vacancy rate is expected to rise this year amid declining household formation spurred by economic uncertainty, the upward pressure should be metered as metro employers continue boosting staff counts. More workers are anticipated to return to Manhattan and Brooklyn office hubs, which, in conjunction with a full recovery of domestic tourism, should stimulate recruitment in the leisure and hospitality sector, and help to maintain tight conditions. At the same time, the metro faces a noteworthy supply influx in 2023 that will coincide with weaker demand. Consistent with the trailing three-year average, just under 20,000 new units will open in New York City, lifting Class A vacancy and trimming segment rent growth to 1.7 percent in 2023. This mild pace of rental rate expansion is a result of increased concessionary activity. Late last year, the percent of luxury tier apartments offering concessions was the highest in the Upper East and West Sides, and the lowest in the Financial District.

Investment remains robust, though rising costs color buyer choices. Buoyed by New York's consistently strong fundamentals, overall transaction velocity last year proceeded at roughly the same rate as 2021 in the face of increasing capital costs. Deal flow in the $20 million-plus tranche, however, practically doubled the 2021 recording. Rising management expenses may be prompting some buyers to move away from rent stabilized stock, with sales of mid-tier assets featuring more recently-built assets in 2022 than during the prior year. Updated rent guidelines could reduce this shift moving forward, though if inflation continues to exceed these, buyers may move capital to assets where monthly rents can be dictated by market conditions. Investors more familiar with the market may be quicker to spot opportunities amid the current flux, shown by local buyers accounting for a higher proportion of sales activity by dollar volume compared to historic norms. Mid-tier apartments and lower-tier complexes of a larger scale in Brooklyn and Manhattan have attracted locally-based institutions most frequently in recent periods. Non-local institutions could remain relatively passive, closely scrutinizing incoming supply and concession usage before pursuing deals.

23.7% *2022 share of local population between 20 and 34 years old*

34.9% *of local population hold bachelor's degree or higher⌘*

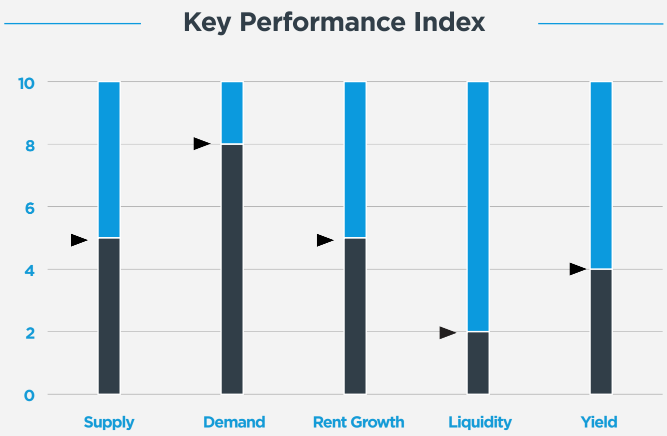
$903,000 *2022 median home price✧*

2023 Investment Outlook

New York is projected to rank in the top five markets nationally for employment growth in 2023, helping the metro score an 8 on the demand portion. This is the highest figure on that section of the Key Performance Index. Additionally, a supply score of 5 is above the overall average.

The market is one of only a few in which the liquidity score is unchanged relative to last year. More stable deal flow is a result of comparatively stronger demand and a mild pace of new supply. Furthermore, the yield ranking of 4 exceeds several other gateway metros.

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



2023 Market Forecast

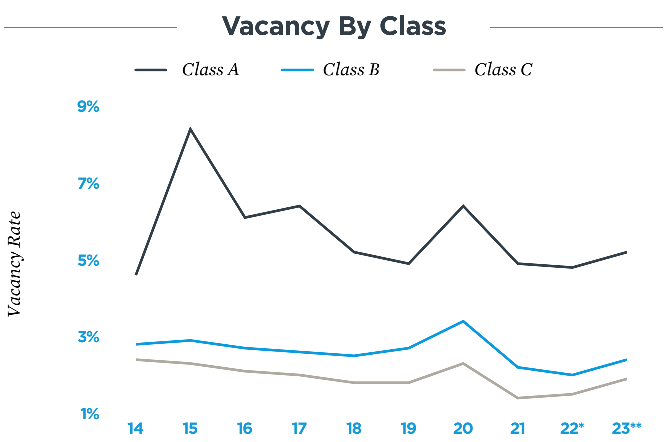
NMI Rank 23

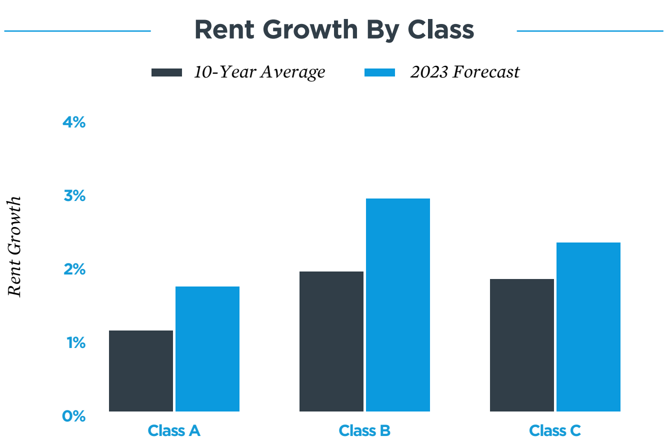
Employment
40,000 jobs
Metro **0.9%**
U.S. **0.5%**

Construction
as % of inventory❖
Metro **0.9%**
U.S. **2.1%**

Class A Vacancy
Up 40 bps
Metro **5.1%**
U.S. **6.1%**

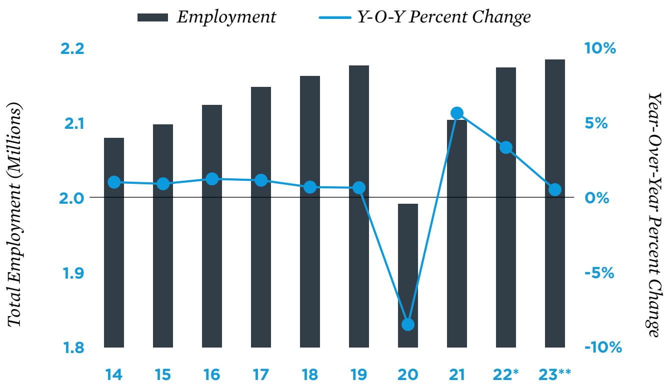
Class A Rent
$4,667 per month
Metro **1.7%**
U.S. **1.5%**



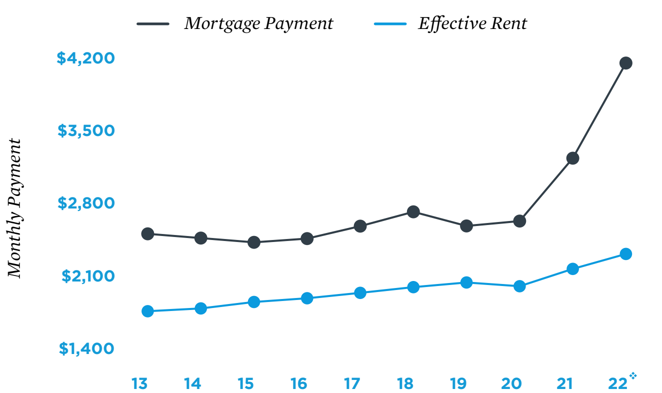


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

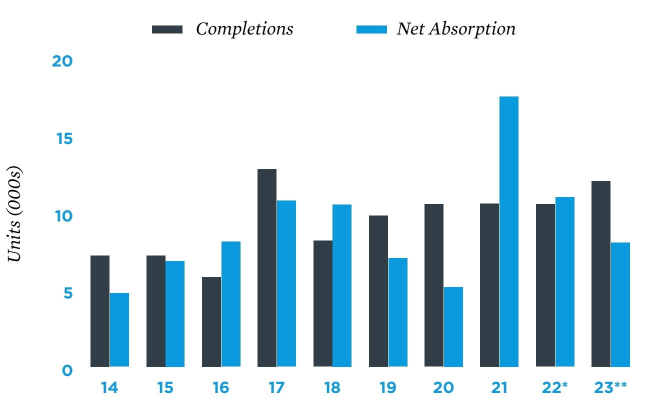
Employment Trends



Housing Affordability Gap



Supply and Demand



** Estimate ** Forecast ✧ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Substantial Construction and Capital Market Flux Lead to Opportunities

Robust supply additions test renter appetites for upper-tier space. One of the nation's foremost pharmaceutical and medical hubs, Northern New Jersey is welcoming a bevy of category firms, with Gilead, Embecta and adjacent initiatives in the process of establishing operations here. The metro also hosts a growing Fintech roster, with firms attracted by tax incentives at the state level. These entrants will augment the modest expansion expected in the job market this year, with a sizable number of well-compensated positions providing a demand backstop for upper-tier apartments. Looking east, the rise of hybrid workplace plans in Manhattan has prompted commuters to search for housing farther from the office as weekly trips decrease. The market also retains a substantial affordability gap, despite some housing market attrition, which should support Class A and B leasing. Availability will nevertheless see significant pressure from the supply side in the near term. Development activity shows no signs of abating, with 2023's expected annual completions achieving the second-highest total in more than two decades, and the overall supply pipeline approaching 27,000 doors late last year. This expedited pace of supply growth amid economic uncertainty, which is weighing on household formation, will flatten Class A rent growth in 2023 as segment vacancy moves above 6 percent.

Investor focus shifts amid mounting capital costs. Financing headwinds complicated transaction activity as 2022 progressed, translating to a trading slowdown in the latter half of the year. Moving forward, the institutions that are still active in the market will prioritize strategically located, high-occupancy assets as lenders exhibit more discretion when funding acquisitions. Institutions that are willing to accept lower first-year returns will maintain a focus on Class A and B assets built within the past 10 years in Hudson Waterfront locales, or further west in Morris County suburbs like Parsippany. However, investor appetites remain in the market's inland west, particularly Passaic County. This locale was the lone submarket in which trades last year proceeded at a rate roughly equivalent to the prior 12-month span. In addition to boasting the tightest conditions in the metro at the tail end of 2022, yields here tend to be higher than along the Hudson Waterfront and other more heavily-developed zones. Limited development in Paterson and nearby locales should give an additional boost to existing stock as new supply is rapidly added elsewhere.

20.1% *2022 share of local population between 20 and 34 years old*

38.7% *of local population hold bachelor's degree or higher⌘*

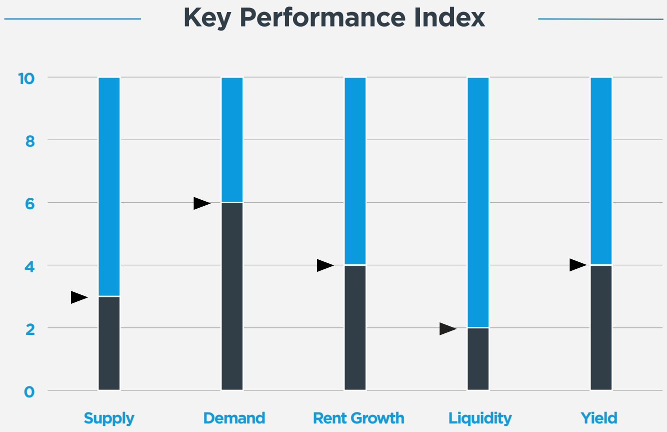
$533,200 *2022 median home price✧*

2023 Investment Outlook

The Northern New Jersey region improves its supply and demand scores by 1 point each compared to the market's figures in last year's Index. However, the rent growth measure descends from a 5 to a 4 in 2023, with Class A apartment rates expected to increase marginally.

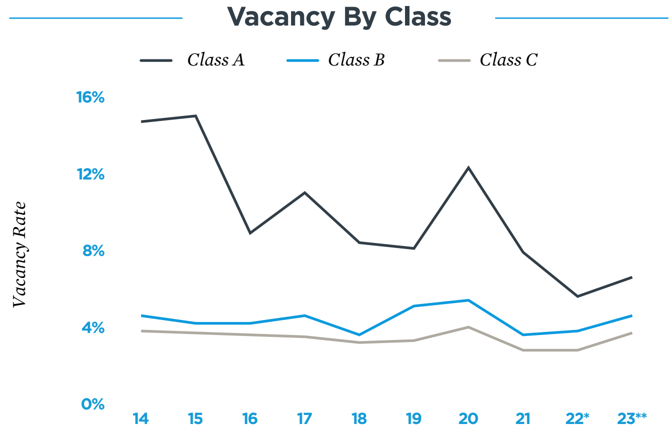
Despite comparatively stronger supply and demand metrics this year, transaction velocity will be pressed on by economic and capital markets conditions. This is reflected in the below-average liquidity score of 2. Despite this, a yield ranking of 4 surpasses some other East Coast metros.

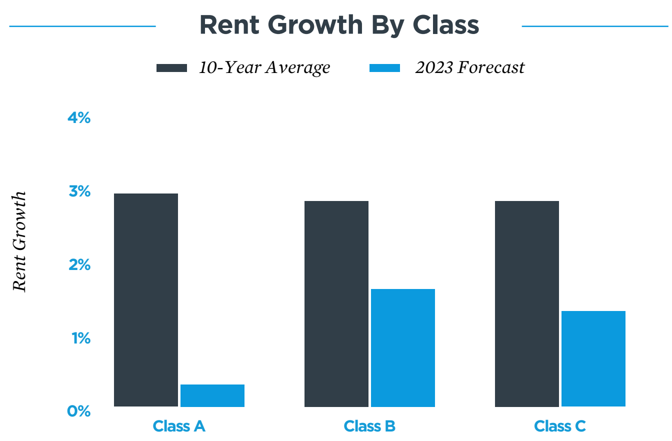
Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2023 Market Forecast

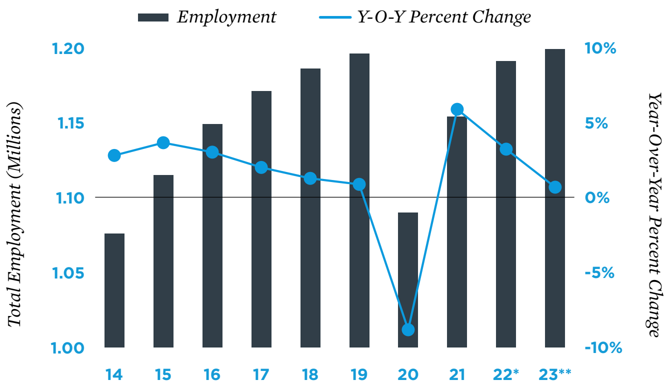
NMI Rank		31
Employment *11,000 jobs*	*Metro* 0.5%	*U.S.* 0.5%
Construction *as % of inventory*❖	*Metro* 2.8%	*U.S.* 2.1%
Class A Vacancy *Up 100 bps*	*Metro* 6.4%	*U.S.* 6.1%
Class A Rent *$3,234 per month*	*Metro* 0.3%	*U.S.* 1.5%



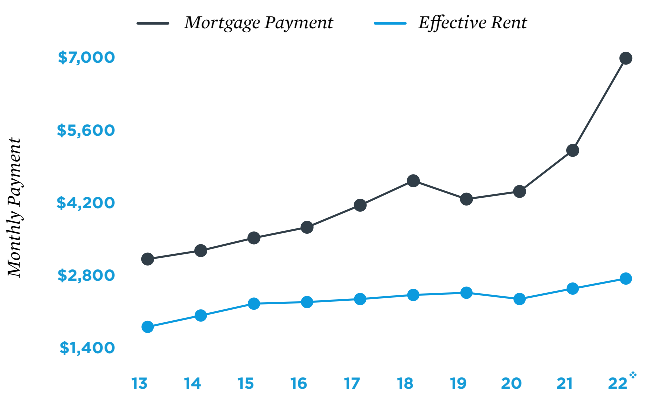


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

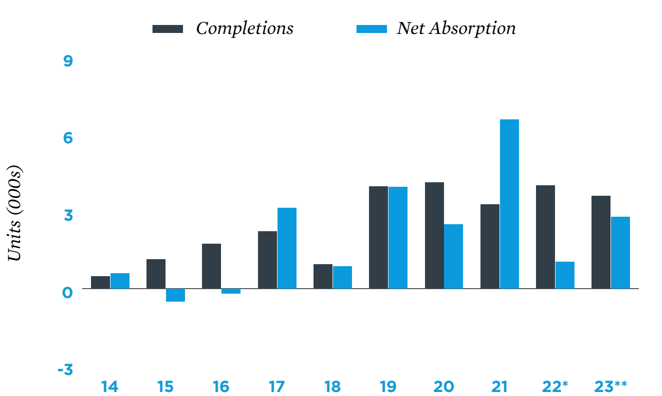
Employment Trends



Housing Affordability Gap



Supply and Demand



** Estimate ** Forecast ✧ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Renters Incentivized to Stay Put, Providing Stability to Multifamily Metrics

Demand in East Bay supported by neighboring markets. Oakland is joining its Bay Area siblings in an ongoing economic recovery from the health crisis, benefiting local apartments. A smaller percentage of traditionally office-based jobs than in San Francisco or San Jose meant Oakland renters were already less predisposed to remote work than in other parts of the region, aiding properties during the earlier part of the pandemic. As more employees are now returning to workplaces across the entire Bay, Oakland rentals are poised to benefit further. Professionals with hybrid schedules can opt for a longer commute, but find comparatively lower monthly rates here. These trends supplement rental demand generated from local job growth. However, even with reinforced fundamentals, Oakland will not be immune to macroeconomic trends that are affecting the region, including layoffs in the technology sector as firms prepare for oncoming headwinds.

Relatively higher yields a consideration for investors. The rapid swell in interest rates last year that extends into 2023 has placed an added emphasis on cap rates. The select institutions looking to expand their regional portfolios in 2023 may be attracted to the East Bay, which retains higher returns than San Francisco and San Jose on average. Within the metro, the same dynamic exists between East Oakland and the rest of the core, which may help this locale retain more of its sales velocity this year. At the same time, institutional investors could maintain a focus on core assets, favoring properties built in the last 20 years. Apartments meeting this criteria have changed hands in Downtown Oakland and Oakland Hills for price tags near $500,000 per unit on average. However, rent regulations within the city of Oakland were further restricted last year, with annual rate adjustments now set to the lesser of 60 percent of the change in CPI, or 3 percent. As such, a handful of buyers will likely gravitate toward other areas of the market, even though some costs of capital improvements may be passed on in the form of rent increases on a case-by-case basis via petition.

20.6% *2022 share of local population between 20 and 34 years old*

42.3% *of local population hold bachelor's degree or higher⌘*

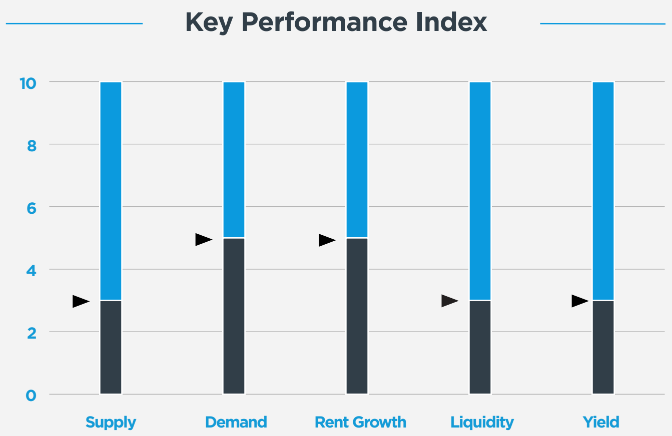
$1,119,600 *2022 median home price✧*

2023 Investment Outlook

In comparison to the other two major Bay Area markets, Oakland logs the lowest supply score this year, but ties with San Jose for the highest rent growth measure. The 3 on the supply section, however, is a slight improvement from Oakland's recording in the 2022 Index.

Oakland's 3 on the liquidity portion of the Key Performance Index is better than San Francisco and San Jose, which both receive a 1 on that section this year. The comparatively stronger liquidity in the East Bay is partially a result of higher cap rates.

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



2023 Market Forecast

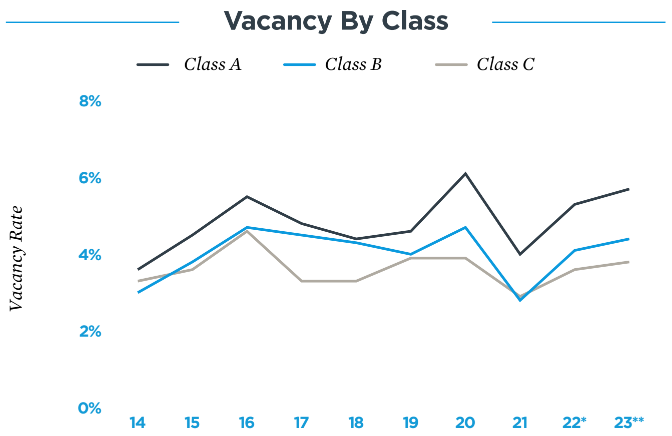
NMI Rank ▶ **20**

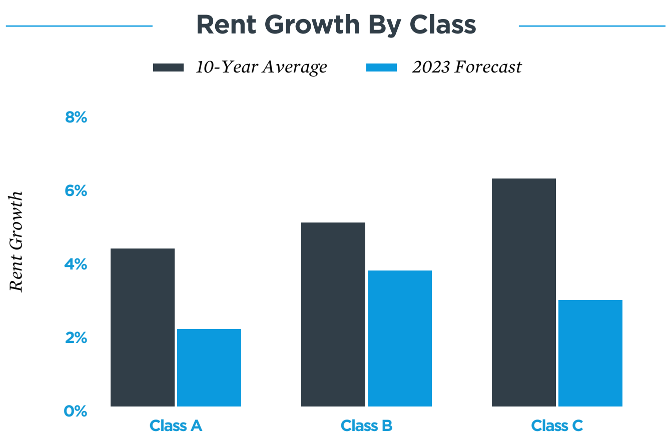
Employment
8,000 jobs
Metro **0.7%**
U.S. **0.5%**

Construction
as % of inventory❖
Metro **1.6%**
U.S. **2.1%**

Class A Vacancy
Up 40 bps
Metro **5.6%**
U.S. **6.1%**

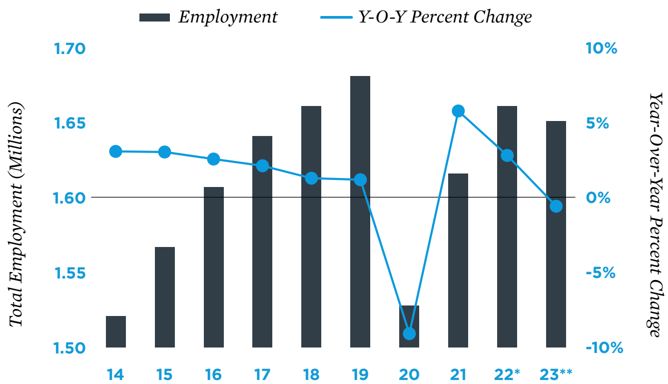
Class A Rent
$3,277 per month
Metro **2.1%**
U.S. **1.5%**



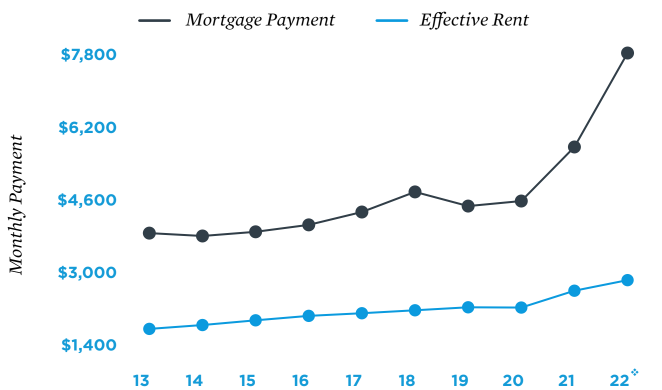


* Estimate ** Forecast
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

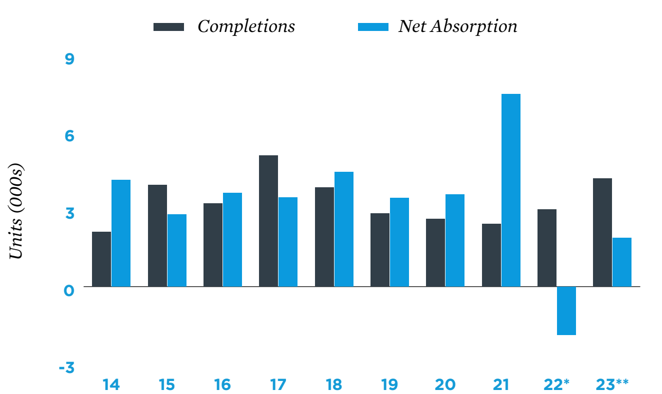
Employment Trends



Housing Affordability Gap



Supply and Demand



** Estimate ** Forecast ⁜ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Areas of Locally-Discounted Rent and Sparse Building Could Outperform

Divergent cities brace for noteworthy stock expansions. A sizable collection of $1 million-plus homes and an above-average share of professional and business services jobs continue to fuel a competitive Class A rental environment in Orange County, despite economic headwinds. At the tail end of last year, the metro claimed the lowest luxury vacancy rate among major U.S. markets, a ranking that could persist despite some hurdles. Deliveries are slated to eclipse the 4,000-unit mark this year for the first time since 2017, with supply additions concentrated in two contrasting cities. The epicenter of local corporate operations, Irvine's apartment stock is expected to expand by 3.0 percent this year, as nearly 1,400 rentals are finalized. Upcoming deliveries, however, may benefit from a broader return to in-office operations and the city's sub-3 percent Class A vacancy rate. Meanwhile, a similar number of units are scheduled for completion in Santa Ana, expanding local stock by 7.0 percent. Here, new apartments seeking more than $3,000 per month may have a harder time stabilizing in 2023, as the city has historically offered residents some of the metro's lowest effective rates. Longer lease-up timelines for this slew of units opening here could press on local rent growth if concessions are used.

Transit improvements may garner institutional attention. Entering 2023 with the lowest Class A and third-tightest Class B vacancy rates among major U.S. markets, Orange County will remain an attractive locale for institutions targeting highly-occupied assets. Nevertheless, older complexes with fewer than 20 units should continue to account for the bulk of deal flow this year, as private investors target areas that offer upside potential via some of the metro's lowest average effective rents and infrastructure projects. Santa Ana and Garden Grove fit this description. The completion of the OC Streetcar in 2024, a four-mile stretch of light rail passing through both cities, could draw more renters to nearby apartments. Once interest rate stability is achieved and uncertainty fades, institutions could follow private investors and ramp up activity in these same areas, concentrating on larger unit-count apartments. Buyers favoring coastal rentals remain particularly keen on Huntington Beach and Laguna Beach, where pricing above $400,000 per door is frequent and cap rates are among the lowest in the metro on average.

20.8% *2022 share of local population between 20 and 34 years old*

37.2% *of local population hold bachelor's degree or higher⌘*

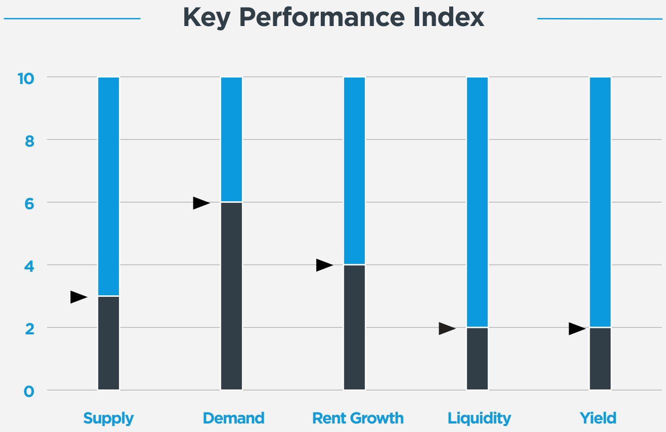
$1,257,900 *2022 median home price⁜*

2023 Investment Outlook

Last year, Orange County grabbed the best score possible on the demand portion of the Key Performance Index. While that metric dropped 4 points for 2023, it is still tied for the third highest across all major markets. Conversely, the rent growth score trails the overall average.

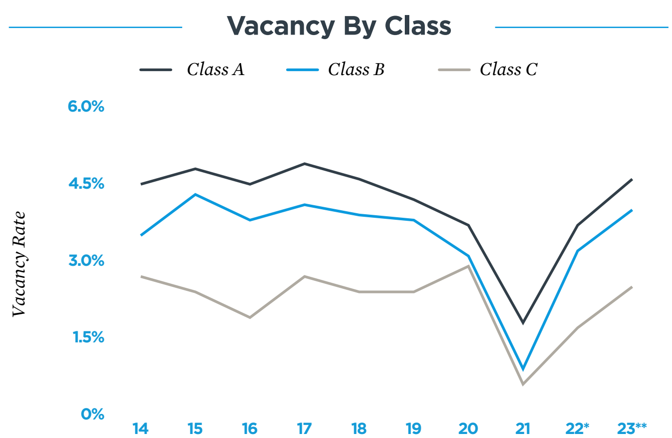
Liquidity in Orange County is expected to be impeded by the ongoing economic uncertainty and capital markets volatility. That metric fell from a 7 last year to a 2 in 2023, as deals will be more challenging to complete amid relatively low cap rates in a higher interest rate environment.

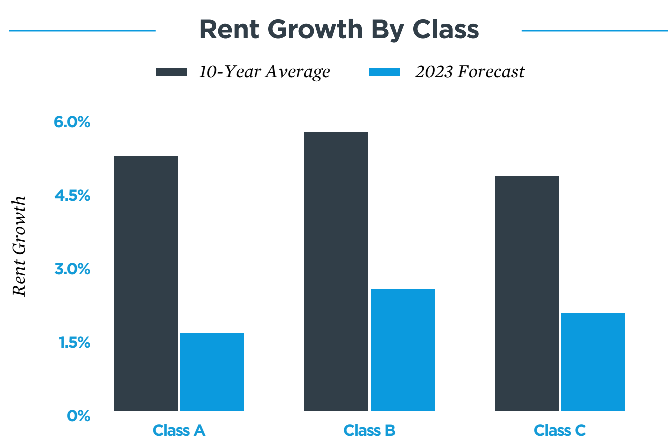
Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2023 Market Forecast

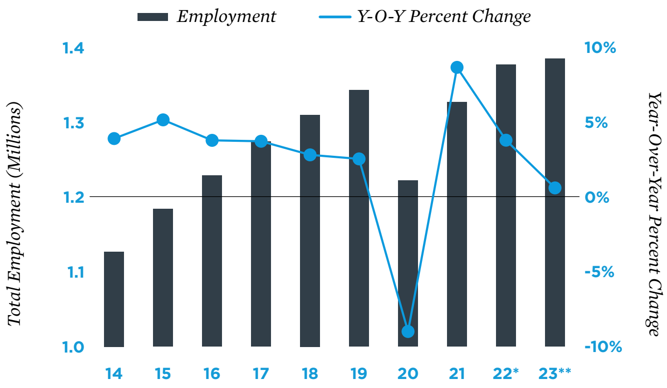
NMI Rank	▶	19
Employment *-10,000 jobs*		*Metro* **-0.6%** *U.S.* **0.5%**
Construction *as % of inventory*❖		*Metro* **1.6%** *U.S.* **2.1%**
Class A Vacancy *Up 90 bps*		*Metro* **4.5%** *U.S.* **6.1%**
Class A Rent *$3,155 per month*		*Metro* **1.6%** *U.S.* **1.5%**



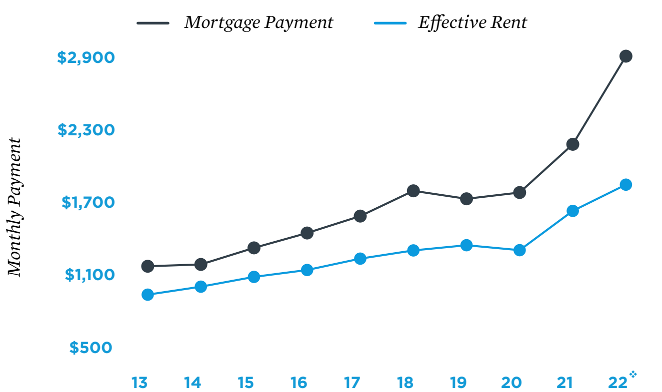


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

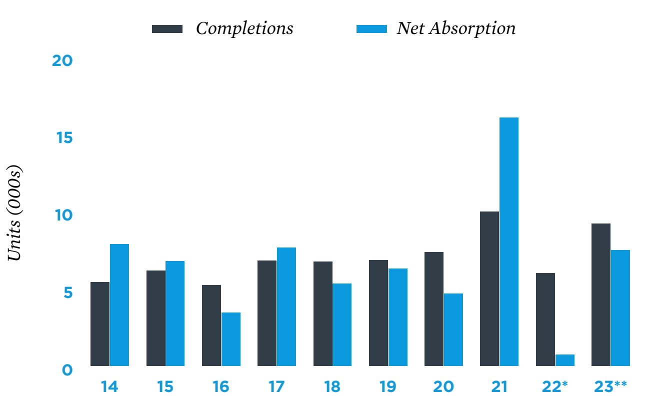
Employment Trends



Housing Affordability Gap



Supply and Demand



** Estimate ** Forecast ✣ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Favorable Living Costs, Tourism Backbone and Corporate Relocations Fortify Demand

Desirable living conditions keep rental market leveled. Completions will elevate in 2023 as last year's postponed projects populate the pipeline. An above-average period of supply additions will help bring the market back to equilibrium, even with the stronger demand for rentals expected this year. Robust population growth is sustaining a household formation pace that nearly triples the national rate. Net in-migration is being driven by lower living costs compared to the Northeast and other areas of Florida, alongside solid job availability, especially in the leisure sector. Orlando boasts the second-largest arts, entertainment and recreation employment base in the nation. Other aspects of the local economy are also expanding. A bevy of corporate relocations and expansions from Amazon, Astronics Test Systems, Iceland-based SAHARA, among others, will support the metro through potential upcoming economic volatility. All of these factors are contributing to renter demand, along with elevated interest rates, which have caused some prospective first-time homebuyers to postpone ownership amid a growing affordability gap between average rent and the typical mortgage payment. Tenacious housing needs will provide a backstop for vacancy among additional supply pressure and a cooling economy.

Robust fundamentals and growth trends continue to attract institutions. Investors' purchasing power has been constrained by the actions taken by the Federal Reserve to curb inflation, causing some sellers to shelve deals and wait out the interest rate hikes. However, some buyers are finding that the strong rent gains anticipated in Orlando this year could offset increased debt costs. Low vacancy and high rent growth may temper the impact on pricing compared to other markets amid lifted borrowing costs. The downtown and I-Drive areas have reported recent boosts in transaction volumes from previous years, likely due to the stability garnered from high median incomes and population density. Properties trading here are typically luxury apartments with cap rates below the metrowide average. Robust construction throughout Orlando should also present development partnership opportunities and enhance the metro's volume of institutional-grade stock in the years to come. The Kissimmee-Osceola County area, in particular, has a noteworthy construction pipeline, aligning with robust household formation.

21.8% *2022 share of local population between 20 and 34 years old*

30.1% *of local population hold bachelor's degree or higher⌘*

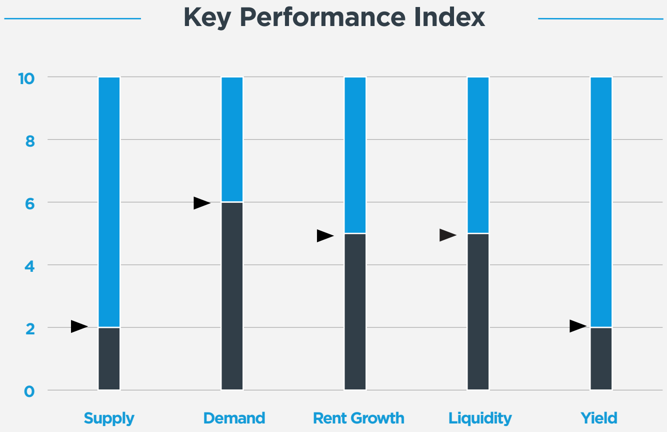
$416,700 *2022 median home price✣*

2023 Investment Outlook

After Orlando claimed a 10 on the demand segment of the 2022 Key Performance Index, that measure falls to a 6 this year. Despite the reduction, this mark is still tied for the third highest across major metros. Additionally, Orlando will rank in the top five for rent growth in 2023.

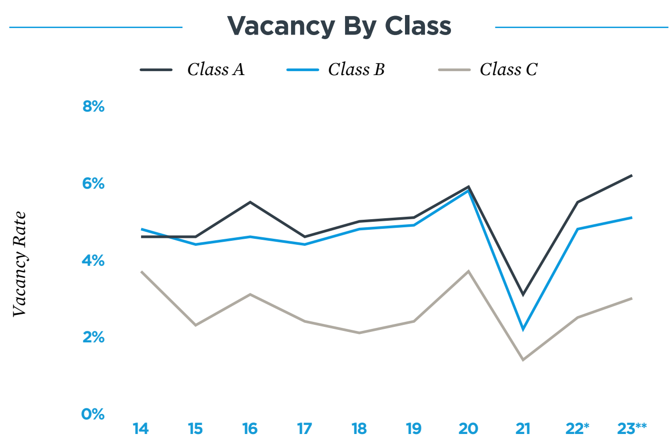
While Orlando's liquidity ranking of 5 this year trails the 2022 register by 2 points, it is still in the upper half of the market spectrum. Transaction velocity is anticipated to drop relative to recent years amid some buyer and seller disconnect tied to the rapid upward interest rate movement.

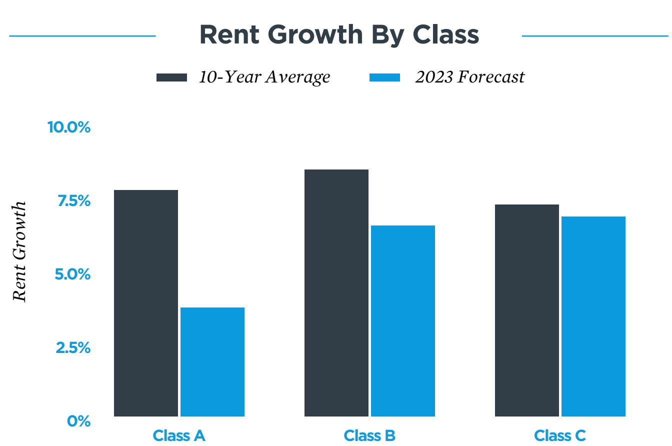
Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2023 Market Forecast

NMI Rank		3
Employment *8,000 jobs*	*Metro* **0.6%**	*U.S.* **0.5%**
Construction *as % of inventory*❖	*Metro* **3.6%**	*U.S.* **2.1%**
Class A Vacancy *Up 70 bps*	*Metro* **6.1%**	*U.S.* **6.1%**
Class A Rent *$2,235 per month*	*Metro* **3.7%**	*U.S.* **1.5%**





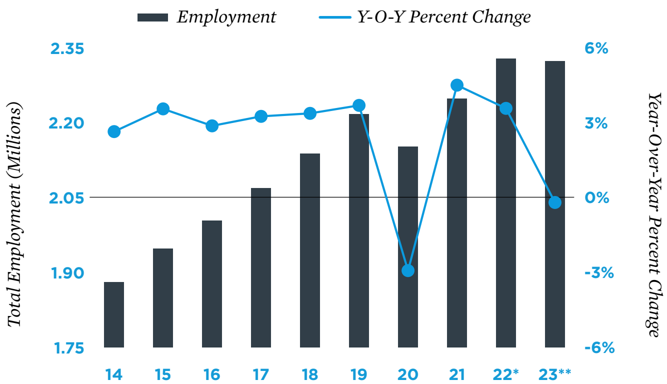
** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

Semiconductor Investments Aid Economic Growth; Buyers Persevere Amid Headwinds

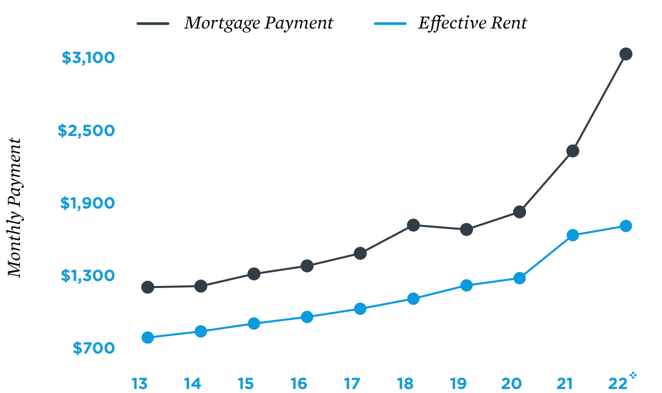
Long-term hiring wave becomes clearer. Phoenix is emerging at the forefront of the U.S. manufacturing proliferation, following local expansions from semiconductor giants Intel and Taiwan Semiconductor Manufacturing Company (TSMC). These firms' investments in the market, which total $32 billion, should render Phoenix a key player in the global supply chain and initiate rapid hiring in the years to come. Aside from its abundant land and skilled labor, the metro's low income tax rates and tax reductions for foreign investments will continue to play a major role in establishing a robust industrial ecosystem, stoking labor gains in the Valley. TSMC's announced entrance has already urged more than 40 semiconductor suppliers to enter Phoenix, in addition to the 2,000-plus local technician jobs anticipated to be created within the firm by 2024. As most of these positions are likely to fall within the renter pool, the local multifamily sector should reap operational gains from the semiconductor industry's growth in the longer term. Though, for the time being, a historic supply infusion will be met with a short-term reset of the labor market, sustaining upward pressure on vacancy. This will cool rent growth from the blistering pace it had been on, with the gain for this year expected to fall below 5 percent for the first time since 2013.

Myriad demand drivers underscore investment activity. Trading velocity has dipped moderately, due to weaker performance across asset classes and mounting capital costs. Though, the metro's strong economic outlook — supported by a growing roster of multinational retailers and manufacturers — is softening some institutions' concerns arising from near-term economic headwinds. Areas likely to draw active investors include North Phoenix, where low- to mid-tier assets are situated near TSMC's construction site. Meanwhile, properties in Tempe continue to generate interest, with the presence of Arizona State University and many of the metro's tech employers enhancing local assets' resiliency amid sudden vacancy increases. Areas with robust residential growth, such as Chandler, may see an uptick in Class A trades, which have been relatively quiet as of late. Investors anticipate improvements to top-tier demand here, as climbing home prices are steering households to rentals. Meanwhile, institutional investors focused on luxury apartments in areas that appeal to young adults will keep an eye on Old Town Scottsdale.

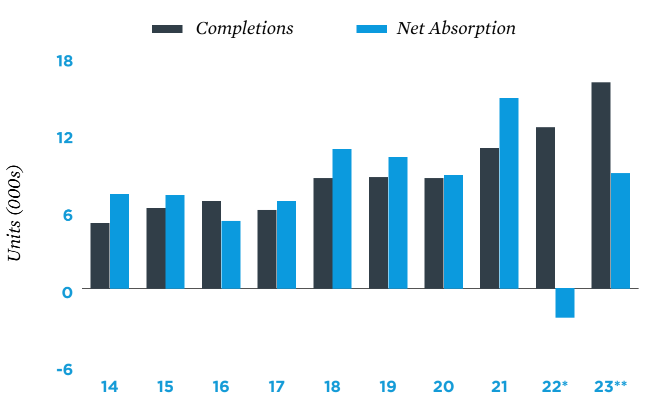
Employment Trends

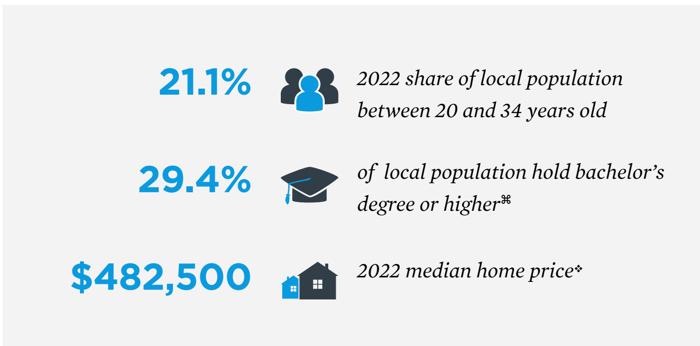


Housing Affordability Gap



Supply and Demand





* Estimate ** Forecast ✣ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

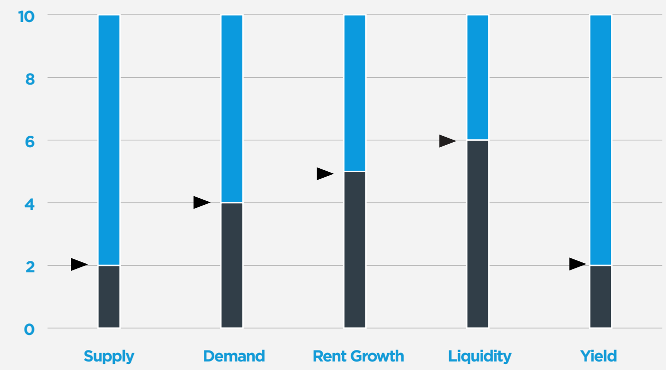
2023 Investment Outlook

Inventory growth is expeditious in the Valley, pressing the supply score to a 2 this year. Robust construction coincides with a moderation in household creation, weighing on the demand and rent growth metrics. However, the metro remains a favored migration destination longer term.

The 6 on the liquidity portion of the 2023 Key Performance Index is second highest across all major U.S. markets this year. Still, this metric is below last year's score of 10. Buyer fervor during the pandemic compressed cap rates, creating some hurdles now with higher debt costs.

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

Key Performance Index

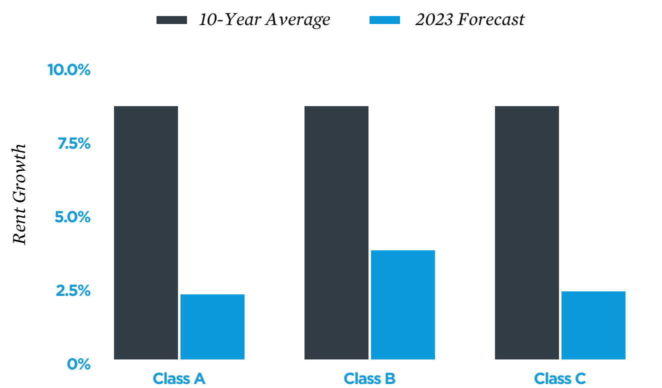


2023 Market Forecast

NMI Rank		10
Employment *-5,000 jobs*	*Metro* **-0.2%**	*U.S.* **0.5%**
Construction *as % of inventory*❖	*Metro* **4.1%**	*U.S.* **2.1%**
Class A Vacancy *Up 160 bps*	*Metro* **8.3%**	*U.S.* **6.1%**
Class A Rent *$1,997 per month*	*Metro* **2.2%**	*U.S.* **1.5%**

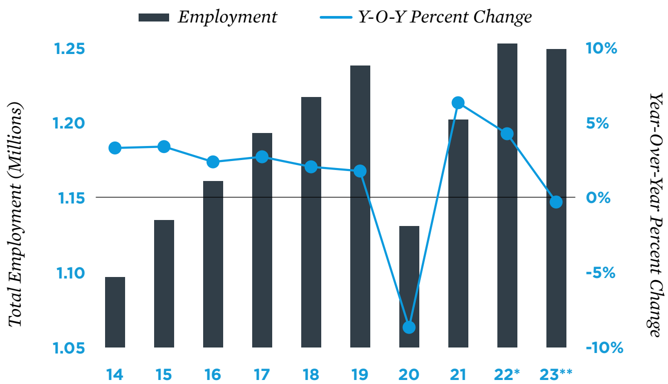
Vacancy By Class

Rent Growth By Class

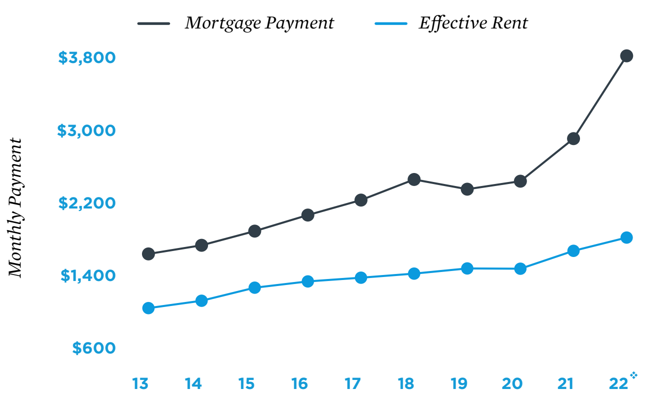


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

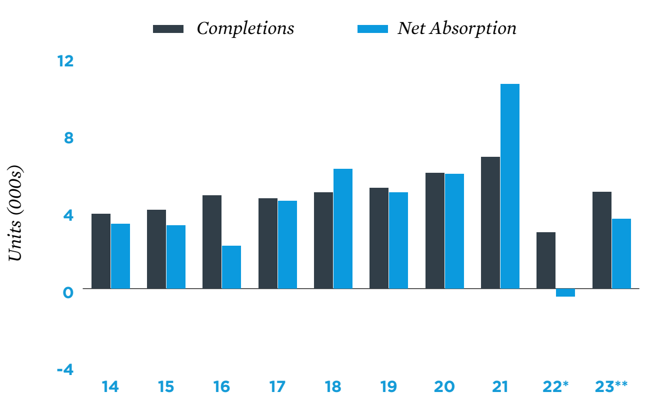
Employment Trends



Housing Affordability Gap



Supply and Demand



** Estimate ** Forecast ✣ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Microchip Production Lays Pathway for Future Growth; Rent Cap Alters Strategies

Expansions underpin long-term job gains. Entering 2023, Portland's multifamily sector was in flux. A slowdown in global semiconductor sales has led Oregon's largest employer, Intel, to temporarily cut a significant number of positions, contributing to the anticipated loss of 4,000 jobs from the metro's total headcount by year-end. Career uncertainty among renters from events like these will stunt household creation, weighing on demand at the lower-end of the rental spectrum and reducing the confidence of Class B renters to move up the quality stack. This activity, combined with an elevated supply volume, will lift vacancy in the near term and slow rent growth. Nonetheless, the metro is still attracting expansions that will stoke multifamily tailwinds when it comes time to hire again. Intel intends to construct a $700 million data center in Hillsboro, and has yet to recruit for the $3 billion D1X expansion completed early last year. Neighborhoods adjacent to these facilities should observe vacancy improvements when these operations are fully online, as workers will likely desire efficient commutes.

Institutions navigate local legislation, but remain keen on Portland. Since the passing of Oregon's rent control bill in 2019, the investment landscape south of the Columbia River has largely been one of controlling costs and managing long-term revenue streams. The bill enforces a rental rate cap on units older than 15 years of age and introduced stricter requirements for evicting tenants. However, the legislation has not deflected institutional interest in Portland. In fact, trades of assets priced at $20 million or greater accounted for about 18 percent of total multifamily deals since the start of 2021, compared to a 10 percent share in the years leading up to the bill's passage. Barriers to entry presented by rent control, however, should continue to direct buyers to properties with discounted pricing and expense-reducing features. As such, assets in the Lloyd District are being taken off the market, with investors drawn to the subsidized property maintenance and utility management services the municipality offers as part of its Enhanced Service District program. Additionally in Vancouver, cap-exempt lower- and mid-tier properties can provide stronger upside than their Oregon counterparts, and investors anticipate improvements in local renter demand are ahead after strong leasing for newer-built, top-tier projects recently.

21.3% *2022 share of local population between 20 and 34 years old*

36.2% *of local population hold bachelor's degree or higher⌘*

$585,200 *2022 median home price✣*

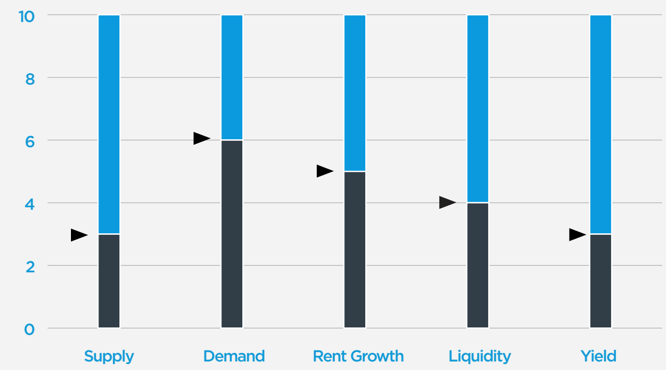
2023 Investment Outlook

Portland's rent growth measure of 5 is consistent with the tally last year. However, the supply and demand scores drop by 1 point and 3 points, respectively. The more sizable decline in the demand metric correlates with the projected wane in local jobs and household creation.

The liquidity ranking of 4 for this year is a notch above the overall Key Performance Index average. Nevertheless, it is below Portland's own measure of 7 last year. While deal flow is expected to retreat, it should be comparatively sturdier than some other markets across the country.

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

Key Performance Index



2023 Market Forecast

NMI Rank 14

Employment
-4,000 jobs
Metro **-0.3%**
U.S. **0.5%**

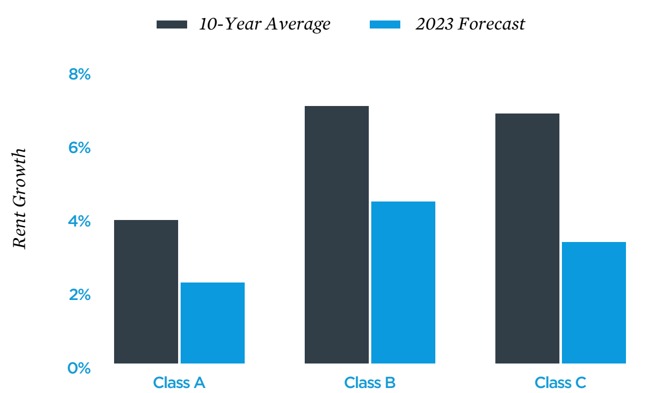
Construction
as % of inventory❖
Metro **2.2%**
U.S. **2.1%**

Class A Vacancy
Up 60 bps
Metro **5.8%**
U.S. **6.1%**

Class A Rent
$2,010 per month
Metro **2.2%**
U.S. **1.5%**

Vacancy By Class

Rent Growth By Class



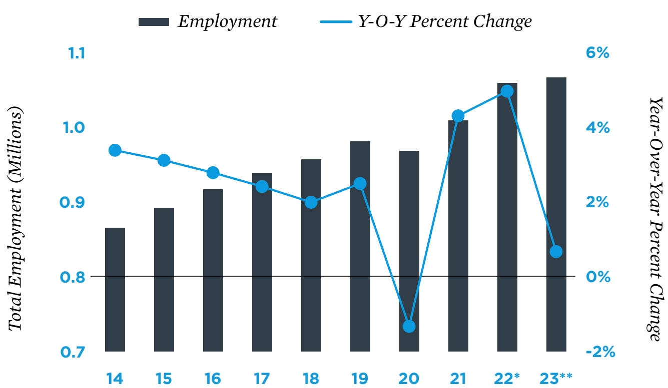
** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

Tech Firms Plant Seeds; Institutions Still Eye Prospects, Despite Current Headwinds

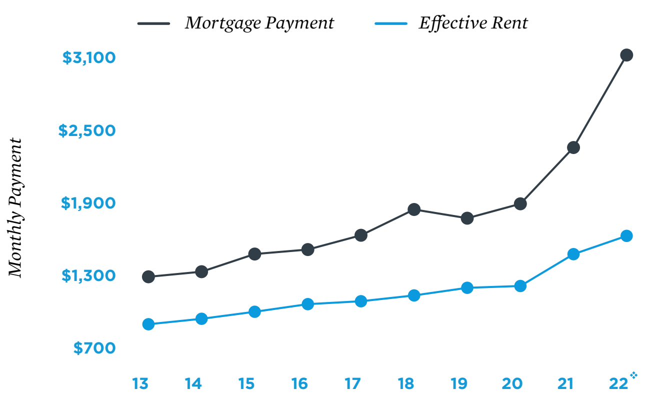
Substantial supply growth leapfrogs demand. The announcement of several billion-dollar investments for corporate expansions into Raleigh has noticeably boosted apartment development. Builders broke ground on more than 50 multifamily projects last year, following Apple and Google's 2021 commitments to construct campuses in the Research Triangle. Still, it may be a few years before these expansions are fully online, and in the meantime, rental supply will jump 6.3 percent this year. This new inventory, paired with a more modest hiring outlook for 2023, will push vacancy up. Multiple structural factors bode well for local recruitment efforts in the long-run, however. Three of Raleigh's universities rank among the top 30 in the nation, and the metro already boasts an established tech presence. These factors are contributing to a diversifying economy and are stoking tailwinds for local rentals. Automaker VinFast, and silicon carbide producer Wolfspeed, each intend to build multi-billion dollar manufacturing facilities in 2024. These projects are anticipated to create 9,200 positions, significantly adding to lower- and mid-tier rental demand, as such employees typically fall under these renter pools.

Investors maintain long-term confidence. Raleigh's fruitful economic outlook will serve to be a key driver for trades amid mounting capital costs and economic uncertainty. Newer-built and mid-tier properties in Downtown Raleigh and Downtown Durham should continue to generate institutional interest, with assets proximate to the metro's universities providing a strong backbone through some economic turbulence. Though, some buyers may pivot to South Durham, as the area features a range of apartments in relative proximity to both VinFast and Wolfspeed's new manufacturing facilities. While Class A trades have been somewhat muted, substantial development should provide more opportunities for investors to acquire institutional-grade assets. Raleigh's rise to prominence as a southeast focal point for multifamily institutions has been consistent. Assets priced in the $20 million-plus range have accounted for more than 50 percent of total apartment trades in every year going back to 2016.

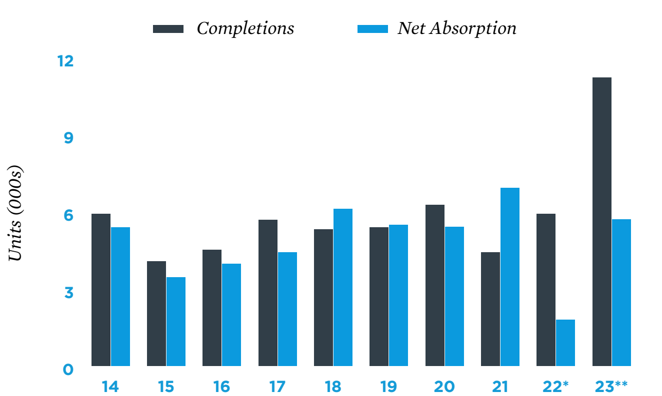
Employment Trends



Housing Affordability Gap



Supply and Demand



20.4% — *2022 share of local population between 20 and 34 years old*

43.9% — *of local population hold bachelor's degree or higher⌘*

$457,400 — *2022 median home price✣*

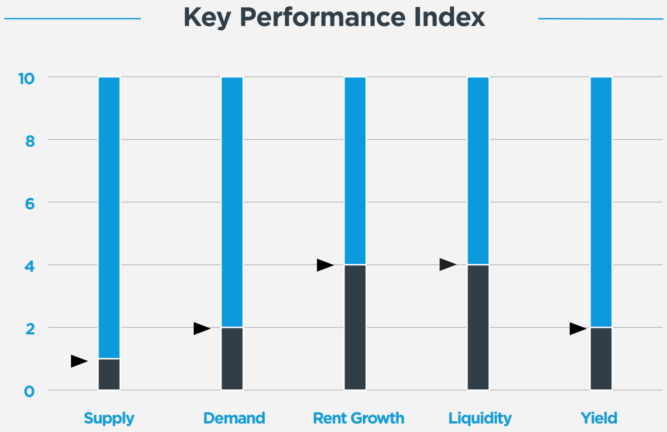
** Estimate ** Forecast ✣ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

2023 Investment Outlook

The metro faces considerable supply pressure this year, which will weaken fundamentals. However, it also ranks in the top 10 for job gains and household creation, as it continues to be a preferred migration destination for both residents and companies.

Raleigh's yield measure of 2 is consistent with last year's metric, while the liquidity ranking descends by 4 points. The contraction in liquidity is a factor of external conditions, as well as the likelihood of some investors tapping the brakes in Raleigh amid immense supply pressure.

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



2023 Market Forecast

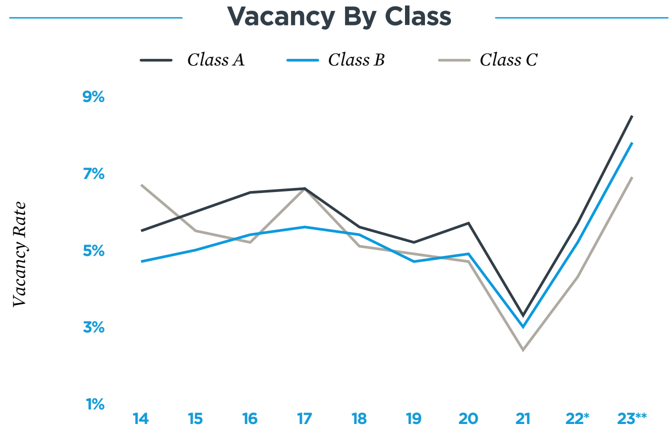
NMI Rank ▶ 12

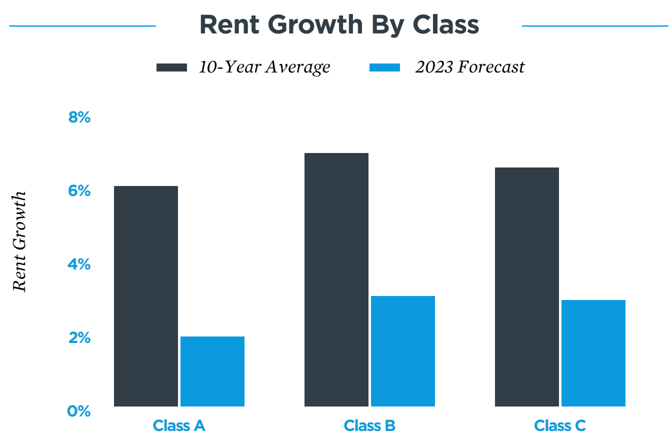
Employment *7,000 jobs* — *Metro* **0.7%** *U.S.* **0.5%**

Construction *as % of inventory*❖ — *Metro* **6.3%** *U.S.* **2.1%**

Class A Vacancy *Up 280 bps* — *Metro* **8.4%** *U.S.* **6.1%**

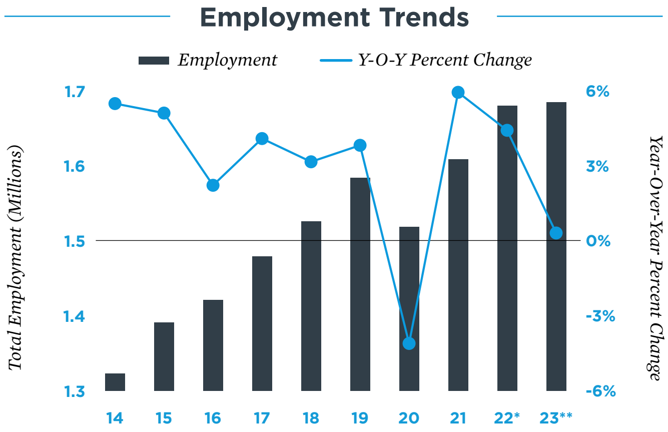
Class A Rent *$1,948 per month* — *Metro* **1.9%** *U.S.* **1.5%**

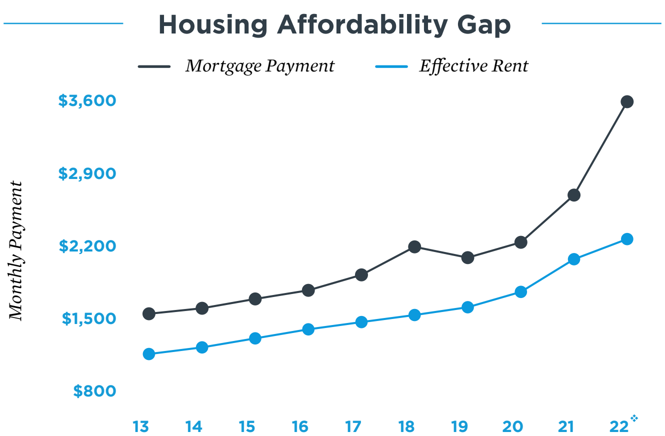


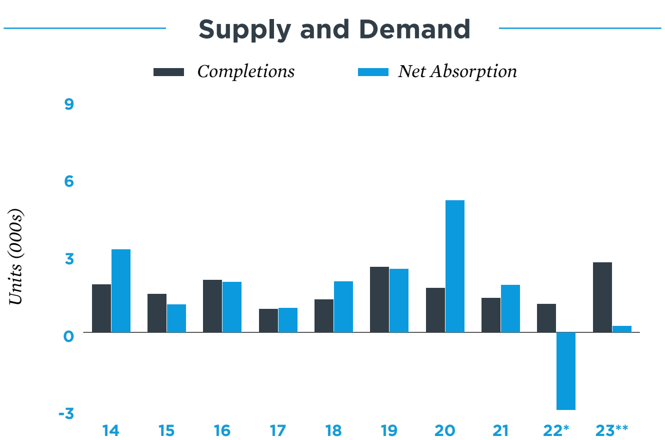


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

Pillars of Economy Hold Firm, Stoking Demand for Region's Lowest-Cost Rentals







* Estimate ** Forecast ✣ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Luxury sector at a crossroads as large-scale deliveries approach. The Inland Empire entered this year with an average effective rent at least $500 per month below all major Southern California markets. This affordability is poised to facilitate regional relocations to Riverside and San Bernardino counties during 2023, aiding apartment demand amid a period of economic volatility. Rapid industrial sector expansion should further fuel leasing at complexes, with transportation and warehousing-related jobs added as companies occupy the 25 million square feet of such space that comes online this year. Together, these positives may prevent a significant rise in multifamily vacancy from occurring over the coming quarters. Still, Class A demand stands to be tested. Following a two-year interval of relatively limited new supply, a collective of large-scale projects are slated to deliver units in 2023. Several multiphase developments in Ontario and Rancho Cucamonga highlight the list of upcoming completions that feature upward of 300 rentals. These properties and a group of new apartments in South Riverside County have the potential to push the metro's Class A vacancy rate beyond 6 percent for the first time in more than a decade.

Specific property characteristics stand out to investors. Riverside-San Bernardino is a unique market, with more than 90 percent of deals priced in the $20 million-plus range last year, including Class B or C assets, rather than luxury-tier apartments. Local Class C vacancy was one of the nation's tightest at the onset of 2023, positioning lower-tier properties to provide owners with stable cash flow during a potential recessionary period. Additionally, the market's Class B availability was among the top five lowest in the country ending last year. The strength in these tiers, and supply pressure in the luxury segment, will coax institutions to maintain this strategy. Most trades featuring properties with at least 100 units are likely to be Class B and C assets, with a preference for older complexes that could offer upside through renovations. These type of assets typically command price tags north of $300,000 per unit. Institutions seeking regionally discounted pricing have historically found the most opportunities in the metro's largest cities, and more recently high desert locales off Interstate 15. Properties with a three-bedroom-unit mix should be coveted as well, as they stand to benefit from household consolidation trends.

21.6% *2022 share of local population between 20 and 34 years old*

20.4% *of local population hold bachelor's degree or higher⌘*

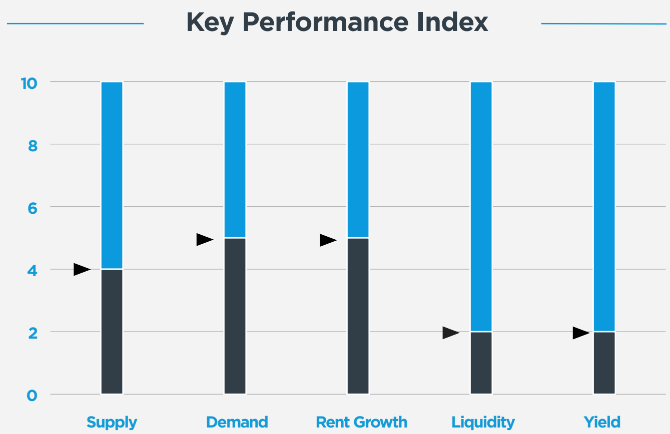
$567,700 *2022 median home price✣*

2023 Investment Outlook

Riverside-San Bernardino boasts the highest supply figure among the four major southern California metros this year, and also ties Los Angeles and San Diego for the top rent growth score. On the other hand, the demand measure of 5 halves last year when the market grabbed a 10.

Liquidity and yield both stand at a 2 in the 2023 Key Performance Index, aligning with the regional market averages. Comparing Riverside-San Bernardino against its own metrics last year, the yield ranking is unchanged, while liquidity fell by 4 points.

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



2023 Market Forecast

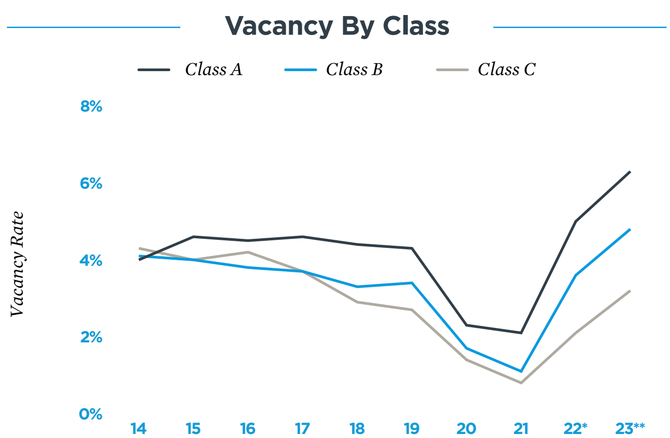
NMI Rank ▶ **11**

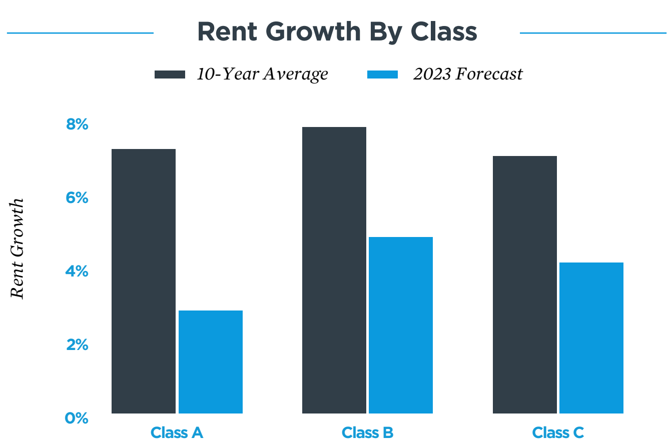
Employment
5,000 jobs
Metro **0.3%**
U.S. **0.5%**

Construction
as % of inventory❖
Metro **1.4%**
U.S. **2.1%**

Class A Vacancy
Up 130 bps
Metro **6.2%**
U.S. **6.1%**

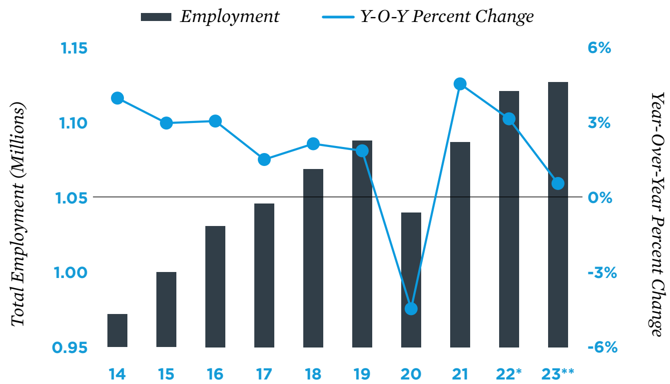
Class A Rent
$2,688 per month
Metro **2.8%**
U.S. **1.5%**



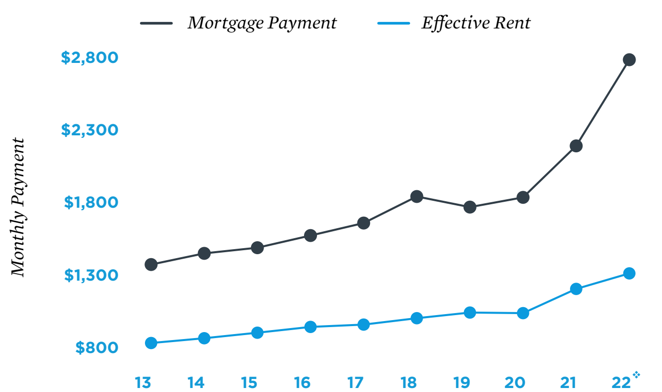


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

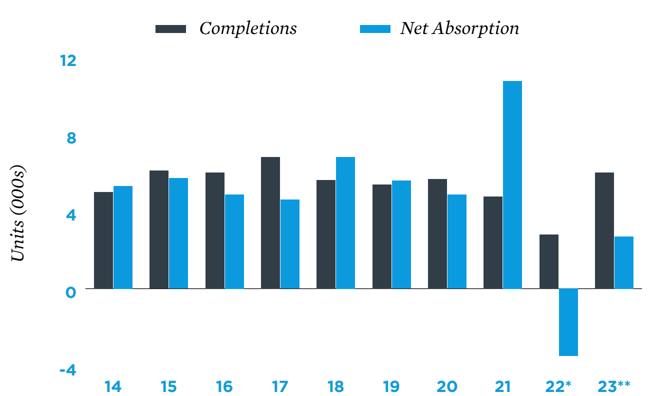
Employment Trends



Housing Affordability Gap



Supply and Demand



** Estimate ** Forecast ✣ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Public-Private Initiatives Help Metro Weather Inbound Headwinds

Public sector and related employers mitigate demand hurdles. Due to a high concentration of recession-resistant industries, San Antonio is uniquely positioned to withstand an economic downturn. Aside from a plethora of state government organizations, the region boasts a substantial national defense sector — including a regional NSA headquarters. This agency underscores San Antonio's notable cybersecurity segment, which constitutes the second-largest cluster of category firms nationwide. Concerns stemming from rising cybercrime could keep segment employment steady or potentially in expansion mode, even as downsizing is observed elsewhere. Easing overall job growth is contributing to falling renter demand and moderating fundamentals, however, after record-low vacancy was observed early last year. In 2022, the market reported its first year of negative net absorption in over two decades. Availability is expected to continue trending upward in 2023, pushed up by a five-year high of supply growth. Vacancy appears to be returning to levels typical during the pre-pandemic economic cycle, when rates in the mid-6 to mid-7 percent range were often observed.

Institutions seek assets proximate to metro's chief economic engines. Prompted by the rapid growth of various Texas markets, institutions are increasingly acting in partnership with smaller local parties to ease the acquisition process. Though mounting financing headwinds will likely complicate this, these investors are mostly targeting opportunities in San Antonio proper, with remaining activity concentrated to the city's north and east. Prominent locales include fast-growing suburbs like New Braunfels, Boerne and Converse, which offer entry costs well below the market average. Near the core, investors are pursuing opportunities in northern areas around the 1604 Beltway. Buyers often look near the intersection of this roadway and Interstate 10, which offers proximity to a number of major employers, in addition to the University of Texas at San Antonio. Rapid apartment construction in the metro's northwest should provide institutions with ample development partnership prospects and bolster the metro's already substantial stock of institutional-grade assets. Downtown trading remains scarce, but the resurgence of tourism and by relationship, industry employment, could generate some buyer attention.

21.9% *2022 share of local population between 20 and 34 years old*

26.6% *of local population hold bachelor's degree or higher⌘*

$336,700 *2022 median home price✣*

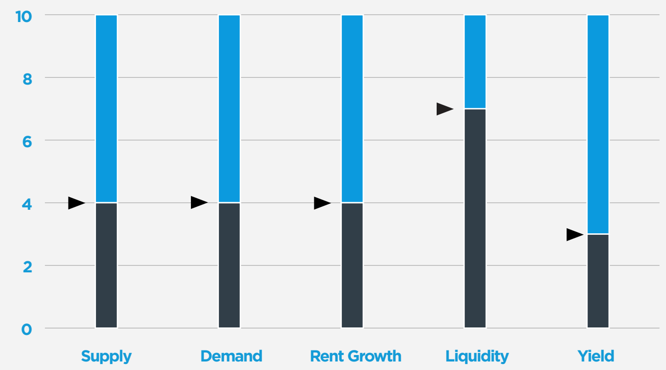
2023 Investment Outlook

While the market claims the highest supply score across the four major Texas markets this year, it also has the lowest rent growth ranking. Class A rent gains are expected to trail the national average this year amid slower demand. However, longer-term migration tailwinds are evident.

The 7 on the liquidity segment of the 2023 Key Performance Index is the best across all major U.S. markets. Trading will be hindered by higher interest rates, but San Antonio's comparatively higher cap rates help curb challenges, and robust growth trends should sustain buyer appetite.

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

Key Performance Index

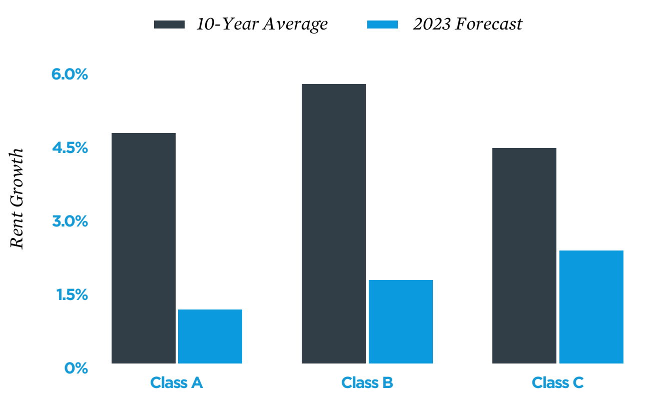


2023 Market Forecast

NMI Rank		18
Employment *6,000 jobs*	Metro **0.5%**	U.S. **0.5%**
Construction *as % of inventory*❖	Metro **2.7%**	U.S. **2.1%**
Class A Vacancy *Up 150 bps*	Metro **8.0%**	U.S. **6.1%**
Class A Rent *$1,595 per month*	Metro **1.1%**	U.S. **1.5%**

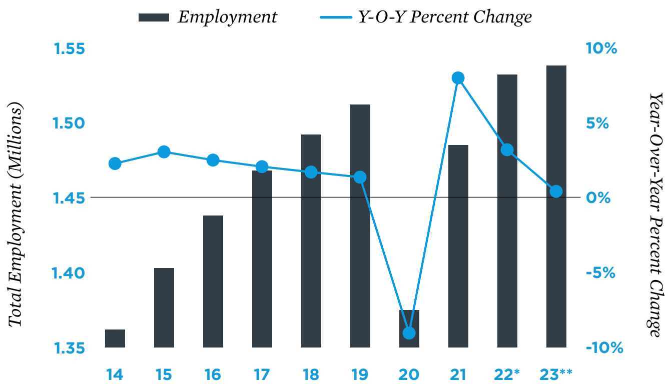
Vacancy By Class

Rent Growth By Class

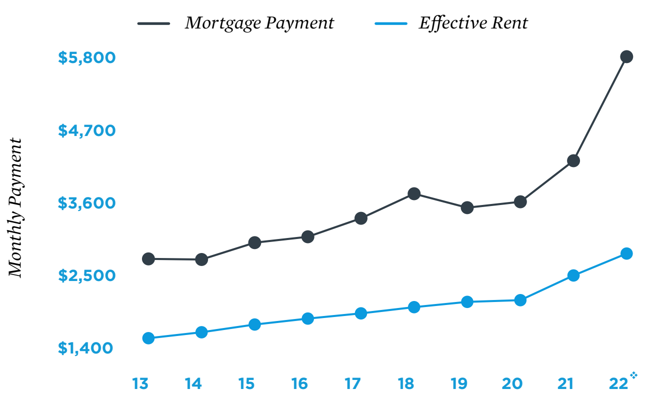


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

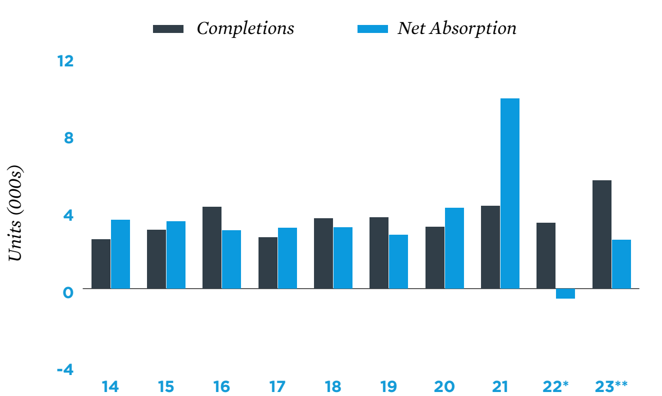
Employment Trends



Housing Affordability Gap



Supply and Demand



* Estimate ** Forecast ✧ Through 3Q
⌘ 2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Out-of-Reach Home Prices and Rent Disparities Facilitate Tight Conditions

Developers' response to long-existing conditions comes to fruition. The difference between an average monthly mortgage payment and the mean effective rent well exceeded the $3,000 mark in San Diego County at the onset of this year. This significant gap will continue to price many households and individuals out of homeownership for the foreseeable future, fueling a level of apartment demand that will allow the metro to remain among the nation's tightest rental markets during 2023. Still, San Diego is not without near-term hurdles. A historically high volume of new units are slated for completion this year, which will test demand for luxury rentals. Deliveries, however, are fairly well dispersed throughout the metro. Chula Vista and the far north and northwest reaches of San Diego proper will each add between 700 to 1,100 rentals, with Downtown San Diego's stock growing by more than 1,400 units. Fortunately, life science and tech-related hiring is expected to remain positive, aiding demand for these luxury apartments. Even with supply pressure this year, the market is expected to claim the second-tightest Class A vacancy rate among major U.S. metros at the end of 2023.

Lower-cost rental demand could lead institutions down the quality scale. The disparity between the average Class B and Class C effective rent in San Diego is the largest among major West Coast markets. This discrepancy, which stood at more than $700 per month at the tail end of last year, has sustained extremely tight vacancy in the lower-tier sector, a condition that is expected to continue for the foreseeable future. In response, private investors are maintaining a heavy focus on submarkets with large concentrations of Class C stock. Select institutions could follow this trend and target larger-scale lower-tier complexes amid localized supply pressure in some market areas. Meanwhile, buyers with a preference for locales that are popular among young professionals will target Balboa Park-adjacent neighborhoods, including North Park and Golden Hill, as well as coastal neighborhoods like Pacific Beach. However, institutional-sized deals will remain most prevalent in San Diego proper, particularly downtown nodes and Mission Valley, where pricing for newer-built assets often exceeds $400,000 per unit. Buyers looking to avoid supply pressure could turn to El Cajon, where the pipeline has been minimal in recent years and is poised to stay that way in 2023.

23.7% *2022 share of local population between 20 and 34 years old*

35.7% *of local population hold bachelor's degree or higher⌘*

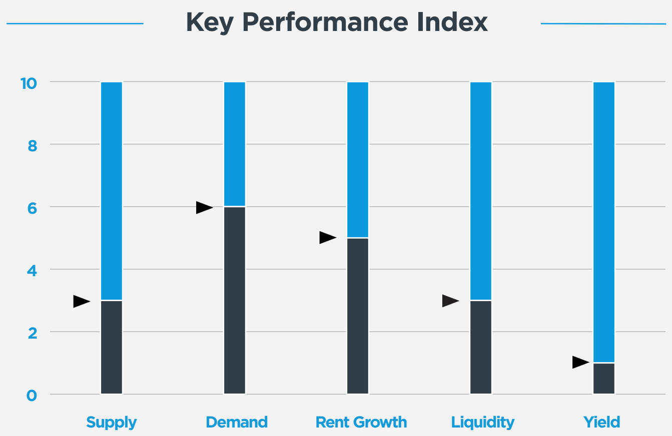
$930,000 *2022 median home price✧*

2023 Investment Outlook

Using the Key Performance Index averages across the seven major California markets, San Diego is below the mean for its supply score, but above the average for its demand and rent growth figures. The metro's vacancy rate will remain among the lowest in the country this year.

San Diego's 3 on the liquidity segment ties Oakland for the highest among major California markets. On the contrary, the 1 on the yield portion is the lowest in the state. The market's strong fundamentals encourage investment, despite relatively low cap rates.

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



2023 Market Forecast

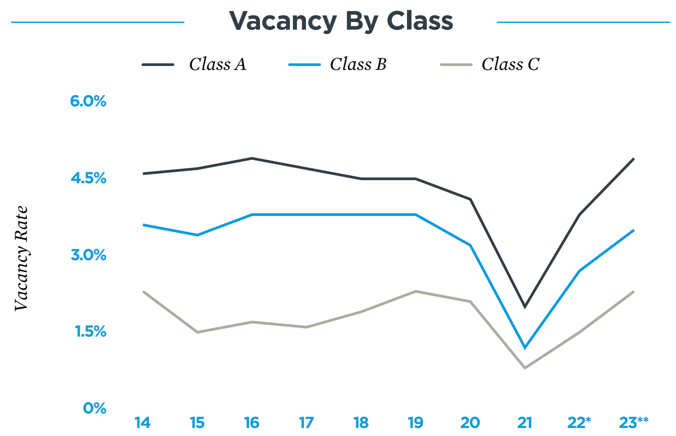
NMI Rank 16

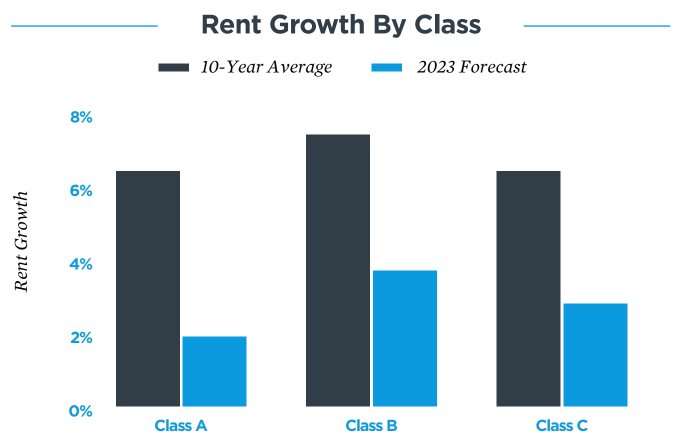
Employment
6,000 jobs
Metro **0.4%**
U.S. **0.5%**

Construction
as % of inventory❖
Metro **1.8%**
U.S. **2.1%**

Class A Vacancy
Up 110 bps
Metro **4.8%**
U.S. **6.1%**

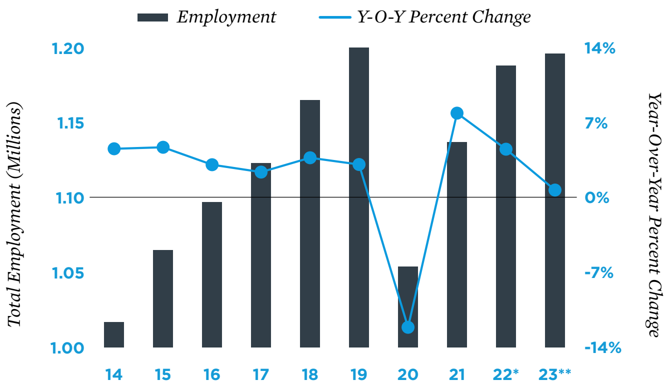
Class A Rent
$3,322 per month
Metro **1.9%**
U.S. **1.5%**



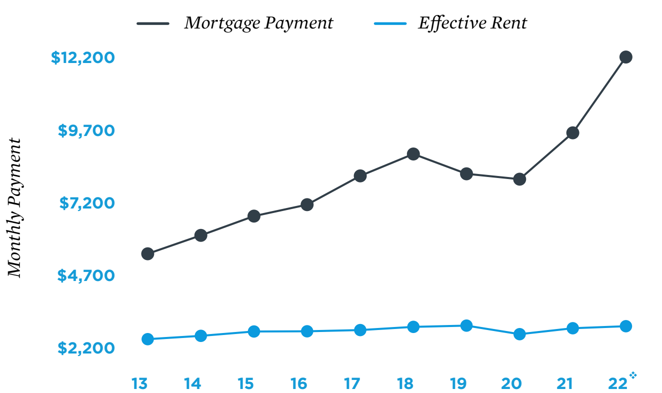


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

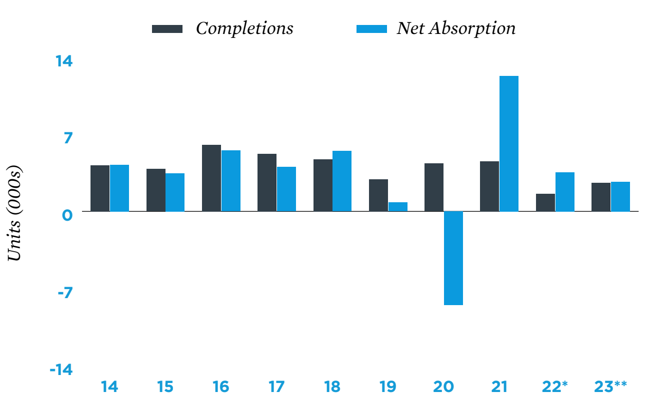
Employment Trends



Housing Affordability Gap



Supply and Demand



*Estimate ** Forecast ✣ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Amenities Bolster Downtown Demand; Full Recovery Contingent on Return to Office

Market conditions turning the corner. San Francisco was one of two major markets in the U.S. to record annual vacancy compression in 2022. In fact, CBD availability equaled the suburban rate for the first time since 2015, as amenities like restaurants, night life, shops and parks drew renters back downtown, despite lower office utilization from local employers. Although vacancy remains above the long-term average entering this year, the rate is much improved from the all-time high of 10.4 percent recorded in December 2020. Looking ahead, barriers to homeownership will continue to fuel renter demand and compress vacancy further in 2023, even though there is potential for an economic slowdown. The local median single-family home price is at least 10 percent above any other Bay Area metro and ranks as the highest among all major U.S. markets. However, despite minimal competition from the single-family sector and the encouraging momentum in operations, the prevalence of remote work has created uncertainty about how quickly a full recovery in apartment demand could transpire. Vacancy may remain above historical norms in the near- to mid-term, if hybrid and remote work schedules are permanently adopted.

Long-term prospects underscore institutional attentiveness. San Francisco is a distinctive multifamily investment market. Development partnership opportunities are extremely limited, although the slow construction pace also gives institutional buyers confidence that renter demand will outweigh new supply in the long term. Submarkets within San Francisco proper have been the most liquid in recent periods, as rapidly declining vacancy over the past two years in the CBD has elevated investor interest. Meanwhile, properties in Richmond-Western Addition, Marina-Pacific Heights and the Haight-Mission area are highly sought after, where median household incomes rank among the highest in the metro. Outside the city, institutions have shown a willingness to pay entry costs above $450,000 per unit for assets in San Mateo-Burlingame and Redwood City-Menlo Park. Nevertheless, marketwide institutional-level deal flow is expected to be relatively mild this year as buyers and sellers adjust to the rapidly changing interest rate climate. San Francisco's claim on the highest Class A vacancy rate among major U.S. markets does little to help ease transaction market hurdles.

24.4% *2022 share of local population between 20 and 34 years old*

49.8% *of local population hold bachelor's degree or higher⌘*

$1,971,200 *2022 median home price✣*

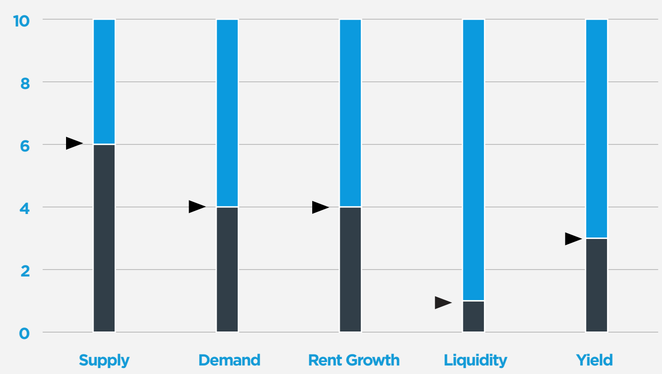
2023 Investment Outlook

San Francisco leads all major U.S. markets, with a supply score of 6 this year. It is a positive that the metro is not facing much pressure from new construction. However, it logs below-average demand and rent growth measures, due to a prolonged economic recovery from the pandemic.

The metro's yield ranking of 3 is up 2 points from the 2022 Key Performance Index, but this will not be enough to generate stronger deal flow amid transaction market hurdles. As such, San Francisco receives a 1 on the liquidity Index this year, down from a 4 in 2022.

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

Key Performance Index

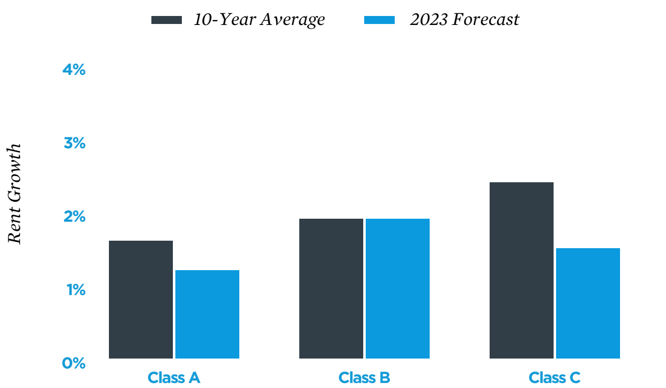


2023 Market Forecast

NMI Rank		25
Employment *8,000 jobs*	*Metro* **0.7%**	*U.S.* **0.5%**
Construction *as % of inventory*❖	*Metro* **1.0%**	*U.S.* **2.1%**
Class A Vacancy *Up 10 bps*	*Metro* **9.7%**	*U.S.* **6.1%**
Class A Rent *$3,798 per month*	*Metro* **1.2%**	*U.S.* **1.5%**

Vacancy By Class

Rent Growth By Class



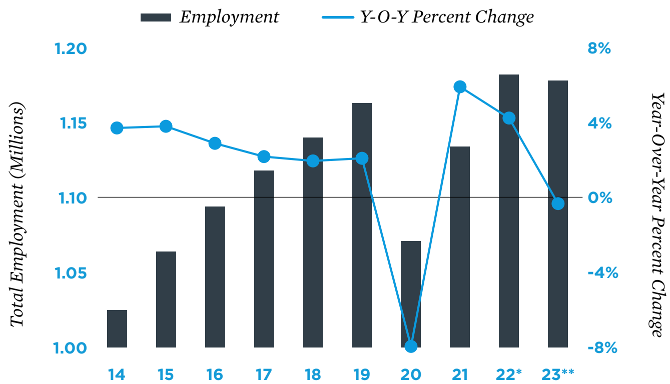
* Estimate ** Forecast
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

San Jose Boasts Bay Area's Lowest Vacancy Rate, Aided by Slow Development

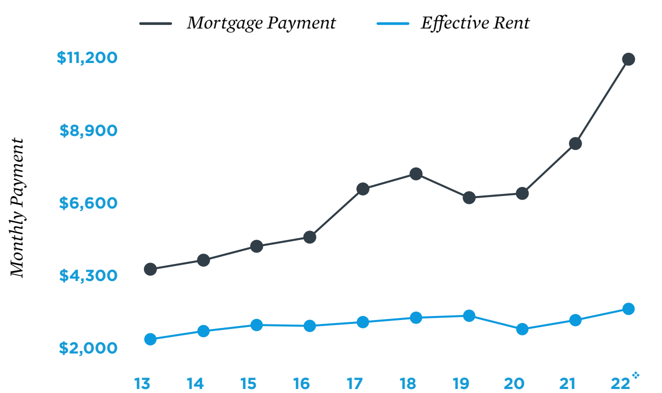
Possible return to office underpins renter demand. Entering this year, local vacancy was at 3.7 percent, 30 basis points below the pre-pandemic level and the lowest rate among Bay Area metros. Major firms, such as Apple, Google and Intuit, have expressed a desire to have employees in the office at least two to three days a week, and this may have contributed to the recent momentum. Many residents likely returned to the metro in anticipation of having to be physically present at work. Moving forward, there are several factors that will continue to fuel local multifamily demand. The expensive single-family housing market often steers new households to rentals rather than homeownership, creating a backstop for apartment demand. While the overall employment base is expected to take a small step back this year, growth in the emerging life sciences sector will continue to draw new residents to the area, bolstering the local renter pool. Although household formation is expected to slow in the near term, due to widespread inflation and a potential recession, construction activity will reach a four-year low in 2023. As a result, net absorption is expected to keep pace with supply additions, holding vacancy relatively steady throughout this year.

Prominent employers keep institutional eyes on San Jose. Deal flow returned to pre-pandemic levels in 2022, as a resurgence in leasing activity restored investor confidence. This year brings a new set of challenges, as rapid upward interest rate movement has diverged buyer and seller expectations and created financing challenges, especially with San Jose's average cap rate being among the lowest in the country. Once interest rates stabilize and valuations become more clear, however, institutions are expected to come off the sidelines and retain their moderate role in the local transaction market. In a typical year, sales in the $20 million-plus range only account for about 10 percent of metrowide deal flow, despite having one of the highest prices per-unit in the nation. This is also a factor of apartment dynamics, with smaller unit-count complexes making up a sizable share of San Jose's stock. Assets in Mountain View-Los Altos and Santa Clara will be highly sought after by the select institutions that are active, due to their proximity to major employers like Google, Intuit, LinkedIn, Intel, Avaya and Nvidia. The lack of rent control and efficient access to major job centers is a draw for investors in Sunnyvale as well.

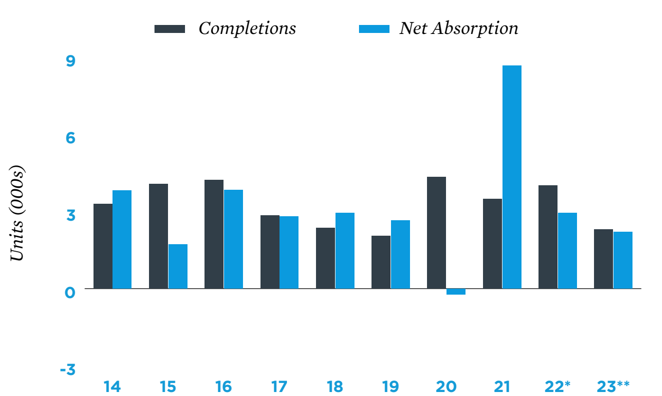
Employment Trends



Housing Affordability Gap



Supply and Demand



22.2% *2022 share of local population between 20 and 34 years old*

48.2% *of local population hold bachelor's degree or higher⌘*

$1,796,900 *2022 median home price✣*

** Estimate ** Forecast ✣ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

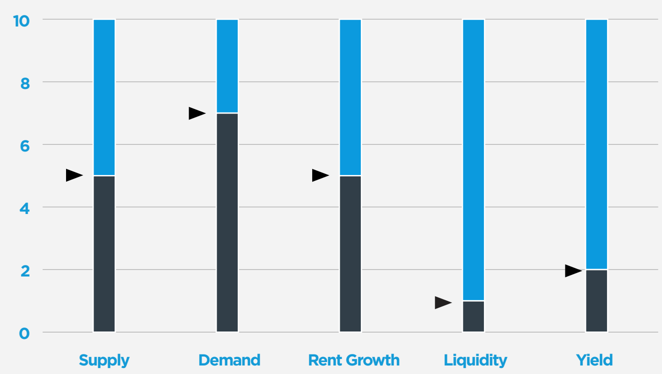
2023 Investment Outlook

San Jose's demand score is the second highest across all major markets in the 2023 Key Performance Index, as the metro is projected to have one of the smallest vacancy changes this year. The supply and rent growth figures also exceed statewide averages, despite the expected loss of some local jobs.

Relative to its Bay Area counterparts, San Jose notches the lowest yield score of the three major markets at 2. Tight cap rates will make it challenging to get deals done in a higher interest rate climate, compressing the liquidity metric to a 1, after posting a 5 last year.

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

Key Performance Index

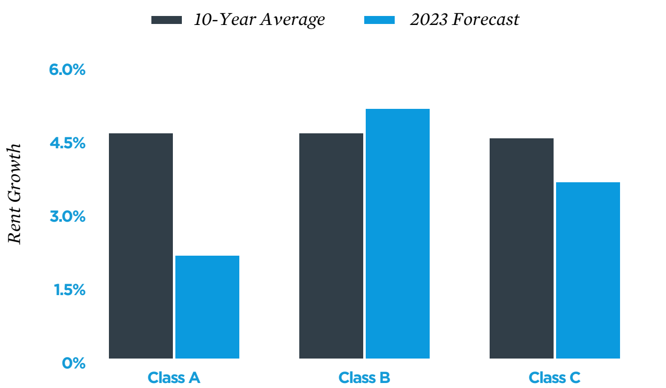


2023 Market Forecast

NMI Rank		24
Employment *-4,000 jobs*	*Metro* **-0.3%**	*U.S.* **0.5%**
Construction *as % of inventory*❖	*Metro* **1.3%**	*U.S.* **2.1%**
Class A Vacancy *Up 20 bps*	*Metro* **4.5%**	*U.S.* **6.1%**
Class A Rent *$3,824 per month*	*Metro* **2.1%**	*U.S.* **1.5%**

Vacancy By Class

Rent Growth By Class



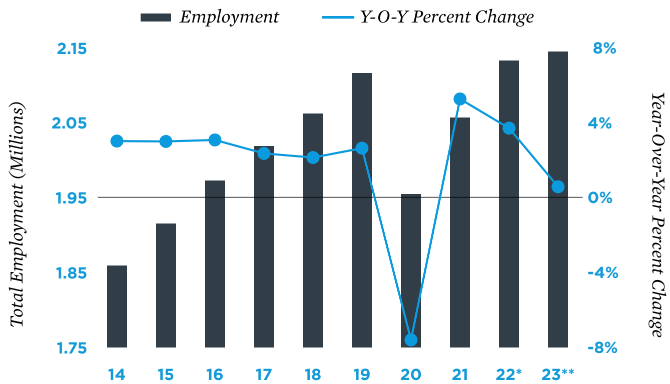
* Estimate ** Forecast
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

Cost-Conscious Renters Anchor Sector; Investment Channels into Emerging Hubs

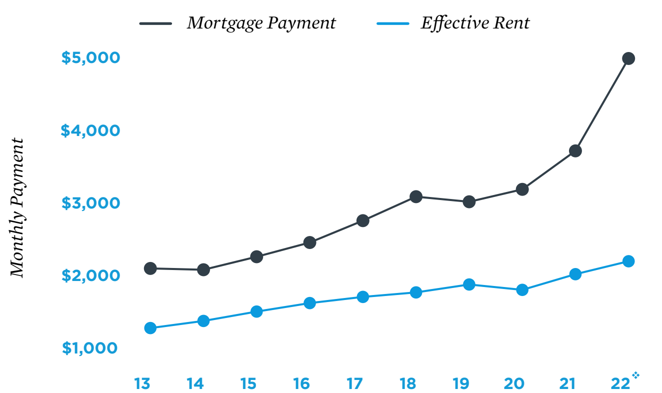
Significant affordability gap backstops renter demand. The difference between the metro's typical monthly mortgage payment on a median priced home and the mean rent obligation eclipsed $2,000 for the first time last year, more than doubling since the end of 2020. Amid high mortgage rates, home prices and inflation, many households will continue to delay homebuying, choosing instead to remain in a rental market that can offer greater budgetary and lifestyle flexibility. This trend is encouraging an increasing number of apartment project starts, despite a quieter job outlook as tech firms slow hiring. Although renters are unlikely to match the pace of supply this year, tailwinds exist over longer horizons. An emerging life sciences sector, with entrants such as Sonoma Biotherapeutics and Sana Biotechnology, will bolster long-term wage growth, helping to shore up Class A demand. Meanwhile, additions to the metro's logistics-related roster may boost demand for lower- and mid-tier rentals, as employees of these companies typically fall into those renter pools.

Buyers pursue opportunities in arising industrial and office hotspots. Institutional investors maintain interest in Seattle apartments, as a lack of housing affordability and a diversifying economy form a strong base for future rental demand. Nonetheless, rising capital costs have moved some investors to the sidelines and complicated the transaction process. Seattle-Tacoma's average cap rate ranks among the lowest 10 for major metros nationally, creating financing hurdles amid higher interest rates. Institutional buyers that are present in the marketplace this year will likely favor expansionary pockets of the metro that could present stronger rent growth potential. Industrial expansion in Tacoma could lure some institutions to target larger-scale Class B assets in the area. Newer-built luxury tier complexes with 100-plus unit counts have also generated investor interest here, with price tags often exceeding the $30 million mark. Everett could be another focal point for buyers seeking upside, with improvements to local Class A/B rental demand expected after the locale's office assets observed strongly positive net absorption last year, hosting move-ins from the likes of Orbis and RLI. Institutions with their sights on Seattle city limits will scour neighborhoods that appeal to young adults, including trendy bay-side areas like Ballard, as well as Lake Union waterfront communities.

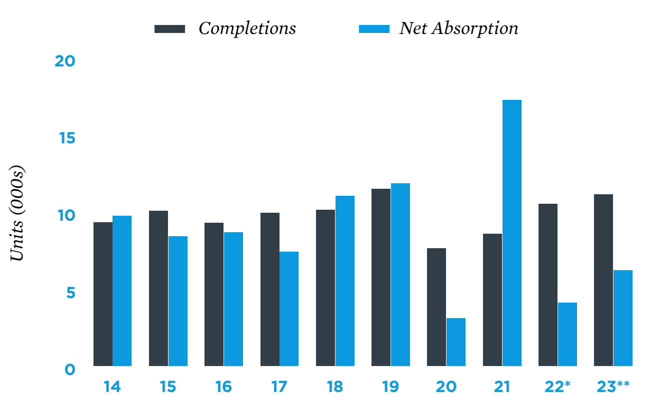
Employment Trends



Housing Affordability Gap



Supply and Demand



23.2% 2022 share of local population between 20 and 34 years old

39.8% of local population hold bachelor's degree or higher⌘

$772,200 2022 median home price✣

* Estimate ** Forecast ✣ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

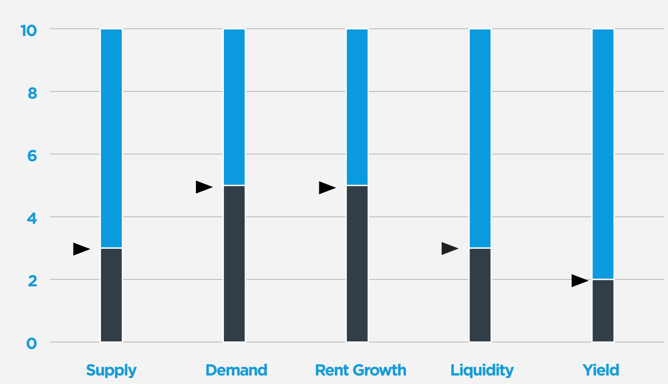
2023 Investment Outlook

The supply score of 3 is an improvement from last year's ranking, and the rent growth metric is consistent with 2022. On the other hand, the demand figure fell by 3 points, with vacancy expected to jump by a sizable margin across the apartment spectrum amid slower household creation.

Seattle-Tacoma has a liquidity measure on par with the overall Key Performance Index average, but has a yield ranking below the national mean. Trading activity will be relatively muted this year amid financing hurdles, but a top 10 pace of rent growth will keep buyers interested.

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

Key Performance Index



2023 Market Forecast

NMI Rank 13

Employment *12,000 jobs* — *Metro* **0.6%** *U.S.* **0.5%**

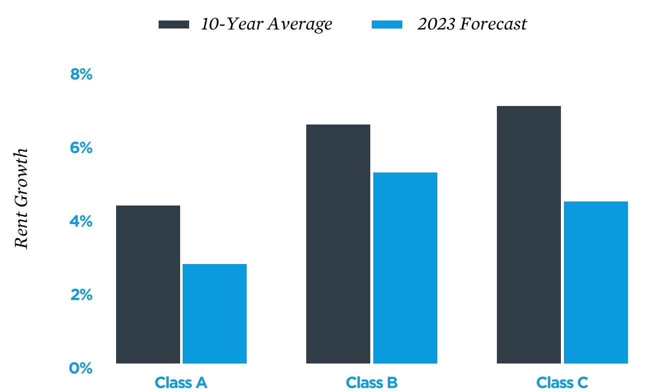
Construction *as % of inventory*❖ — *Metro* **2.6%** *U.S.* **2.1%**

Class A Vacancy *Up 110 bps* — *Metro* **6.3%** *U.S.* **6.1%**

Class A Rent *$2,541 per month* — *Metro* **2.7%** *U.S.* **1.5%**

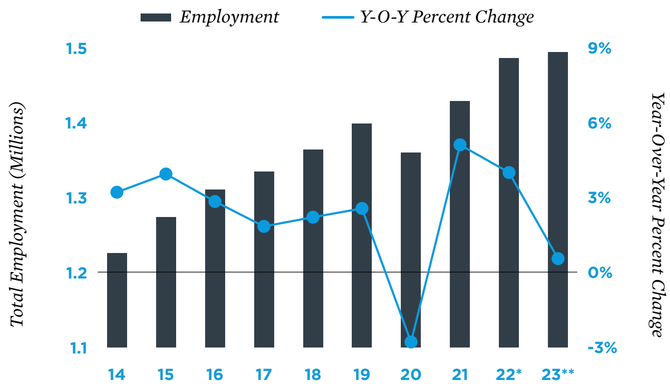
Vacancy By Class

Rent Growth By Class

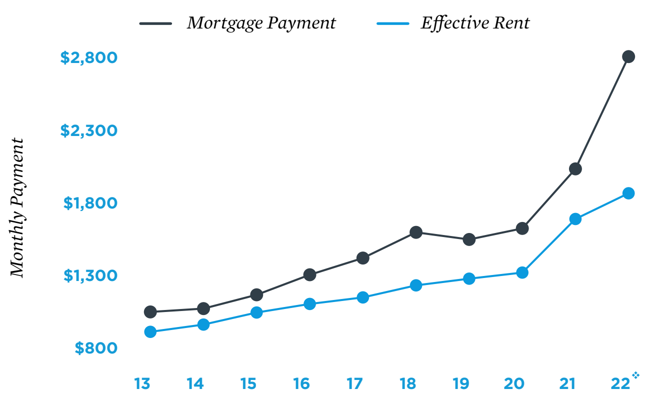


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

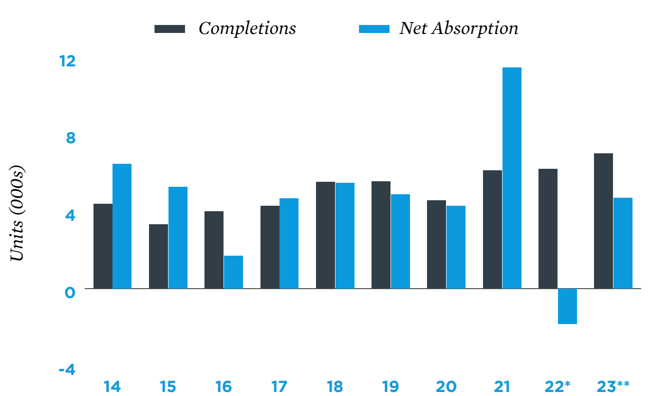
Employment Trends



Housing Affordability Gap



Supply and Demand



* Estimate ** Forecast ✣ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

Sturdy Demand and Supply Drivers Present; Natural Disaster Adds Layer to Appeal

Regional demand meets friction this year. Household formation is expected to remain comparatively elevated in 2023, after last year's near two-decade record. The metro's lower living costs help attract professionals from Northeastern markets, with expanding financial and health service industries diversifying Tampa's economic base and bolstering employment opportunities for relocating job seekers. At the same time, many new residents will opt for apartments, due to a range of factors. Higher mortgage rates are compounding the region's rapid home price run-ups that occurred during the pandemic, putting a spotlight on the relative affordability and flexibility of multifamily living. Additionally, homeowner's insurance in the state nearly tripled the national rate last year, and costs are expected to rise further in the wake of the latest natural disaster. Tampa's core avoided the worst of Hurricane Ian, but southern areas like Sarasota-Bradenton had more direct impacts, which will slow growth amid rebuilding efforts this year. The market as a whole faces its own set of hurdles, linked to the sizable amount of new supply coming online. Inventory expansion is necessitated by longer-term tailwinds, but will surpass demand during a year of economic uncertainty and weigh on fundamentals near term.

Metro retains desirability amid broad economic headwinds. As the economy softens, the renter stability provided by a higher median income level and an older population will attract active institutions to Pinellas County. Outside of the core, the Sarasota-Bradenton suburbs are generating buyer attention as the area appeals to renters seeking lower costs and larger spaces, translating into tighter vacancy rates. In the near term, Hurricane Ian's devastation could provide some risk-tolerating buyers with new opportunities in the area. Damaged properties may be sold at prices lower than normal, and land plots for redevelopment could come to market. Although higher insurance premiums are a substantial challenge, public support from the state may be coming down the line. Institutions will take into account the risks of investing in Tampa-St. Petersburg, but investor appetites should remain strong. Robust economic and population growth led the metro to record more $20 million-plus multifamily trades than every other major Florida market, except Orlando, across 2021 and 2022.

18.9% *2022 share of local population between 20 and 34 years old*

28.0% *of local population hold bachelor's degree or higher⌘*

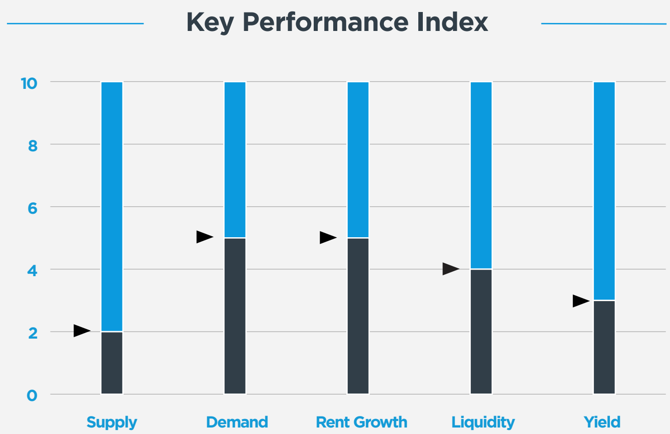
$402,300 *2022 median home price✣*

2023 Investment Outlook

Tampa-St. Petersburg has lower supply, demand and rent growth figures relative to last year, with the biggest drop coming in the demand segment. This indicates some near-term headwinds for the market, but it remains in good position longer term, fueled by net in-migration and job gains.

After grabbing an 8 on the liquidity portion of the 2022 Key Performance Index, that metric slips to a 4 this year. Buyer and seller disconnect, financing complications, vacancy decompression and natural disaster concerns will likely curtail transaction velocity in 2023.

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



2023 Market Forecast

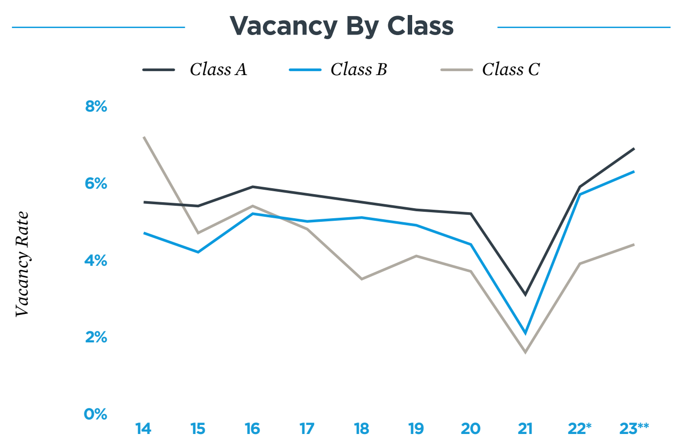
NMI Rank ▶ **5**

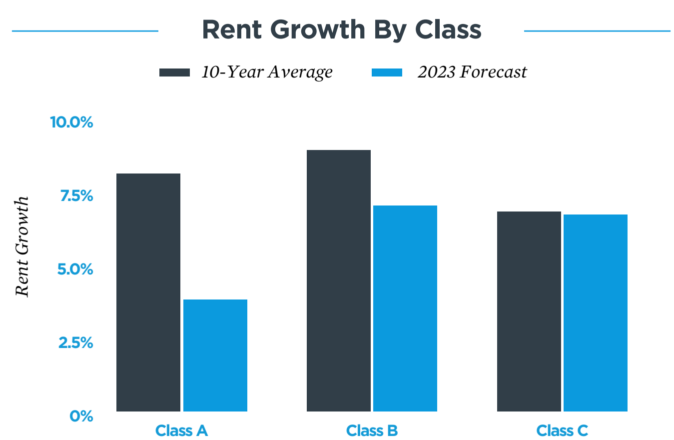
Employment
8,000 jobs
Metro **0.5%**
U.S. **0.5%**

Construction
as % of inventory❖
Metro **2.6%**
U.S. **2.1%**

Class A Vacancy
Up 100 bps
Metro **6.8%**
U.S. **6.1%**

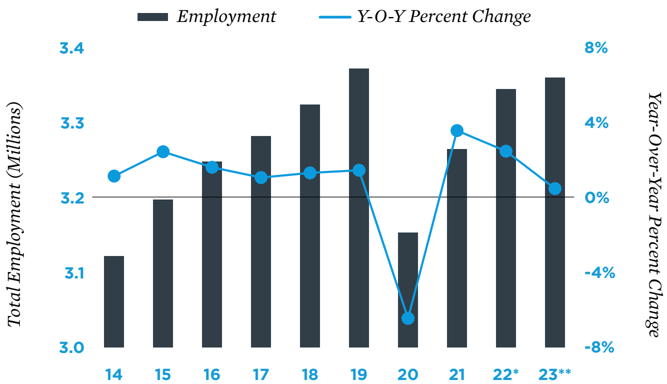
Class A Rent
$2,477 per month
Metro **3.8%**
U.S. **1.5%**



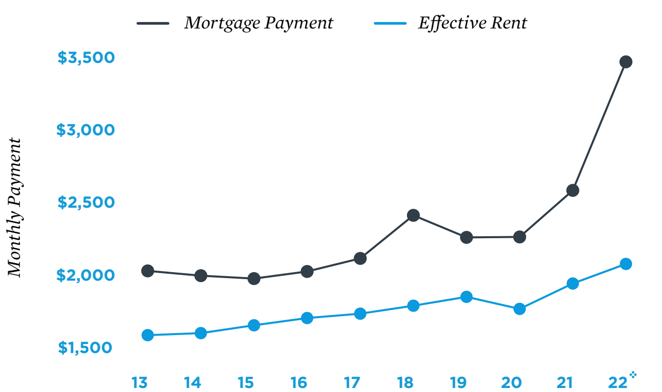


** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

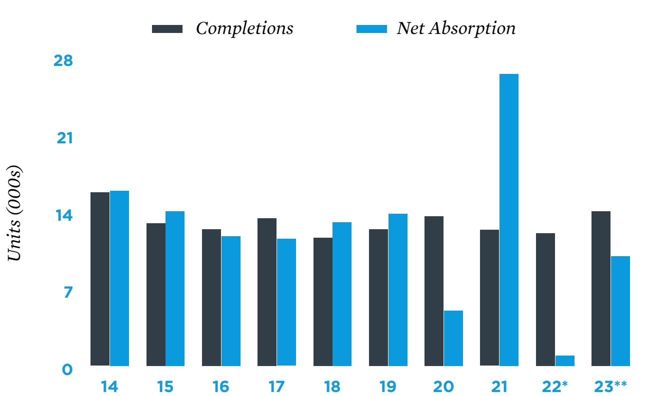
Employment Trends



Housing Affordability Gap



Supply and Demand



*Estimate ** Forecast ✣ Through 3Q
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

District's Strong Track Record Sustains Confidence, Despite Swift Building Pace

Growing economy spurs new development. Washington, D.C. continues to draw highly-educated young professionals, due to the diverse economic landscape that supports job prospects, despite a broad-based slowdown in growth and increased uncertainty this year. From 2012 to 2022, the population increased by roughly 500,000 residents, and projections indicate the market will gain an average of more than 35,000 new people per year over the next decade. Supporting this trend will be the new headquarter locations coming from firms like Boeing, Raytheon Technologies, RapidFlight and Pangiam. A robust talent pool and proximity to the federal government are key factors contributing to these relocations and expansions, which bode well for apartment demand long term. However, development has been ramping up in recent quarters and is approaching record levels, with roughly 35,000 units underway entering this year. Construction activity is most pronounced in areas proximate to prominent metro rail stations, while suburban locales in Prince William County, Prince George's County and Fredericksburg-Stafford will be less affected by new supply. Although renter demand remains strong, vacancy is expected to rise in the coming quarters as newly-delivered communities undergo the process of stabilization.

Long-term prospects keep institutions tuned in. D.C.'s unique employment base, which has been historically less impacted by economic downturns relative to other metros, is a major draw for multifamily institutions. Deal flow reached an all-time high in 2022, even amid elevated interest rates, highlighting the confidence investors have in the long-term demand drivers present in the market. Trading in the $20 million-plus range accounted for almost 40 percent of overall multifamily deal flow last year, reflecting the active role that institutions play in the local transaction market. Assets in affluent neighborhoods near public transit, like Tysons Corner, Alexandria, Arlington, Bethesda, Rosslyn, H Street-NoMa and Navy Yard, are top of mind for institutions willing to pay a premium. Development partnerships should also emerge given the sizable construction pipeline, especially in the Navy Yard-Capitol South and Northeast D.C. areas, where a combined excess of 8,500 rentals are underway. Exceptionally tight Class B availability in Southeast D.C. and North Arlington also warrant institutional attention.

20.8% *2022 share of local population between 20 and 34 years old*

46.3% *of local population hold bachelor's degree or higher⌘*

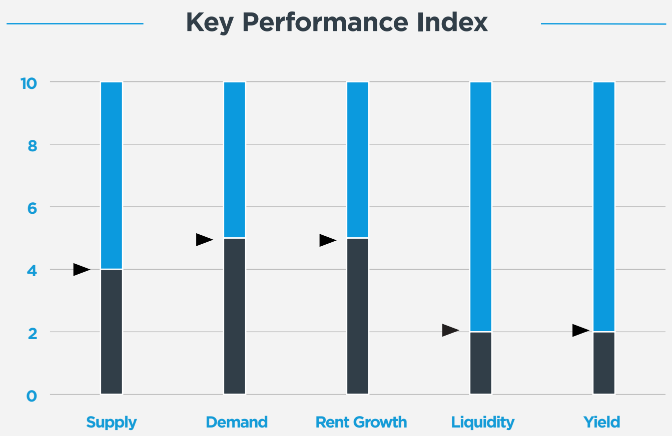
$579,100 *2022 median home price✣*

2023 Investment Outlook

Washington, D.C. has supply, demand and rent growth scores that all align with averages for the major markets in the Northeast region. Compared to its own metrics in the 2022 Index, the demand and rent growth figures are lower this year, while the supply figure held firm.

The metro's yield score of 2 is lowest in the Northeast this year, contributing to a relatively small liquidity ranking as tight cap rates amid higher interest rates make deals more difficult to complete. Nonetheless, the international prominence of the market will keep buyers tuned in.

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



2023 Market Forecast

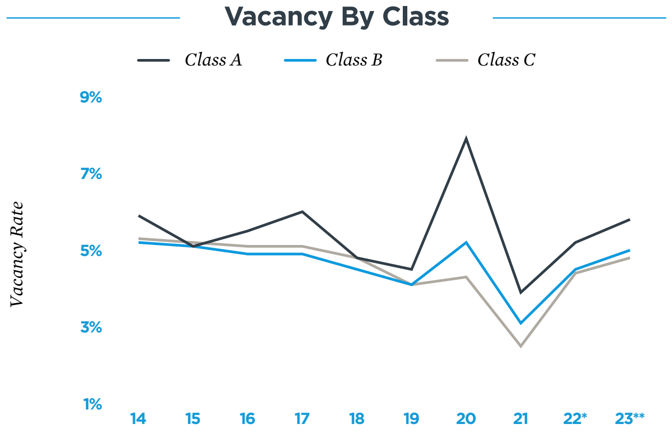
NMI Rank 21

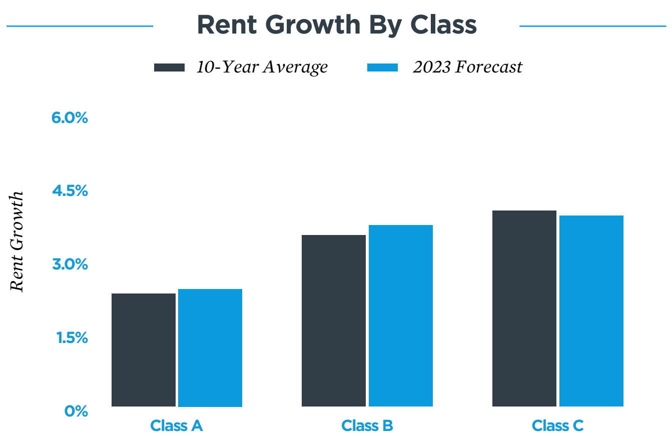
Employment *15,000 jobs* — *Metro* **0.4%** *U.S.* **0.5%**

Construction *as % of inventory*❖ — *Metro* **2.1%** *U.S.* **2.1%**

Class A Vacancy *Up 60 bps* — *Metro* **5.7%** *U.S.* **6.1%**

Class A Rent *$2,746 per month* — *Metro* **2.4%** *U.S.* **1.5%**





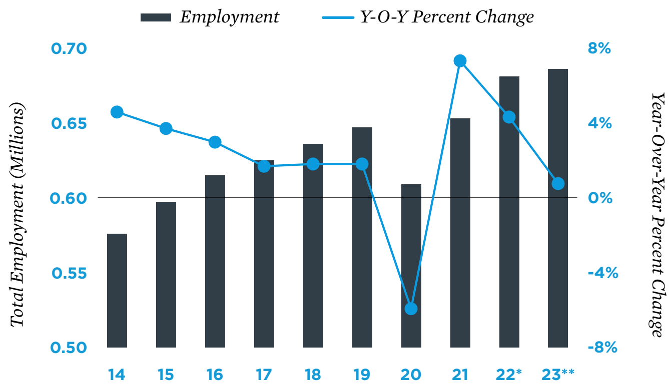
** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

Economic Development Incentives Bring in New Firms, Spurring Rapid Net In-Migration

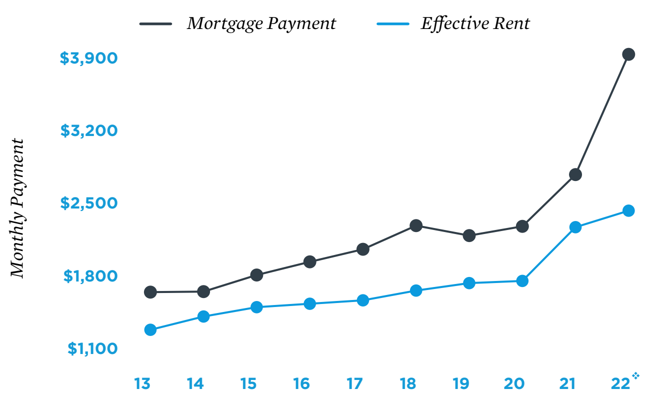
Influx of new residents drive unprecedented rent gains. Since 2019, West Palm Beach has led all major Southeast Florida markets in population growth, gaining more than 55,000 new residents. Initiatives from the Business Development Board of Palm Beach County encouraged new corporate relocations and expansions from firms like Citadel and KruseCom, which, in turn, strengthened in-migration to the region amid staff recruitment efforts. The recent surge in apartment demand tied to this employment activity sparked an unprecedented stretch of rent growth, with the average effective rate increasing by more than 40 percent since the onset of the pandemic. Leasing velocity slowed in response, as this rapid appreciation occurred during a time when consumers were tightening their budgets due to widespread inflation. Moving forward, market conditions will likely continue to soften in the near term, as a slowing economy is set to temper the rate of household formation. However, the metro's large renter-by-choice baby boomer population should provide a bit of stability during times of economic uncertainty. Additionally, the region's warm climate and favorable tax rates are expected to draw more young adults to the area. This will expand the local renter pool, helping bolster long-term apartment demand in the metro.

Despite recent strong performance, metro is under-tapped by institutions. Robust rent gains over the past two years have elevated investor interest for apartment assets in West Palm Beach, with transaction velocity rising above historical levels in 2022. Ascending interest rates also put a spotlight on the market, as the average first-year return is at least 30 basis points higher than any other major Florida metro. However, institutional-level activity remains relatively subdued in West Palm Beach compared to other markets in the region. Across 2021 and 2022, the market recorded at least 20 percent fewer $20 million-plus trades than either Miami-Dade or Fort Lauderdale. Nonetheless, trades in this segment across the past two years surpassed the metro's own 2017-2019 total, indicating local improvement. Higher-tier assets change hands most frequently in West Palm Beach proper and Boynton Beach, locales that could garner greater interest from active institutions moving forward, if the metro continues to attract corporate relocations. Entry costs for these luxury-tier properties generally exceed $350,000 per unit.

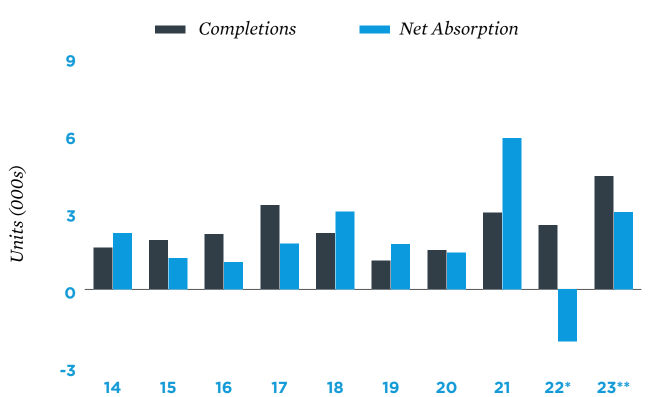
Employment Trends



Housing Affordability Gap



Supply and Demand



17.1% *2022 share of local population between 20 and 34 years old*

32.9% *of local population hold bachelor's degree or higher⌘*

$570,000 *2022 median home price✧*

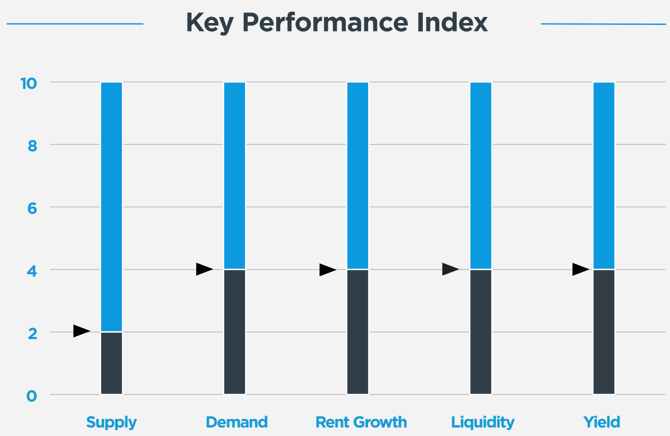
** Estimate ** Forecast ✧ Through 3Q*
⌘2022: 25+ years old
Sources: IPA Research Services; BLS; Freddie Mac; National Association of Realtors; RealPage, Inc.

2023 Investment Outlook

The market is projected to register a top 10 pace of both employment growth and household creation this year. Despite these positives, however, West Palm Beach has the lowest demand and rent growth figures among the three major southeast Florida markets.

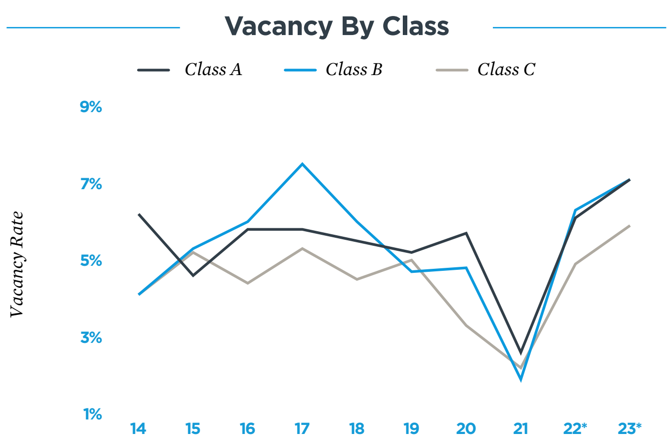
Liquidity sits at a 4 in the 2023 Key Performance Index, which is above Miami-Dade and Fort Lauderdale. The metro has the highest yield measure among these three southeast Florida markets, which helps facilitate deals during a higher interest rate climate.

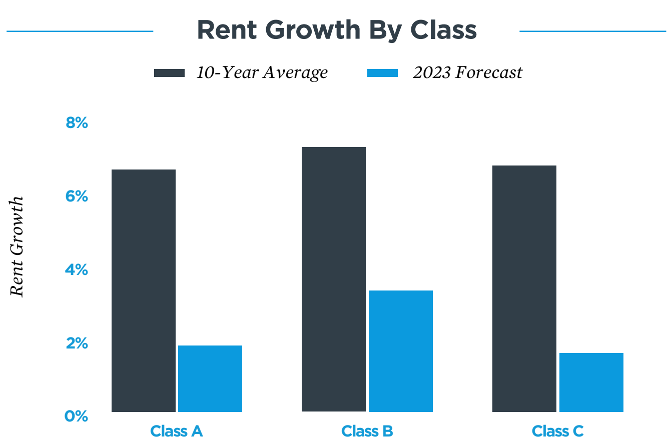
Note: The Key Performance Index provides a metro-level relational benchmark scaled from 1-10 for five key metrics.



2023 Market Forecast

NMI Rank		9
Employment *5,000 jobs*		*Metro* 0.7% *U.S.* 0.5%
Construction *as % of inventory*❖		*Metro* 3.5% *U.S.* 2.1%
Class A Vacancy *Up 100 bps*		*Metro* 7.0% *U.S.* 6.1%
Class A Rent *$3,012 per month*		*Metro* 1.8% *U.S.* 1.5%





** Estimate ** Forecast*
❖ Arrow reflects completions trend compared with 2022
Sources: IPA Research Services; CoStar Group, Inc.; RealPage, Inc.; Real Capital Analytics

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Luke Murphy | *Research Analyst*

Chris Ngo | *Data Analyst II*

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[1]National Multifamily Index Note: Employment and apartment data forecasts for 2023 are based on the most up-to-date information available as of December 2022 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 December2022. 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 December 2022 and represent estimates of future performance. Sales data includes transactions valued at $1,000,000 and greater unless otherwise noted. 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: Sources: IPA Research Services; American Health Care Association; Austin Chamber of Commerce; Blue Yonder; Centers for Disease Control and Prevention; Centers for Medicare & Medicaid Services; CoStar Group, Inc.; Creditintell; Economy.com; Employment and Training Administration; Experian; Federal Reserve; Freddie Mac; Global Business Travel Association; Kastle Systems; Google Community Mobility Reports; Harvard Joint Centers for Housing Studies; John Burns Real Estate Consulting; major U.S. port authorities; McKinsey & Company; Moody's Analytics; Mortgage Bankers Association; National Association of Realtors; National Center for Health Statistics; Nareit; New York Times; NMHC; Oxford Economics; Philips; Placer.ai; Primary Care Collective; Real Capital Analytics; RealPage, Inc.; Small Business Administration; Standard & Poor's; The Conference Board; The Larry A. Green Center; Thomasnet; Trepp; U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics; U.S. Bureau of Transportation Statistics; U.S. Census Bureau; U.S. Department of Education; U.S. Department of Labor: U.S. Transport Security Administration; U.S. Travel Association

2023 U.S. MULTIFAMILY INVESTMENT FORECAST

	Employment[2]				Completions[2]				Class A Vacancy[2]				Class A Rent[2]				Share of Sales Volume (15M+)[2]			
	2020	2021	2022*	2023**	2020	2021	2022*	2023**	2020	2021	2022*	2023**	2020	2021	2022*	2023**	2020	2021	2022*	
Atlanta	-4.7%	5.7%	4.0%	0.5%	13,248	8,890	9,500	14,000	5.5%	3.5%	5.6%	6.2%	$1,623	$1,963	$2,111	$2,163	90%	96%	96%	Atlanta
Austin	-2.1%	8.9%	3.8%	0.8%	10,112	11,297	14,900	18,000	7.3%	3.8%	6.0%	7.1%	$1,642	$2,057	$2,221	$2,285	92%	96%	96%	Austin
Baltimore	-7.0%	4.1%	2.7%	0.4%	3,287	1,803	900	2,400	4.6%	2.8%	5.0%	5.7%	$1,801	$2,059	$2,158	$2,188	92%	95%	94%	Baltimore
Boston	-8.4%	5.6%	2.9%	-0.4%	9,300	6,081	7,500	11,000	7.0%	3.2%	4.5%	6.2%	$3,068	$3,473	$3,760	$3,797	82%	77%	85%	Boston
Chicago	-8.0%	5.6%	2.6%	0.5%	8,394	6,952	5,900	8,000	8.8%	4.5%	4.8%	5.8%	$2,140	$2,383	$2,624	$2,713	56%	69%	73%	Chicago
Cincinnati	-5.2%	2.5%	0.3%	-0.3%	2,231	992	2,400	4,000	5.4%	2.2%	4.1%	5.9%	$1,458	$1,581	$1,772	$1,816	43%	46%	31%	Cincinnati
Cleveland	-6.4%	2.4%	2.4%	-0.3%	1,383	878	1,100	1,200	6.2%	3.9%	5.1%	6.3%	$1,420	$1,686	$1,842	$1,850	27%	56%	58%	Cleveland
Columbus	-4.0%	2.5%	1.8%	0.2%	4,140	5,283	3,000	5,000	6.4%	3.1%	4.6%	6.3%	$1,333	$1,473	$1,641	$1,664	76%	83%	77%	Columbus
Dallas-Fort Worth	-3.0%	6.4%	5.0%	0.7%	26,137	28,049	20,000	25,000	6.2%	3.2%	5.4%	6.3%	$1,437	$1,697	$1,883	$1,928	90%	95%	95%	Dallas-Fort Worth
Denver	-6.1%	6.1%	2.9%	-0.3%	7,905	6,905	8,800	11,000	6.4%	3.6%	5.8%	6.7%	$1,785	$2,078	$2,237	$2,290	86%	87%	84%	Denver
Fort Lauderdale	-6.7%	5.8%	3.7%	0.9%	4,090	4,100	3,100	6,000	5.9%	2.6%	5.9%	6.5%	$2,002	$2,659	$2,947	$3,052	86%	86%	82%	Fort Lauderdale
Houston	-5.8%	5.1%	5.1%	0.6%	19,379	16,719	15,700	16,800	8.3%	4.1%	6.3%	7.8%	$1,442	$1,650	$1,786	$1,834	91%	95%	96%	Houston
Los Angeles	-10.4%	7.9%	2.4%	0.3%	10,918	9,469	11,000	18,000	6.0%	3.1%	5.0%	6.1%	$2,931	$3,282	$3,562	$3,645	28%	51%	54%	Los Angeles
Miami-Dade	-7.7%	6.6%	6.2%	0.9%	7,891	6,038	6,600	8,800	7.4%	2.5%	5.0%	6.3%	$2,111	$2,713	$3,154	$3,266	69%	79%	79%	Miami-Dade
Minneapolis-St. Paul	-8.3%	4.5%	2.6%	-0.6%	8,008	9,265	9,000	8,000	7.1%	4.7%	6.2%	7.0%	$1,713	$1,744	$1,864	$1,940	72%	69%	79%	Minneapolis-St. Paul
Nashville	-2.5%	4.9%	4.5%	0.2%	5,321	5,990	8,100	13,600	7.4%	3.4%	6.0%	8.2%	$1,648	$1,917	$2,100	$2,154	92%	95%	94%	Nashville
New Haven-Fairfield County	-6.4%	3.5%	1.3%	-0.5%	1,490	1,884	2,700	1,850	5.9%	2.7%	5.2%	5.8%	$2,492	$2,757	$2,936	$3,004	78%	88%	83%	New Haven-Fairfield County
New York City	-12.3%	6.8%	4.1%	0.9%	18,432	20,530	21,000	19,000	6.3%	4.8%	4.7%	5.1%	$4,121	$4,449	$4,589	$4,667	57%	47%	66%	New York City
Northern New Jersey	-8.5%	5.6%	3.3%	0.5%	10,503	10,535	10,500	12,000	12.1%	7.7%	5.4%	6.4%	$2,660	$2,974	$3,225	$3,234	67%	61%	67%	Northern New Jersey
Oakland	-8.9%	5.9%	3.2%	0.7%	4,131	3,265	4,000	3,600	6.0%	3.9%	5.2%	5.6%	$2,752	$2,976	$3,211	$3,277	57%	75%	73%	Oakland
Orange County	-9.1%	5.8%	2.8%	-0.6%	2,615	2,432	3,000	4,200	3.6%	1.7%	3.6%	4.5%	$2,374	$2,885	$3,105	$3,155	61%	72%	79%	Orange County
Orlando	-9.0%	8.6%	3.8%	0.6%	7,361	9,972	6,000	9,200	5.8%	3.0%	5.4%	6.1%	$1,472	$1,889	$2,155	$2,235	97%	98%	98%	Orlando
Phoenix	-2.9%	4.5%	3.6%	-0.2%	8,545	10,905	12,500	16,000	4.2%	2.8%	6.7%	8.3%	$1,467	$1,897	$1,954	$1,997	87%	92%	93%	Phoenix
Portland	-8.7%	6.3%	4.2%	-0.3%	5,991	6,815	2,900	5,000	7.7%	4.0%	5.2%	5.8%	$1,657	$1,803	$1,967	$2,010	61%	77%	74%	Portland
Raleigh	-1.3%	4.3%	5.0%	0.7%	6,260	4,406	5,900	11,200	5.6%	3.2%	5.6%	8.4%	$1,471	$1,716	$1,912	$1,948	95%	95%	96%	Raleigh
Riverside-San Bernardino	-4.1%	5.9%	4.4%	0.3%	1,710	1,330	1,100	2,700	2.2%	2.0%	4.9%	6.2%	$2,037	$2,471	$2,614	$2,688	77%	82%	86%	Riverside-San Bernardino
San Antonio	-4.5%	4.5%	3.1%	0.5%	5,670	4,774	2,800	6,000	6.8%	3.3%	6.5%	8.0%	$1,229	$1,478	$1,577	$1,595	83%	92%	94%	San Antonio
San Diego	-9.1%	8.0%	3.2%	0.4%	3,202	4,279	3,400	5,600	4.0%	1.9%	3.7%	4.8%	$2,421	$2,869	$3,261	$3,322	51%	63%	69%	San Diego
San Francisco	-12.2%	7.9%	4.5%	0.7%	4,338	4,543	1,600	2,600	18.5%	12.2%	9.6%	9.7%	$3,154	$3,630	$3,755	$3,798	41%	45%	51%	San Francisco
San Jose	-8.0%	5.9%	4.2%	-0.3%	4,339	3,475	4,000	2,300	7.6%	4.0%	4.3%	4.5%	$3,076	$3,329	$3,746	$3,824	75%	59%	75%	San Jose
Seattle-Tacoma	-7.6%	5.2%	3.7%	0.6%	7,601	8,537	10,500	11,100	7.6%	4.2%	5.2%	6.3%	$2,108	$2,307	$2,474	$2,541	74%	84%	82%	Seattle-Tacoma
Tampa-St. Petersburg	-2.8%	5.1%	4.0%	0.5%	4,570	6,107	6,200	7,000	5.1%	3.0%	5.8%	6.8%	$1,673	$2,151	$2,387	$2,477	91%	89%	90%	Tampa-St. Petersburg
Washington, D.C.	-6.5%	3.6%	2.5%	0.4%	13,541	12,299	12,000	14,000	7.8%	3.8%	5.1%	5.7%	$2,319	$2,494	$2,681	$2,746	95%	95%	96%	Washington, D.C.
West Palm Beach	-6.0%	7.3%	4.3%	0.7%	1,526	2,977	2,500	4,400	5.6%	2.5%	6.0%	7.0%	$2,382	$2,808	$2,958	$3,012	84%	92%	91%	West Palm Beach
United States	**-6.1%**	**4.7%**	**3.0%**	**0.5%**	**347,171**	**345,664**	**370,000**	**400,000**	**5.5%**	**3.0%**	**5.1%**	**6.1%**	**$1,779**	**$2,052**	**$2,233**	**$2,266**	**73%**	**81%**	**82%**	**United States**

** Estimate ** Forecast*

[2] See Statistical Note on Page 80

CONNECTING THE RIGHT **INVESTORS** WITH THE RIGHT **OPPORTUNITIES**

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

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