2Q23

United States Multifamily Capital Markets Report

Market Observations

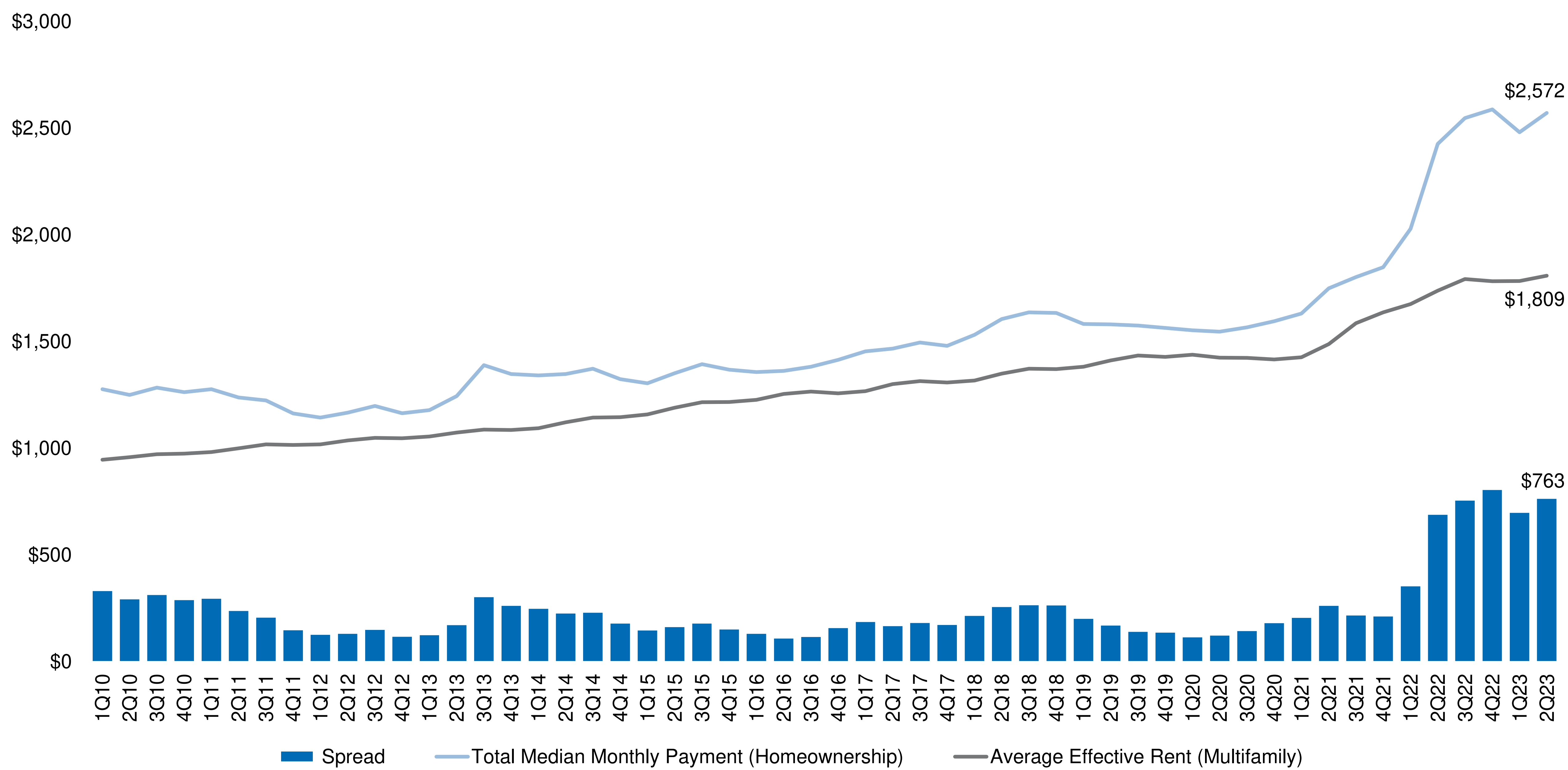
- **Absorption in the first half of 2023 surged to 98,429 units**, with an increase of 83,449 units in the second quarter of 2023. This nearly quadruples the absorption seen in the first half of 2022. **Demand is anticipated to continue accelerating in the second half of 2023 and first half of 2024.**
- With a **record-breaking 198,806 units already delivered in the first half of 2023, total deliveries for full-year 2023 is expected to surge 51.1% year-over-year.** Deliveries are also projected to drastically increase in the second half of 2023 through 2025. Despite this, limited debt availability for new construction should normalize new units delivered in 2026-2028.
- In the four quarters ended 2Q23, the median market saw inventory growth by 2.0%. Only 10 markets out of 150 experienced inventory growth of 5.0% or greater. This is about change. **Over the next four quarters, the median market's inventory is set to grow by 3.2%, including 28 markets with inventory growth of 5.0% or greater.**
- As most markets experience heightened new deliveries between 2023 and 2025, historical annual averages suggest that some markets may be slower to absorb than others. However, despite the heavy supply pipeline anticipated in 2023-2025, absorption in 40 of the top 50 markets is forecasted to outpace the 2018-2022 historical annual average.
- For the first time in three quarters, **multifamily experienced positive effective rent growth quarter-over-quarter** in the second quarter of 2023. Nonetheless, y**ear-over-year effective rent growth continued to slow** and is now below the long-term average. While the year-over-year effective rent growth decreased for each of the top 50 markets compared to with the second quarter of 2022, Midwestern markets experienced significantly less drawdown. As a result, **Midwestern markets made up six of the top ten markets with the greatest year-over-year effective rent growth.**
- Multifamily **expenses increased 8.3% year-over-year, led by a 28.6% surge in insurance costs**. While insurance growth rose nearly 30%, management and other expenses also saw double-digit year-over-year increases, putting a strain on landlords.
- Multifamily origination volumes were the lowest since 2014. **Multifamily origination volumes have been decelerating since March 2022.** Activity recovered from an especially weak January/February 2023 but has been range-bound since.
- **GSE share of multifamily finance has increased sharply in 2023.** The bank and financial (debt fund) shares of lending declined in the first half of 2023, though both remain above their respective pre-pandemic share. Non-agency securitized lending, meanwhile, has continued to contract.
- **Price dislocation and an elevated interest rate environment continues to hinder the investment sales market**, as evidenced by **the 71.8% year-over-year decline to $28.2 billion in quarterly sales volume**. Allocation to major markets have experienced a 7.2% increase from year-end 2022. While major markets have ticked up in the first half of 2023, non-major markets continue to attract the bulk of volume.
- Following the first Federal Reserve rate hike in March 2022, cap rates for deals greater than $75 million bottomed in the second quarter of 2022, while deals under $75 million bottomed in the third quarter of 2022. The **$75-million and greater deals also have experienced the largest expansion in transaction cap rates**.

Demand Drivers

Renting Remains Meaningfully More Economical than Homeownership

Increasing 8.7% from the first quarter of 2023, the spread between homeownership and rental costs grew to $763 in the second quarter of 2023. Driven by an increase in home prices and record-level interest rates, renting continues to be significantly more economical than owning a home.

Cost of Homeownership Compared to Renting



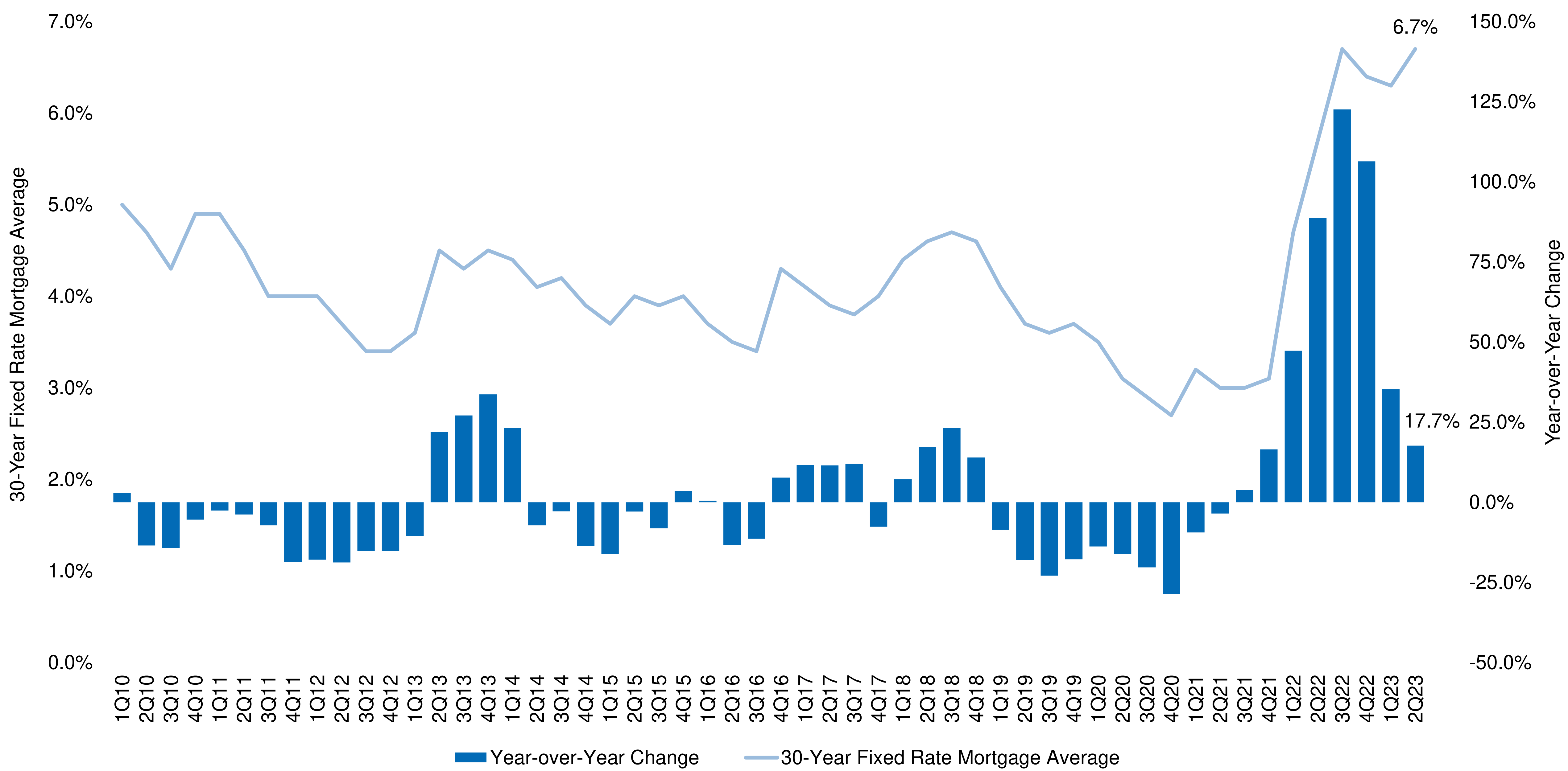
Source: Newmark Research, Atlanta Federal Reserve, RealPage

** Total Monthly Median Home Payments include P&I, Taxes, Insurance and PMI.*

As Rates Rise, Single Family Buyer Pool Shrinks, Benefitting Demand for Multifamily

Despite a deceleration in year-over-year growth, the 30-year fixed rate mortgage average still increased 17.7% between the second quarter of 2022 and 2023. These elevated interest rates continue to force potential home buyers to seek rental solutions.

30-Year Fixed Rate Mortgage Average

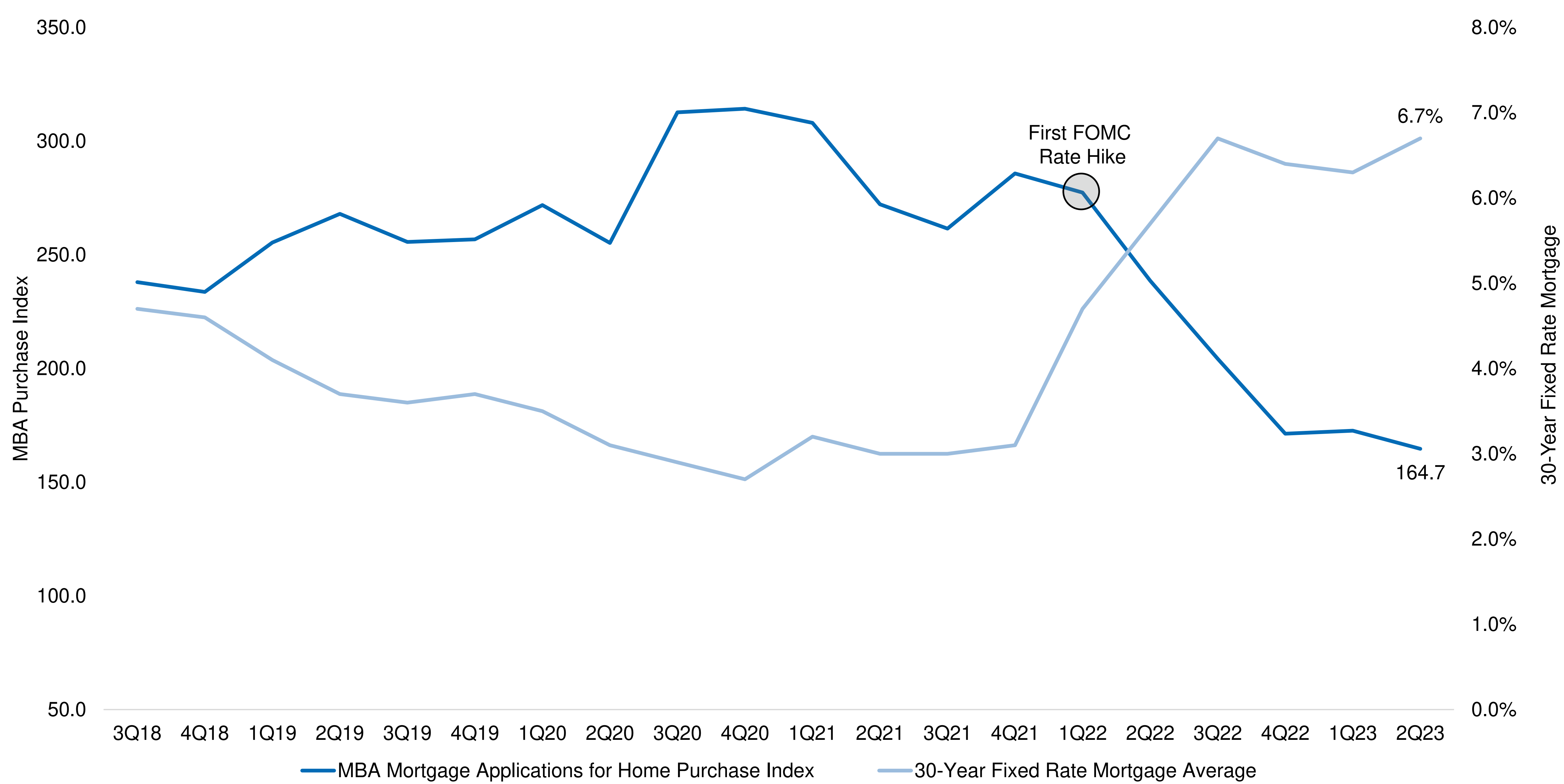


Source: Newmark Research, Federal Reserve Bank of St. Louis, Freddie Mac

Purchase Applications Plummet to 5 Year Low as Mortgage Rates Stabilize above 6%

As the Federal Reserve started increasing interest rates in the first quarter of 2022, many potential home buyers are no longer in the market to purchase. With high interest rates continuing through the second quarter of 2023, the home purchase mortgage applications index fell to a 5-year low.

MBA Mortgage Applications for Home Purchase Index

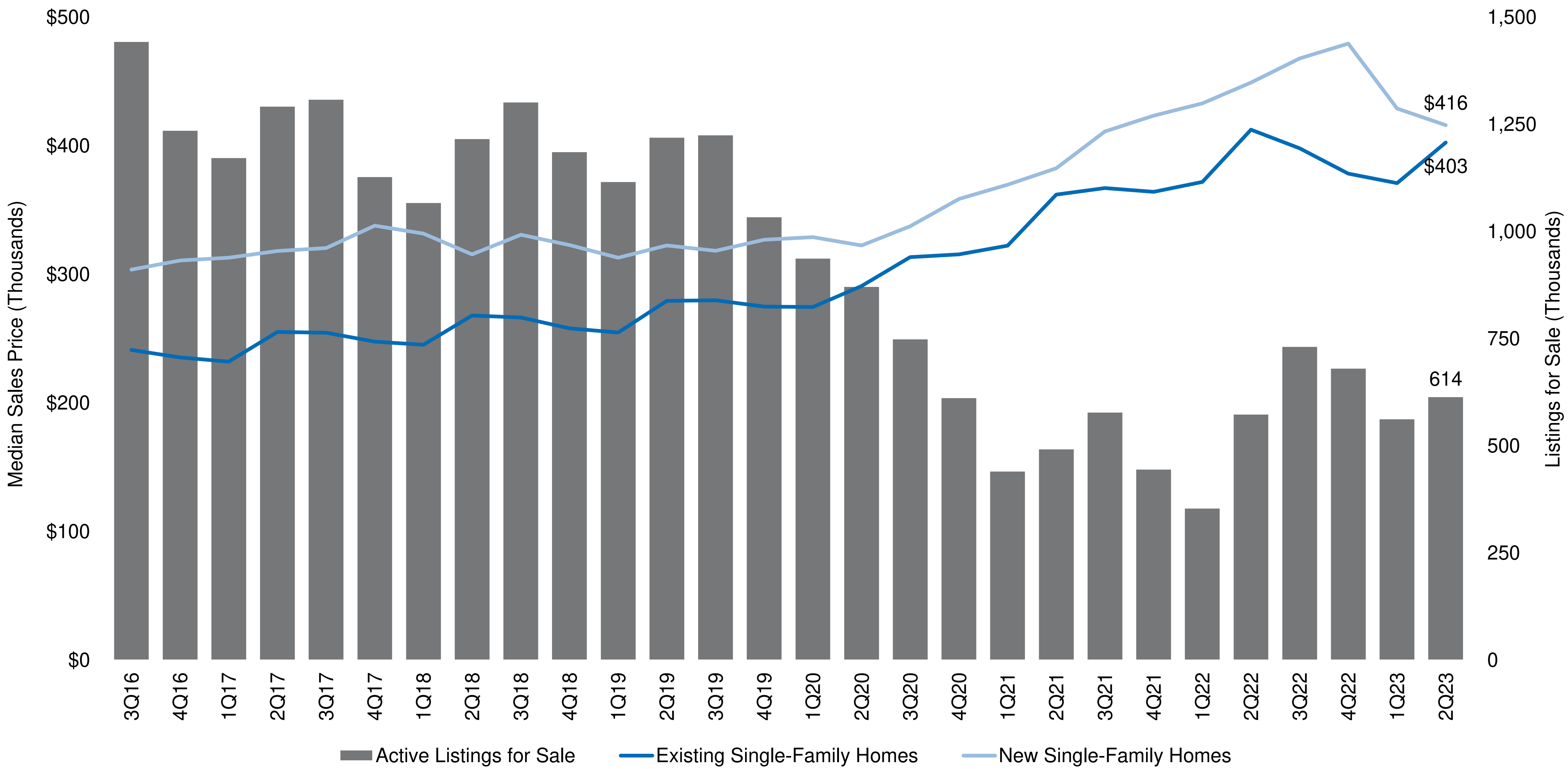


Source: Newmark Research, Federal Reserve Bank of St. Louis, Moody's Analytics, Mortgage Bankers Association, Freddie Mac

New and Existing Homes near Convergence as Low Inventories Contribute to Frenzy

New single-family home prices are down 13.2% in the first half of 2023, resulting in the smallest price difference between new and existing single-family homes in the last seven years.

Median Sales Price and Housing Inventory

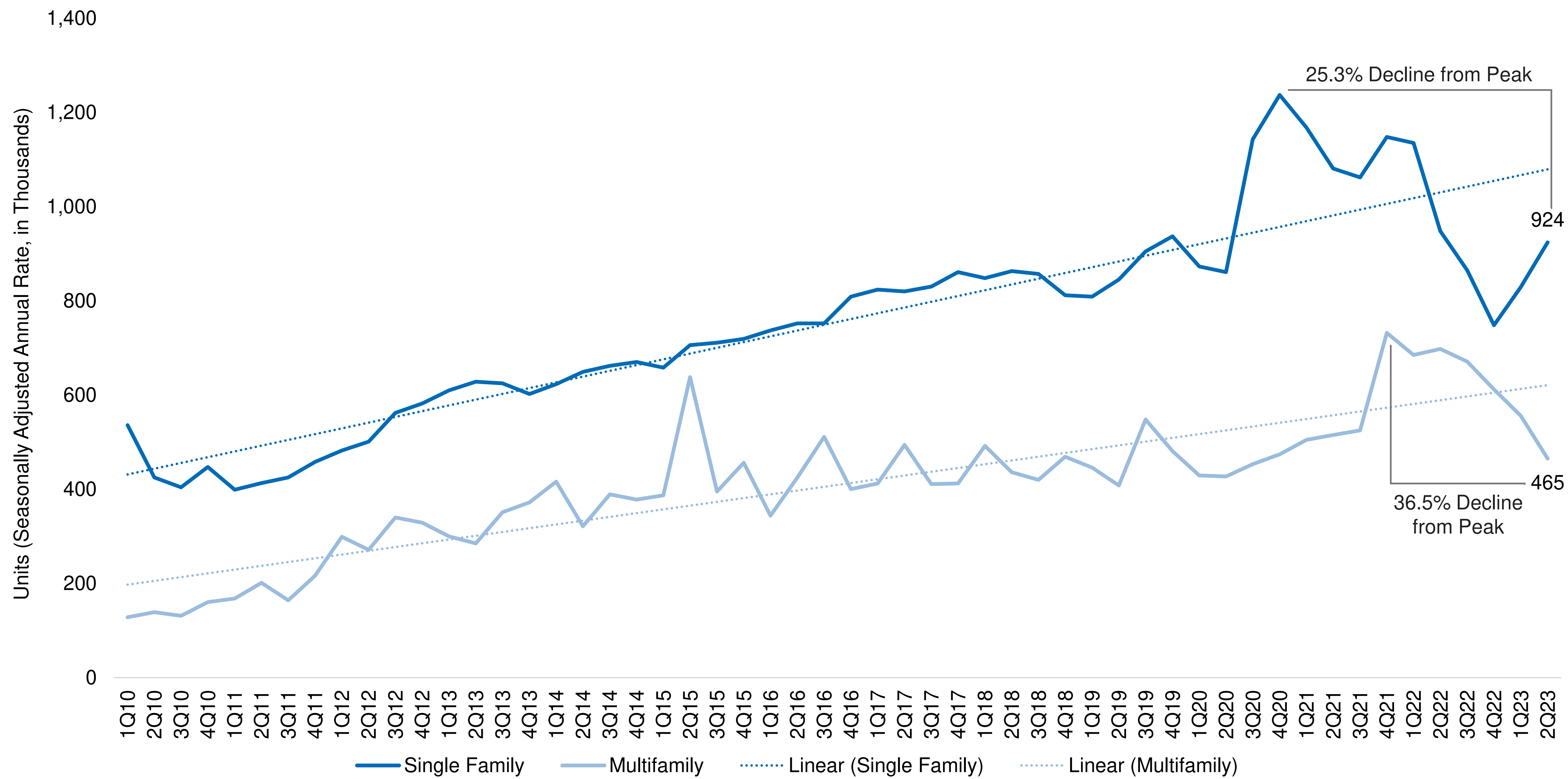


Source: Newmark Research, Federal Reserve Bank of St. Louis, Realtor.com, National Association of Realtors, U.S. Census Bureau

Despite Near-Term Inventory Growth, Housing Likely to Tighten as Permitting Slows

As banks curtail their lending, multifamily properties have experienced a substantial pullback in access to capital. As a result, permitting declined 33.4% year-over-year. While the number of single-family permits issued increased 11.5% quarter-over-quarter, the single-family permitting has dipped below the long-term trend.

New Privately-Owned Housing Units Authorized in Permit-Issuing Places

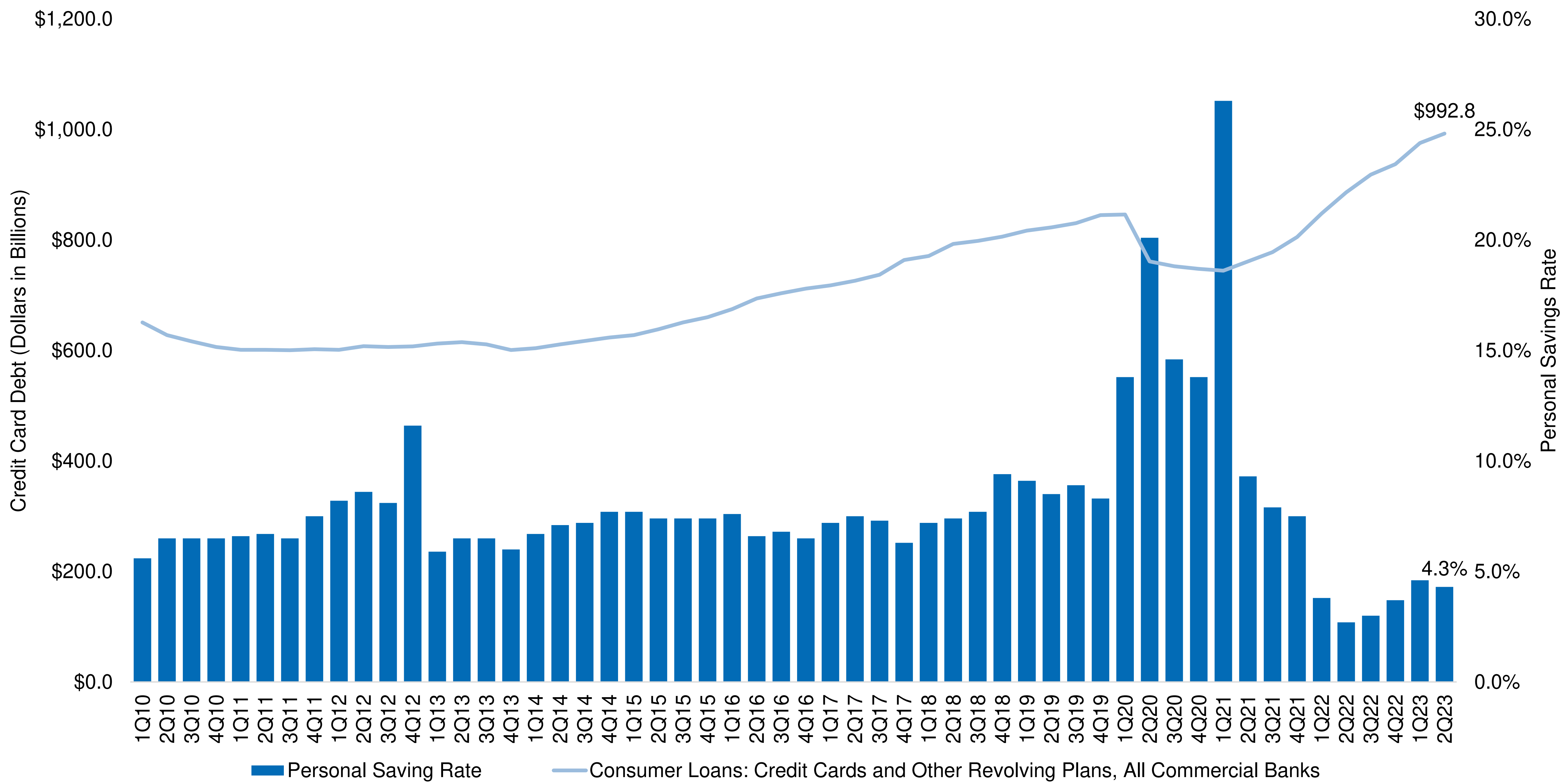


Source: Newmark Research, Federal Reserve Bank of St. Louis, U.S. Census Bureau

Consumers Have More Debt and Less Savings, Adding to Inability to Buy Homes

Credit card debt in the US continues to reach all-time highs with each passing quarter, as the national savings rate remains significantly below the long-term average. This financial stress on consumers further increases the burden of buying a home.

Credit Card Debt and Personal Savings

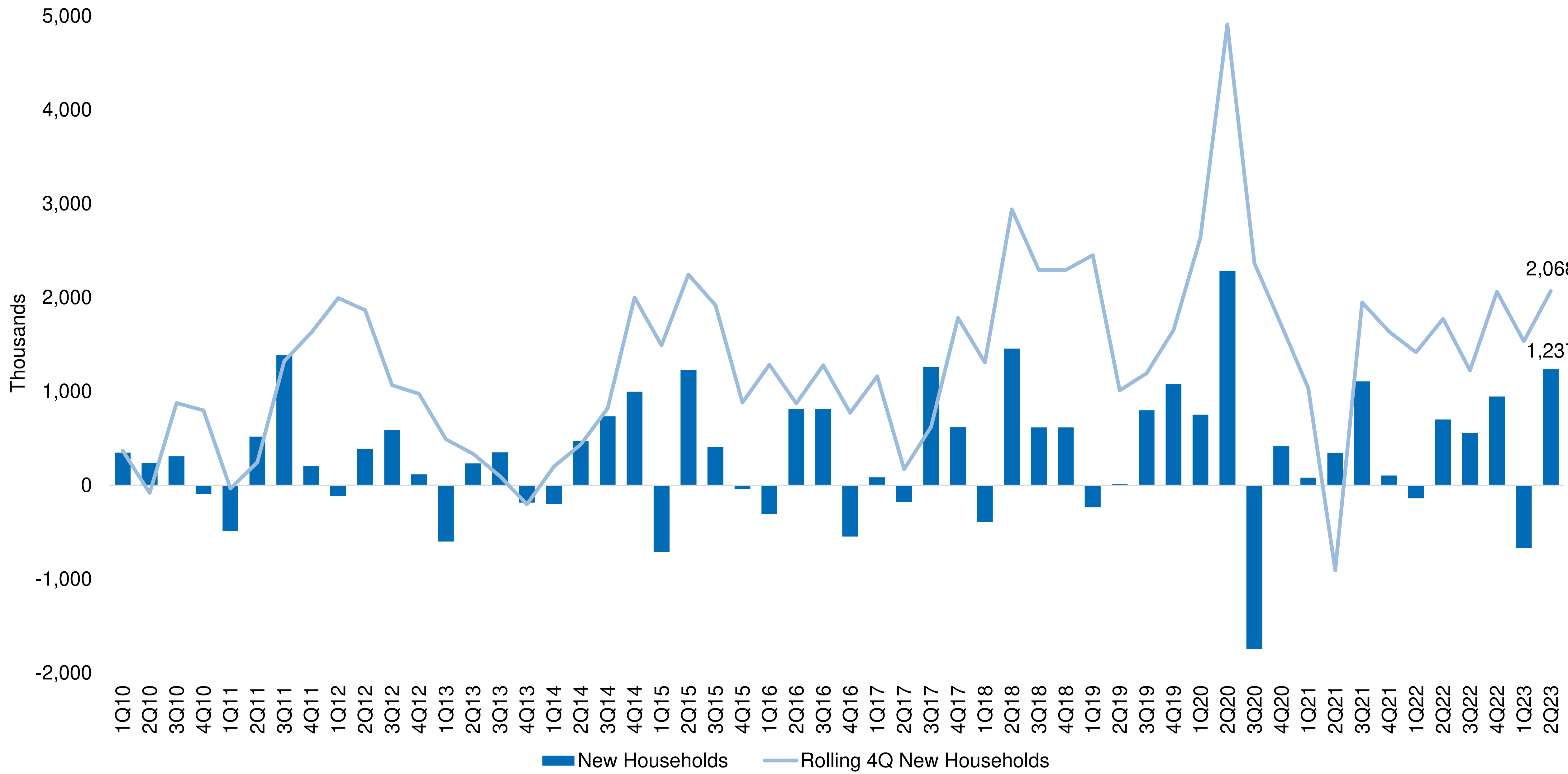


Source: Newmark Research, Federal Reserve Bank of St. Louis, U.S. Bureau of Economic Analysis, Board of Governors of the Federal Reserve System

Household Formation Reaches Post-COVID Highs, Contributing to Secular Trend

The number of households in the U.S. increased by 2.1 million year-over-year in the second quarter of 2023. Households rose by 1.2 million in 2Q23 alone, offsetting a seasonal contraction in the first. Household formation is thus trending upwards and running consistently above the pre-pandemic average, which should support housing demand.

Household Formation

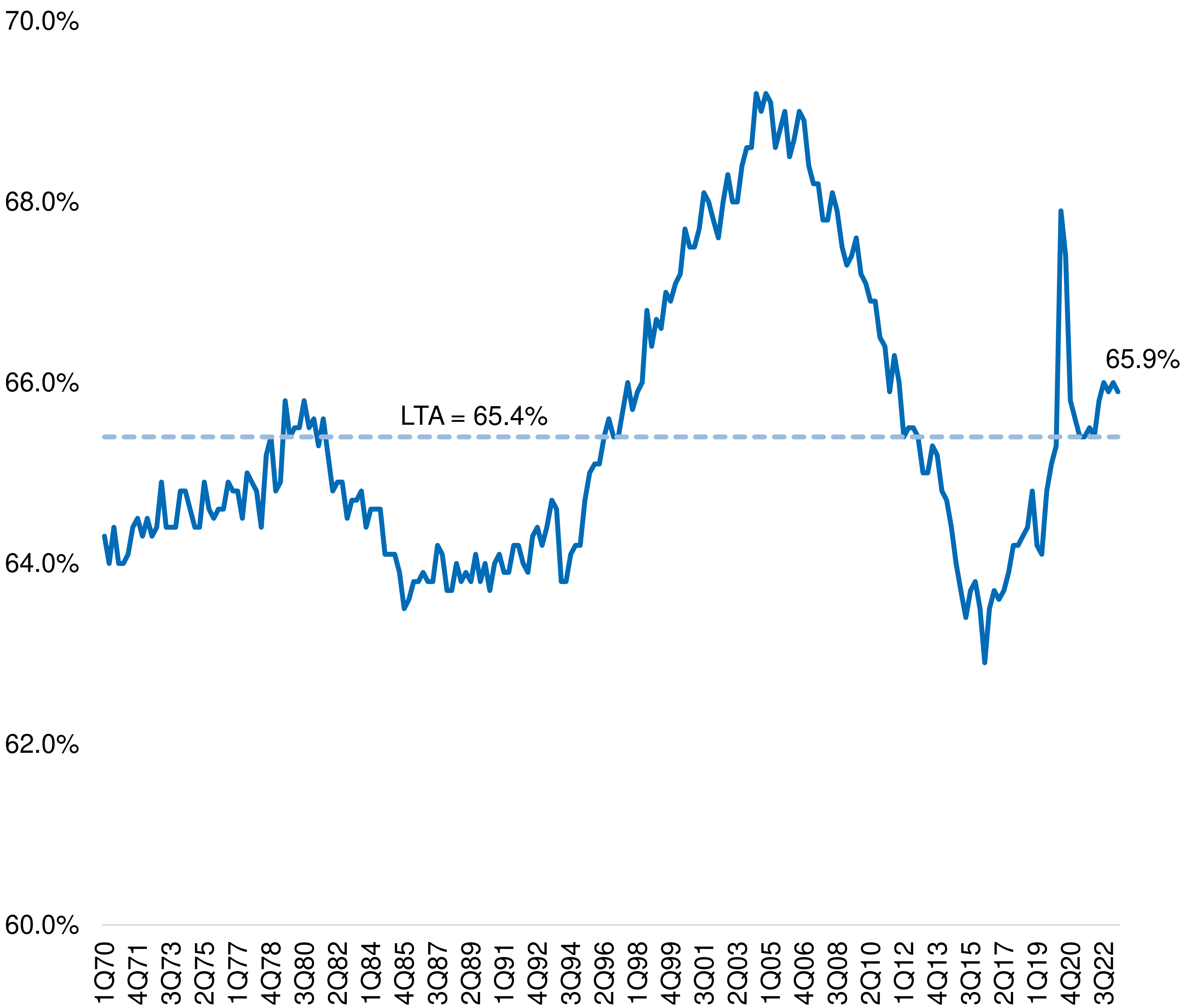


Source: Newmark Research, Federal Reserve Bank of St. Louis, U.S. Census Bureau

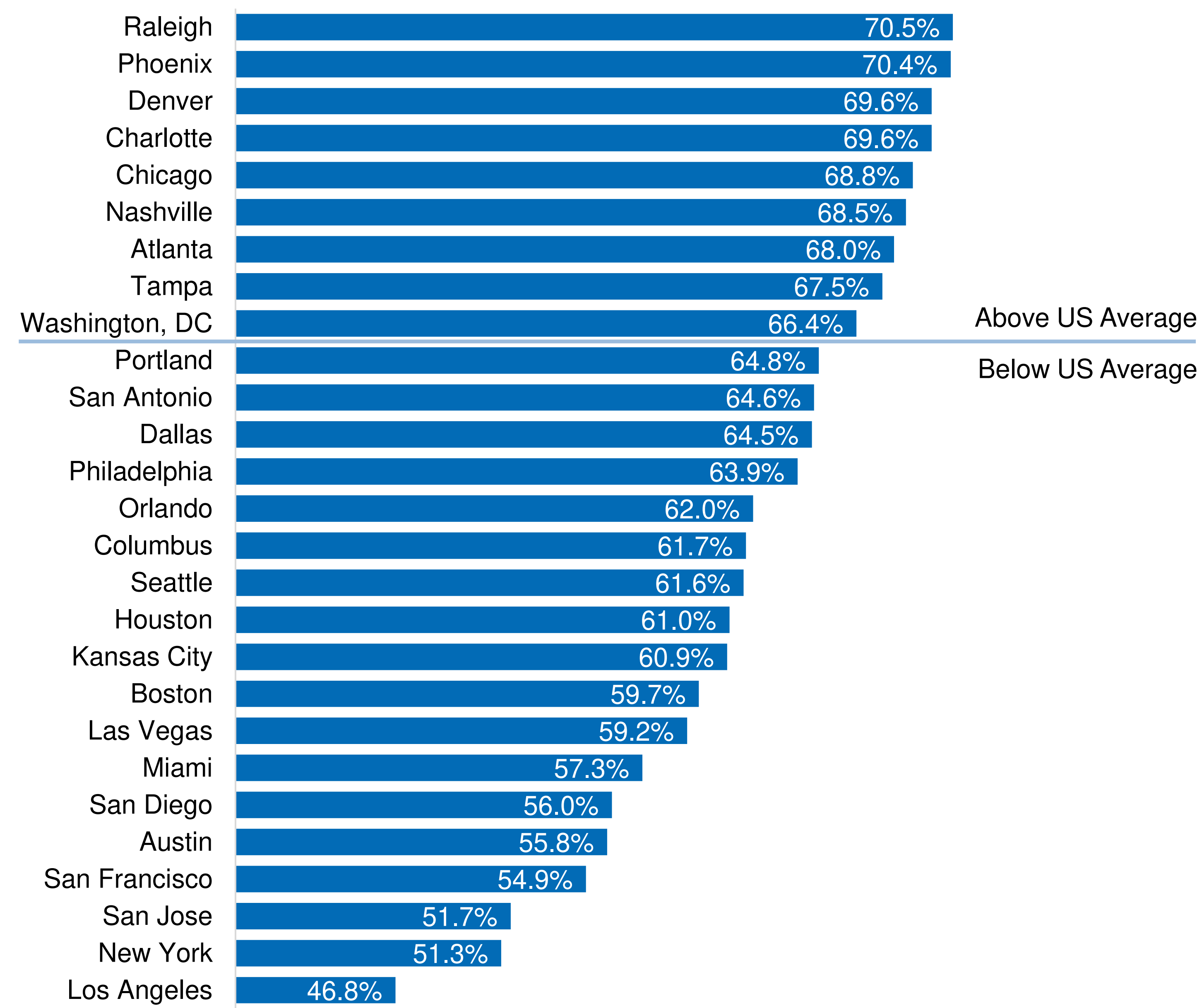
Homeownership Rate Increased YOY, but Largest Markets Have Deep Pool of Renters

Despite national homeownership rates increasing year-over-year, most of the largest markets in the U.S. have rates well below the national average. These markets include New York, Los Angeles, Houston, Dallas, San Francisco and Miami.

US Homeownership Rate



Select Primary Markets

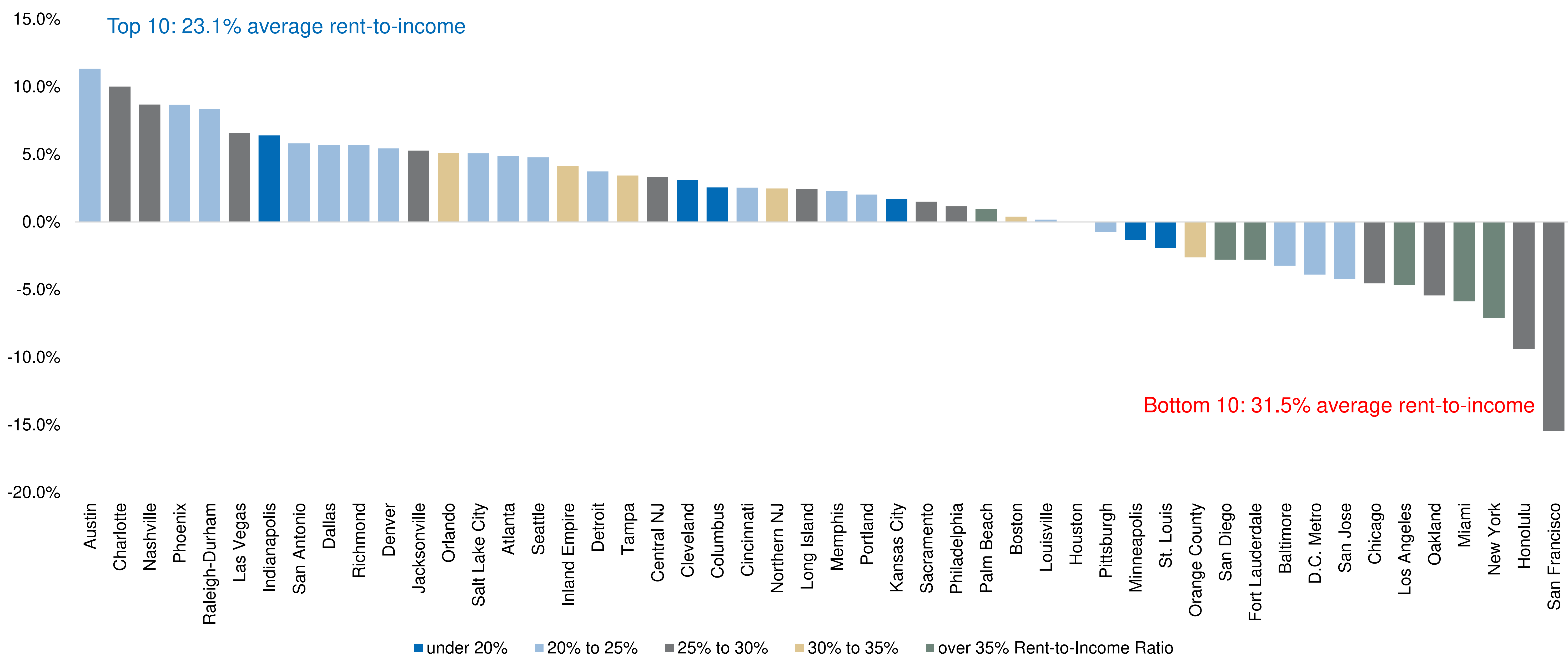


Source: Newmark Research, Federal Reserve Bank of St. Louis, United States Census Bureau

Prime Renter Cohort Migrating to Lower Cost of Living Markets

Prime renters between the ages of 25 to 34 are increasingly migrating out of markets with high costs of living such as New York, San Francisco and Los Angeles. Instead, they are opting for lower cost of living growth markets including Austin, Charlotte and Raleigh-Durham.

Prime Renter Population Growth: 2018 to 2022*



Source: Newmark Research, Green Street Advisors
*Prime renter refers to those aged 25 to 34.

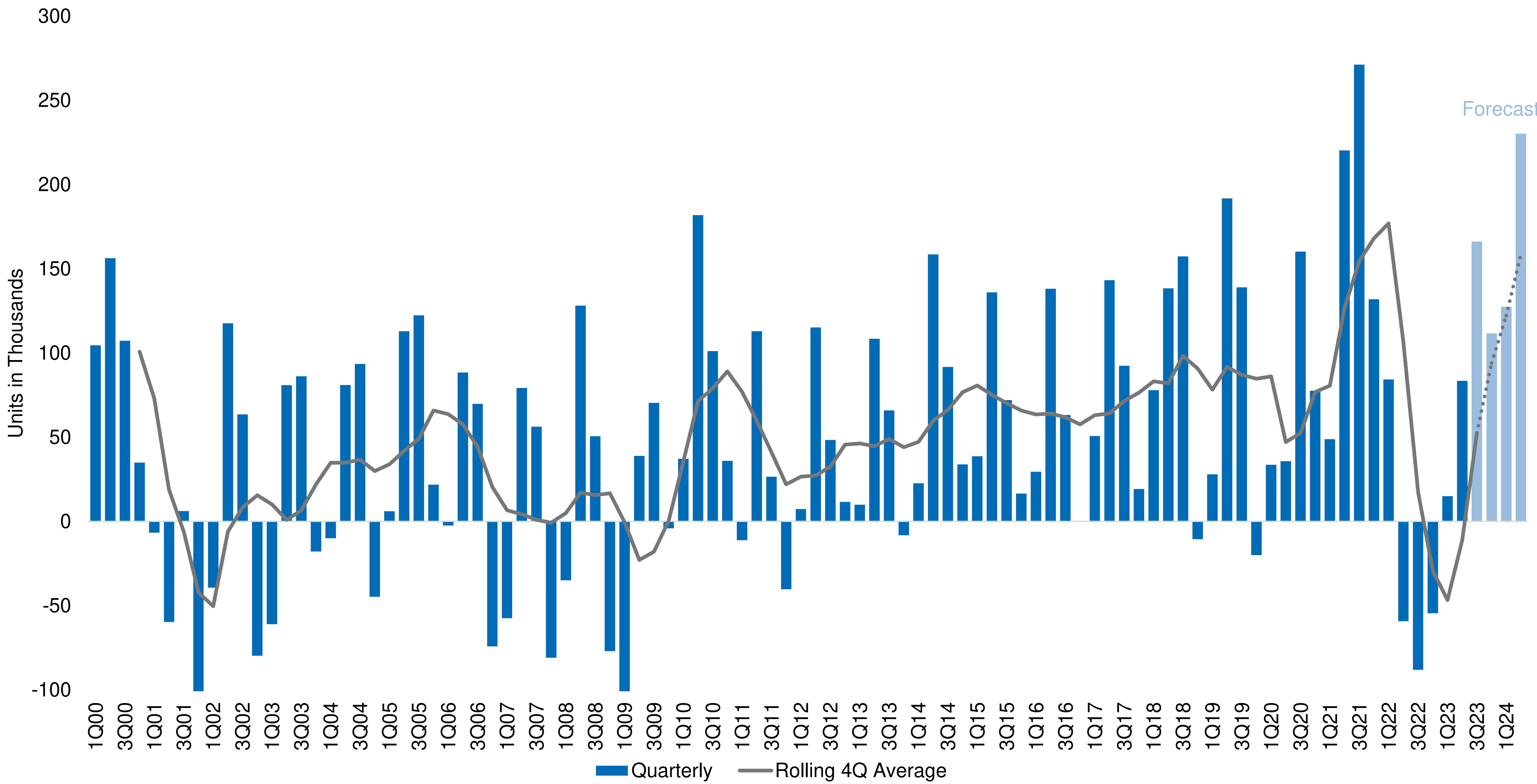
2Q23 US MULTIFAMILY CAPITAL MARKETS REPORT

Leasing Market

Absorption Accelerated in 2Q23, Demand Expected to Strengthen in 2H23 and 1H24

Absorption in the first half of 2023 surged to 98,429 units, with an increase of 83,449 units in the second quarter of 2023. This nearly quadruples the absorption seen in the first half of 2022. Demand is anticipated to continue accelerating in the second half of 2023 and first half of 2024.

Quarterly Demand

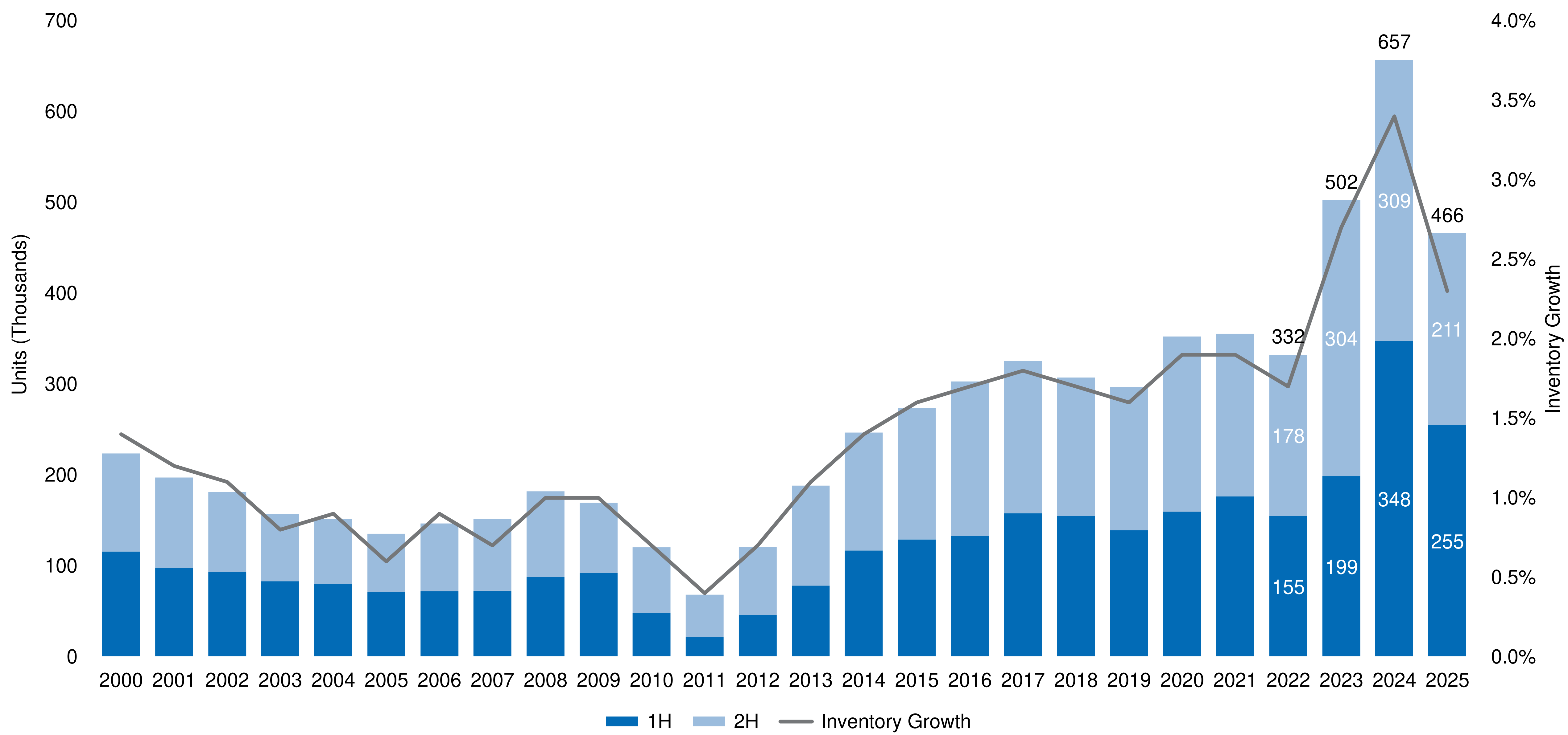


Source: Newmark Research, RealPage

Record-Breaking First Half Deliveries with Uptick Anticipated in 2H23 through 2025

With a record-breaking 198,806 units already delivered in the first half of 2023, total deliveries for full-year 2023 is expected to surge 51.1% year-over-year. Deliveries are also projected to drastically increase in the second half of 2023 through 2025. Despite this, limited debt availability for new construction should normalize new units delivered in 2026-2028.

New Supply and Inventory Growth

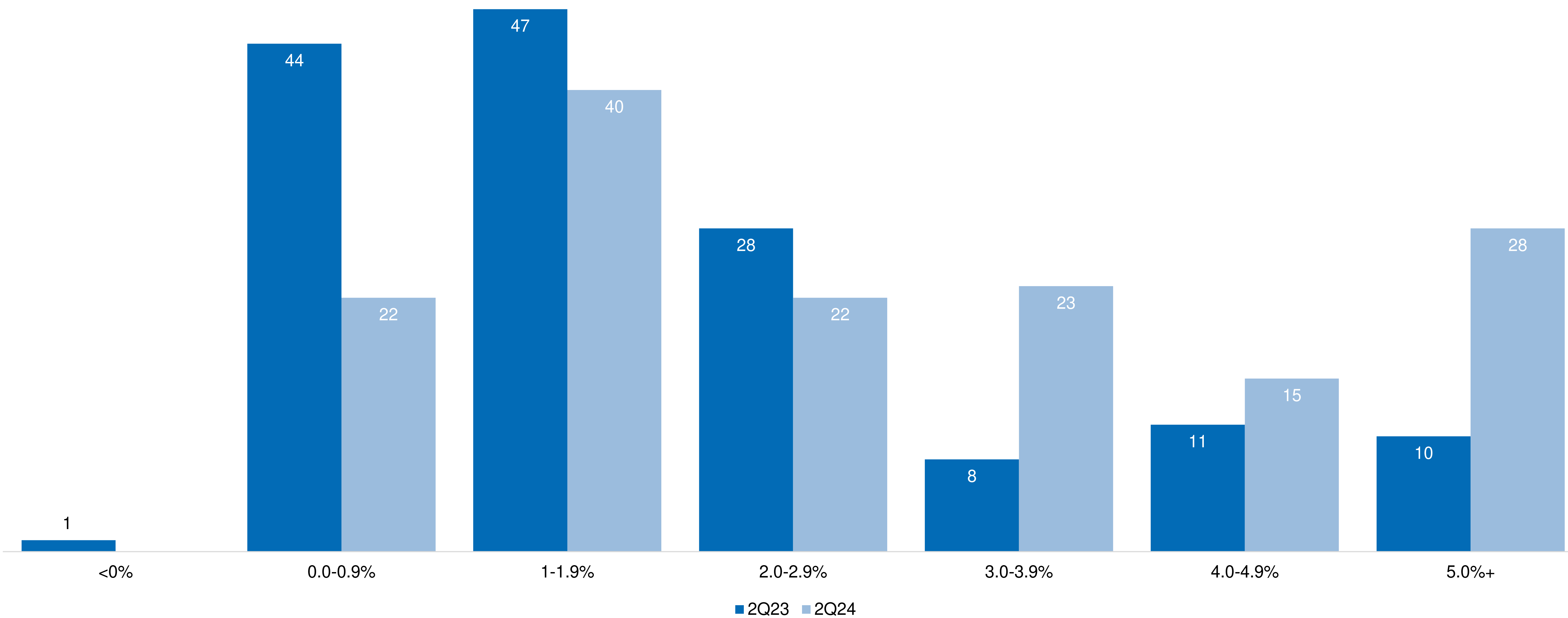


Source: Newmark Research, RealPage

Inventory Growth to Swell over Next 12 Months

In the four quarters ended 2Q23, the median market saw inventory growth by 2.0%. Only 10 markets out of 150 experienced inventory growth of 5.0% or greater. This is about change. Over the next four quarters, the median market's inventory is set to grow by 3.2%, including 28 markets with inventory growth of 5.0% or greater.

Rolling Four Quarter Inventory Growth (Top 150 Markets)

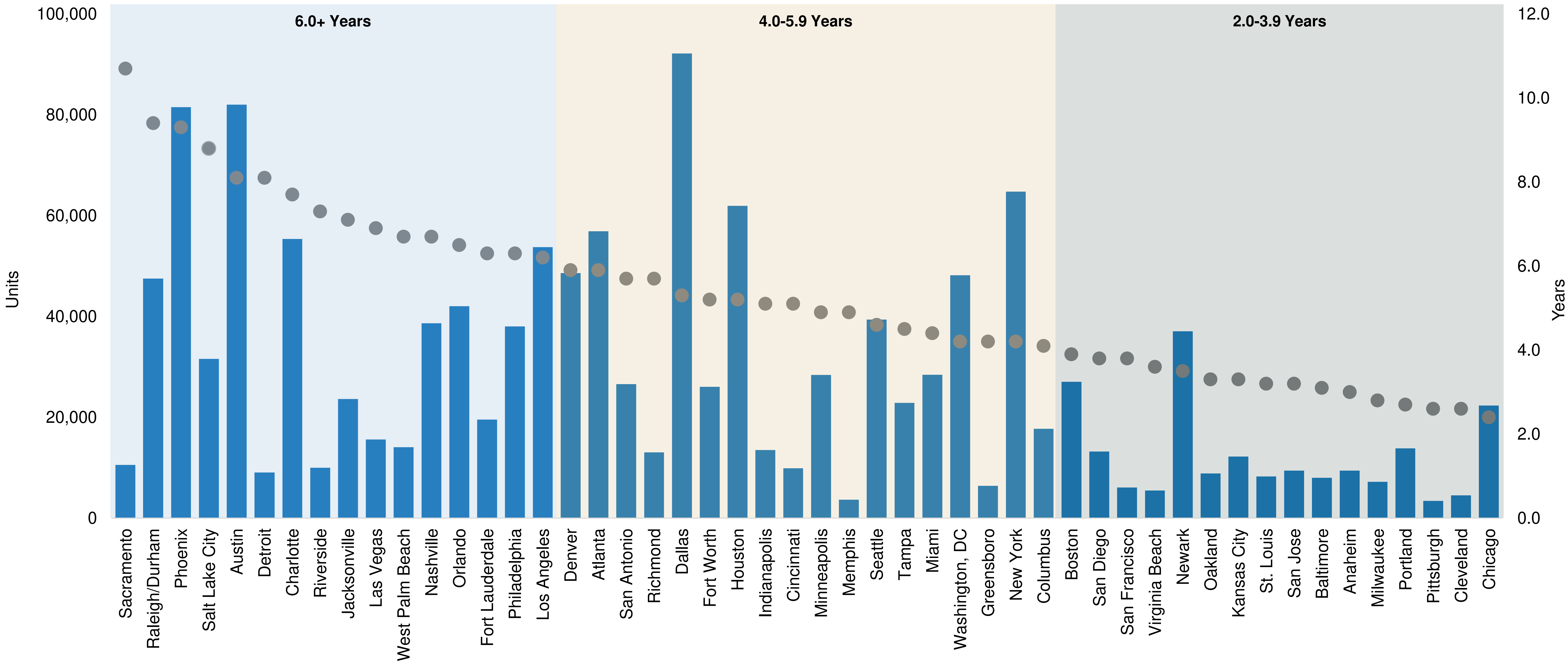


Source: Newmark Research, RealPage

Historical Averages Suggest Absorbing the Wave of Supply Will Take Several Years

As most markets experience heightened new deliveries between 2023 and 2025, historical annual averages suggest that some markets may be slower to absorb than others.

2023-2025 New Supply (Top 50 Markets)



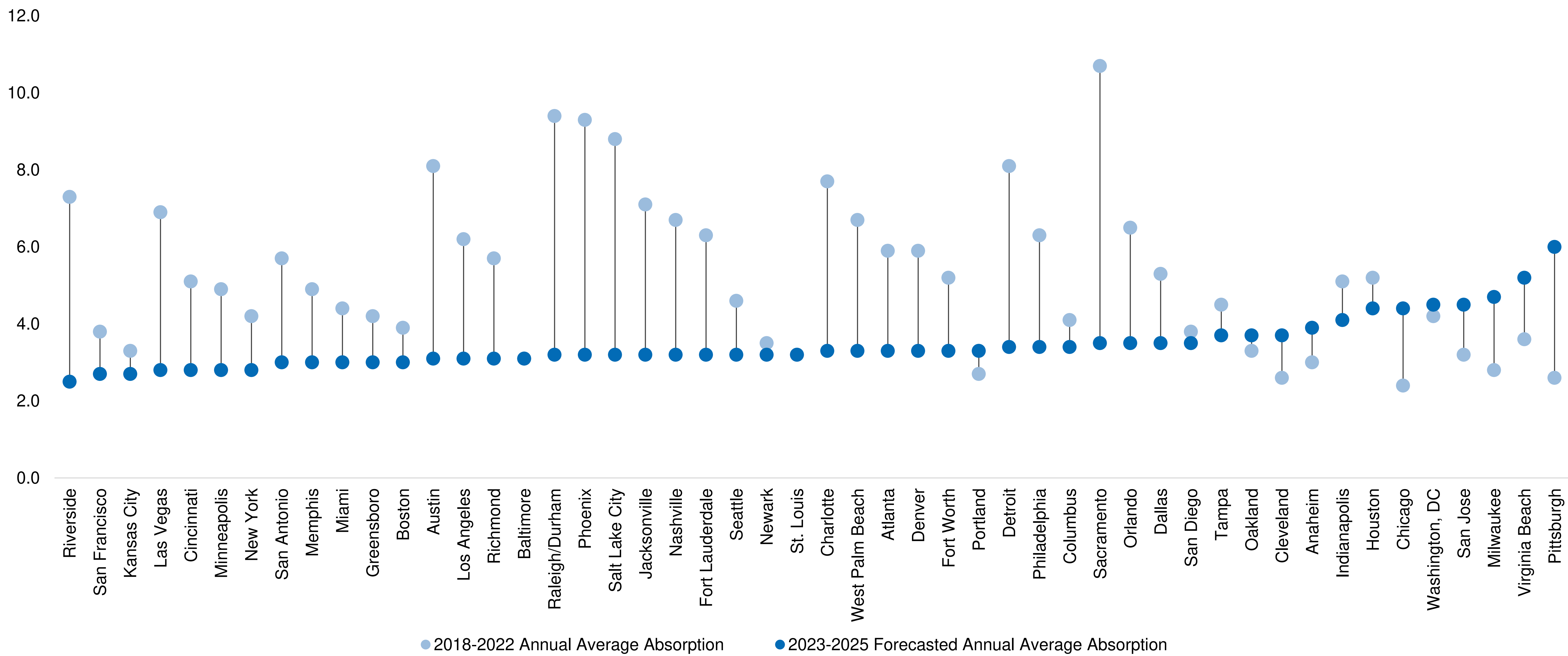
Source: Newmark Research, RealPage

**Years to absorb methodology is based on annual average absorption from 2018-2022.*

Unless Markets Deliver on Historically High Absorption Forecasts

Despite the heavy supply pipeline anticipated in 2023-2025, absorption in 40 of the top 50 markets is forecasted to outpace the 2018-2022 historical annual average. Select growth markets such as Austin, Charlotte, Raleigh/Durham and Phoenix are expected to see the pace of absorption increase 2-3 times faster than historical norms in 2023-2025.

Historical vs. Forecasted Years to Absorb 2023-2025 New Supply (Top 50 Markets)

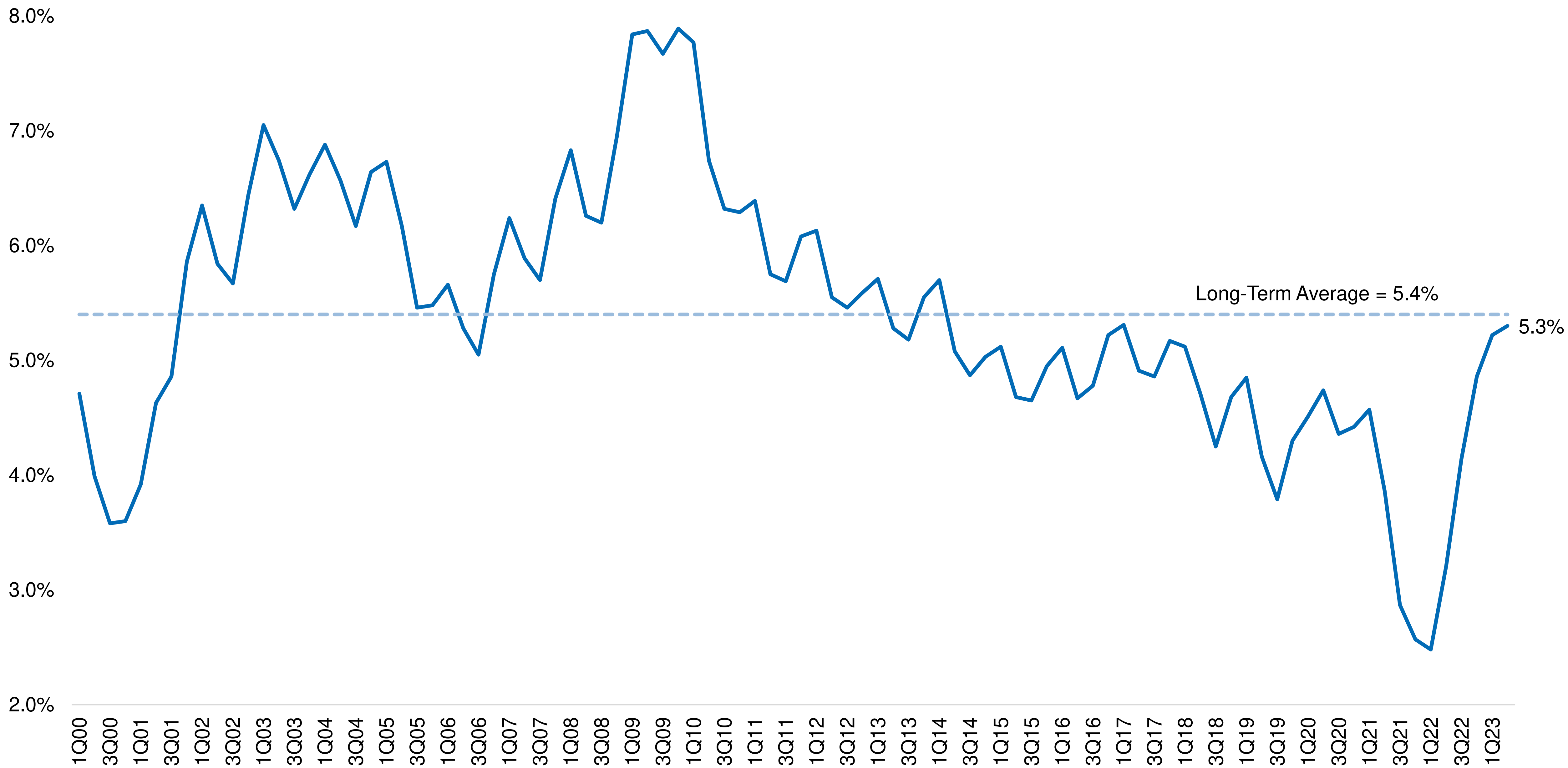


Source: Newmark Research, RealPage

Vacancies Increased 210 BPS Year-over-Year, Near Long-Term Average

In the wake of record-breaking new deliveries in the first half of 2023, national vacancy rates surged to 5.3%. This drastic increase nears vacancy rates not seen since before 2014.

Quarterly Vacancy Rate

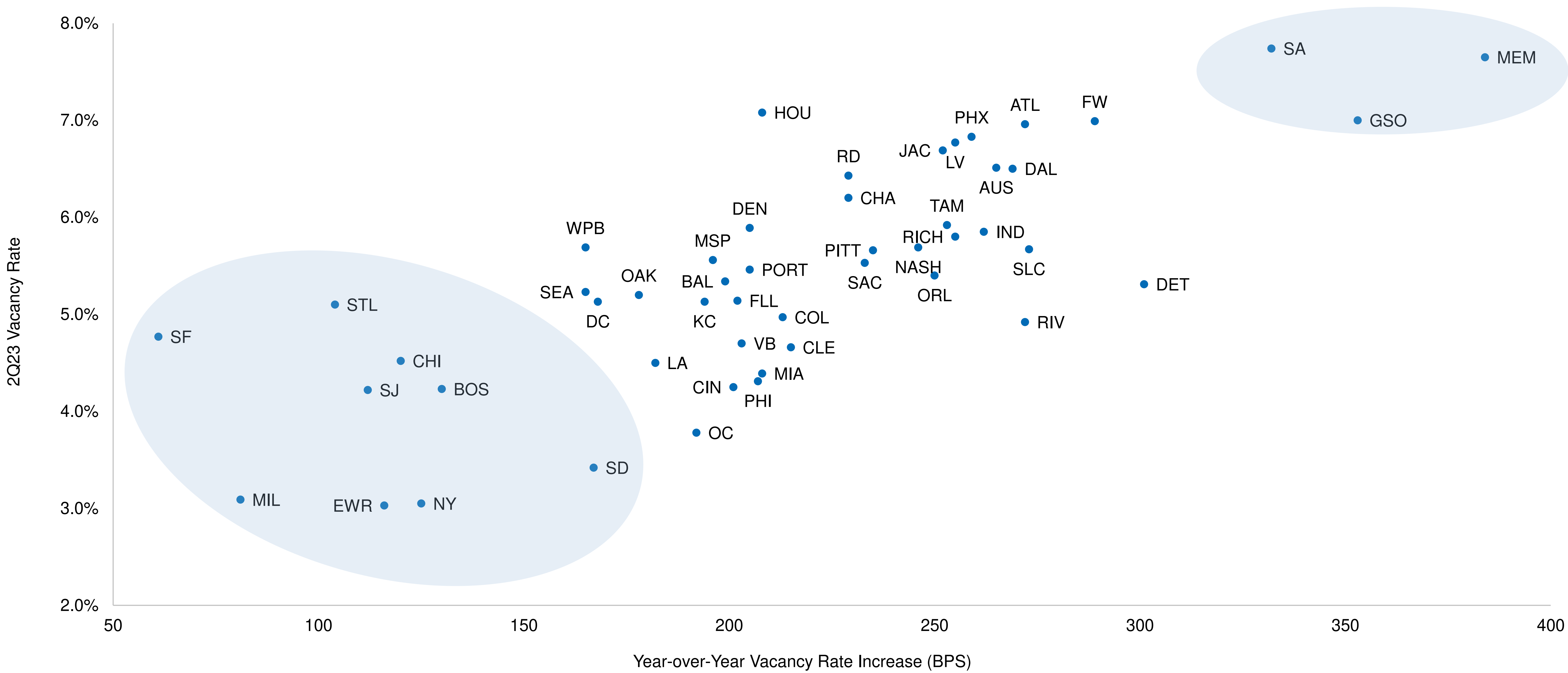


Source: Newmark Research, RealPage

Midwest and Major Markets Exhibiting Less Vacancy Downside

While all markets experienced an increase in year-over-year vacancy rates, several Midwest and major markets were more resilient to this uptick. Conversely, there has been a substantial year-over-year vacancy rate increase in several markets including Memphis, Greensboro and San Antonio.

Top 50 Markets

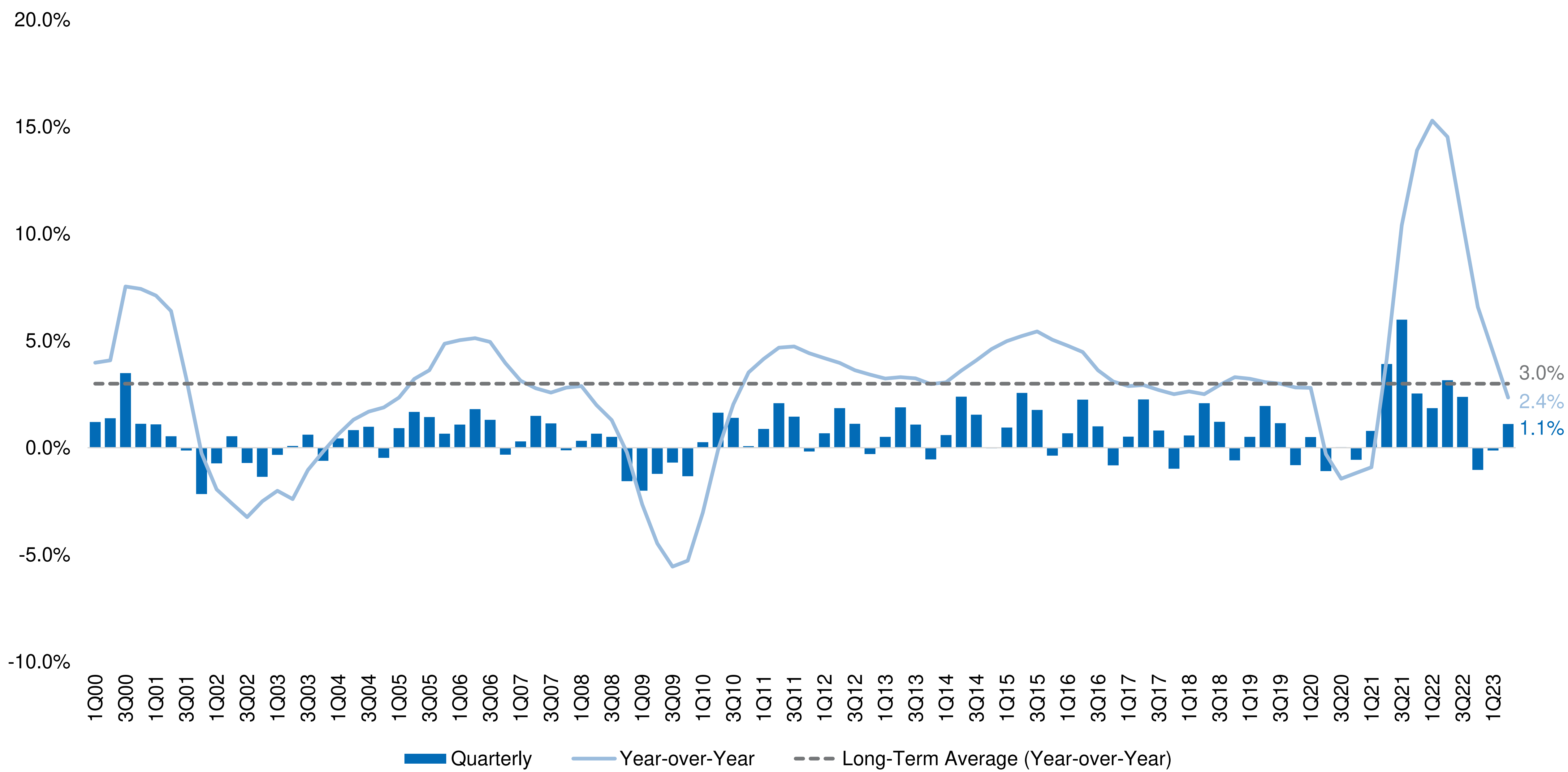


Source: Newmark Research, RealPage

Rent Growth Turns Positive in 2Q23, but Year-over-Year Continues to Slow

For the first time in three quarters, multifamily experienced positive effective rent growth quarter-over-quarter in the second quarter of 2023. Nonetheless, year-over-year effective rent growth continued to slow and is now below the long-term average.

Effective Rent Growth

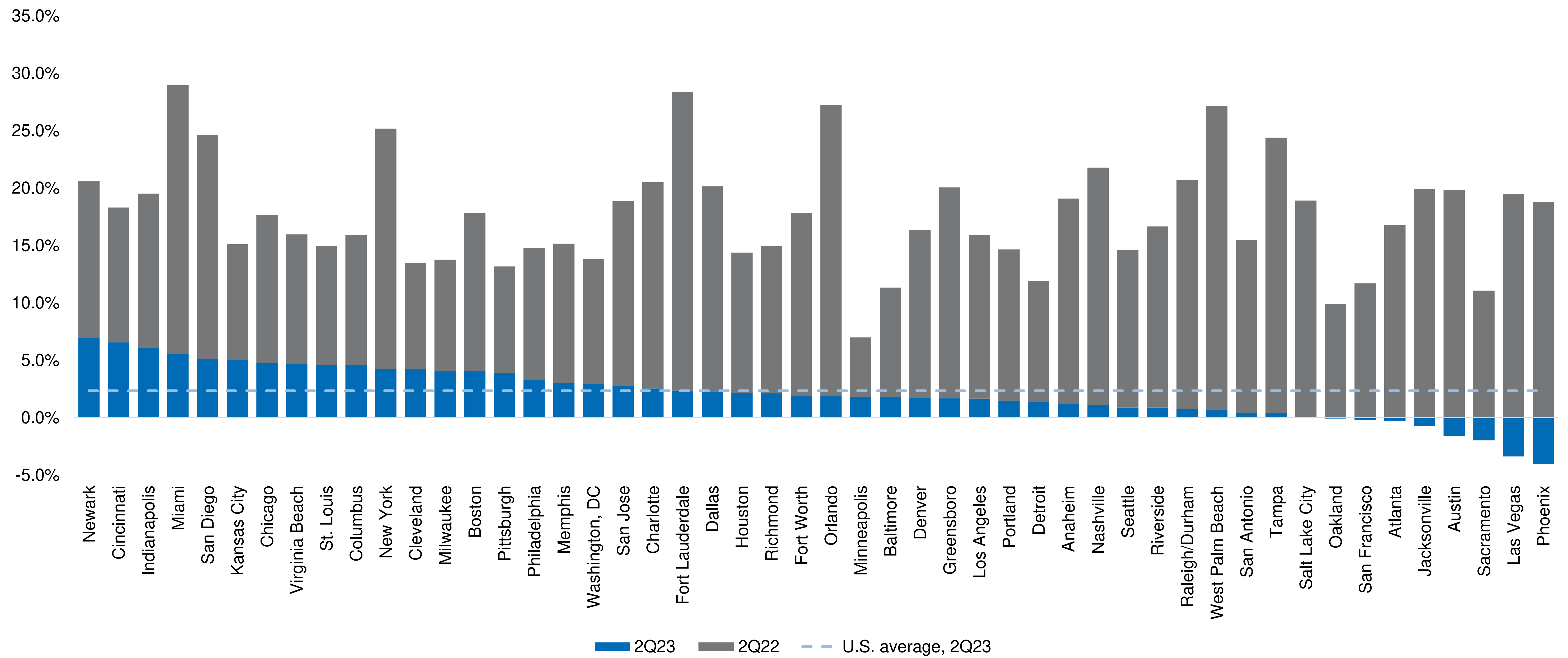


Source: Newmark Research, RealPage

Rent Growth Strongest in Midwest, Declines Universal Compared with 2Q22

While the year-over-year effective rent growth decreased for each of the top 50 markets compared to with the second quarter of 2022, Midwestern markets experienced significantly less drawdown. As a result, Midwestern markets made up six of the top ten markets with the greatest year-over-year effective rent growth.

Year-over-Year Effective Rent Growth (Top 50 Markets

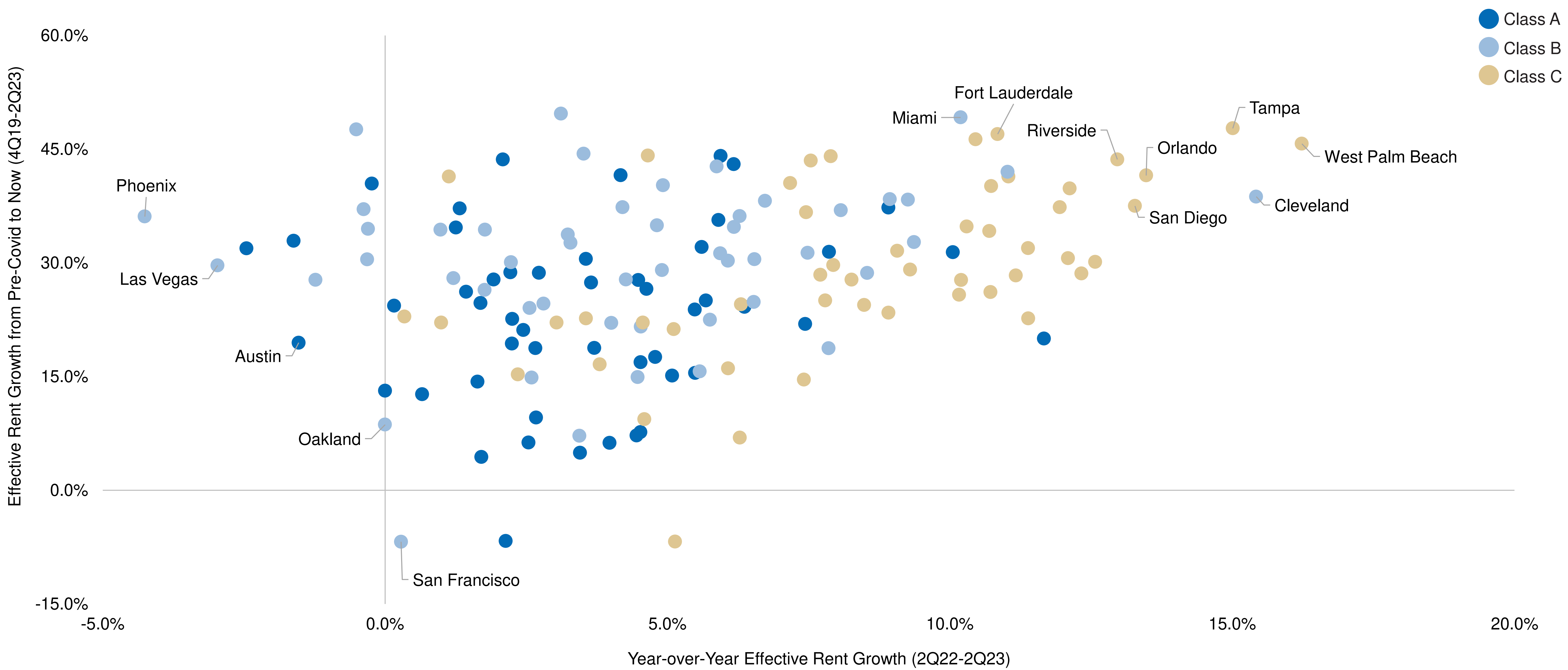


Source: Newmark Research, RealPage

Class C Rent Growth Is Largest Gainer Year over Year, as Well as Post-COVID

As the most affordable option, Class C appeals to the stickiest tenants, who are “renters by necessity.” Coupled with less direct competition, Class C properties have experienced the largest rent growth gains, both year over year and since COVID.

Effective Rent Growth (Top 50 Markets by Class)

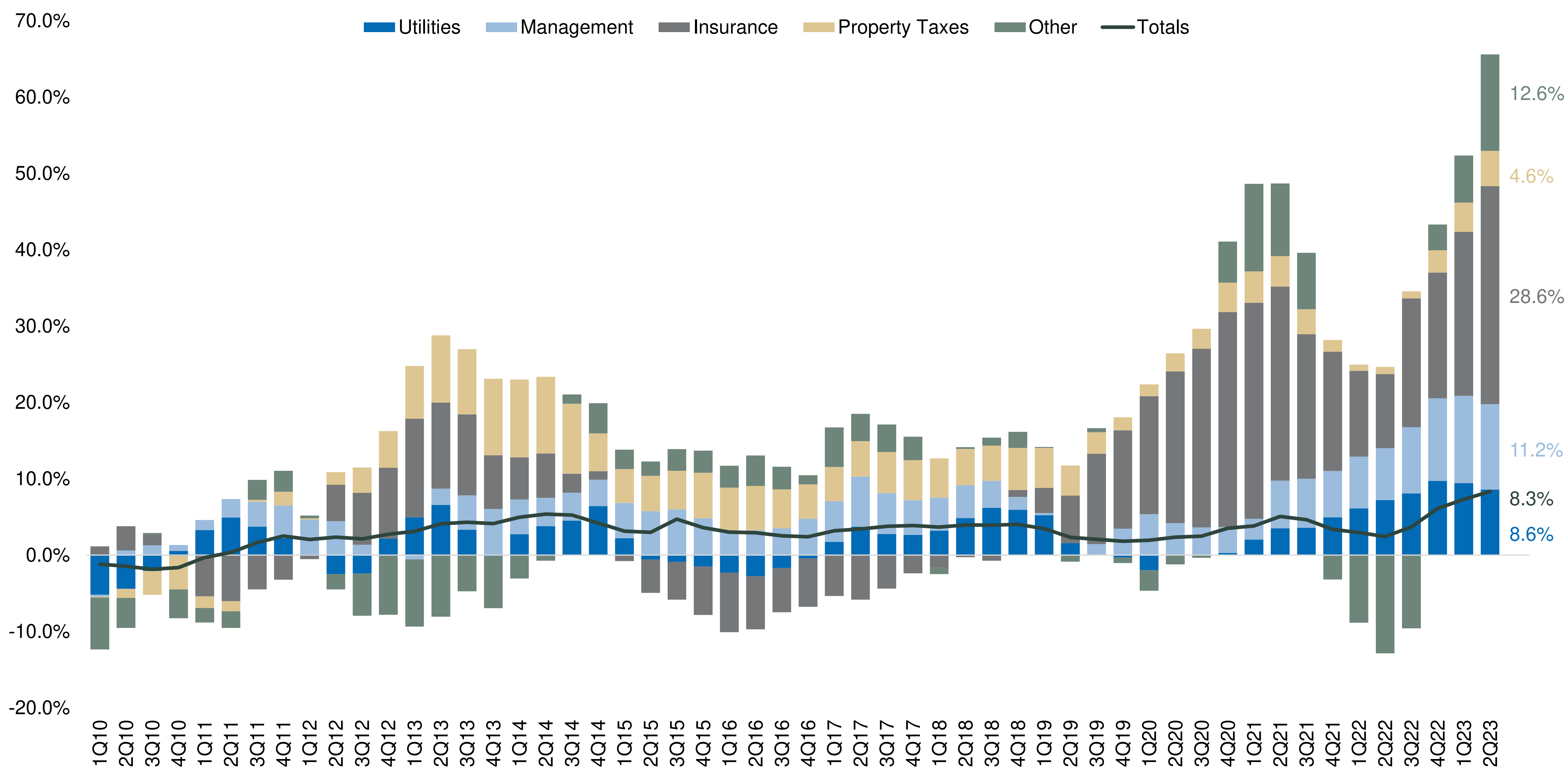


Source: Newmark Research, RealPage

Expenses Continue to Rise, Putting Pressure on Operations

Multifamily expenses increased 8.3% year-over-year, led by a 28.6% surge in insurance costs. While insurance growth rose nearly 30%, management and other expenses also saw double-digit year-over-year increases, putting a strain on landlords.

Year-over-Year Change

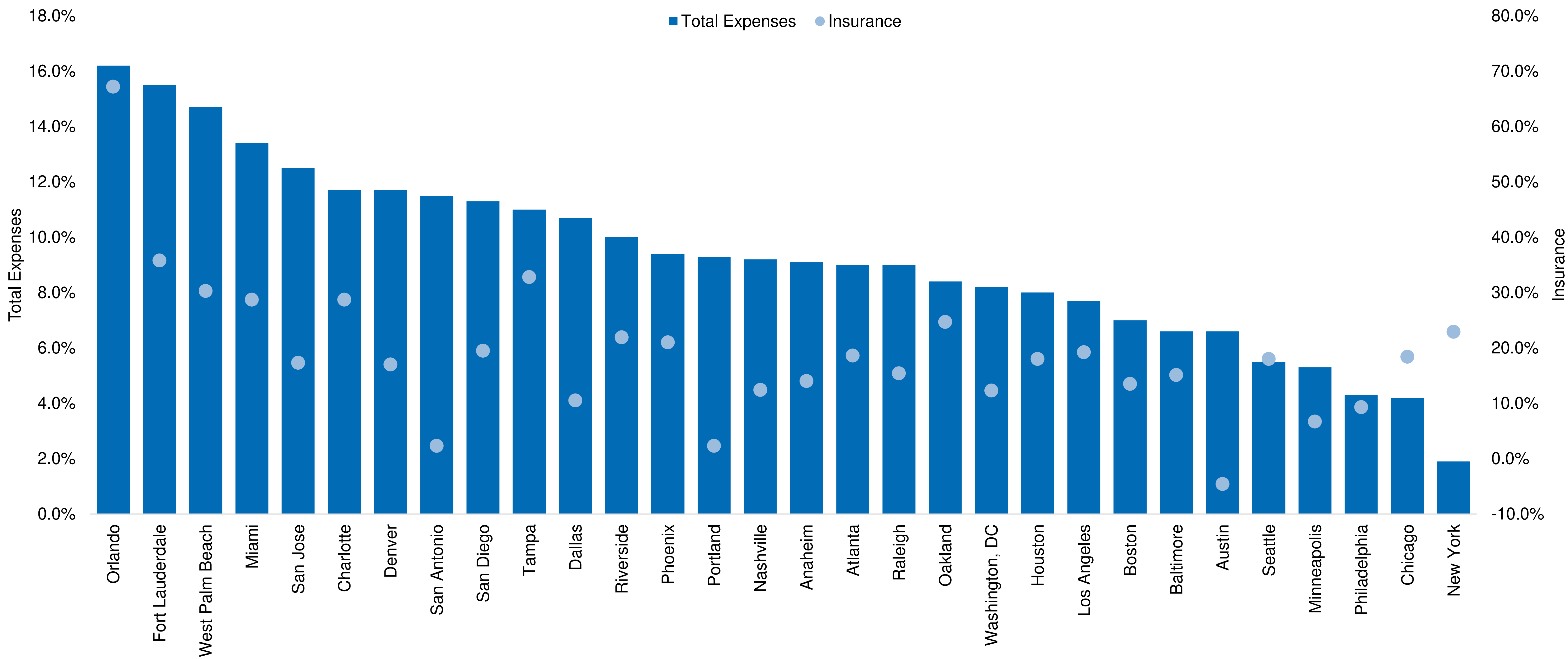


Source: Newmark Research, NCREIF

Expenses Rising Fastest in Florida, Primarily Driven by Insurance

Florida markets, including Fort Lauderdale, Miami, Orlando and West Palm Beach, lead the nation with the greatest increase in year-over-year expenses, in part due to insurance costs rising in excess of 28.0%.

Year-over-Year PSF Change (Select Markets)

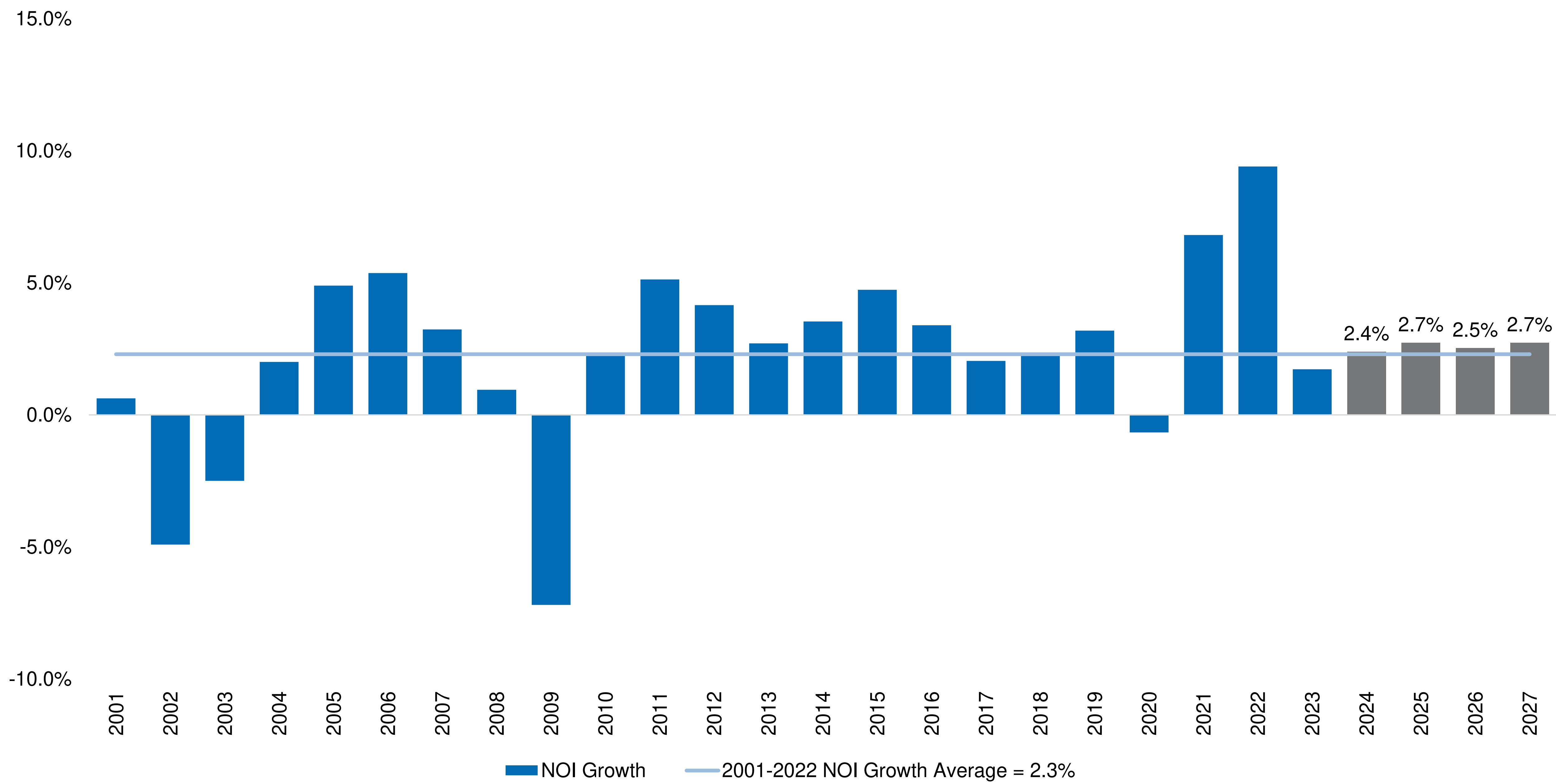


Source: Newmark Research, NCREIF

Above-Average NOI Growth Expected in 2024 to 2027 Following Sluggish 1H23

Despite a 7.7% drop from 2022 to 2023, NOI growth is anticipated to rebound to slightly above the long-term average in 2024 and persist through 2027.

Top 50 Markets Aggregate



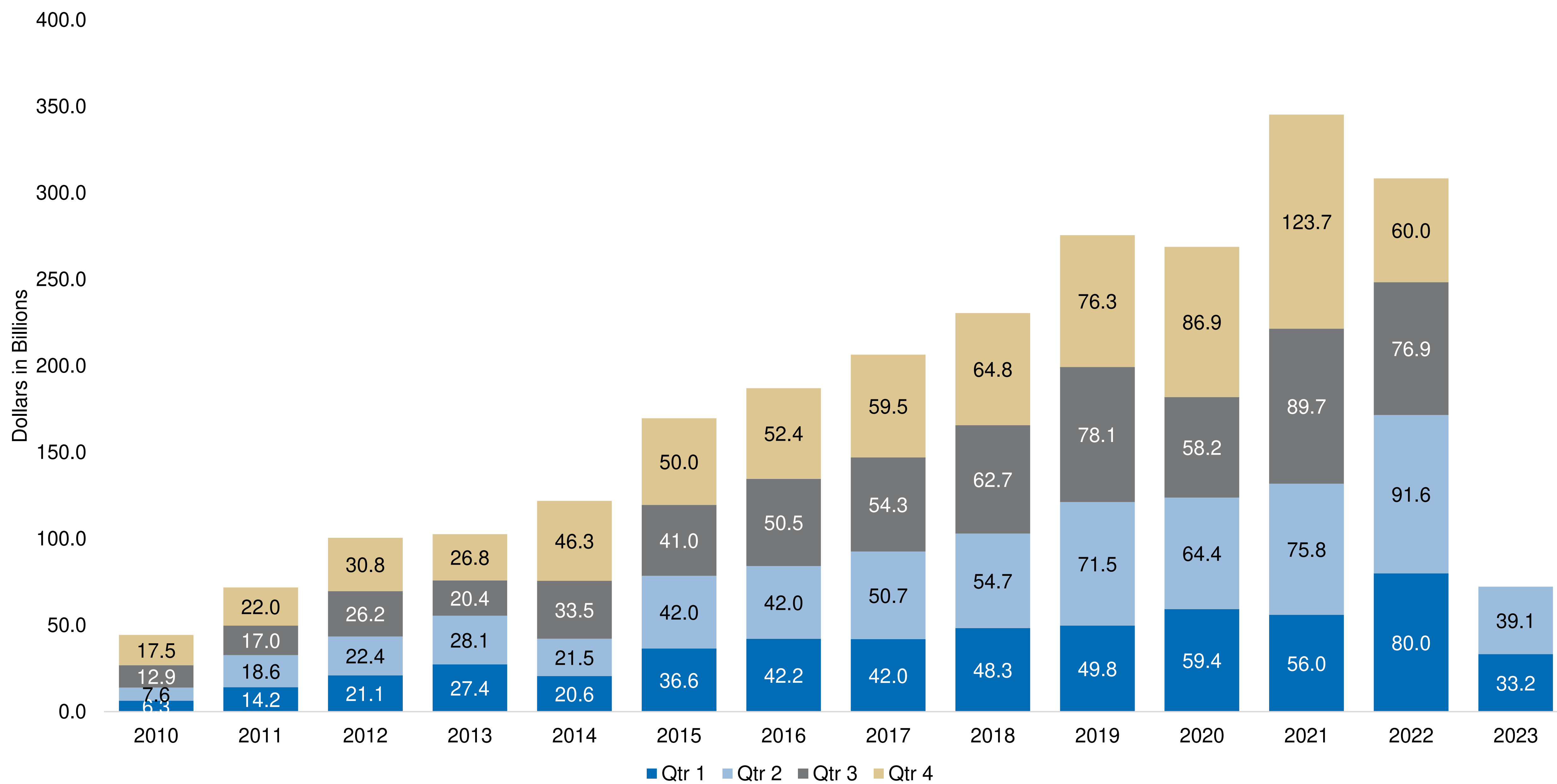
Source: Newmark Research, Green Street Advisors

Debt Capital Markets

Multifamily Debt Originations Down 58% Year-Over-Year in First Half of 2023

While figures are preliminary, revisions would only confirm the sharp deceleration in lending activity in the multifamily sector. Multifamily origination volumes were the lowest since 2014, according to RCA data. Mid- / high-rise and garden apartments experienced similar declines.

Multifamily Debt Origination Volume*

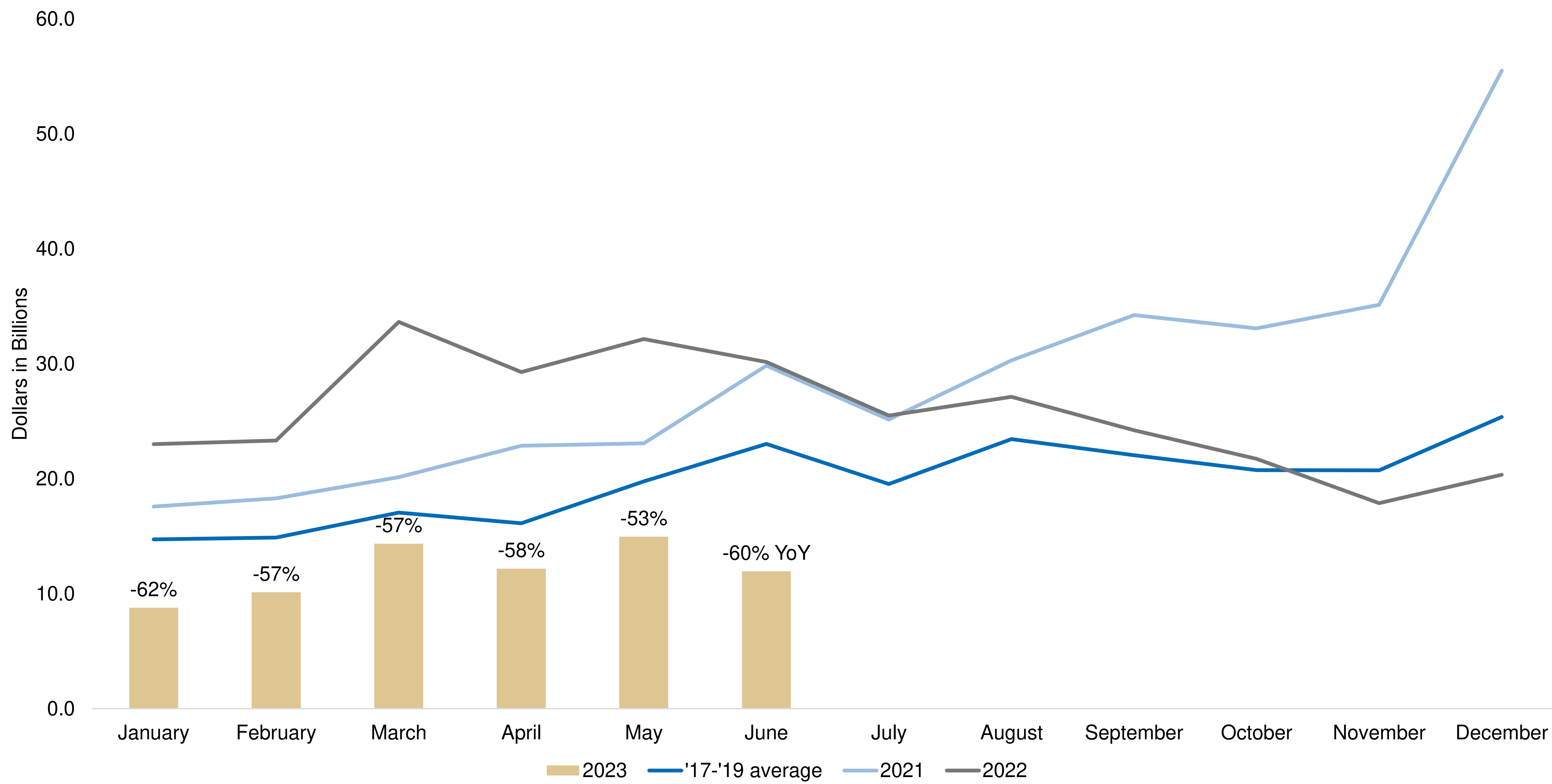


Source: RCA, Newmark Research as of 7/24/2023
* Excludes construction finance. Data is based preliminary loan sums, which are subject to future revision – potentially significant.

Monthly Originations Remain Soft; Running Consistently below Pre-Pandemic Level

Multifamily origination volumes have been decelerating since March 2022. Activity recovered from an especially weak January/February 2023 but has been range-bound since.

Monthly Multifamily Debt Originations Volume*

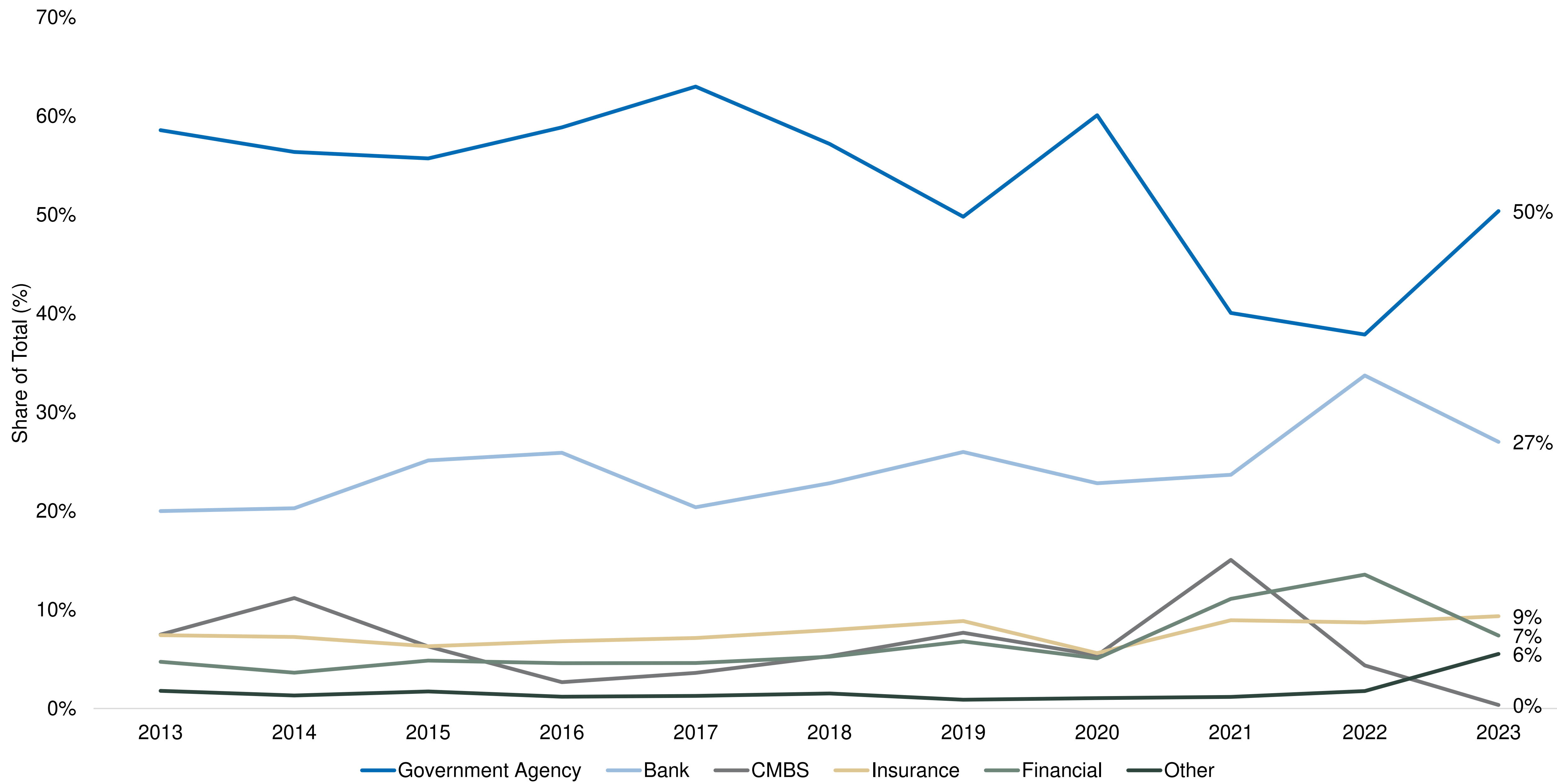


Source: RCA, Newmark Research as of 7/24/2023
* Excludes construction finance. Data is based preliminary loan sums, which are subject to future revision – potentially significant.

GSE Share of Multifamily Finance Has Increased Sharply in 2023

The bank and financial (debt fund) shares of lending declined in the first half of 2023, though both remain above their respective pre-pandemic share. Non-agency securitized lending, meanwhile, has continued to contract.

Origination Share by Lender Group

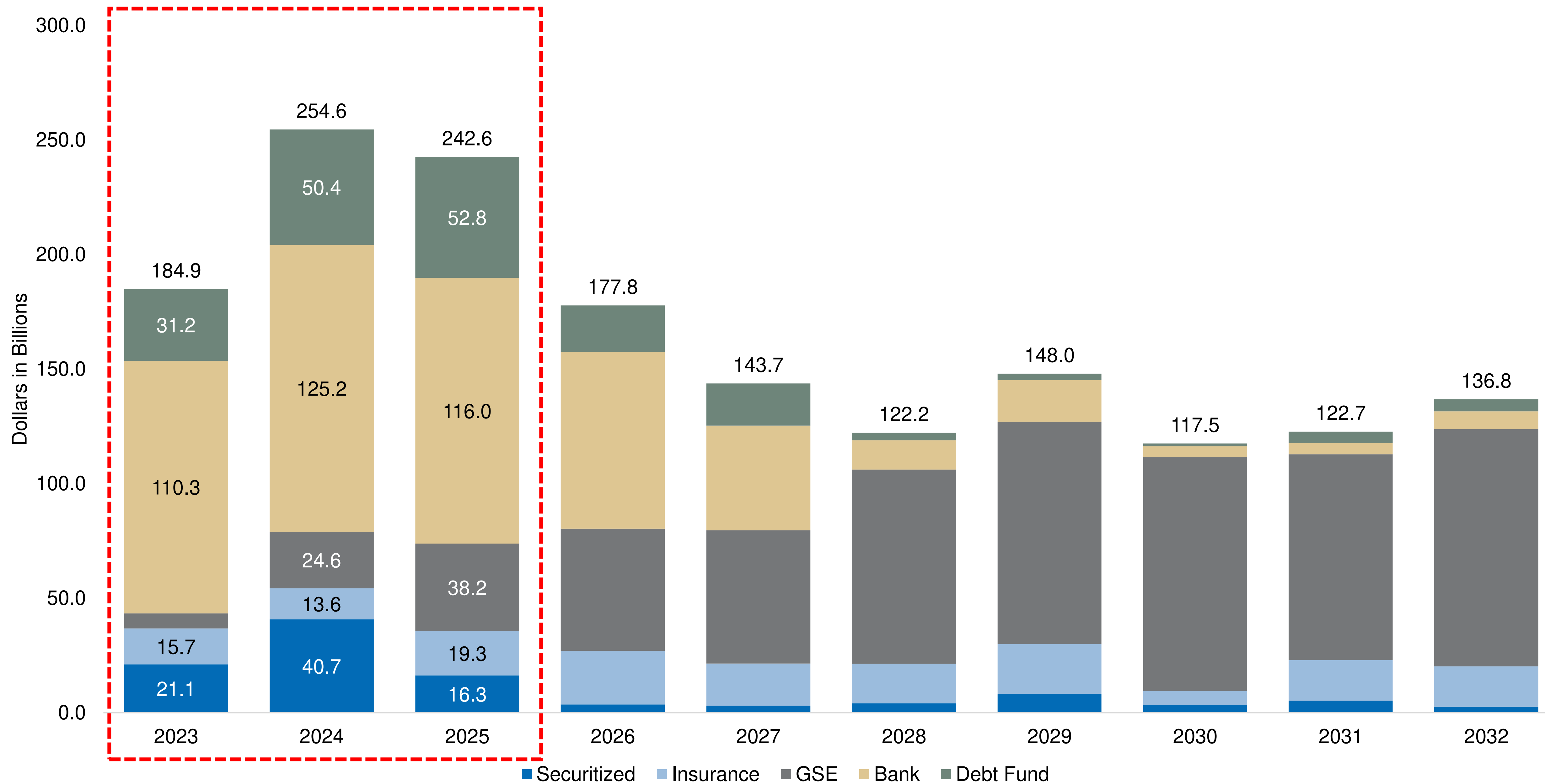


Source: RCA, Newmark Research as of 7/24/2023
* Excludes construction finance. Data is based preliminary loan sums, which are subject to future revision – potentially significant.

$682 Billion in Multifamily Loans Mature Between 2023 and 2025

Banks account for 32% of debt maturities in the full 2023 to 2032 period, but they account for 52% of maturities in 2023 to 2025. Debt fund maturities are similarly front-loaded, accounting for 20% of near-term maturities vs. 12% in the full period. The same is true of securitized lending. It is troubling and, perhaps, not coincidental that these are the lending sectors that have most reduced activity of late.

Multifamily Loan Maturities by Lender Group

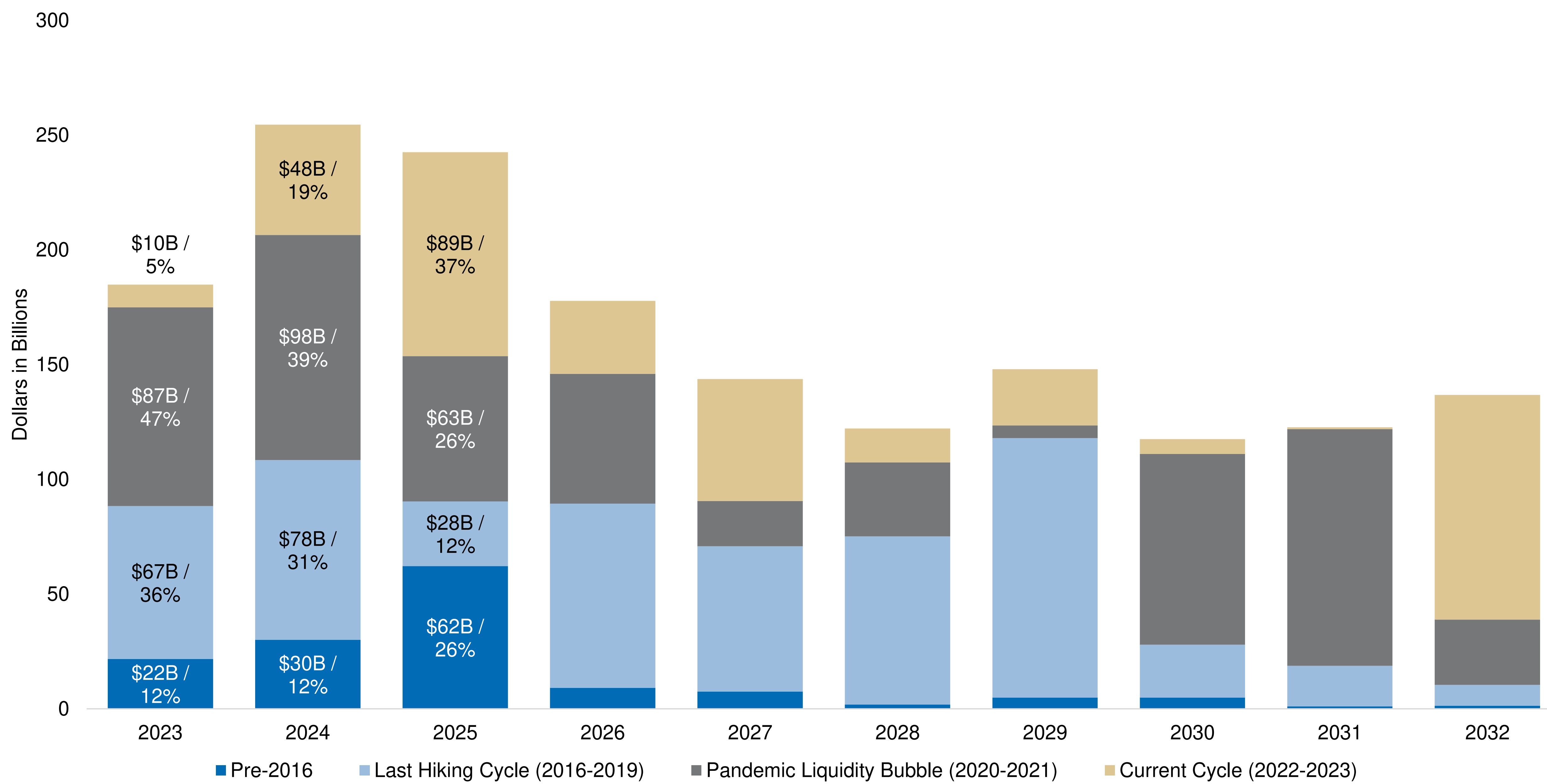


Source: MBA, Trepp, RCA, Newmark Research as of 7/24/2023

Upcoming Maturities Heavily Exposed to Bubble-Era Loans

Multifamily received tremendous capital inflows during the pandemic liquidity bubble of 2020 to the first half of 2022. This was reflected both in transaction activity, as well as pricing for both debt and equity. A significant portion of these loans had short duration and were financing value-add projects. Now those loans are coming due and in a very different environment than when they were originally issued.

Multifamily Loan Maturities by Origination Period

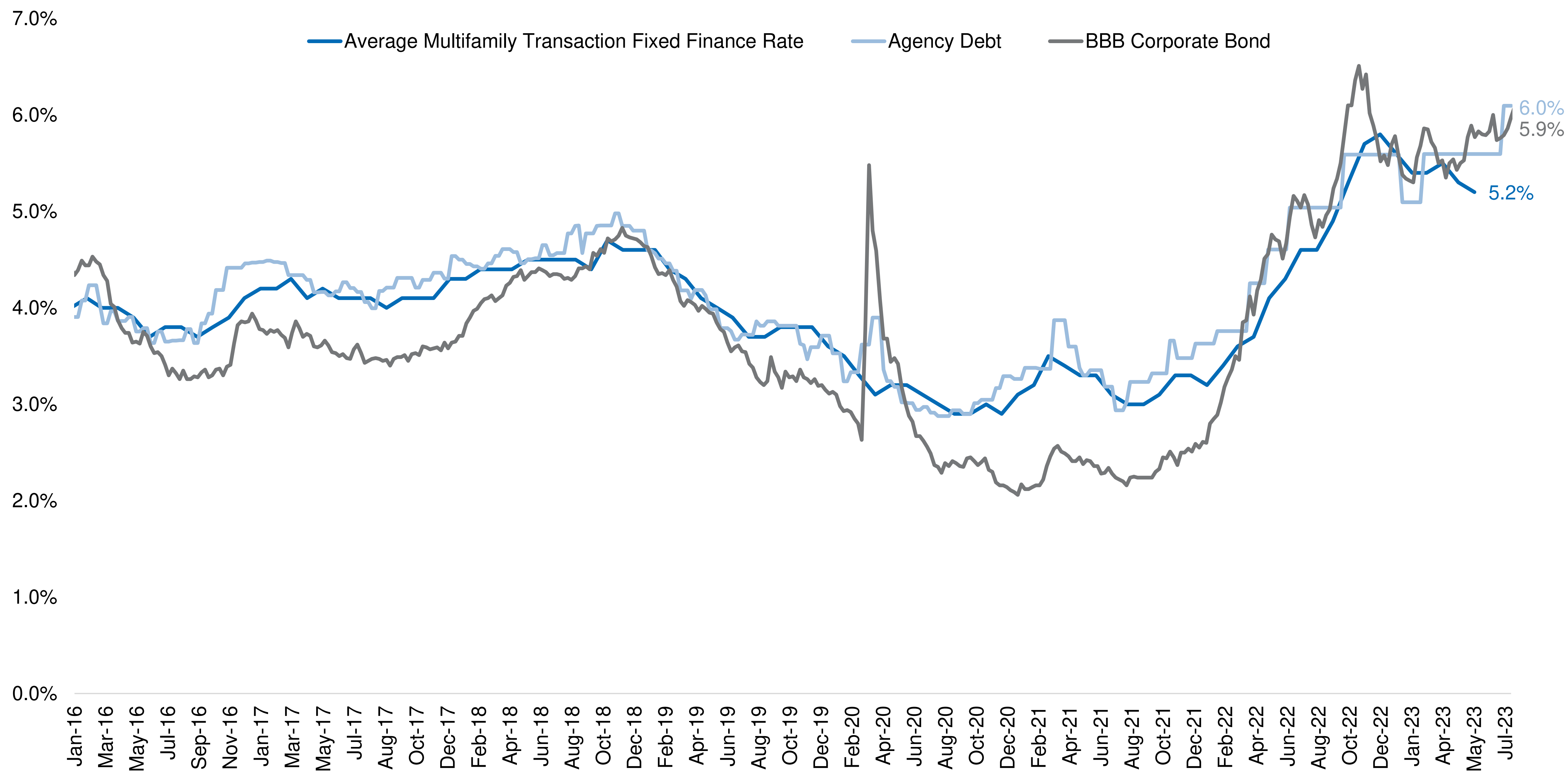


Source: MBA,Trepp, RCA, Newmark Research as of 7/24/2023

Multifamily Debt Costs Have Increased Significantly

Historically, multifamily debt rates have run somewhat above those of BBB corporate bonds. Yields on multifamily agency debt have tended to trade closely with the broader fixed rate transaction market yields. Since the start of the current hiking cycle, BBB bond yields have overshot multifamily debt costs; until recently, agency and transaction debt costs moved in tandem. This seems to have broken down somewhat recently, so reversion in the form of rising multifamily financing rates is most likely.

Multifamily Cost of Debt Capital

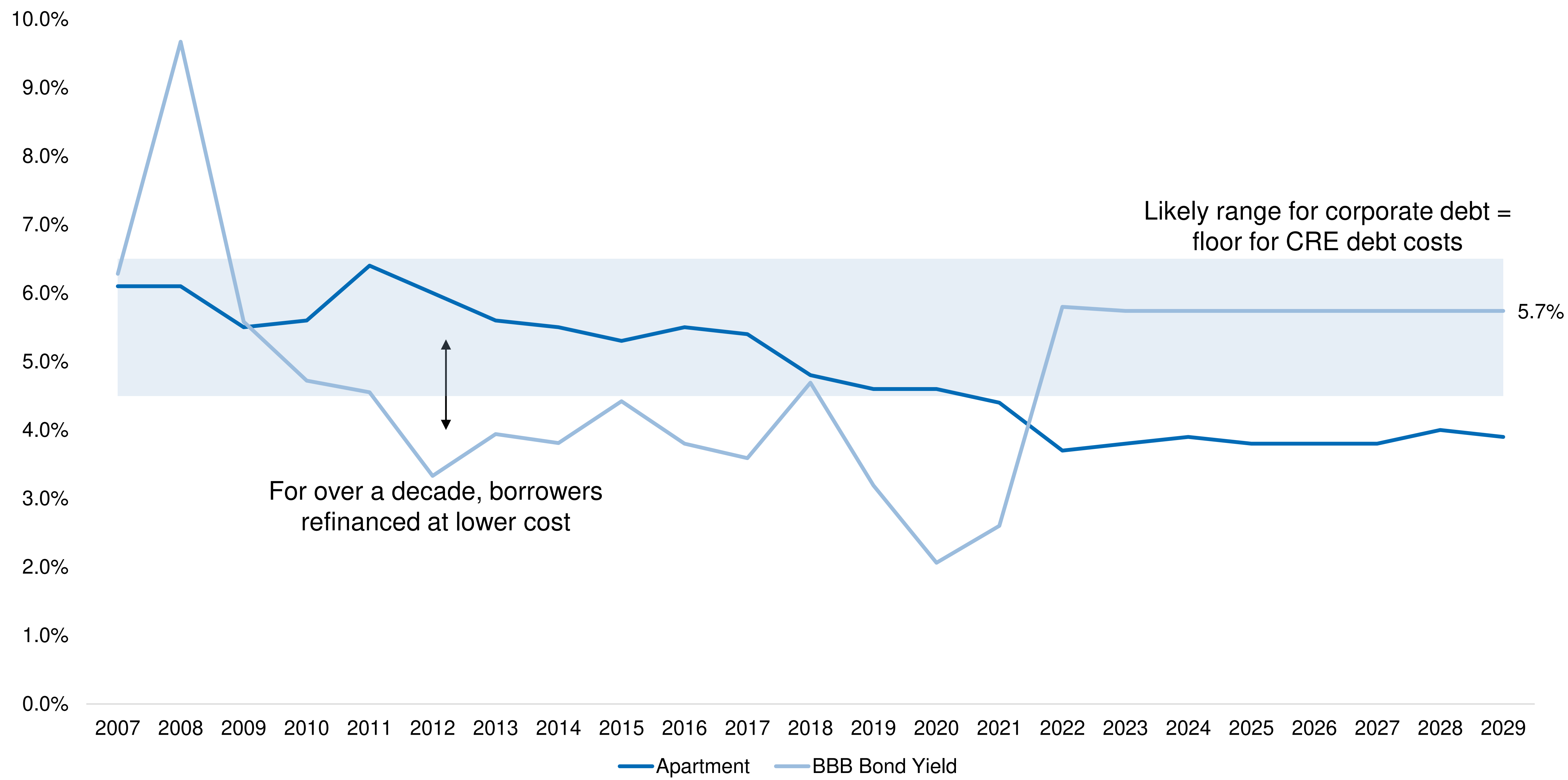


Source: RCA, Green Street, ICE Data Indices, Federal Reserve, Newmark Research as of 8/24/2023
Note: Excludes construction financing

Multifamily Borrowers Face Starkly Higher Costs as Loans Mature

Higher debt costs on refinancing will lower return for all and will give rise to a range of reactions within the market. Some borrowers will choose to pay down their debt, especially if the asset has appreciated meaningfully. Others will refinance the principal or partially pay down, whereas in a lower cost-of-capital environment, they would have re-levered. Still others will be unable to make the math ‘work” and will need to pursue a loan modification, return the keys and/or source rescue equity at an appropriate price point.

Weighted Average Interest Rate on Maturing Debt vs. Prevailing Bond Yields

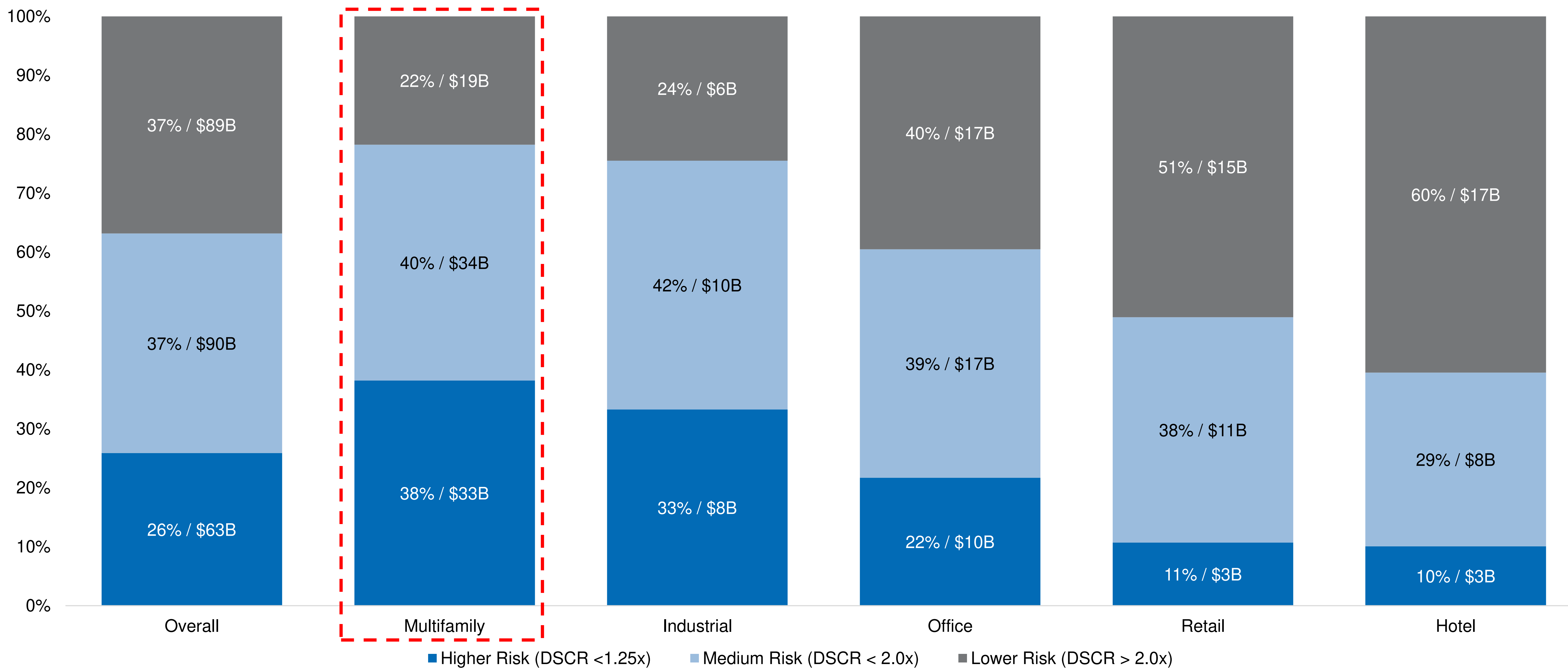


Source: RCA, ICE Data Indices, Newmark Research as of 7/26/2023

Most Loans Will Be Able to Absorb Higher Interest Costs; Many Will Not

38% of upcoming securitized multifamily debt maturities had a DSCR of 1.25x, per their most recent financials, compared with only 22%, with a DSCR of 2.0x or greater. These maturities will struggle to refinance even before taking valuation concerns into account. The maturing loans are biased towards CRE CLO loans, which include higher shares of transitional, floating-rate debt. This is a bad proxy for insurance and GSE lending, but a great proxy for debt funds and a significant share of bank lending.

DSCR Profile of Securitized CRE Debt Maturing in 2023/4

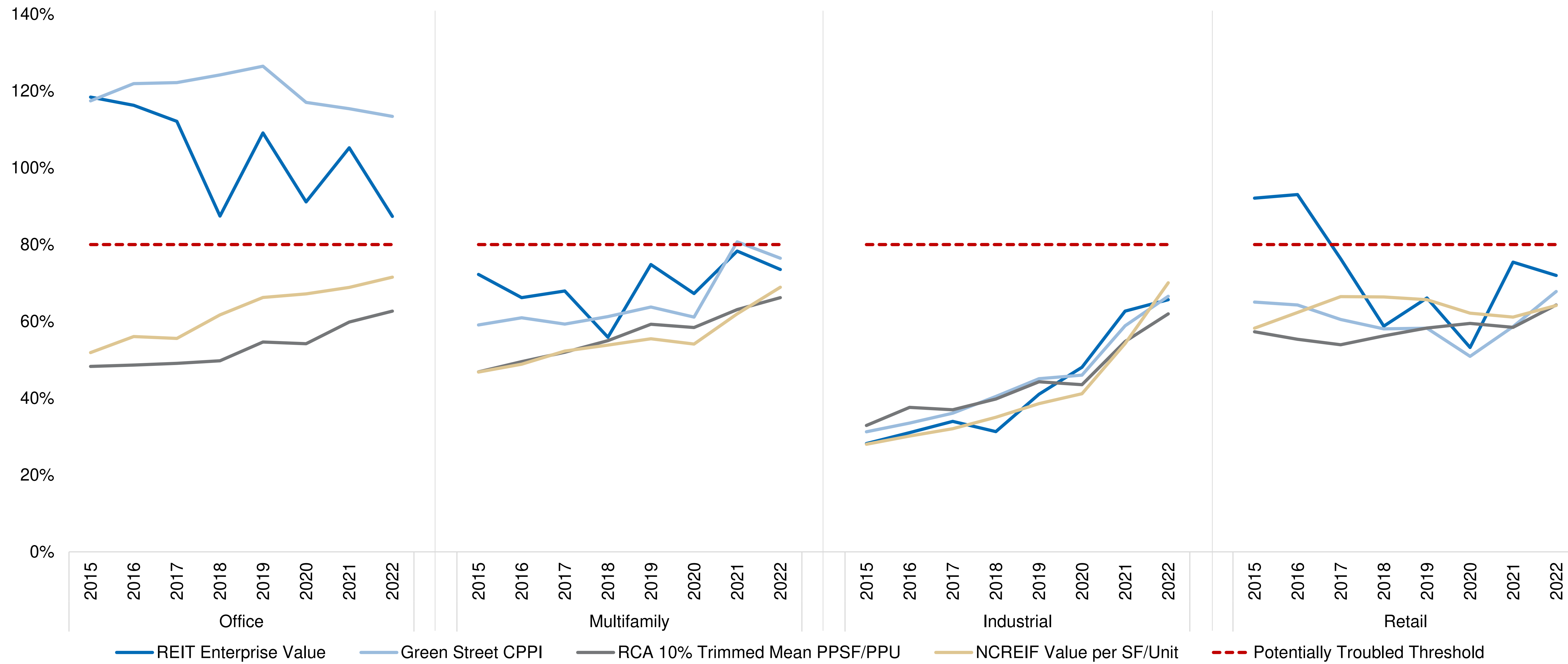


Source: Trepp, Newmark Research as of 7/26/2023

Declining Multifamily Values Threaten Sustainability of 2020 to 2022 Financings

Public market benchmarks and those adjacent (Green Street CPPI) in general show greater recent declines in value and higher resulting mark-to-market LTVs; however, the discrepancy is narrow, except for office. In this instance, the public market benchmarks are more credible. It is worth noting that, except for the RCA transaction-based series, all these measures are biased towards higher-quality, institutional properties. As such, this likely represents a best-case scenario.

Average Mark-to-Market* Loan-to-Value Ratio by Year Debt Originated

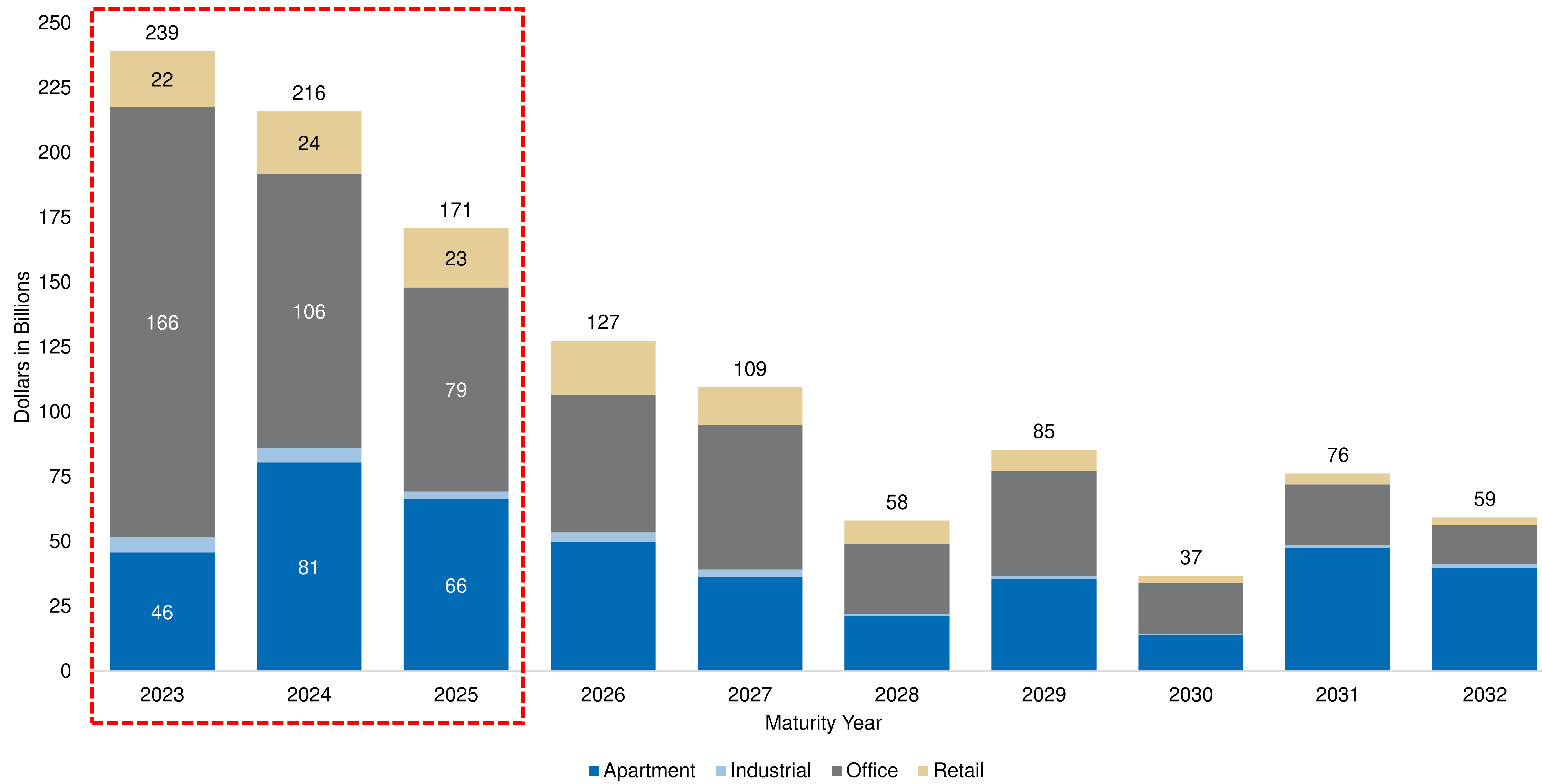


Source: RCA, Green Street, NCREIF Newmark Research as of 7/27/2023
*We take the average loan-to-value ratio of loans originated in each respective year based on an analysis of RCA data, then we mark the value of the assets to market using the various proposed benchmarks.

$1.2 Trillion of CRE Debt is Potentially Troubled, $436 Billion of It Multifamily

Combining our analysis of mark-to-market LTVs with the structure of debt maturities, we estimate the volume of debt that currently is potentially troubled*. Office and multifamily loans constitute most potentially troubled loans, particularly in the 2023 to 2025 period. The high office volume results from most loans being underwater. The distribution of LTV ratios for multifamily are more favorable overall, but the greater size of the multifamily market and the concentration of lending during the recent liquidity bubble drive high nominal exposure.

Potentially Troubled Loans by Maturity Year*

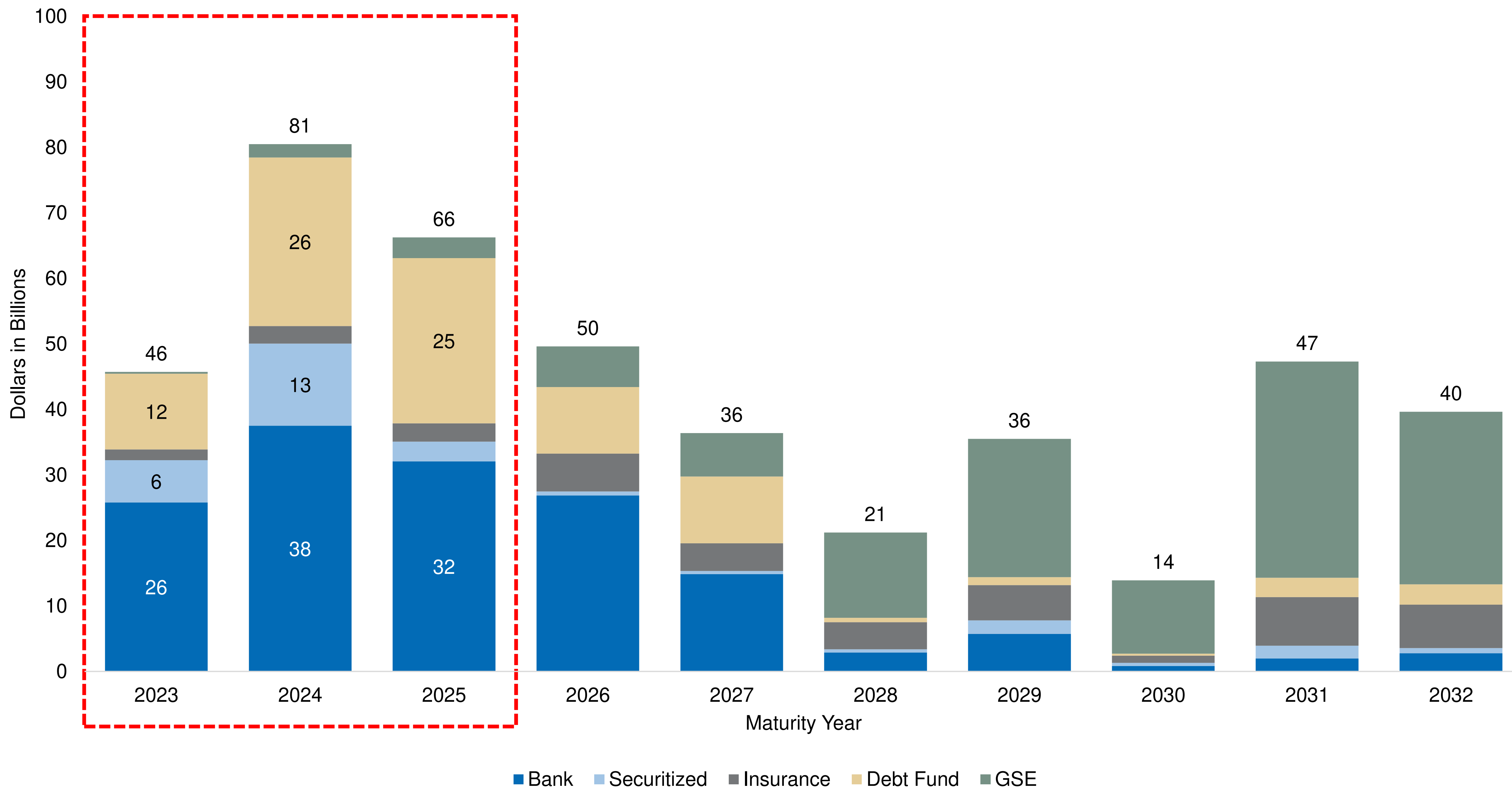


Source: Green Street, NCREIF, RCA, Trepp, MBA, Newmark Research as of 7/24/2023
*Loans with an estimated senior debt LTV of 80% or greater are potentially troubled. The loans are marked-to-market using an average of cumulative changes in the Dow Jones REIT sector price indices, REIT sector enterprise value indices and Green Street sector CPPI.

Potential Multifamily Distress Concentrated in Bank and Debt Fund Lending

Focusing on the 2023 to 2025 period, banks are most exposed to potential distress in nominal terms, but this exactly parallels their share of maturing loans. The same is true of CMBS financing. In contrast, debt funds account for 32% of potentially distressed loans but only 20% of maturing loans, a ratio of 1.6. GSE and insurance lending are outliers in the opposite direction, with 17% of maturities to only 7% of potentially troubled debt. There are more at-risk GSE loans later in the decade, but it is premature focus overmuch on these.

Potentially Troubled Multifamily Loans by Maturity Year*



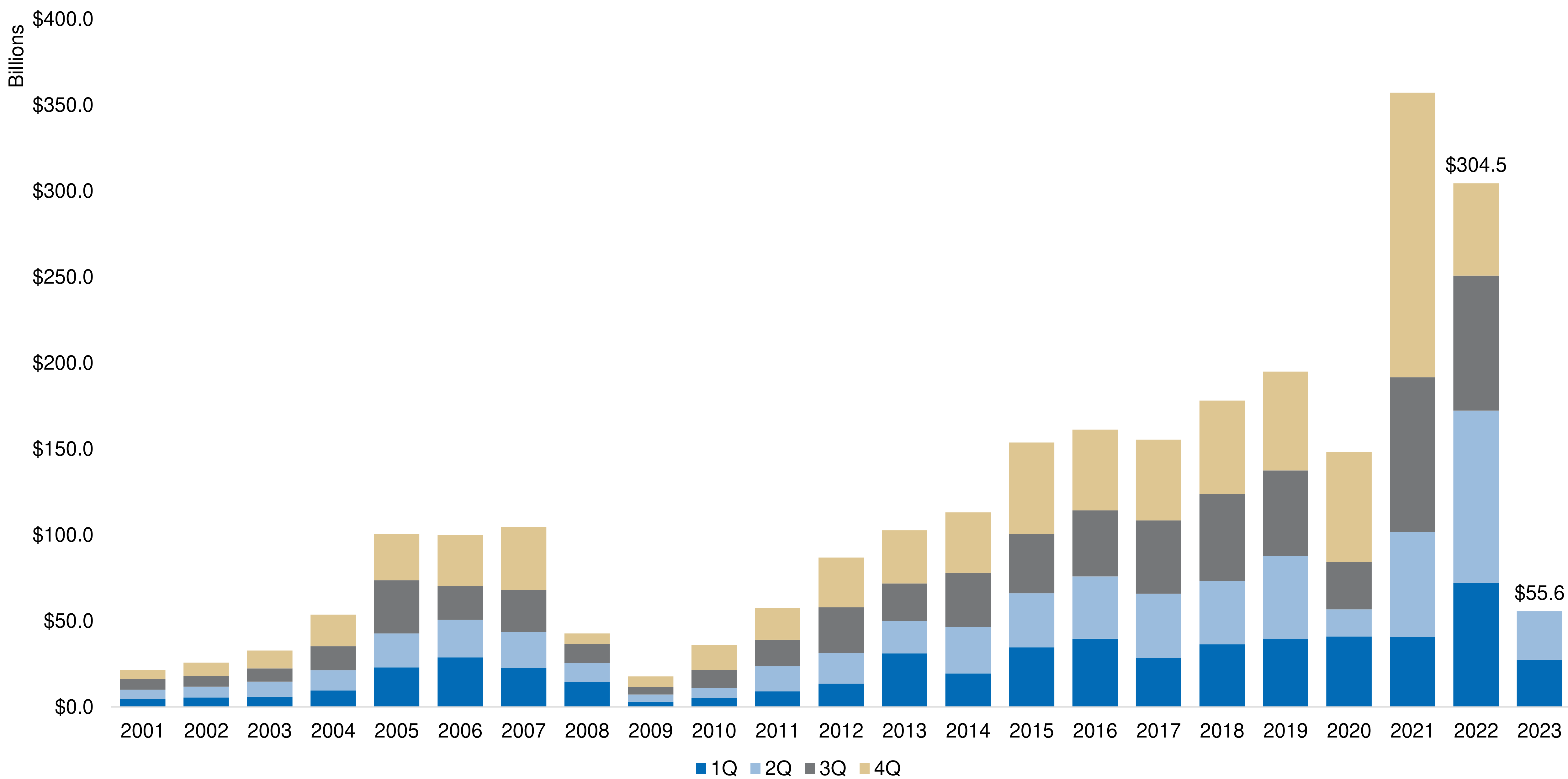
Source: Green Street, NCREIF, RCA, Trepp, MBA, Newmark Research as of 7/24/2023
*Loans with an estimated senior debt LTV of 80% or greater are potentially troubled. The loans are marked-to-market using an average of cumulative changes in the Dow Jones REIT sector price indices, REIT sector enterprise value indices and Green Street sector CPPI.

Investment Sales

Sales Volume Plummets 71.8% Year-over-Year as Prices Continue to Reset

Price dislocation and an elevated interest rate environment continues to hinder the investment sales market, as evidenced by the 71.8% year-over-year decline to $28.2 billion in quarterly sales volume.

Sales Volume

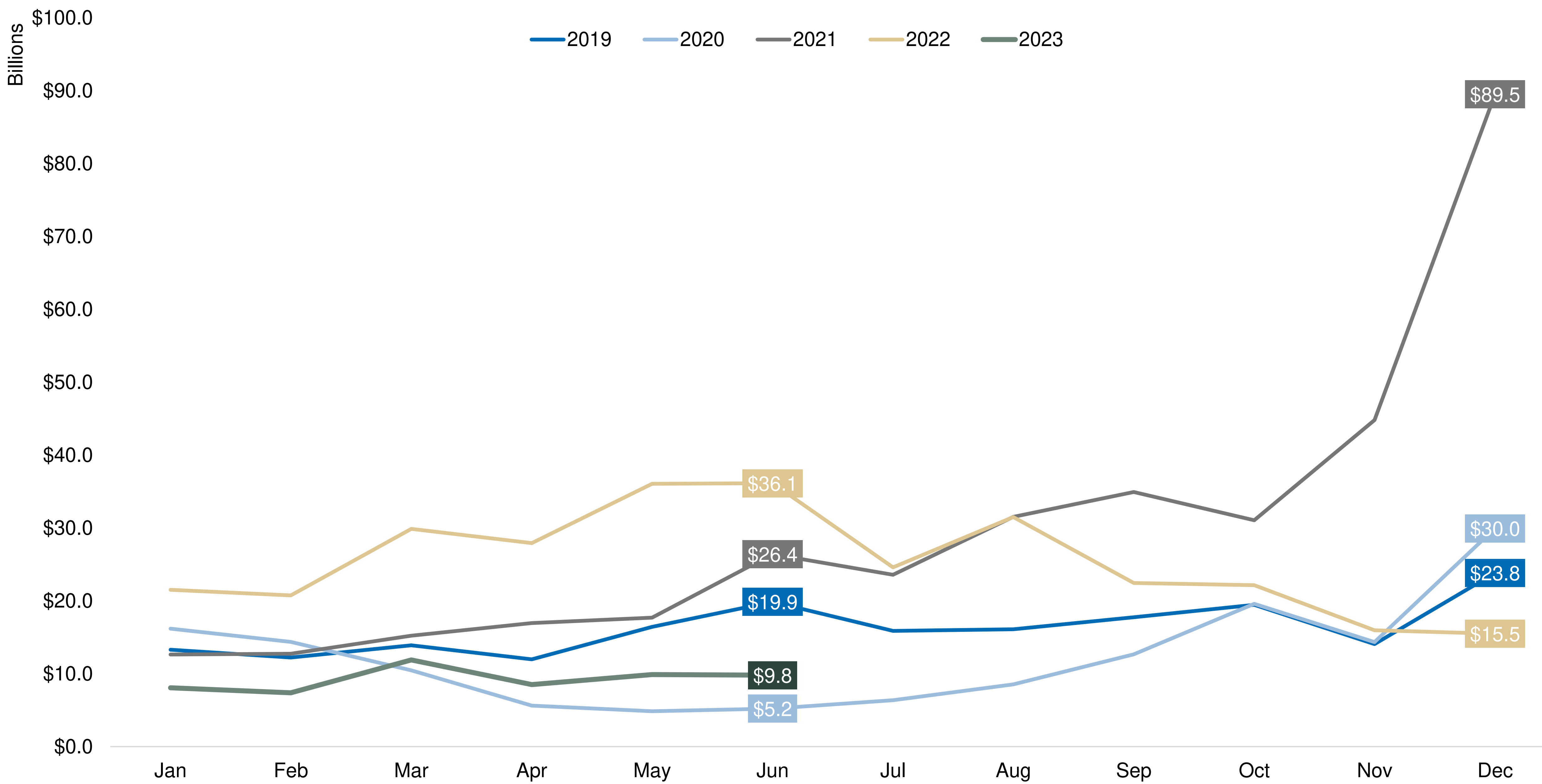


Source: Newmark Research, MSCI Real Capital Analytics

Monthly Sales Volume Remains Depressed, Averaging $9B in 1H23 vs. $29B in 1H22

The first half of 2022 set a record for multifamily sales activity, setting up a difficult comparison; however, sales have also been running well below the level of activity in 2019.

Sales Volume by Month

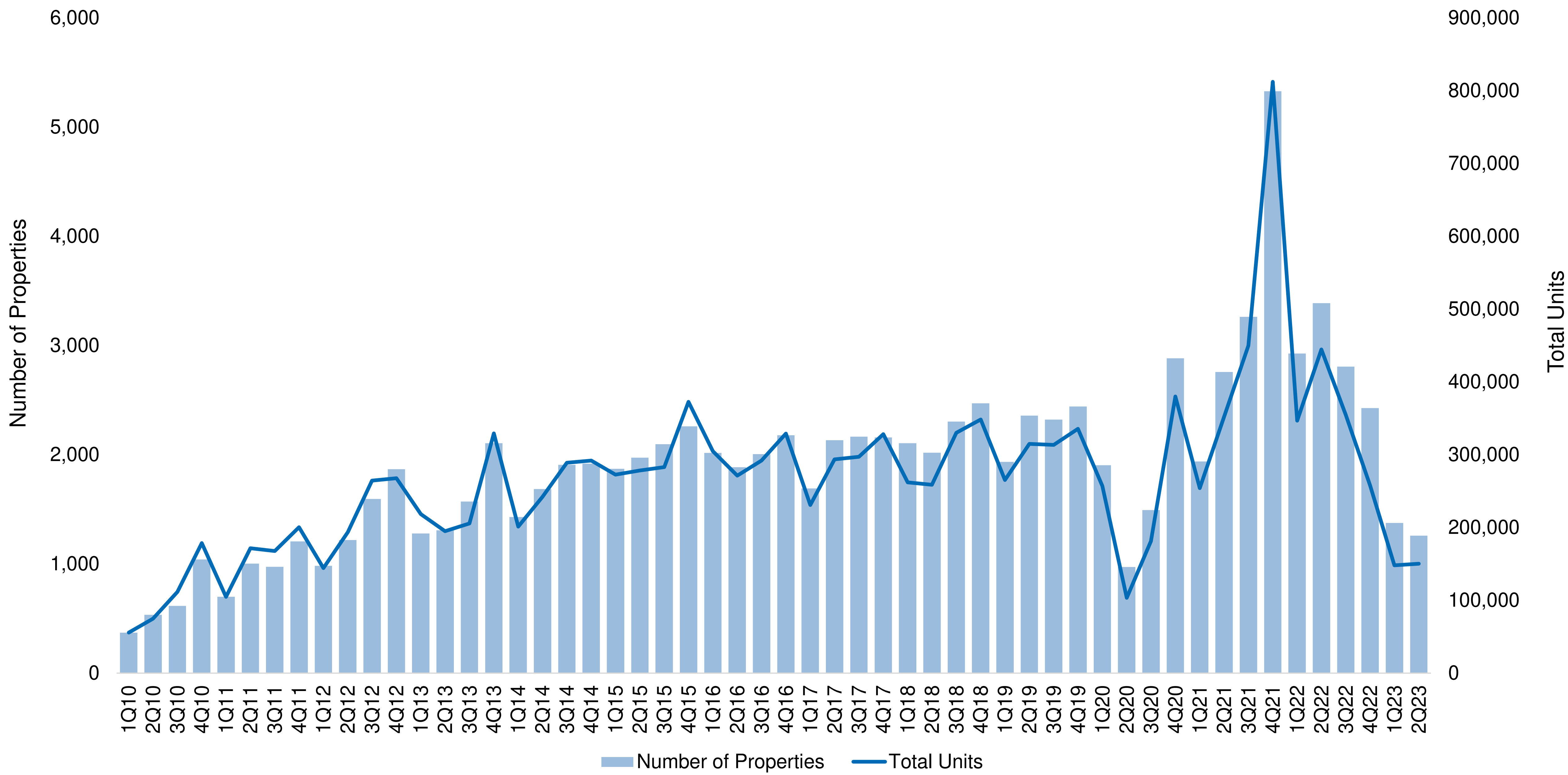


Source: Newmark Research, MSCI Real Capital Analytics

Number of Transactions Sinks to Lowest Quarterly Sum Since Onset of COVID

Due to high interest rates and inflation, the number of transactions continues to decrease through the second quarter of 2023. Falling 62.8% year-over-year, the number of transactions is the lowest seen since the start of COVID.

Quarterly Transaction Totals

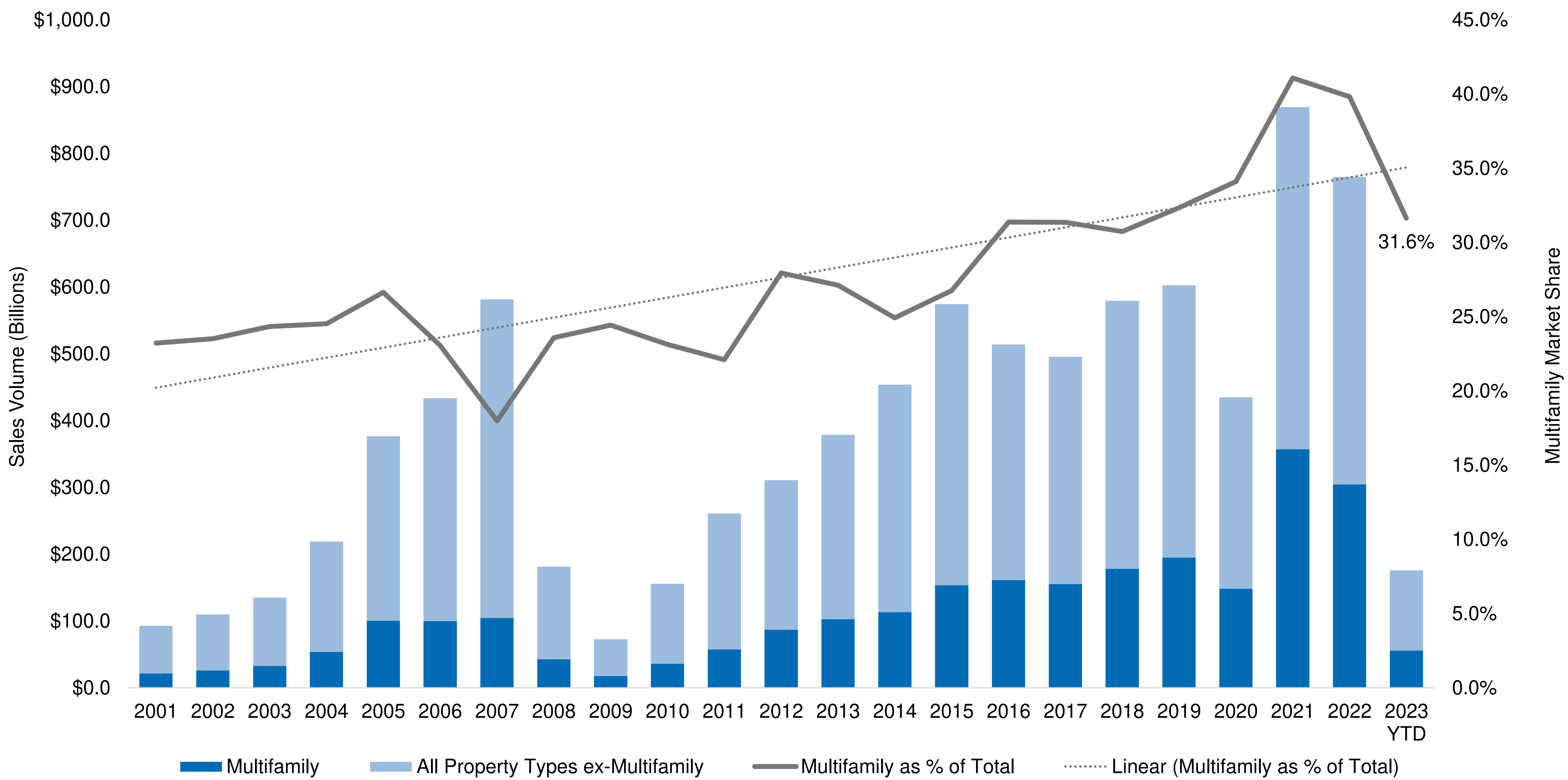


Source: Newmark Research, MSCI Real Capital Analytics

Market Share Slides as Higher Rates & Relatively Lower Yields Have Slowed Activity

Multifamily remains the largest share of investment sales of all US commercial real estate property types at 31.6% in the first half of 2023; however, higher rates paired with lower yields in the property type have resulted in an 8.2% decrease in market share since 2022.

Sales Volume

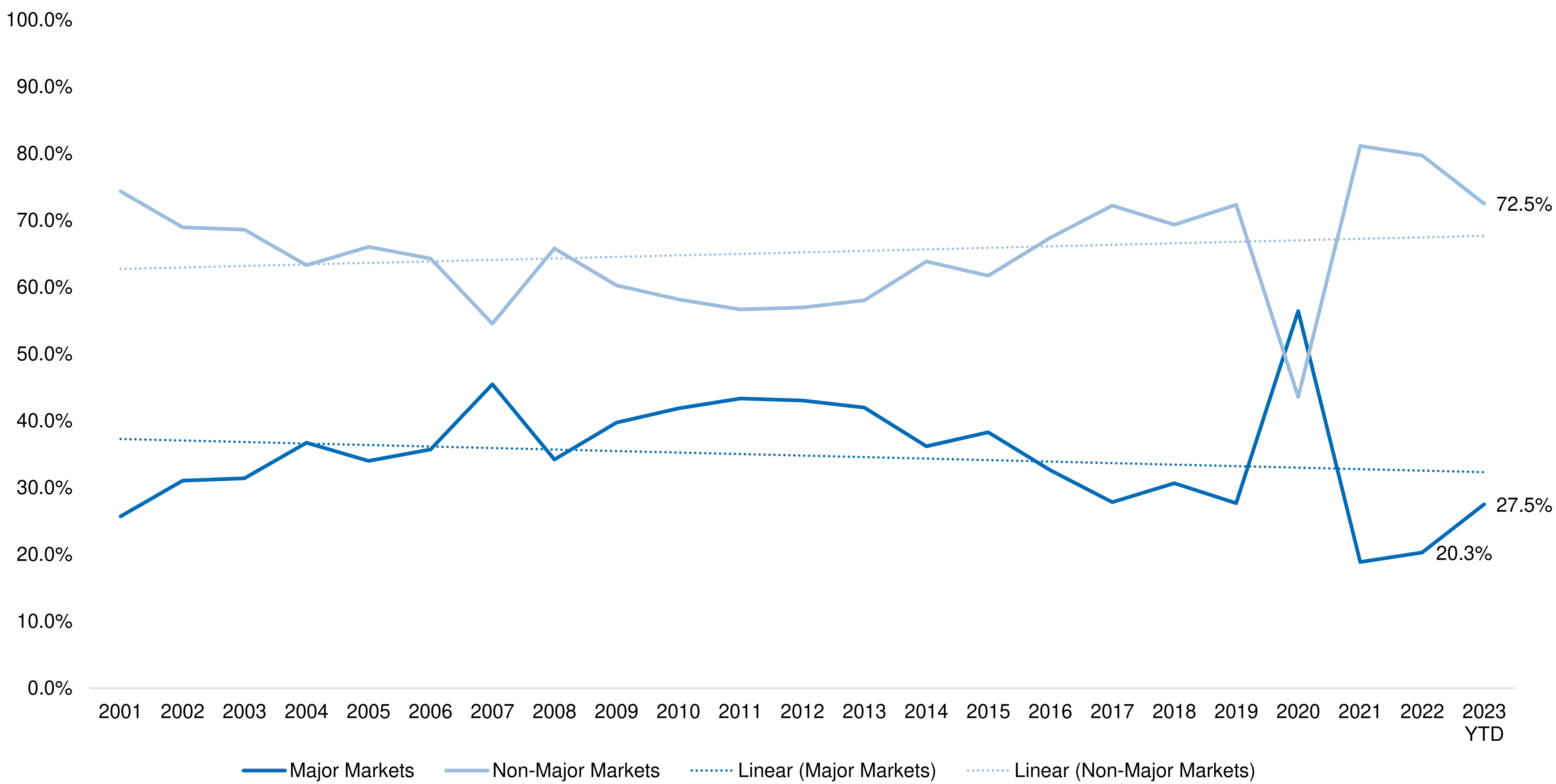


Source: Newmark Research, MSCI Real Capital Analytics

Major Markets Increases, but Investors Still Overwhelmingly Place into Non-Majors

Allocation to major markets have experienced a 7.2% increase from year-end 2022. While major markets have ticked up in the first half of 2023, non-major markets continue to attract the bulk of volume.

Multifamily Market Share



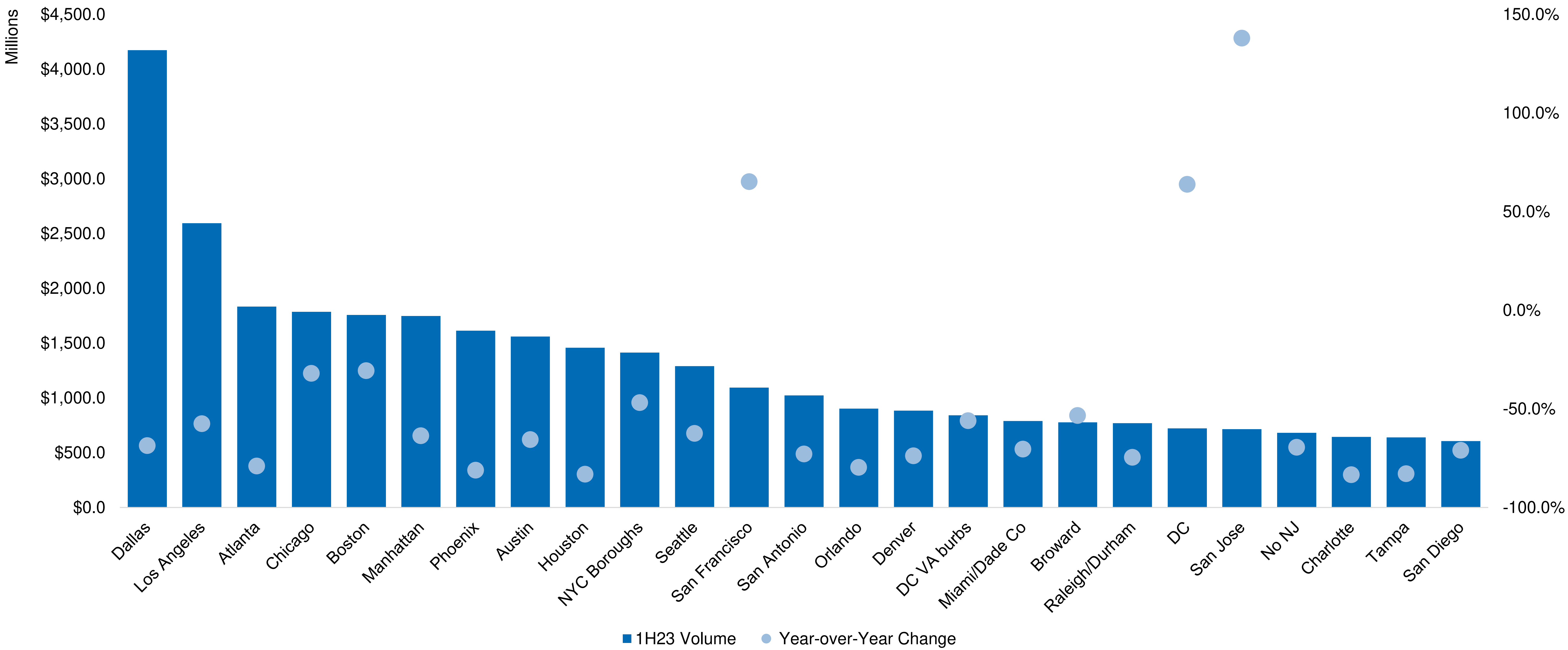
Source: Newmark Research, MSCI Real Capital Analytics

*Major markets are defined as Boston, Chicago, Los Angeles, New York, San Francisco, and Washington, DC metro areas

Safe Haven Markets See (Relative) Boost in Activity in First Half of 2023

Despite a slowdown in volume nationally, investment into major metro areas such as San Francisco, San Jose and Washington, DC through the first half of 2023 were up year-over-year. This shift is evident in the sales volume rankings, with 10 out of the top 25 markets being part of major metropolitan areas, compared with just six in the previous year.

Top 25 Markets



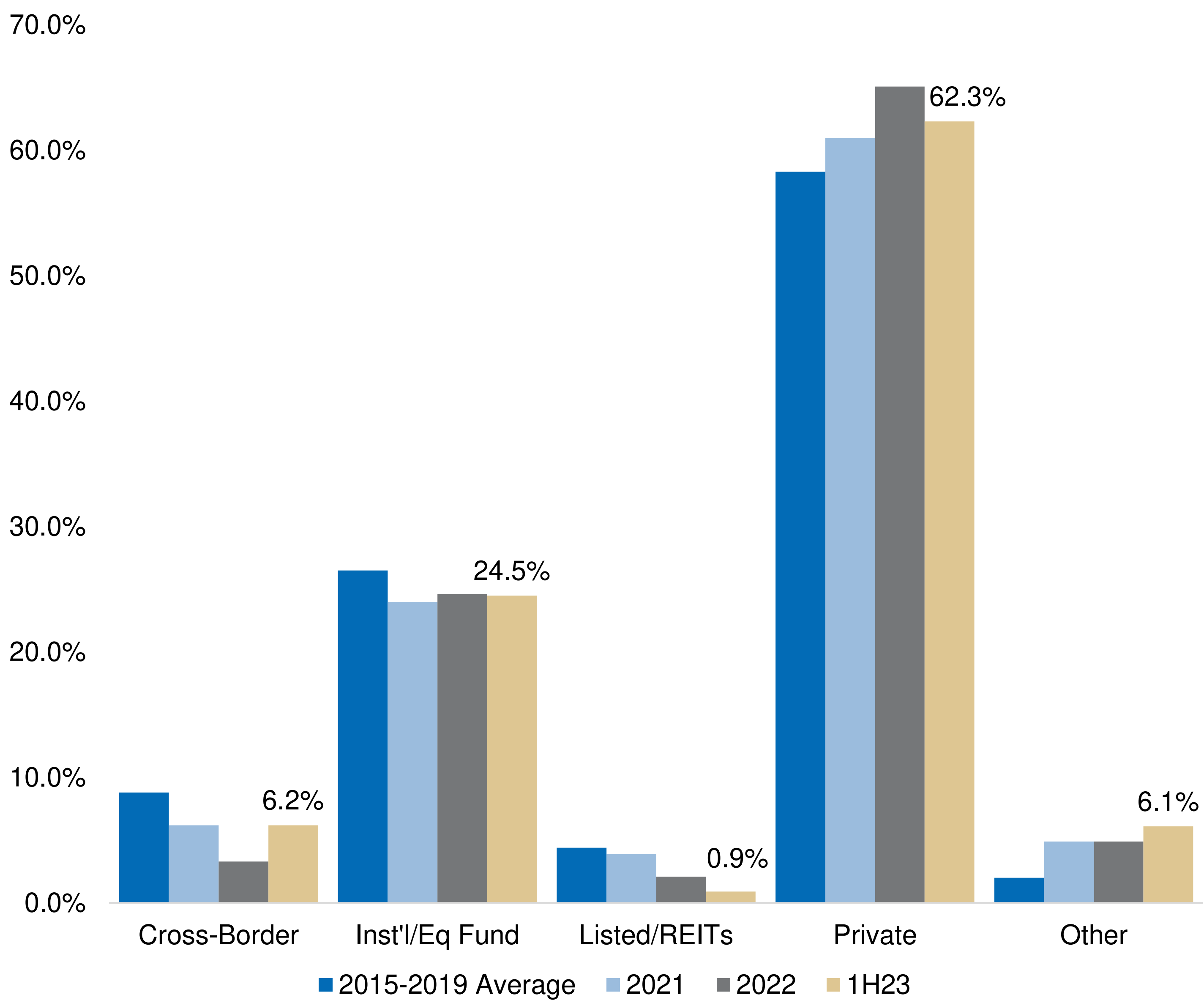
Source: Newmark Research, MSCI Real Capital Analytics

**Major markets are defined as Boston, Chicago, Los Angeles, New York, San Francisco, and Washington, DC metro areas*

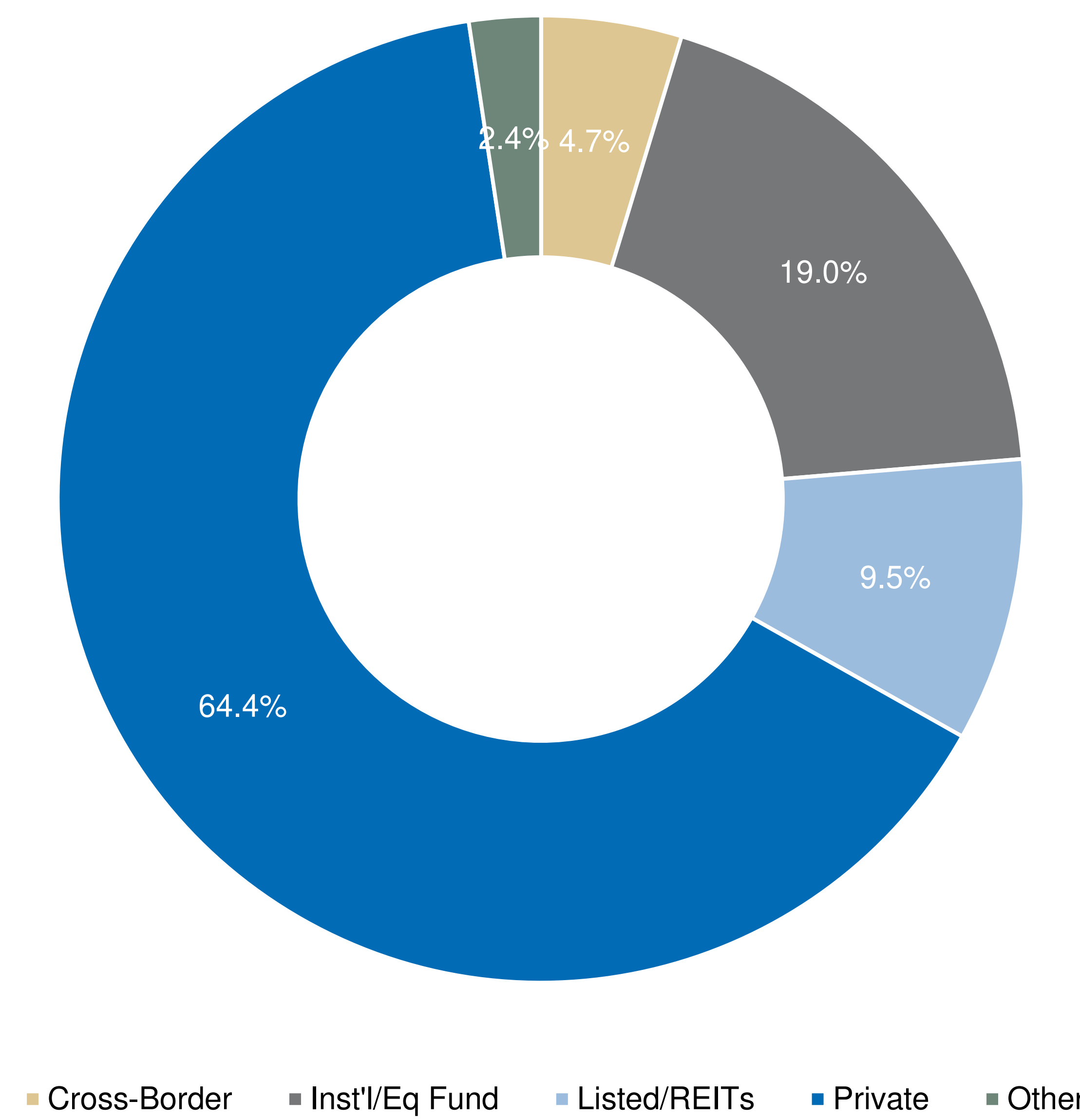
Private Groups Remain Most Nimble Source of Capital

Cross-border market share rose to 6.2% year-to-date, nearly doubling the 2022 market share. Through the first half of 2023, cross-border and institutional/equity funds have been net buyers, whereas REITs, private and other capital groups have been net sellers.

Investor Composition by Capital Group



Dispositions by Capital Group (Past 12 Months)



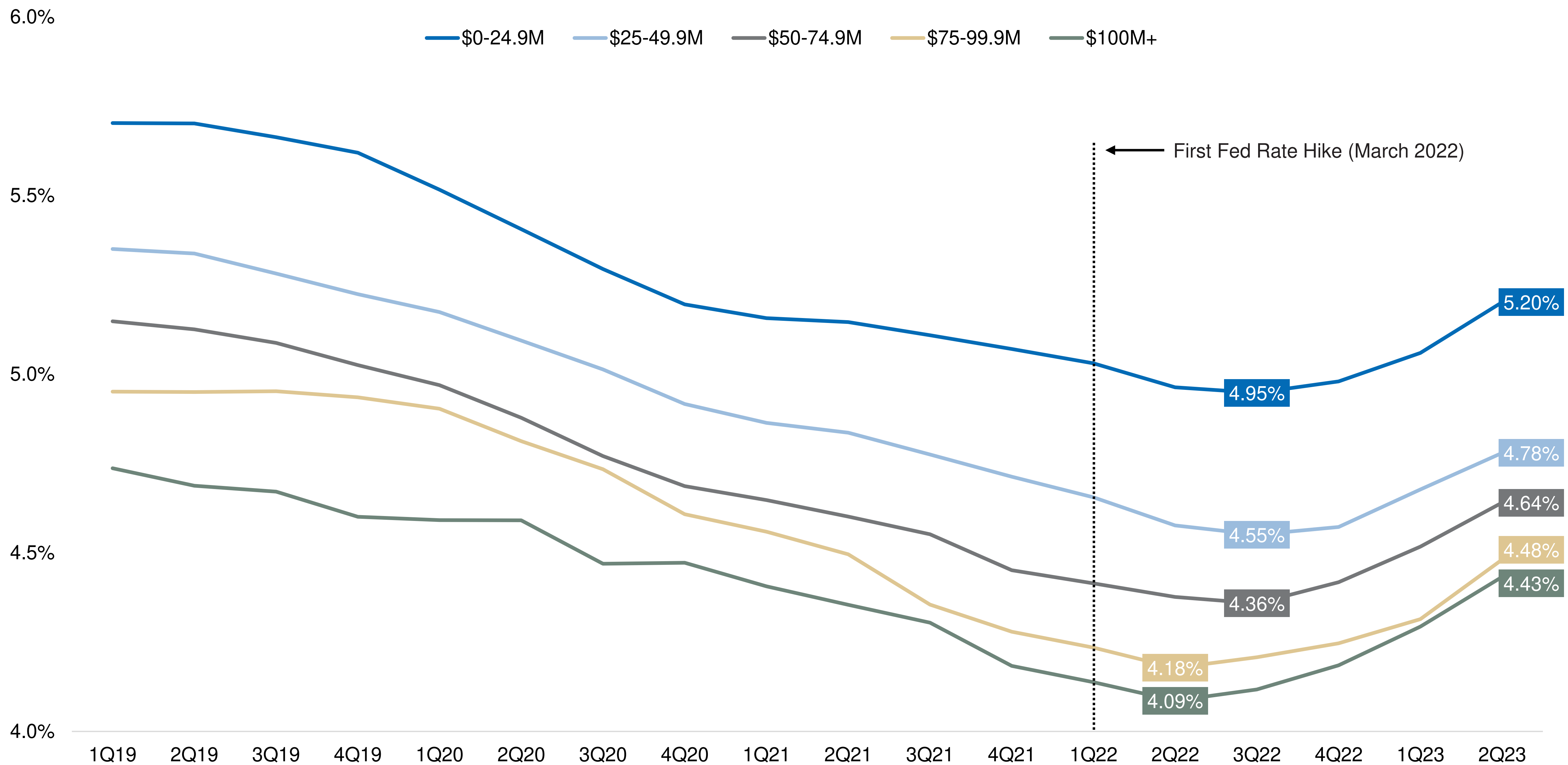
Source: Newmark Research, MSCI Real Capital Analytics

Pricing & Returns

Larger Deals Experiencing Most Evident Reset in Pricing

Following the first Federal Reserve rate hike in March 2022, cap rates for deals greater than $75 million bottomed in the second quarter of 2022, while deals under $75 million bottomed in the third quarter of 2022. The $75-million and greater deals also have experienced the largest expansion in transaction cap rates.

Average Cap Rate by Price Tier

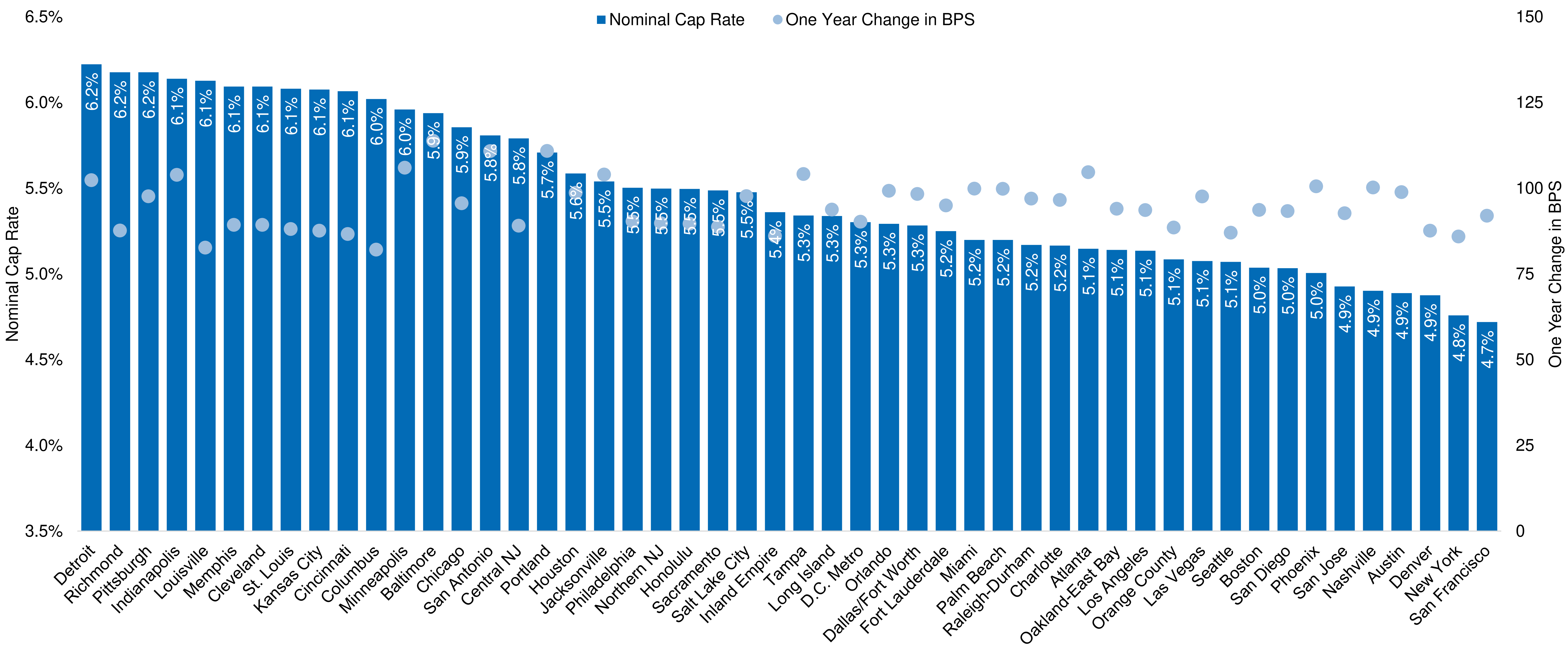


Source: Newmark Research, MSCI Real Capital Analytics

Cap Rates Expanding Universally; Small and Midsized Markets Impacted the Least

Nominal cap rates have risen 90 basis points year over year. Columbus and Louisville experienced the least expansion at 82 and 83 bps respectively, while Baltimore has seen the greatest expansion, with 114 basis points.

Nominal Cap Rates

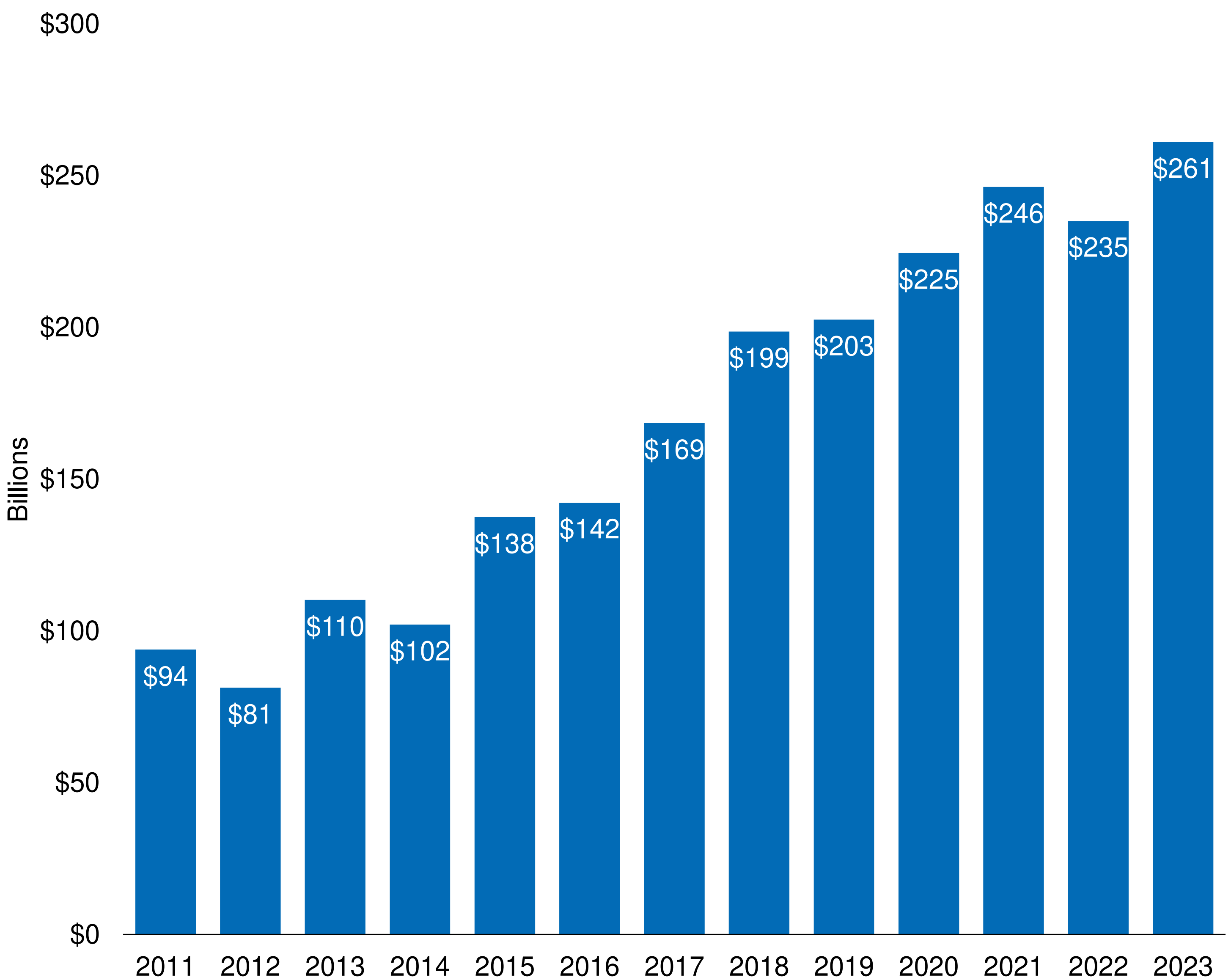


Source: Newmark Research, Green Street Advisors

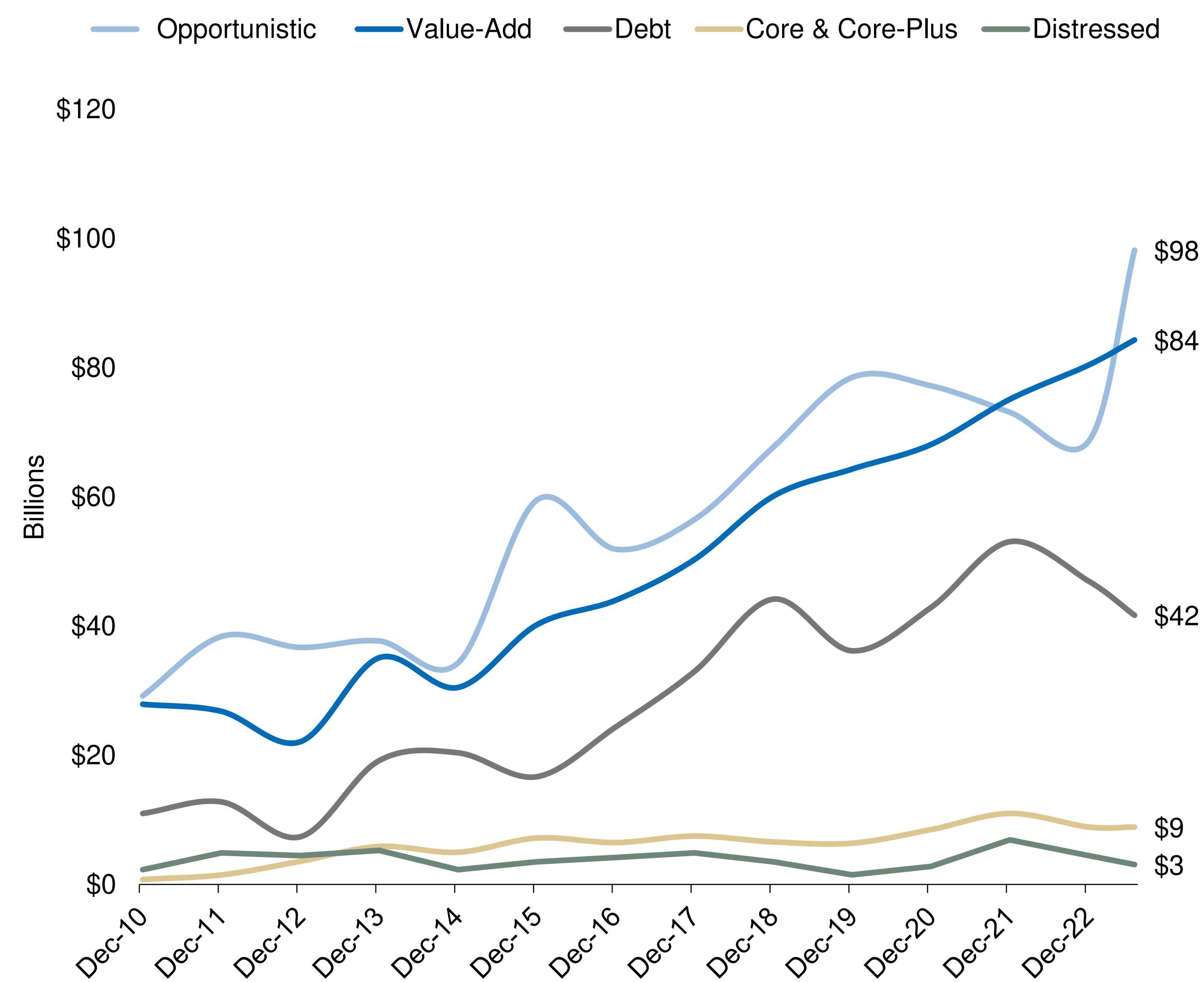
Private Equity Dry Powder Set New Record in 2023

Dry powder at closed-end funds has increased by 11% since the start of the year. The increase is due to continued growth in value-add funds and a sharp increase in dry powder at opportunistic vehicles, reversing a multiyear decline. These were more than able to offset declines in dry powder at debt and distressed funds, off very low levels in the latter case. Record fundraising by opportunistic funds in the second quarter of 2023 appears to have driven the increase as investors gear up to take advantage of asset repricing.

Dry Powder – Closed-End Funds



Dry Powder by Strategy*

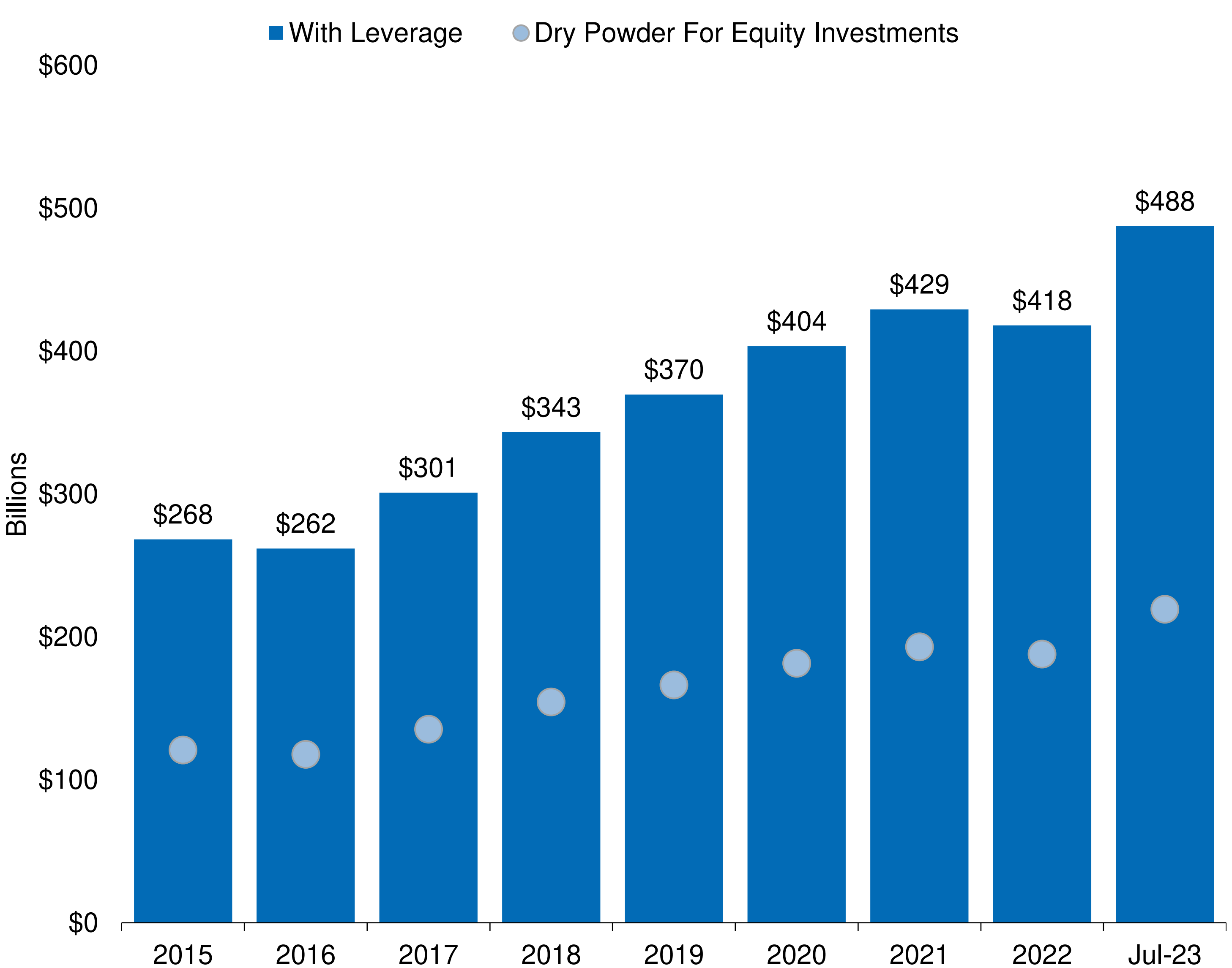


Source: Newmark Research, Preqin as of 7/26/2024
*Not shown: Fund of funds, co-investments, and secondaries strategies

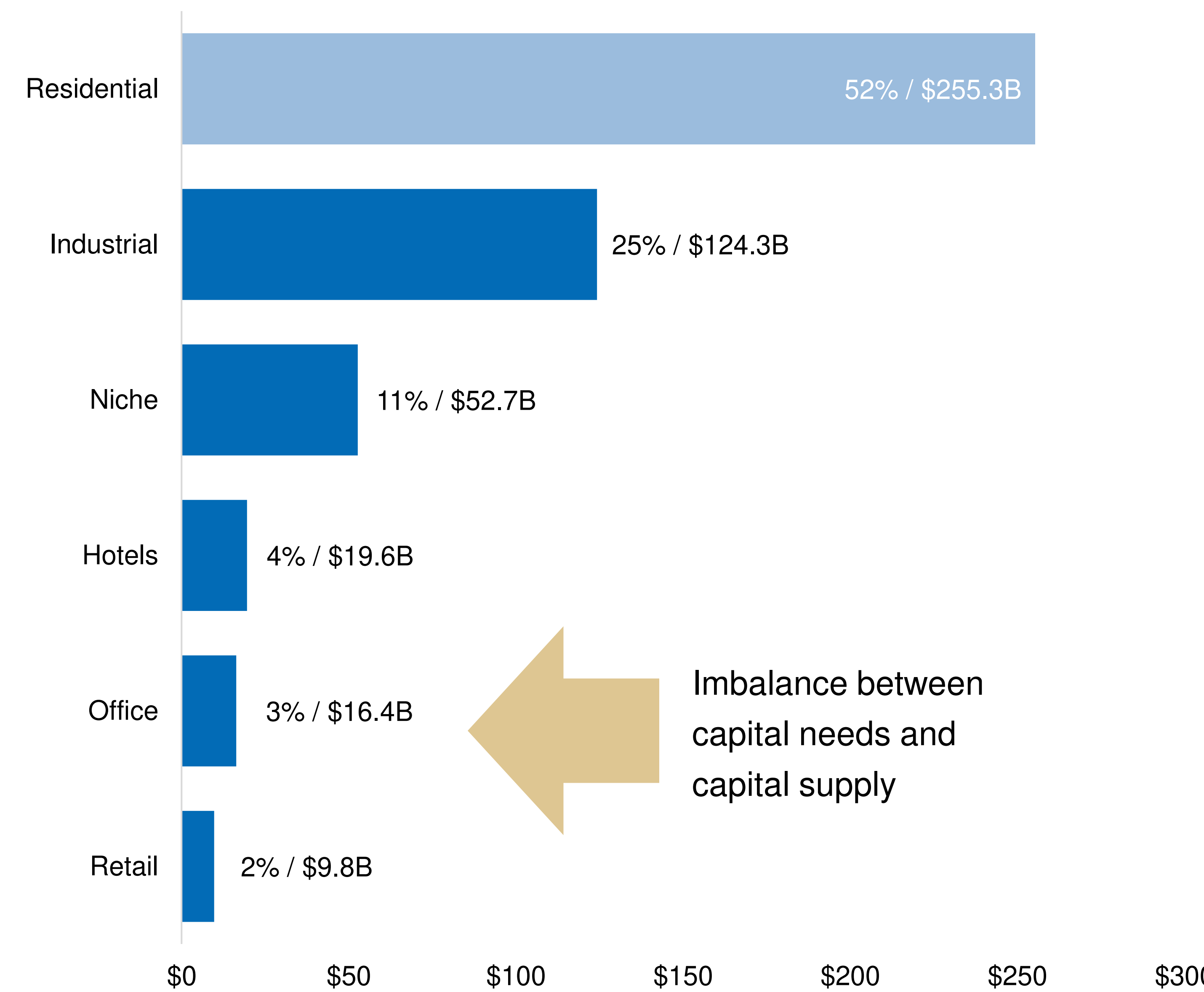
Dry Powder Heavily Biased Towards Residential

The $219 billion in dry powder raised for equity investments, not including dry powder raised for debt strategies, equates to a leveraged purchasing power of $488 billion, using a 55% loan-to-value ratio. We estimate that over half of this capital is targeted at multifamily assets, with most of the remainder focused on industrial assets. The capital targeting office and retail assets is quite small by comparison, which could ultimately represent a contrarian opportunity.

Dry Powder at 55% Leverage



Leveraged Dry Powder By Property Type*

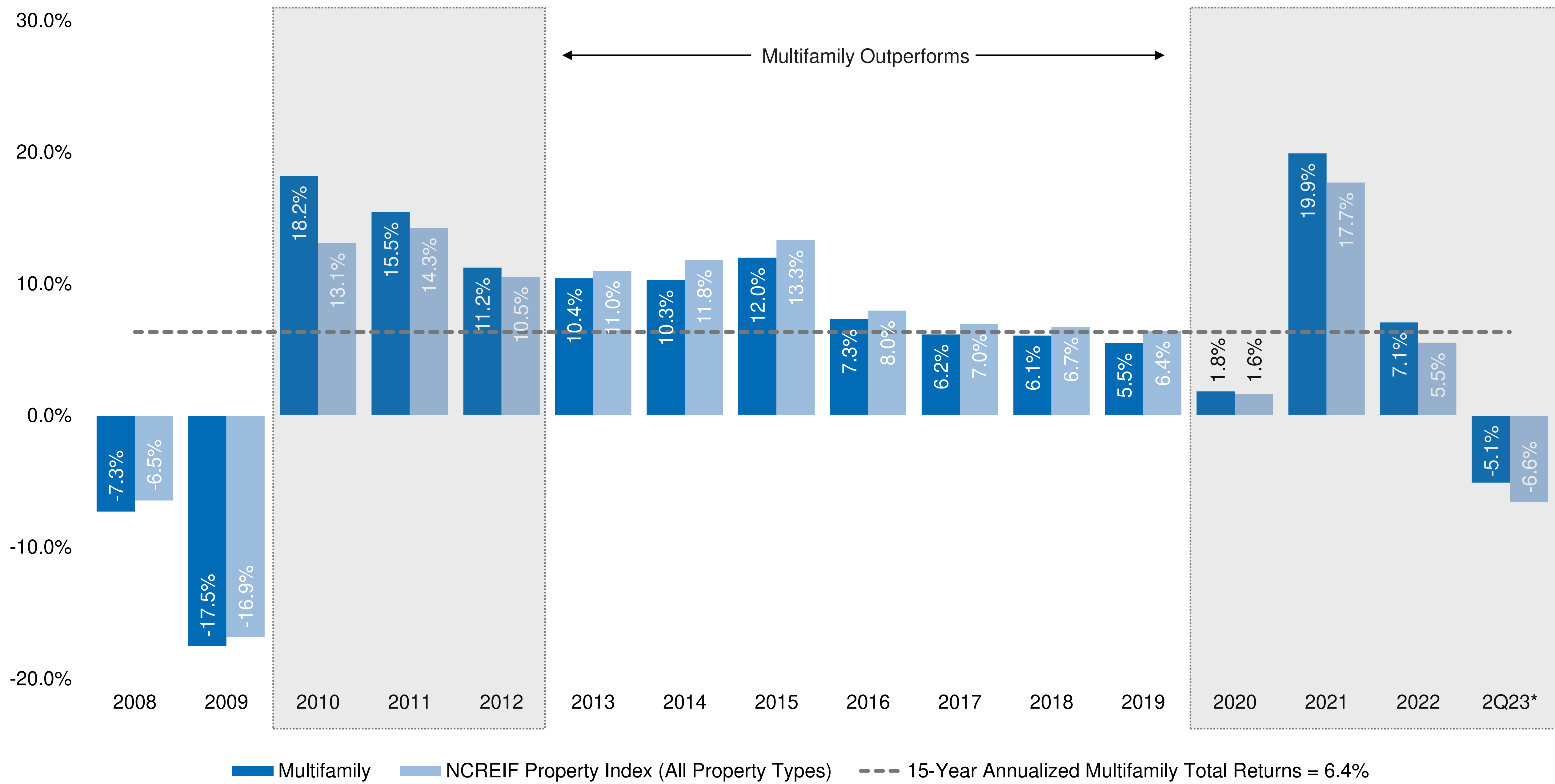


Source: Newmark Research, Preqin as of 7/26/2023
*We looked at the percent called by vintage year and applied this to the total amount fundraised in each year to calculate the amount of uncalled capital (i.e. dry powder), broken out by main property type. Roughly half the dry powder was at diversified funds. This was allocated to the various property types in proportion to their share of total dry powder, excluding diversified funds. Finally, we grossed up the dry powder assuming 55% leverage would be used.

Multifamily Outperforming, Strong Track Record of Generating Alpha in Recoveries

In the years following the Global Financial Crisis and the COVID-19 outbreak, multifamily proved more resilient to investors as they generated greater returns than other property types. Although still down in 2023, as a more defensive and less volatile asset type, multifamily has higher returns than the broader property index thus far in 2023.

Calendar Year Total Returns



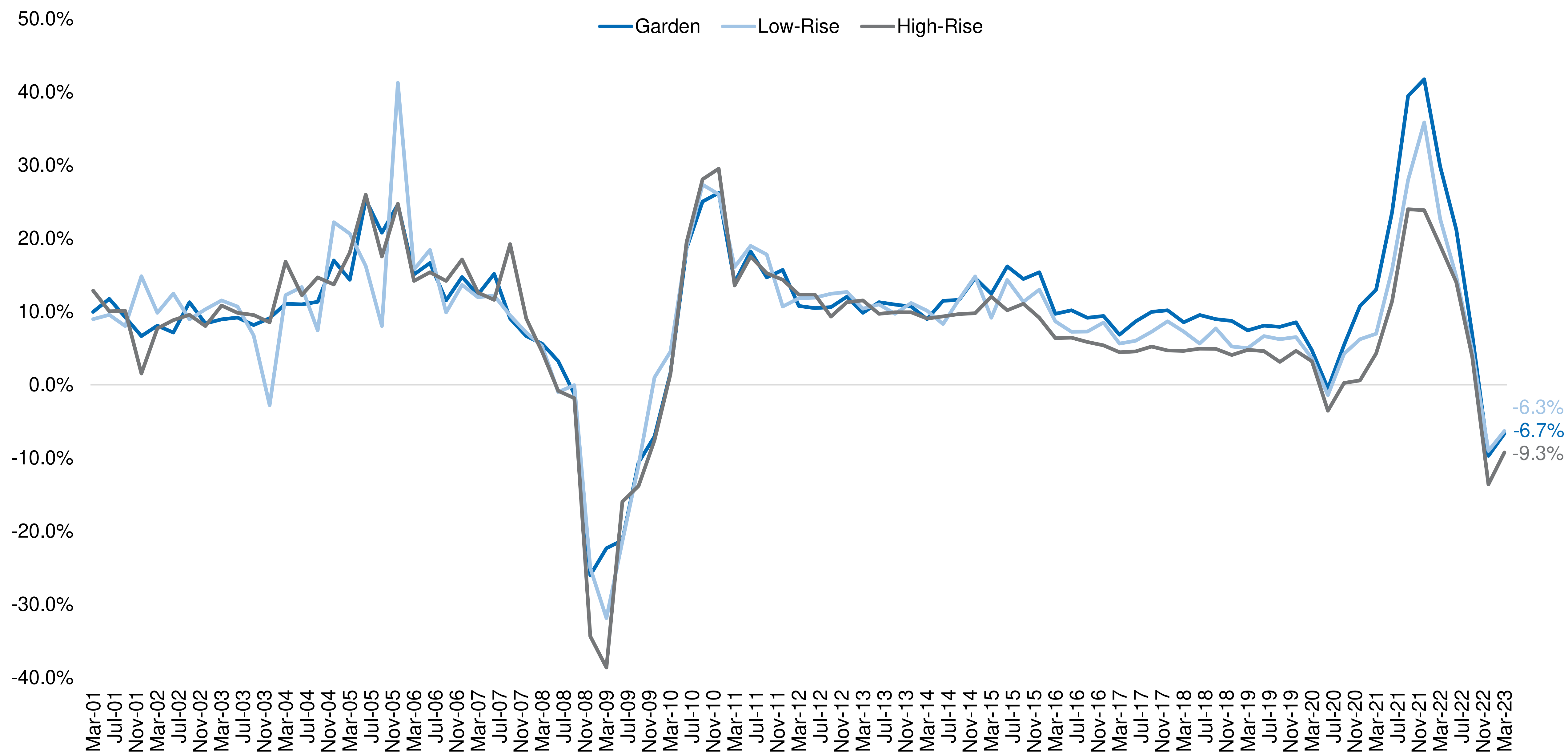
Source: Newmark Research, NCREIF

**2Q23 total returns are annualized*

Returns Remain Broadly Negative; Relative Outperformance in Low-Rise

Multifamily returns increased on the margin, with low-rise and garden apartments continuing to outperform high-rise properties.

NCREIF National Property Index Quarterly Total Return (Percent Annualized)

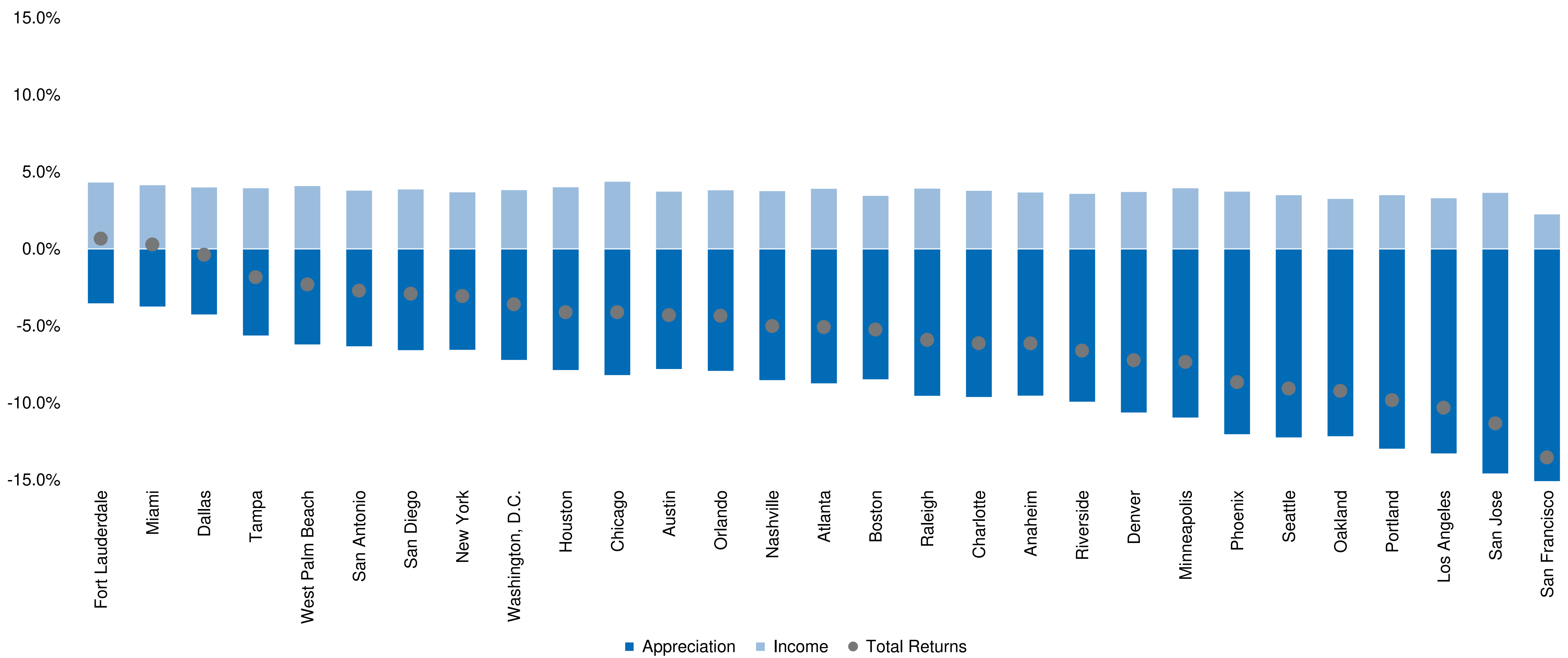


Source: Newmark Research, NCREIF

Incomes Takes Center Stage as Appreciation Falls, Just Two Markets Positive TTM

Just two markets produced positive total returns over the past 12 months: Fort Lauderdale and Miami, at 0.7% and 0.3%, respectively, helped by 4.0%+ income growth. Appreciation declined across the board; however, West Coast markets, such as Los Angles, San Jose and San Francisco, all experienced double-digit total return losses.

NCREIF Annualized Total Returns by Market as of 2Q23



Source: Newmark Research, NCREIF

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