2Q24

United States Multifamily Capital Markets Report

NEWMARK

Market Observations

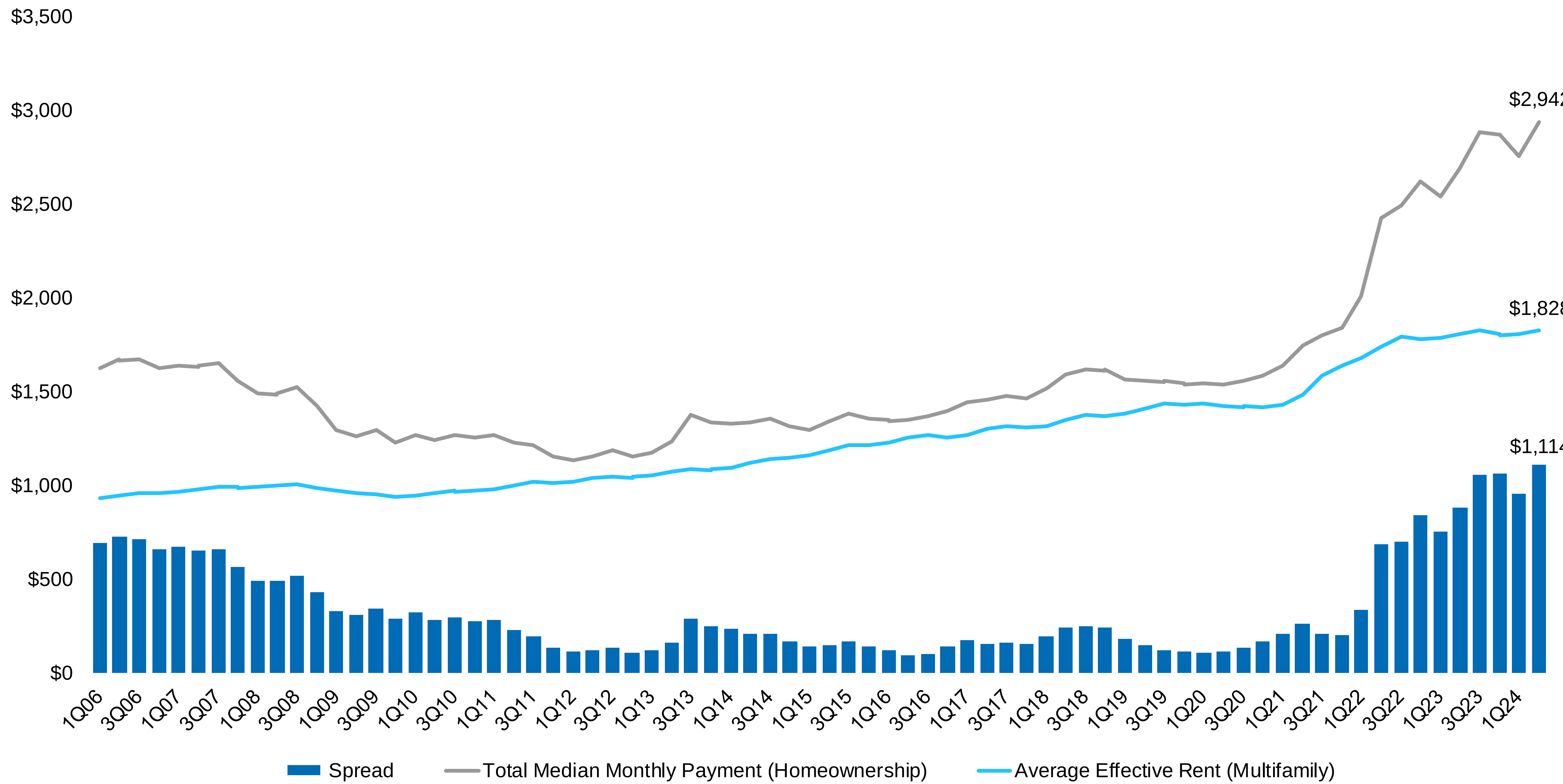
- Increasing 26.7% year over year, the spread between homeownership and rental costs grew to $1,114 in the second quarter of 2024, while MBA's Mortgage Application Index decreased 48.8% since the Fed's initial rate hike in March 2022.
- Quarterly demand totaled 161,707 units in the second quarter of 2024, representing a 102.0% year-over-year surge. Rolling four-quarter demand accelerated to 389,629 units, which has improved for five consecutive quarters. Sun Belt markets within the top 50 markets nationally averaged demand 64.4% greater than the long-term average from 2014 to 2023.
- Breaking the previous largest quarterly sum on record of 126,591 in the first quarter of 2024, 157,052 units were delivered in the second quarter of 2024. New deliveries are expected to continue to accelerate in the third and fourth quarters of 2024, before decelerating in the first quarter of 2025.
- Quarterly rent growth rose to 1.1% in the second quarter of 2024, while year-over-year growth remained flat at 0.2% for the third quarter consecutively. Year-over-year rent growth is projected to increase throughout the second half of 2024 and throughout 2025 as new supply fears lessen.
- $669 billion in multifamily loans mature between 2024 and 2026, with banks accounting for 46% of maturities between 2024 and 2026. GSEs and banks remain the largest lenders, despite originations declining 32% and 22% year over year, respectively. CMBS has been a bright spot, with a 167% year-over-year surge in the first quarter of 2024.
- Sales volume rose to $38.8 billion in the second quarter of 2024, representing a 20.4% year-over-year increase in volume as a flurry of portfolio and entity-level transactions closed throughout the quarter. This also signifies the first sequential positive year-over-year change in volumes since the second quarter of 2022.
- The spread between top quartile cap rates totaled 26 basis points, 67.8% below the long-term average of 80 basis points. The market is pricing non-major markets with lower barriers to entry, favorable demographics and strong demand compared with major markets, which are more supply constrained.
- Dry powder at closed-end funds is 10.3% below its December 2022 peak, reflecting declines in dry powder at value-add and opportunistic funds. Fundraising in the second quarter of 2024 ($29.1 billion) increased 31% quarter over quarter. Even more notably, the number of funds raising capital (139) rose sharply to the highest level since the fourth quarter of 2022 (169).
- Across all residential subtypes and expanded subtypes, total returns over the past 12 months were lower than the 2022-to-2023 average; however, both manufactured and student housing have been bright spots, which may explain why investors have increased allocations to nonconventional in recent years.
- As of the second quarter of 2024, total expenses increased 5.1% year over year; however, this marks the fourth consecutive decline in total expenses after peaking one year prior. Most notably, insurance growth declined to 26.0% in the second quarter of 2024, compared with 36.1% in the first quarter of 2024.

Demand Drivers

Economics Continue to Favor Renting over Homeownership

Increasing 26.7% year over year, the spread between homeownership and rental costs grew to $1,114 in the second quarter of 2024. Driven by record-level interest rates, renting continues to be significantly more economical than owning a home.

Cost of Homeownership Compared to Renting



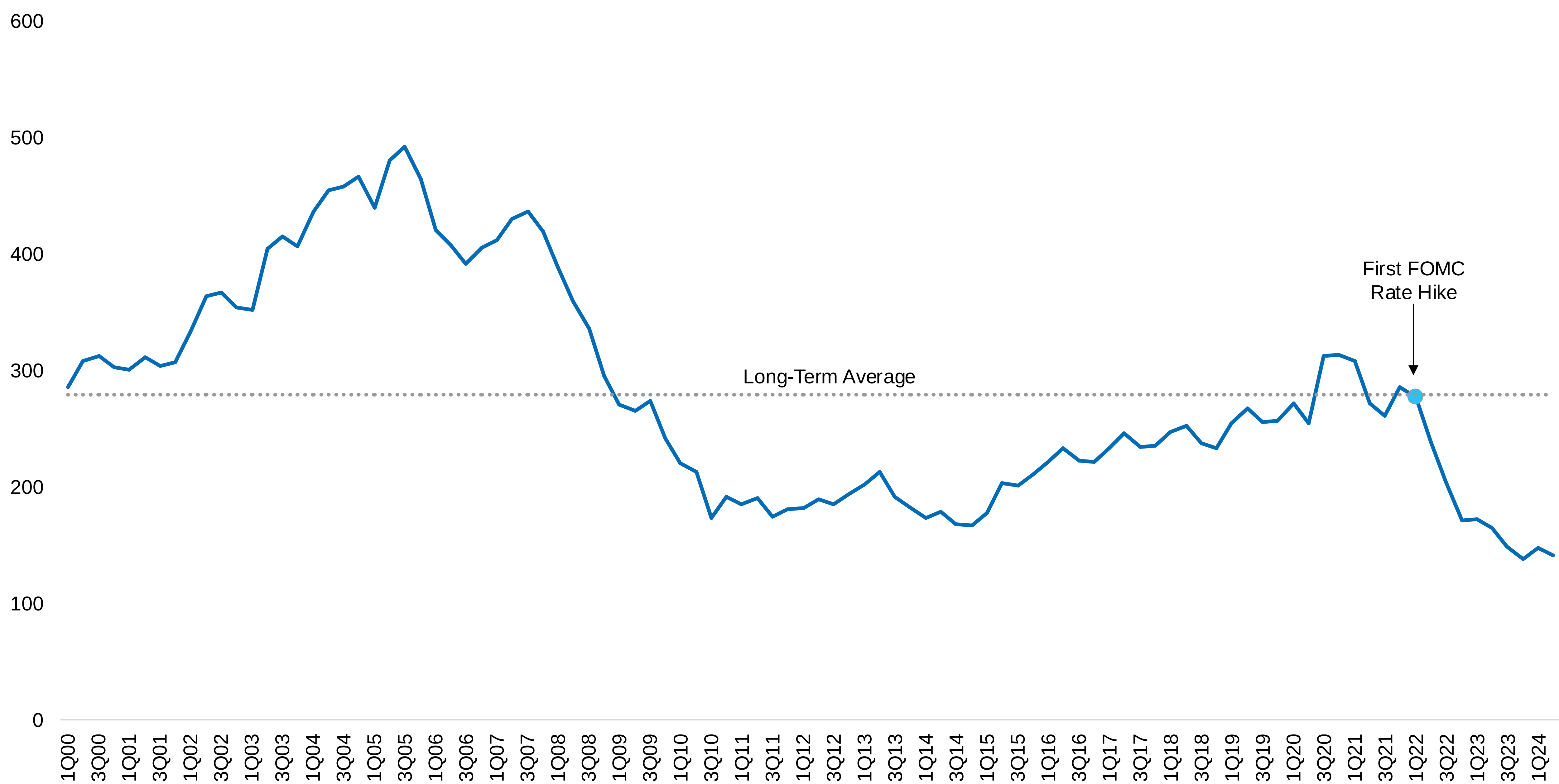
Source: Newmark Research, Atlanta Federal Reserve (7/31/24), RealPage

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

Purchase Applications Plummet 49% Following Initial Fed Rate Hike

As of the second quarter of 2024, MBA's Mortgage Application Index decreased 48.8% since the Fed's initial rate hike in March 2022 and is 49.3% less than the long-term average. Furthermore, applications are at the second lowest level in over 24 years, only mere points off the lows reached two quarters prior.

MBA Mortgage Applications for Home Purchase Index

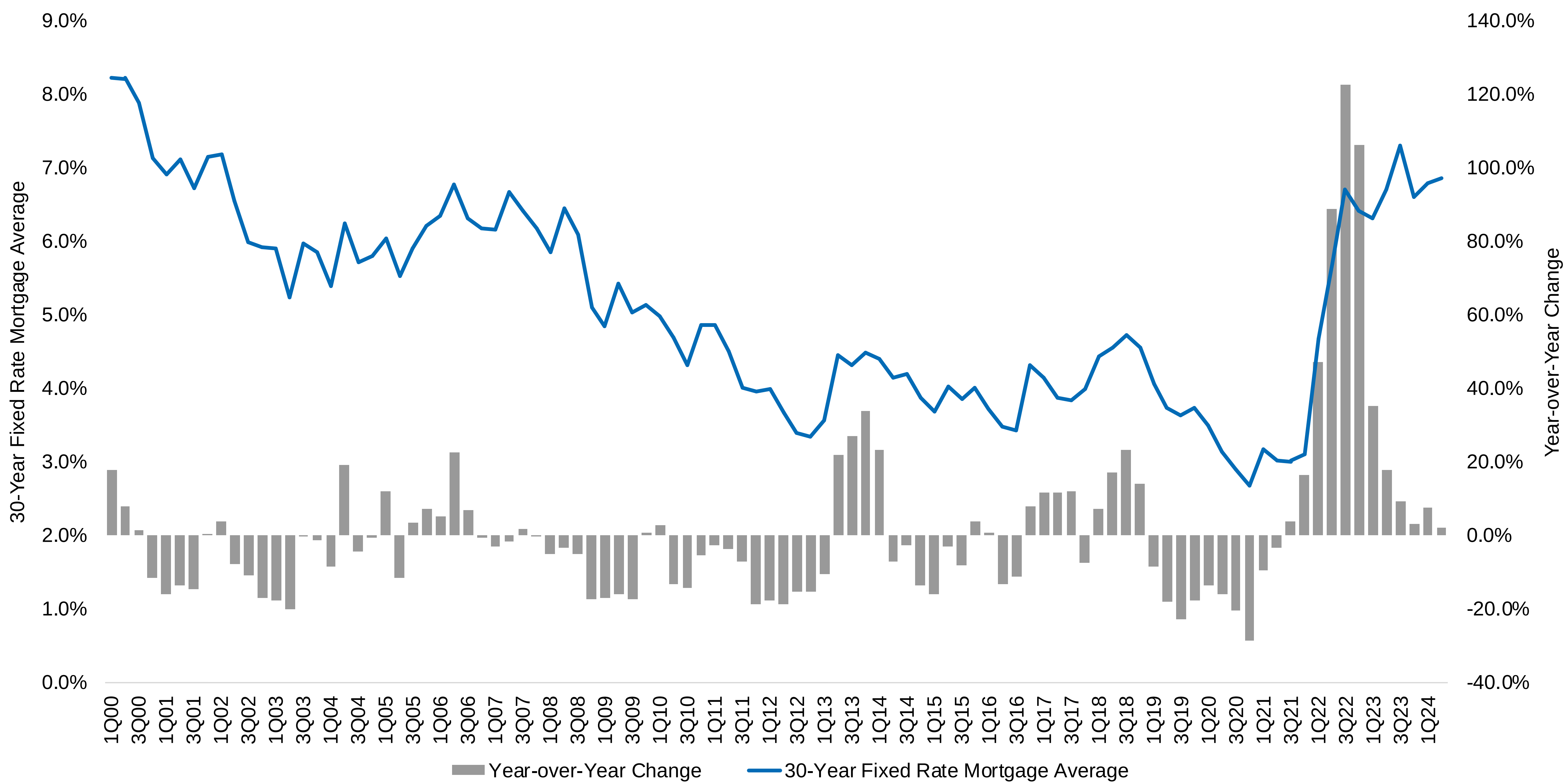


Source: Newmark Research, Moody's Analytics, Mortgage Bankers Association

Pace of Increases Have Slowed, but Borrowing Costs Still Elevated for Home Buyers

As of the second quarter of 2024, the 30-year fixed rate mortgage throughout the United States increased to 6.86%, the second highest rate in 20+ years. While the rate of growth year over year has slowed, borrowing costs for home buyers are 42.9% above the five-year average.

30-Year Fixed Rate Mortgage Average



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

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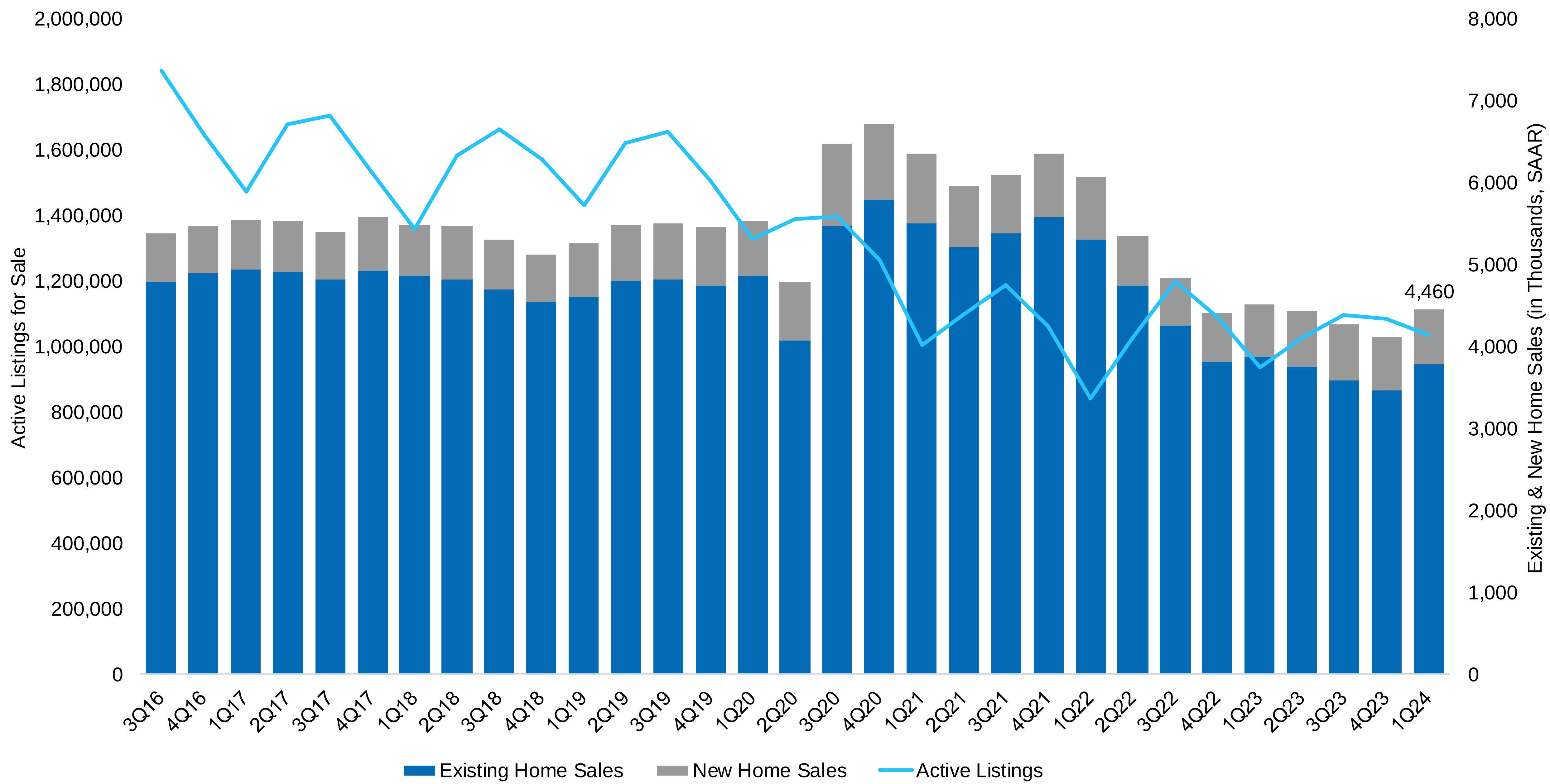
Active Listings Have Ticked up but Home Sales Remain Depressed

While active listings have increased 10.7% year over year, new and existing home sales have decreased 1.2% over the same period. Limited listings, combined with multidecade high interest rates, have resulted in home sales plunging 33.7% since the peak for transactions in the fourth quarter of 2020.

Active Listings for Sale and Number of Homes Sold

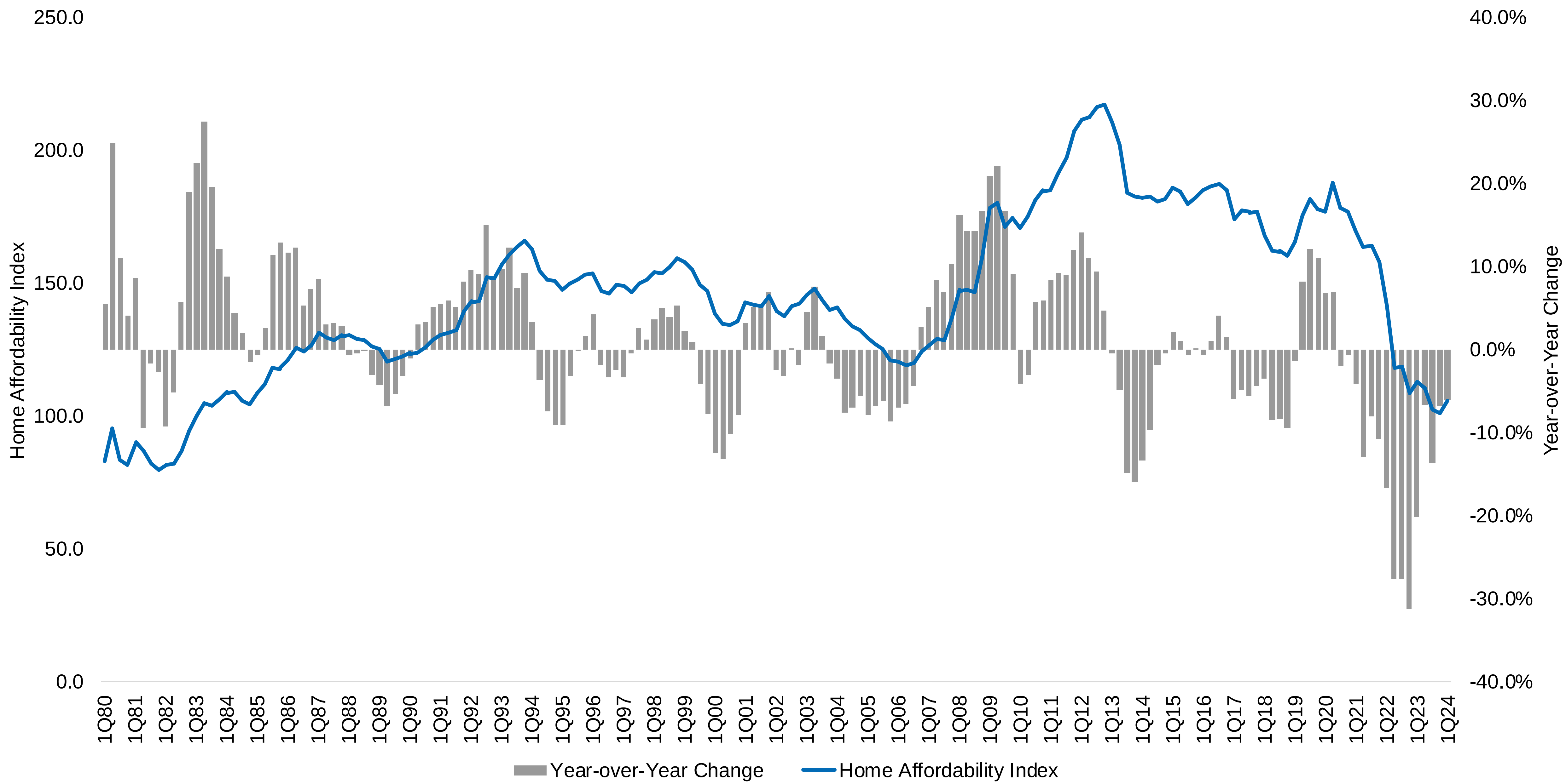


Source: Newmark Research, Realtor.com, National Association of Realtors, U.S. Census Bureau, Moody's Analytics

Rental Housing Also Benefitting from Significantly Decreased Home Affordability

Home affordability has decreasing 6.1% year-over-year. Affordability is a long-term driver of rental housing, as affordability has fallen 25.1% over the past 24 months, 37.6% over the past 36 months and 40.1% over the past 48 months.

Home Affordability Index



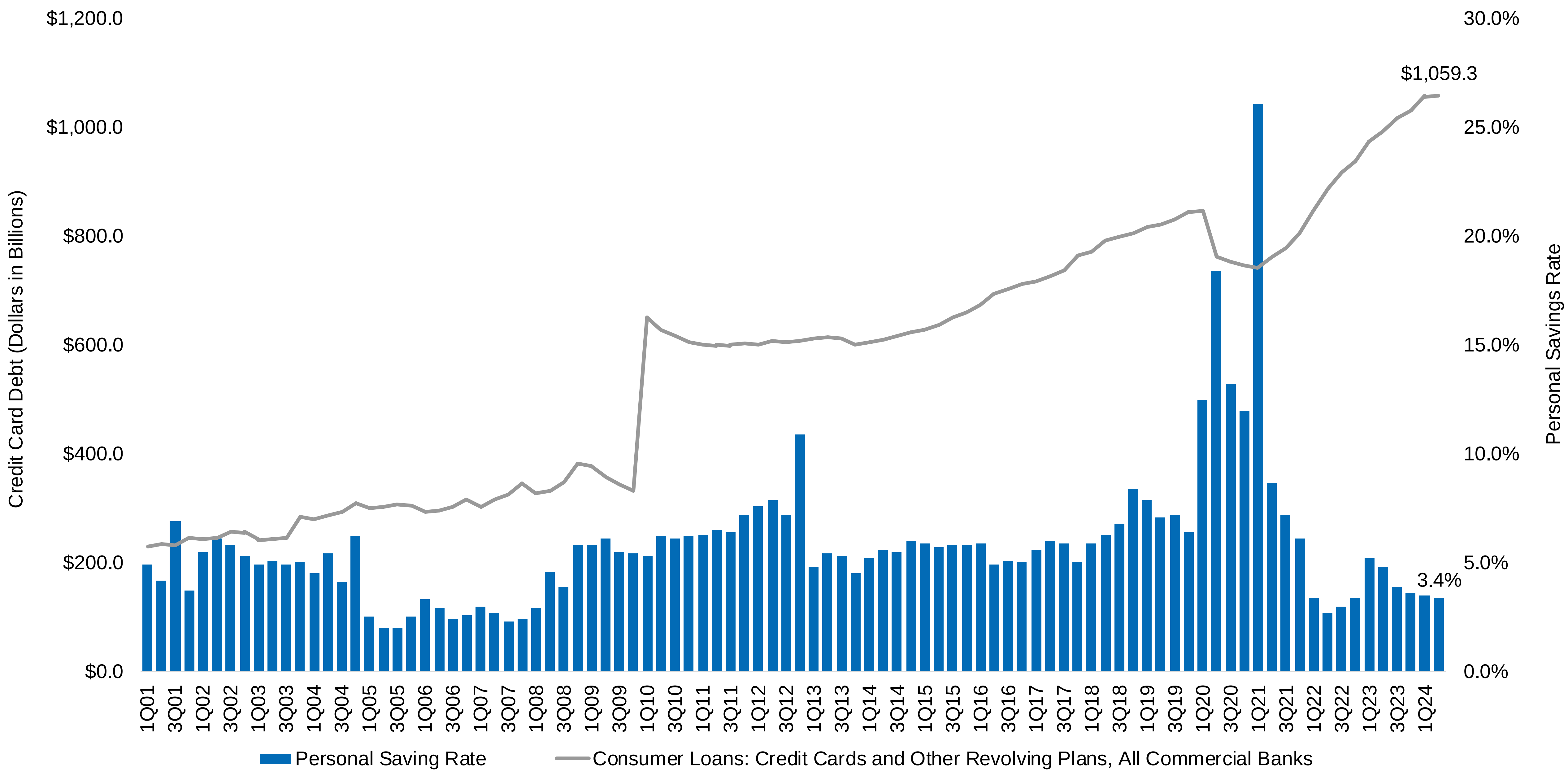
Source: Newmark Research, National Association of Realtors, U.S. Census Bureau, U.S. Bureau of Economic Analysis, Moody's Analytics

**A value of 100 means that a family with the median income has exactly enough income to qualify for a typical mortgage on a median-priced single-family home.*

Consumers Have Less for Down Payment as Savings Rates & Credit Card Debt Grows

Further increasing the burden of buying a home, credit card debt in the US continues to reach all-time highs with each passing quarter. Simultaneously, the personal savings rate declined for the fourth straight quarter to 3.4% in the second quarter of 2024, 240 basis points below the long-term average.

Personal Savings Rate and Consumer Credit Card Debt



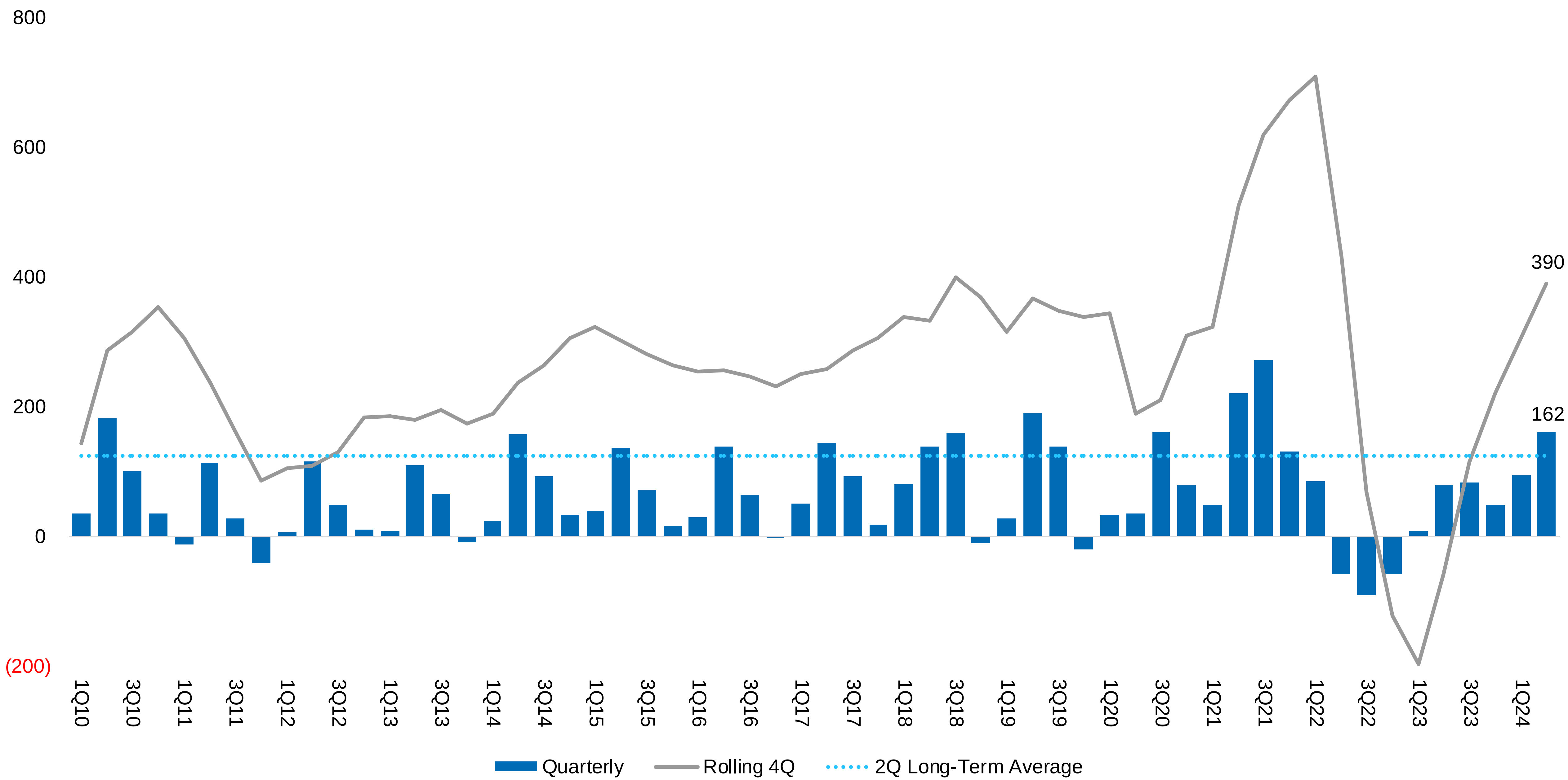
Source: Newmark Research, Federal Reserve Bank of St. Louis, U.S. Bureau of Economic Analysis, Board of Governors of the Federal Reserve System

Leasing Market

Demand Continues to Surge in 2Q24; Rolling Four-Quarter Absorption Escalates

Quarterly demand totaled 161,707 units in the second quarter of 2024, representing an increase of 102.0% year over year, while also outpacing the second-quarter long-term average by 29.7%. Rolling four-quarter demand accelerated to 389,629 units, which has improved for five consecutive quarters.

Demand in Thousands



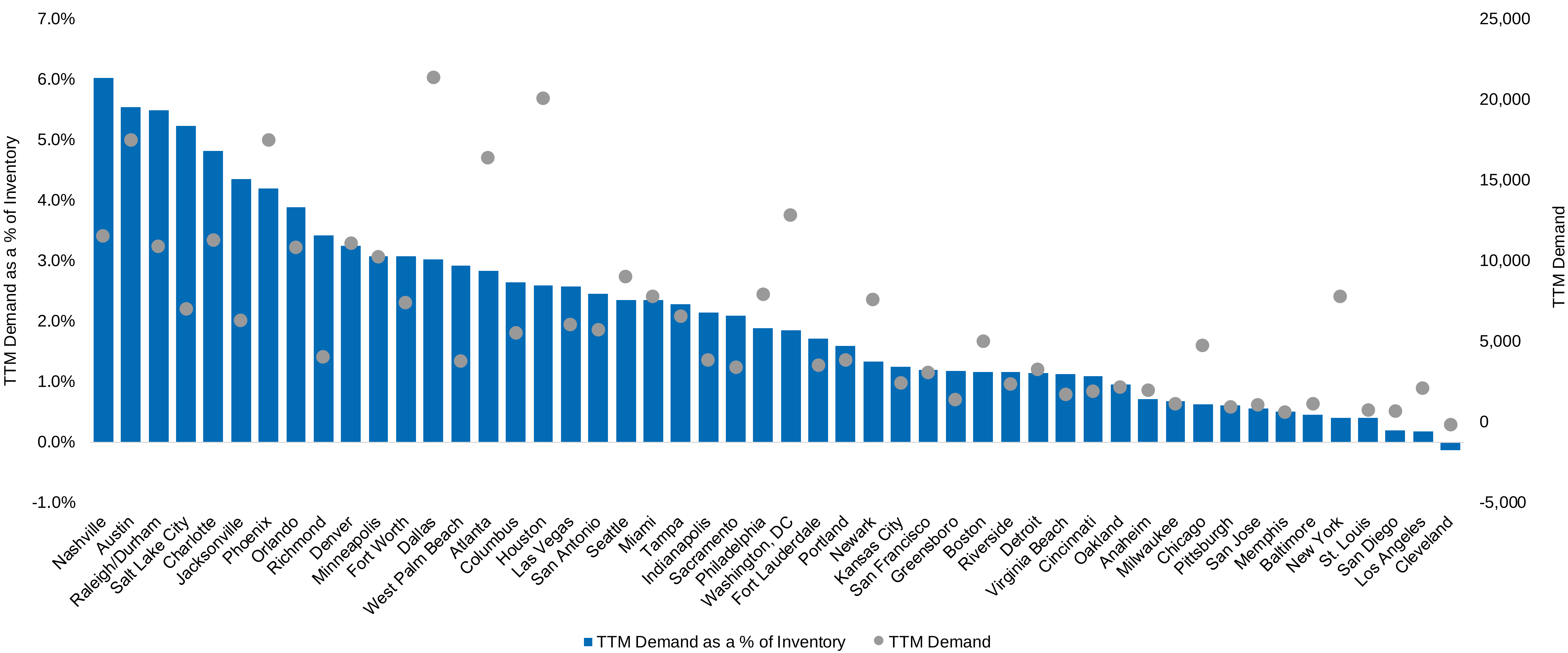
Source: Newmark Research, RealPage

**Demand is defined as the change in occupied units.*

Demand Strongest Throughout Sun Belt, Both Relative to Inventory and Nominally

Sun Belt markets, such as Austin, Raleigh/Durham and Nashville, have shown the highest relative demand on a trailing 12-month basis, while markets such as Dallas and Atlanta have the highest nominal demand over the period.

Top 50 Markets



Source: Newmark Research, RealPage

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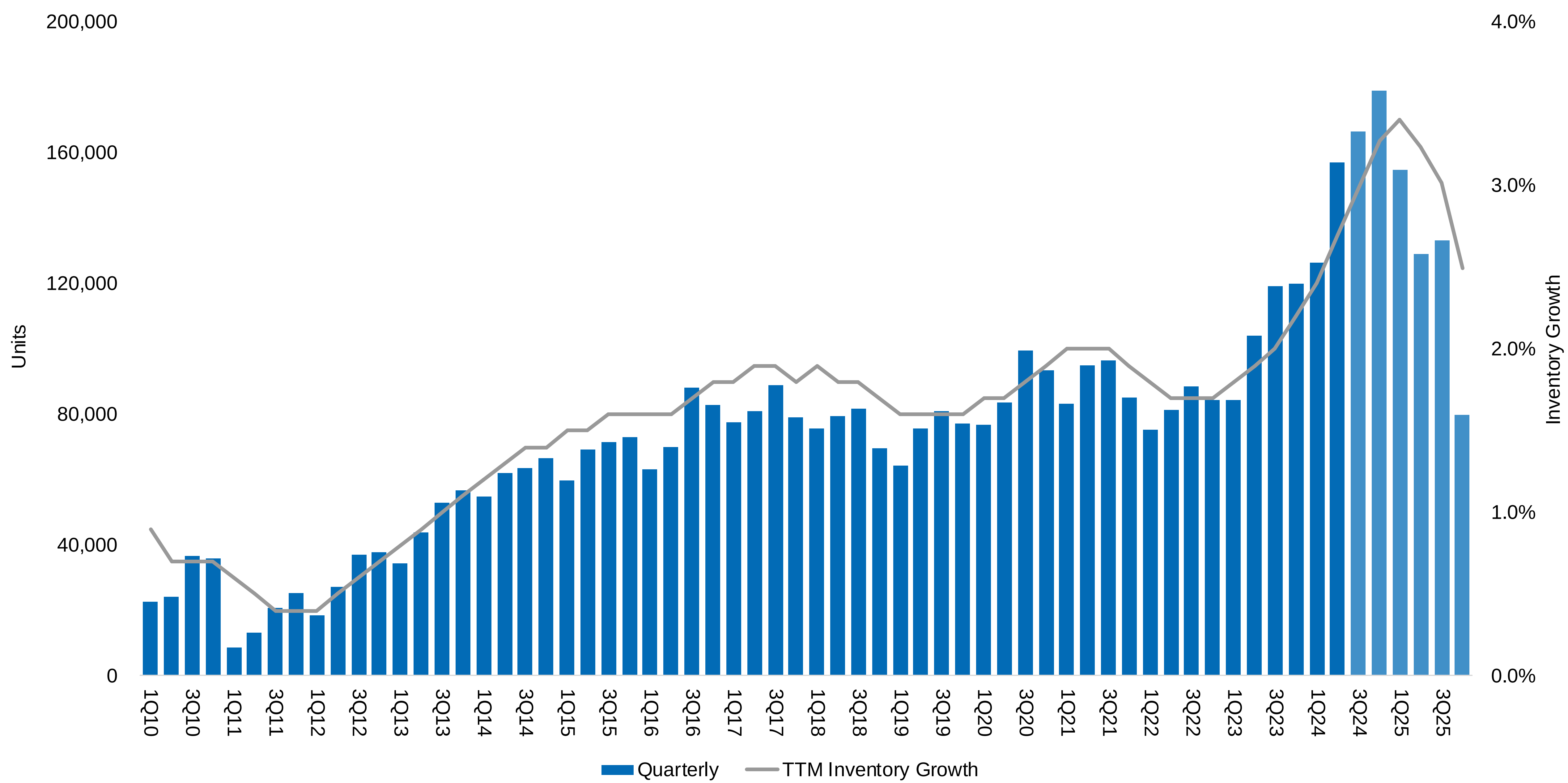
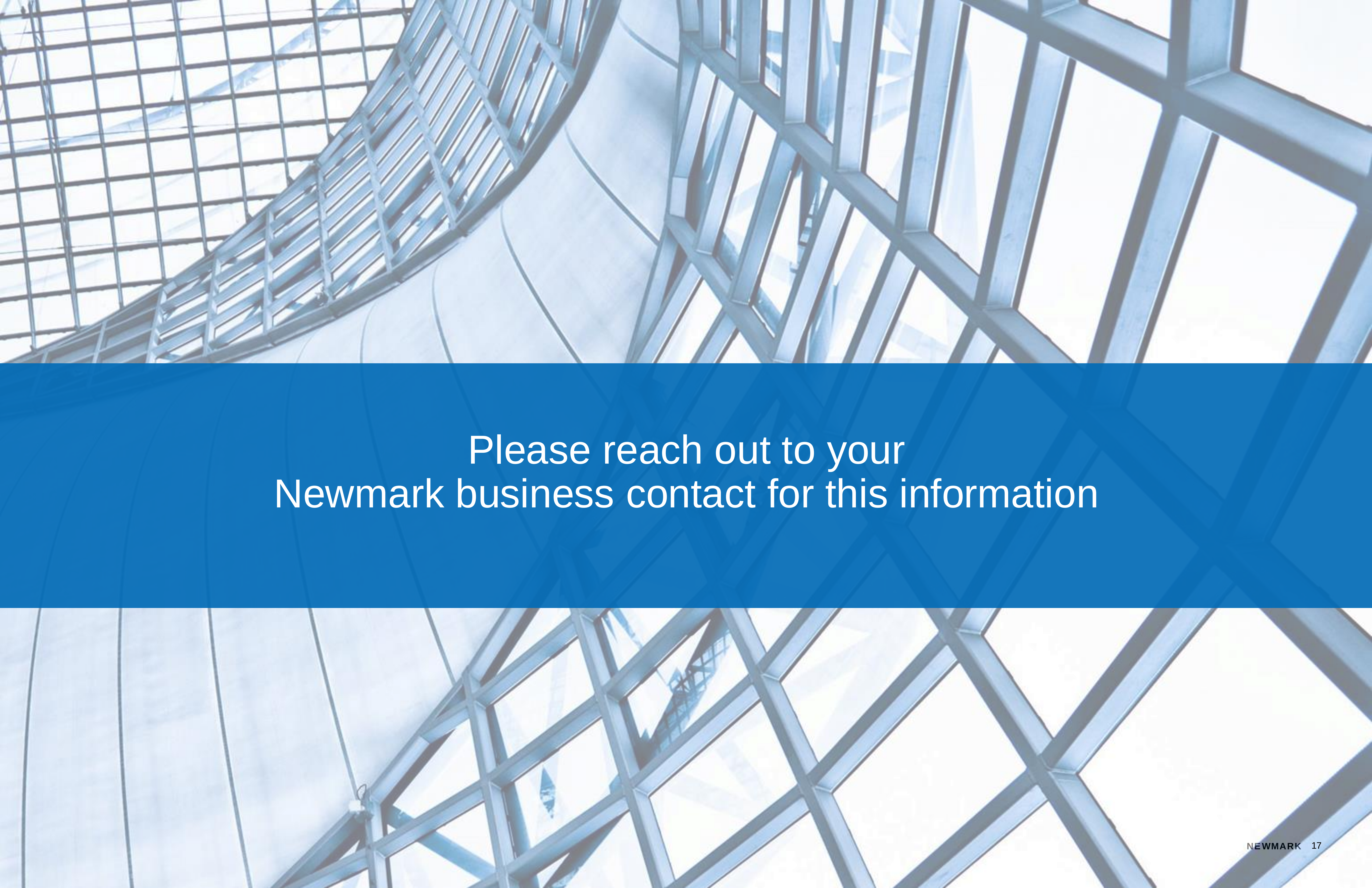
New Supply Breaks Prior All-Time Quarterly High (Again); Deliveries to Peak in 4Q24

157,062 units were delivered in the second quarter of 2024, breaking the previous largest quarterly sum on record of 126,591 in the first quarter of 2024. New deliveries are expected to continue to accelerate in the third and fourth quarters of 2024, before decelerating in the first quarter of 2025, where a reversion to the mean is expected.

Quarterly New Supply



Source: Newmark Research, RealPage



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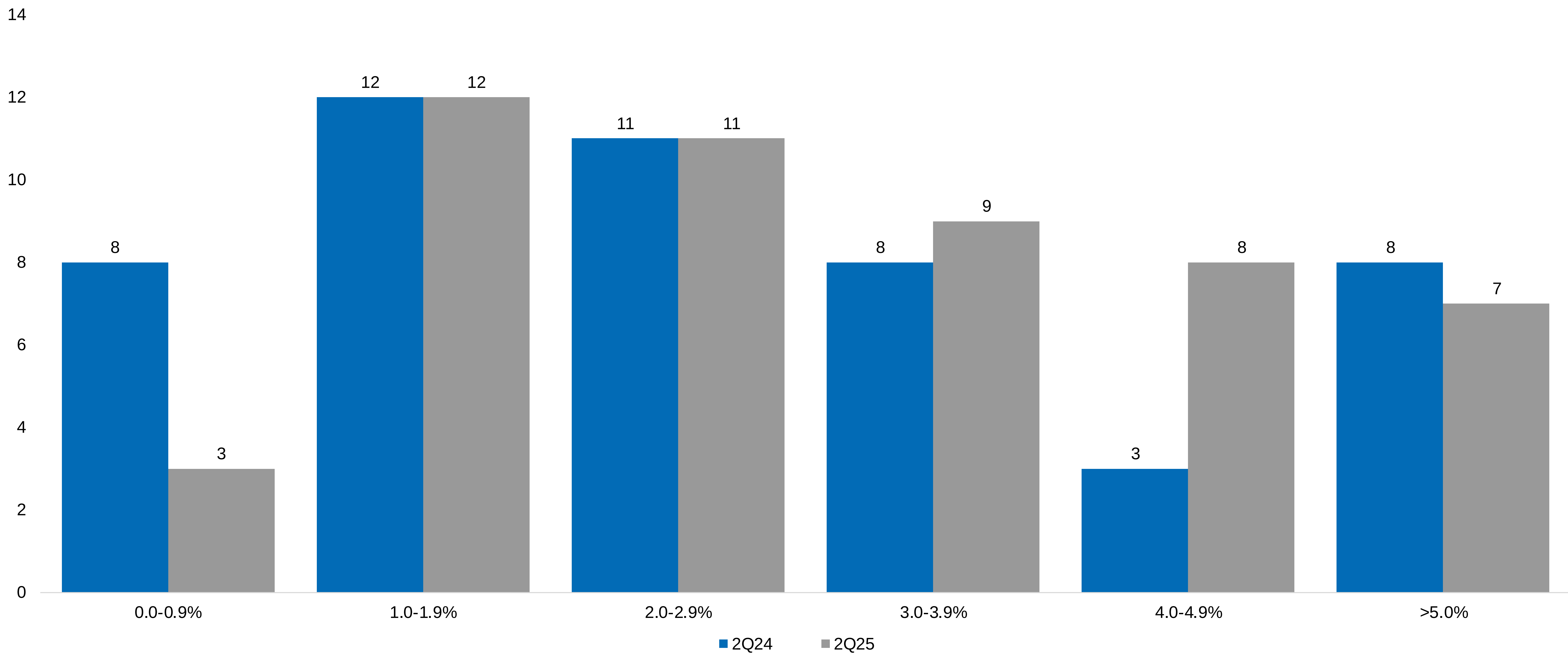
Inventory Growth Expected to Grow over the Next Year

While the wave of new supply has propelled inventory growth nationally to increase 2.7% in the second quarter of 2024, 19 of the top 50 markets have experienced inventory growth of 3.0% or greater. One year from now, 24 of the top 50 markets are projected to exceed 3.0% inventory growth on a trailing 12-month basis.

TTM Inventory Growth; Top 50 Markets

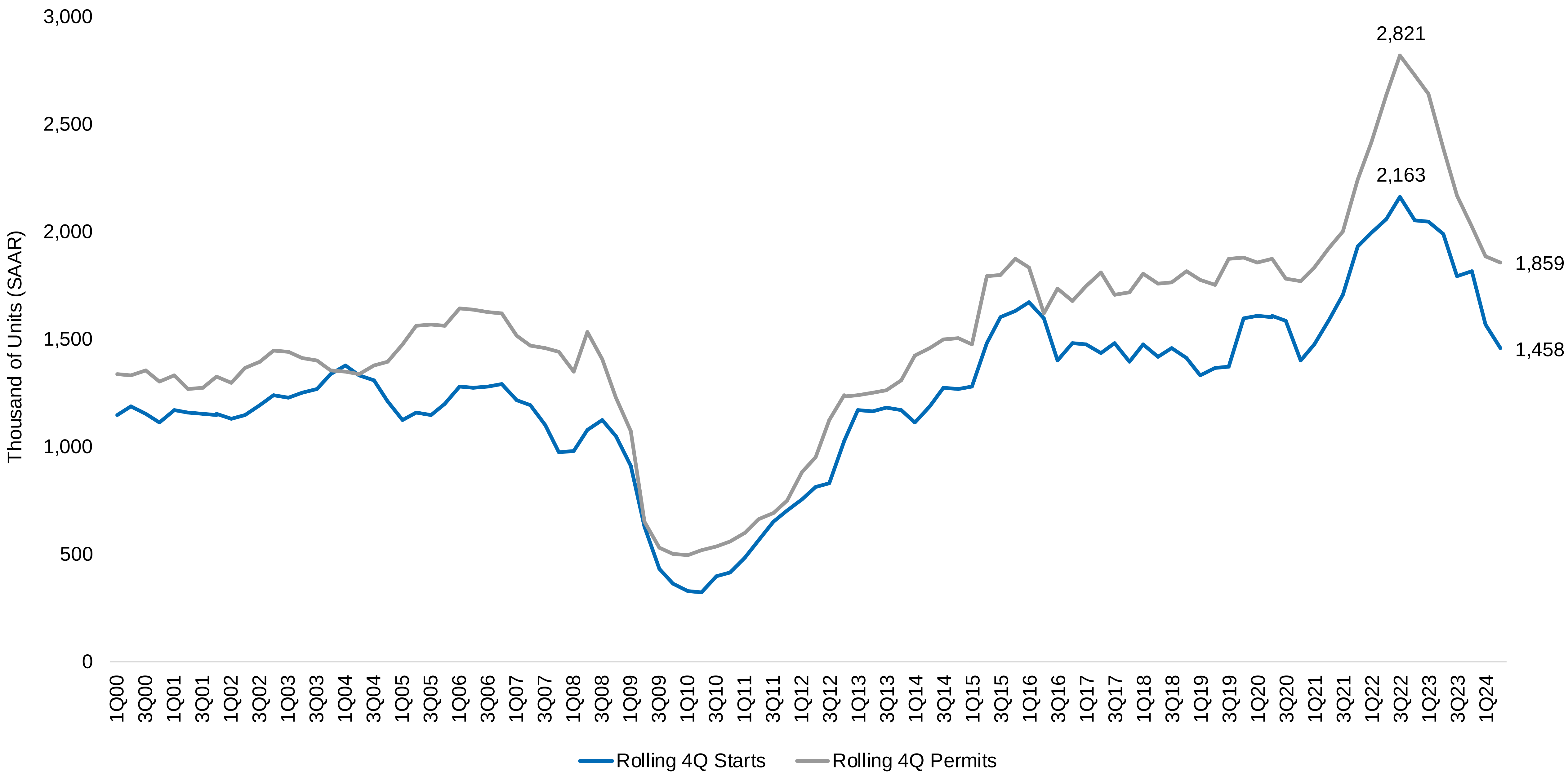


Source: Newmark Research, RealPage

Forward-Looking Metrics Indicate Slowdown in Deliveries Coming

Despite high levels of new supply, rolling four-quarter starts and permits have declined 32.6% and 34.1%, respectively from the peak in the third quarter of 2022. A slowdown in starts and permitting should result in a reversion to more normalized levels of deliveries in 2025 and 2026, which should in turn boost NOI growth.

New Privately-Owned Housing: 5 Units or More

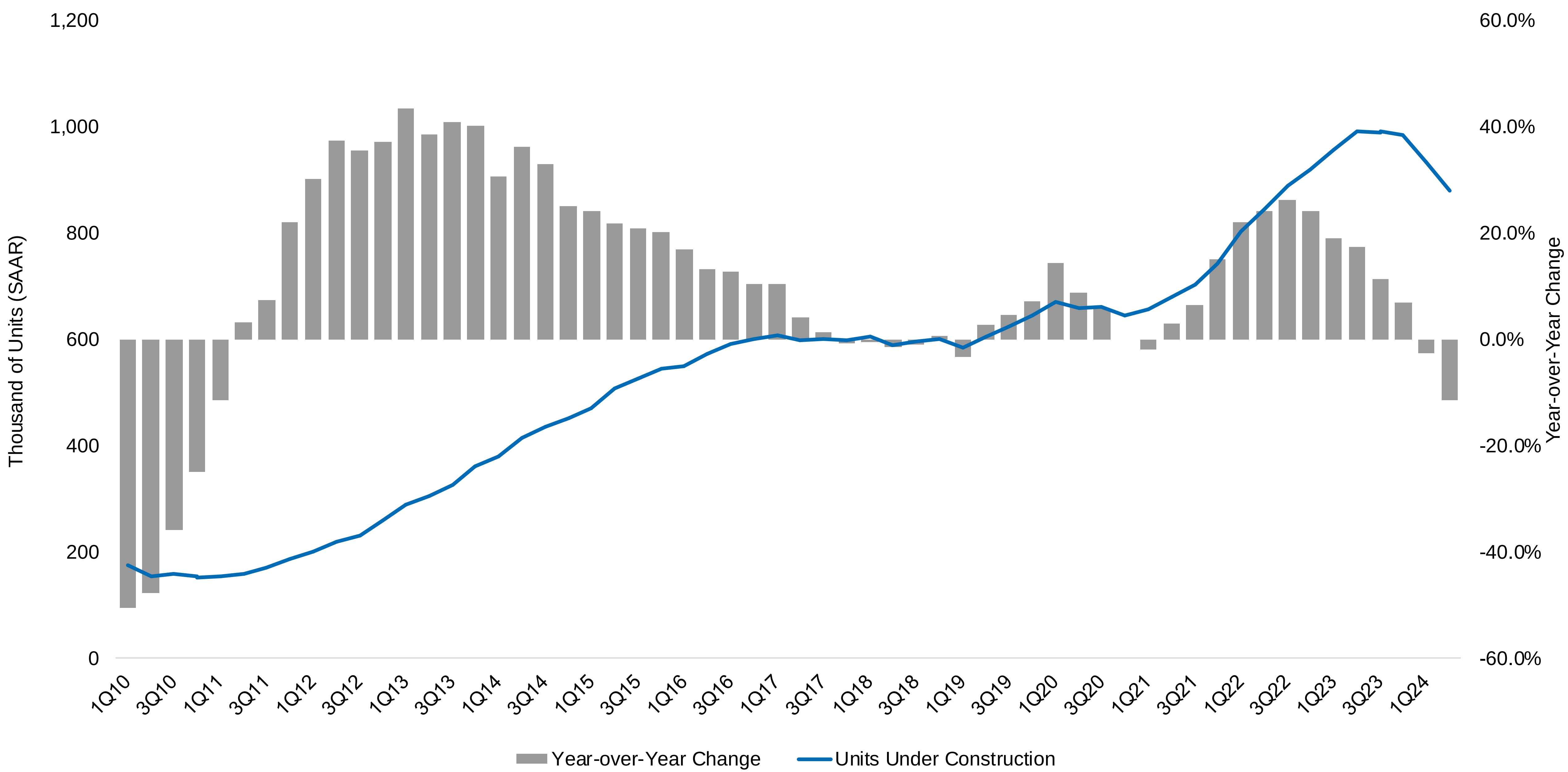


Source: Newmark Research, U.S. Census Bureau, U.S. Department of Housing and Urban Development, Federal Reserve Bank of St. Louis

Units Under Construction Have Peaked with Four Consecutive Quarters of Less Units

Multifamily units under construction declined to 880,000 in the second quarter of 2024, falling 11.4% year over year. Units under construction have decelerated consecutively over the past four quarters after peaking at 993,000 units in the second quarter of 2023.

New Privately-Owned Housing: 5 Units or More

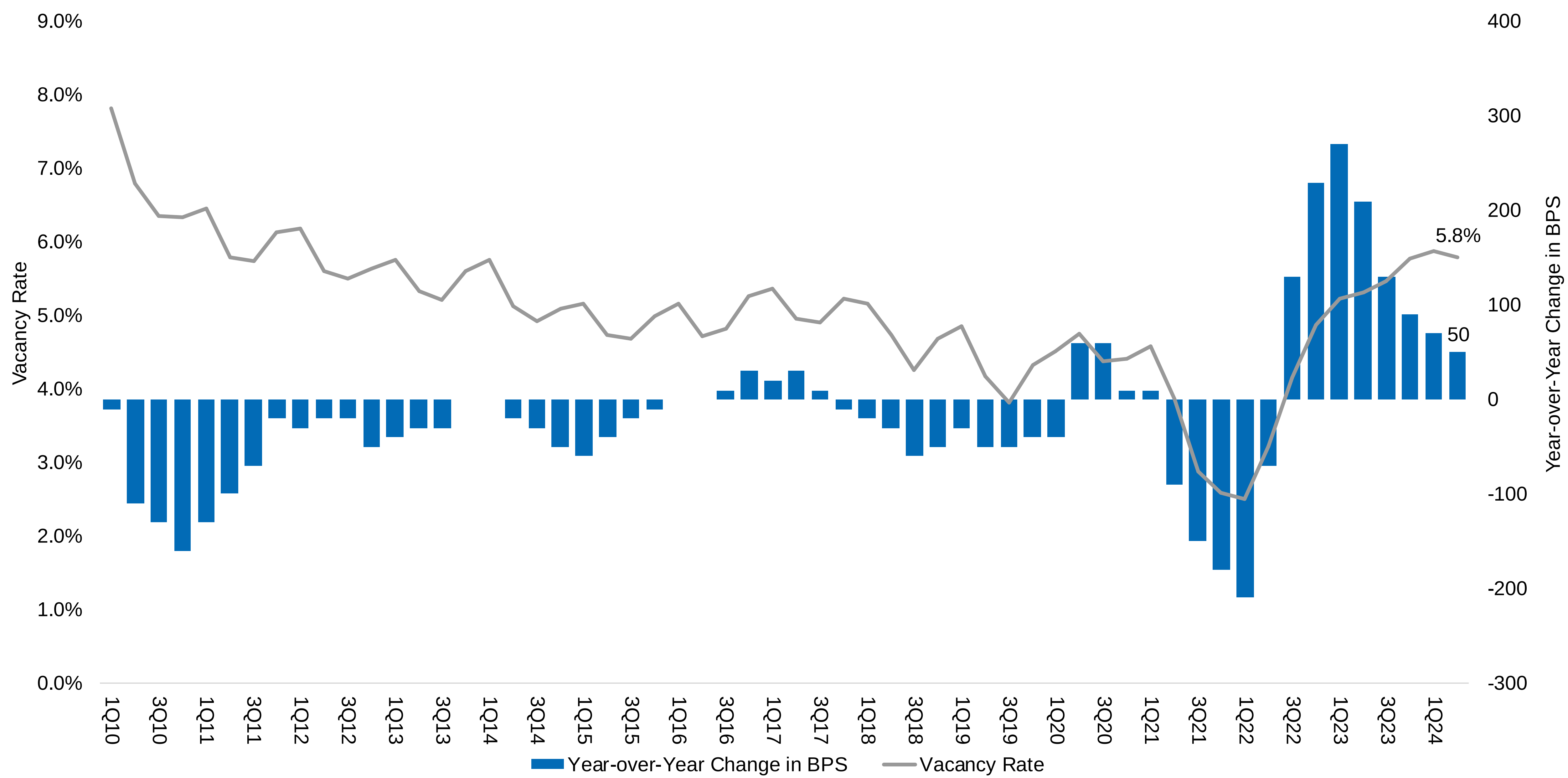


Source: Newmark Research, U.S. Census Bureau, U.S. Department of Housing and Urban Development, Federal Reserve Bank of St. Louis

Vacancy Rate Improves Quarter over Quarter as Demand Boosts Fundamentals

After increasing to 5.9% in the first quarter of 2024, the vacancy rates nationally declined 10 basis points to 5.8% following robust demand in the second quarter of 2024. While vacancy rates are 50 basis points higher than a year ago, the pace of declines have slowed and declined for five consecutive quarters.

Quarterly Vacancy Rate

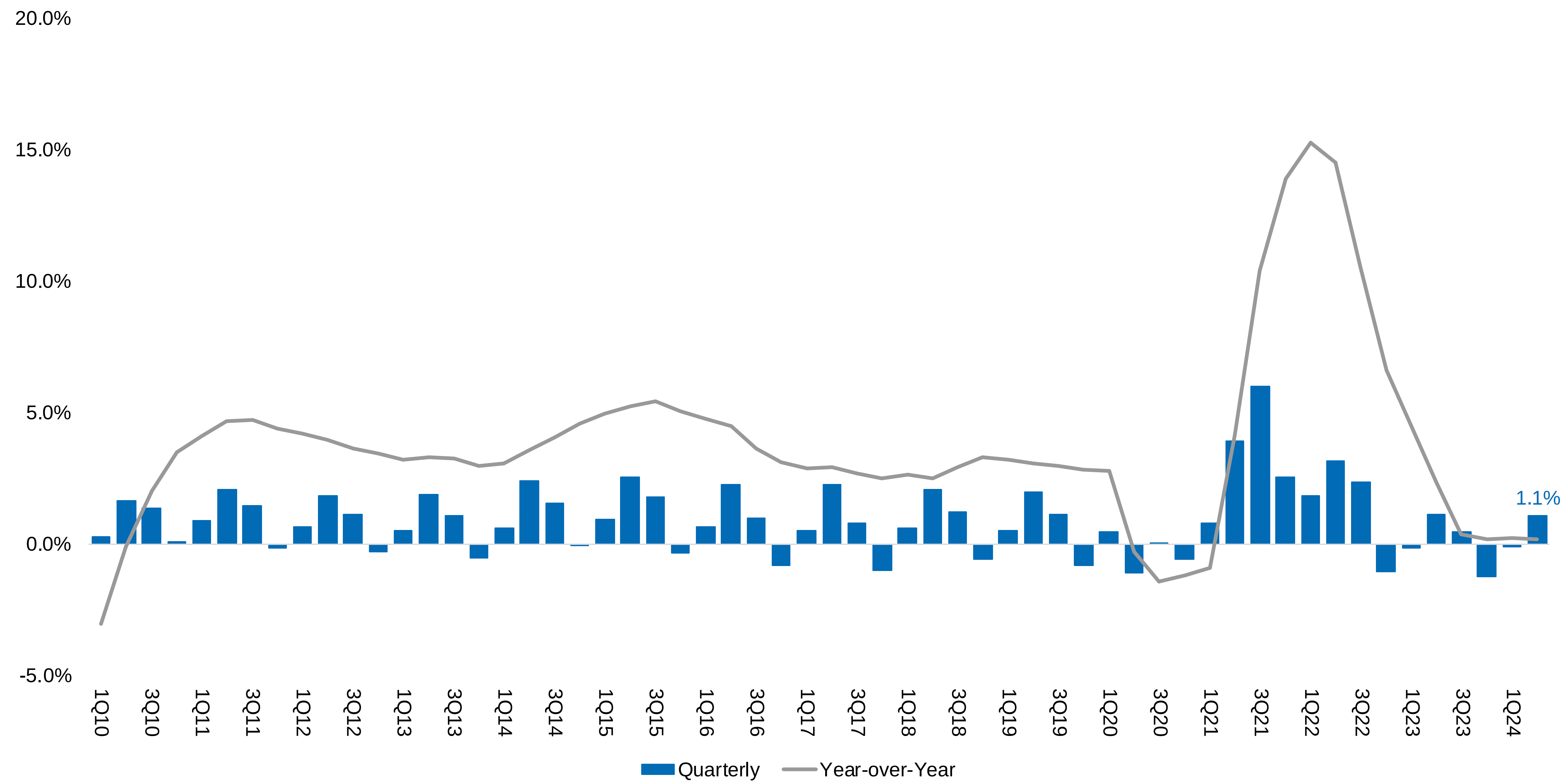


Source: Newmark Research, RealPage

Rent Growth Increased Quarter over Quarter but Year over Year Remains Muted

Quarterly rent growth rose to 1.1% in the second quarter of 2024, while year-over-year growth remained flat at 0.2% for the third quarter consecutively. Year-over-year rent growth is projected to increase throughout the second half of 2024 and throughout 2025 as new supply fears lessen.

Same-Store Effective Rent Growth

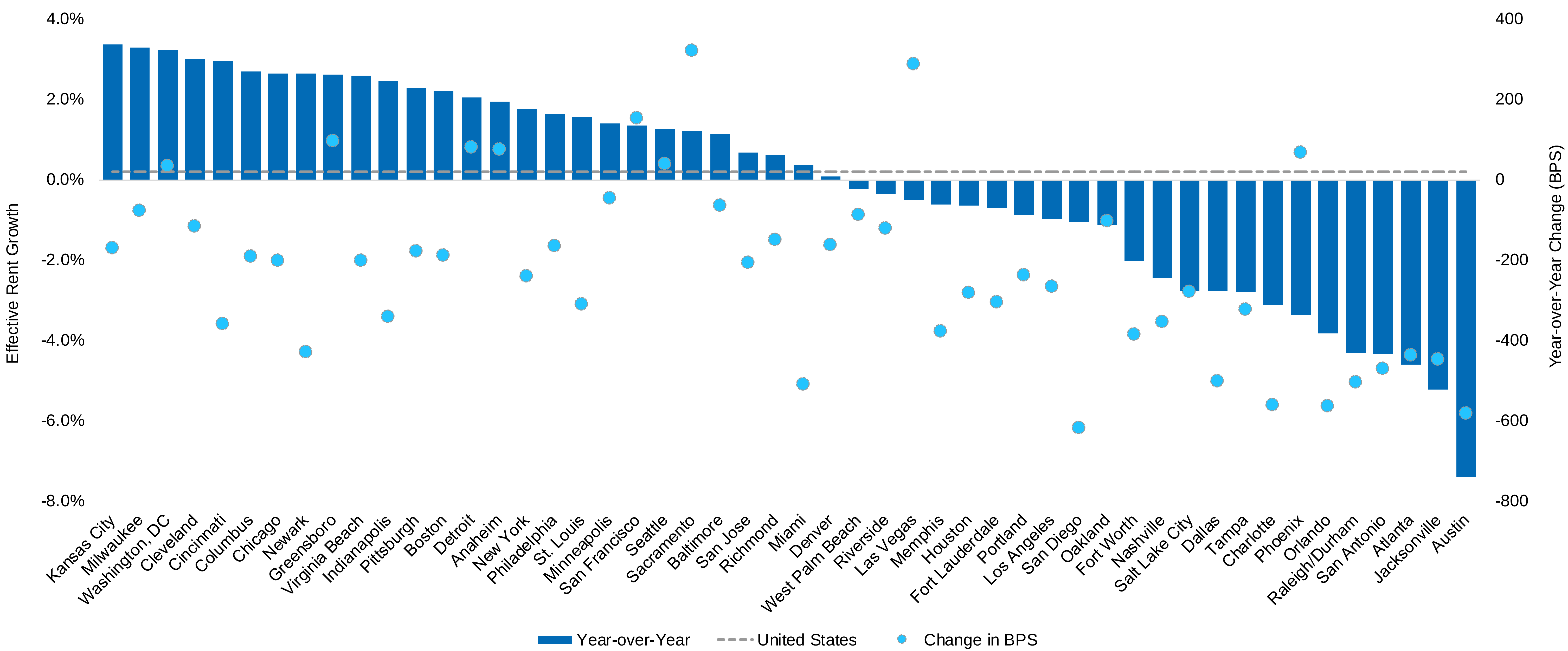


Source: Newmark Research, RealPage

Midwest Markets Lead, While Supply Challenges Fundamentals in Growth Markets

As of the second quarter of 2024, Midwest markets occupy 6 of the top 10 markets for year-over-year effective rent growth, led by Kansas City at 3.4%; 27 of the top 50 markets posted positive effective rent growth year over year; however, just nine markets experienced accelerating growth compared with the previous year.

Same-Store Effective Rent Growth; Top 50 Markets



Source: Newmark Research, RealPage

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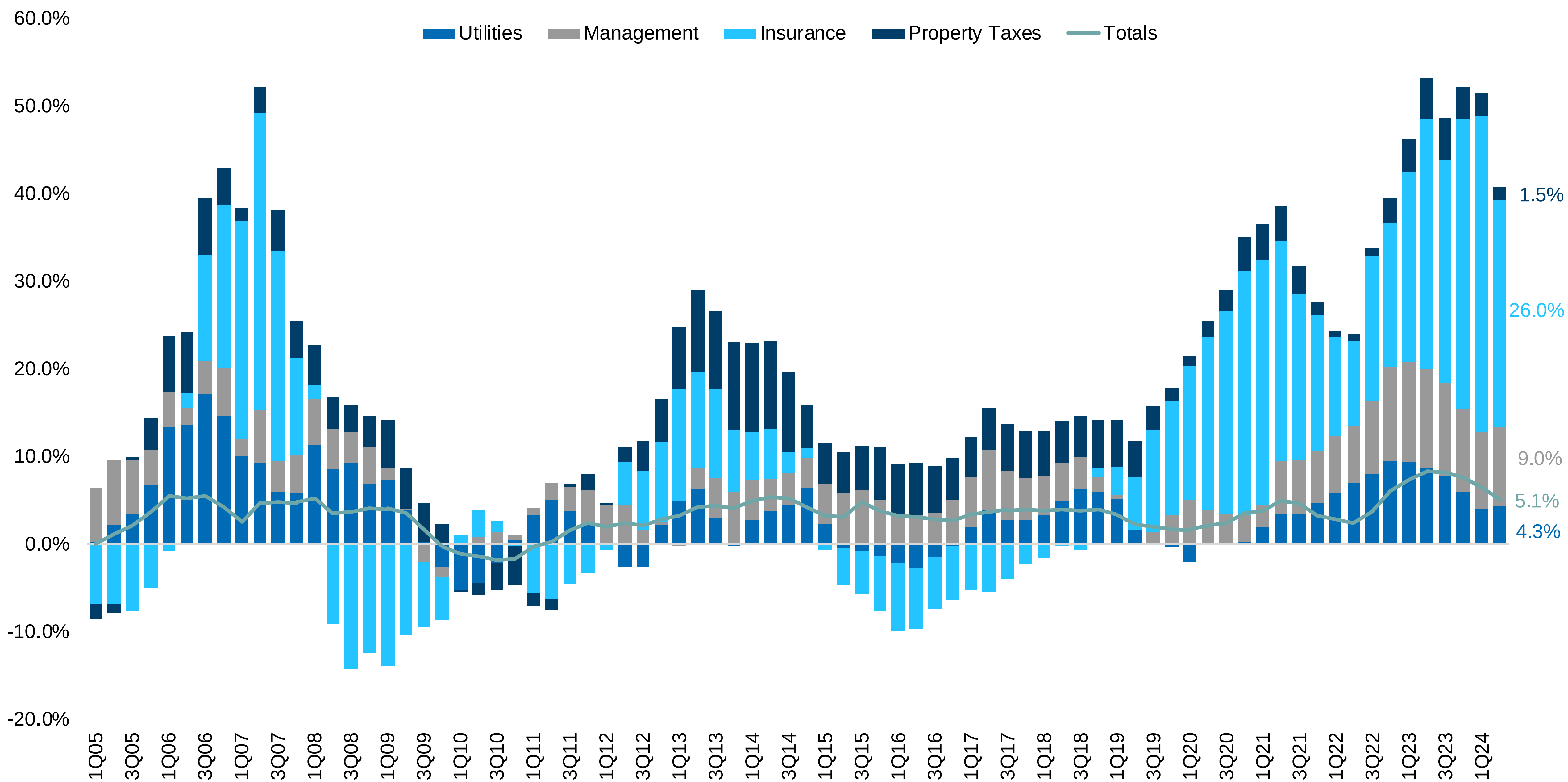
Pace of Expense Growth Has Declined for Four Consecutive Quarters

As of the second quarter of 2024, total expenses increased 5.1% year over year; however, this marks the fourth consecutive decline in total expenses after peaking one year prior. Most notably, insurance growth declined to 26.0% in the second quarter of 2024, compared with 36.1% in the first quarter of 2024.

Year-over-Year Change

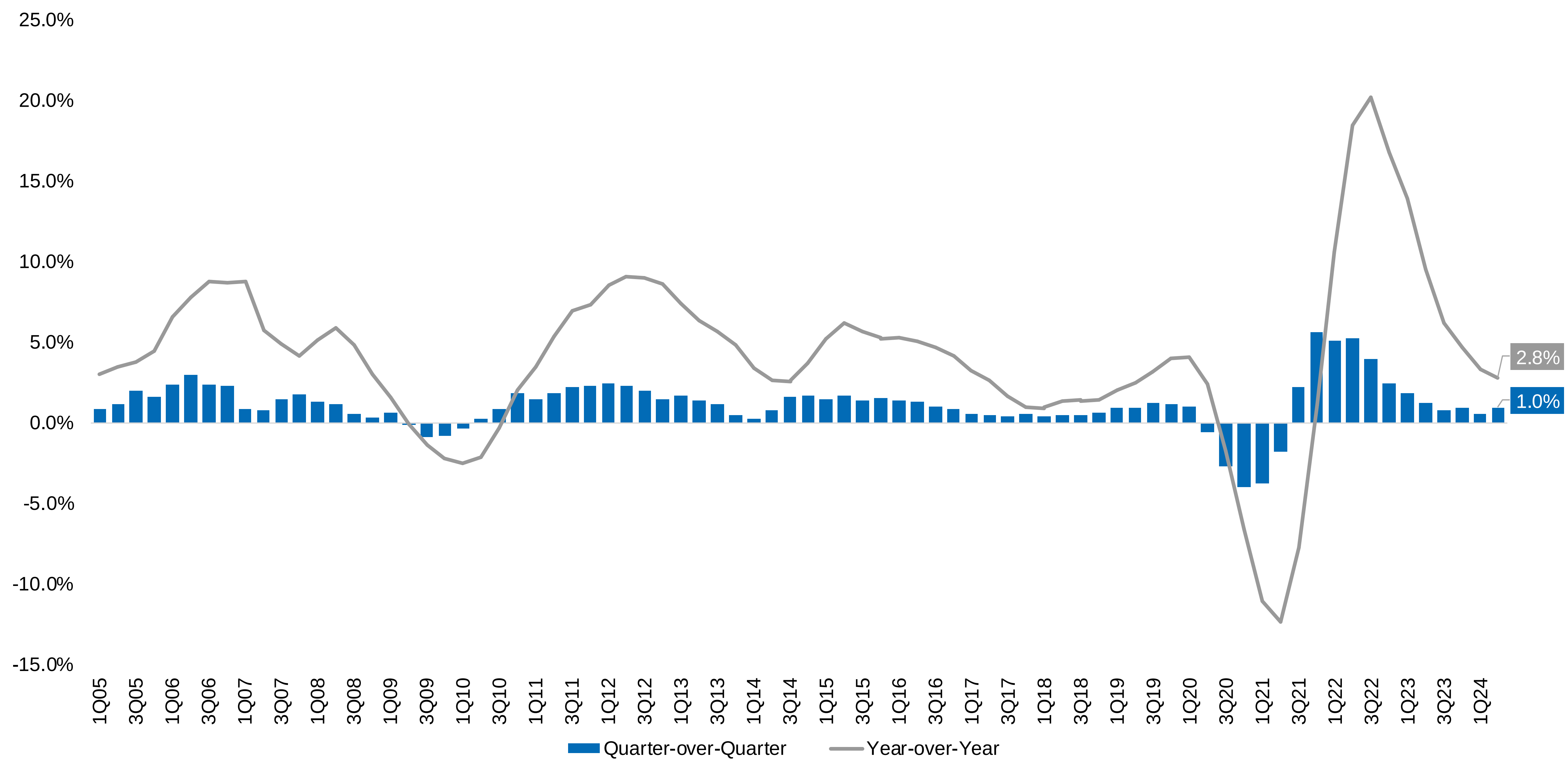


Source: Newmark Research, NCREIF

Quarterly NOI Increases, but Year over Year Continues to Decline

On a quarter-over-quarter basis, net operating income increased to 1.0% and, albeit positive, declined to 2.8%. On a year-over-year basis, this marks the seventh consecutive decrease in the pace of growth.

Net Operating Income



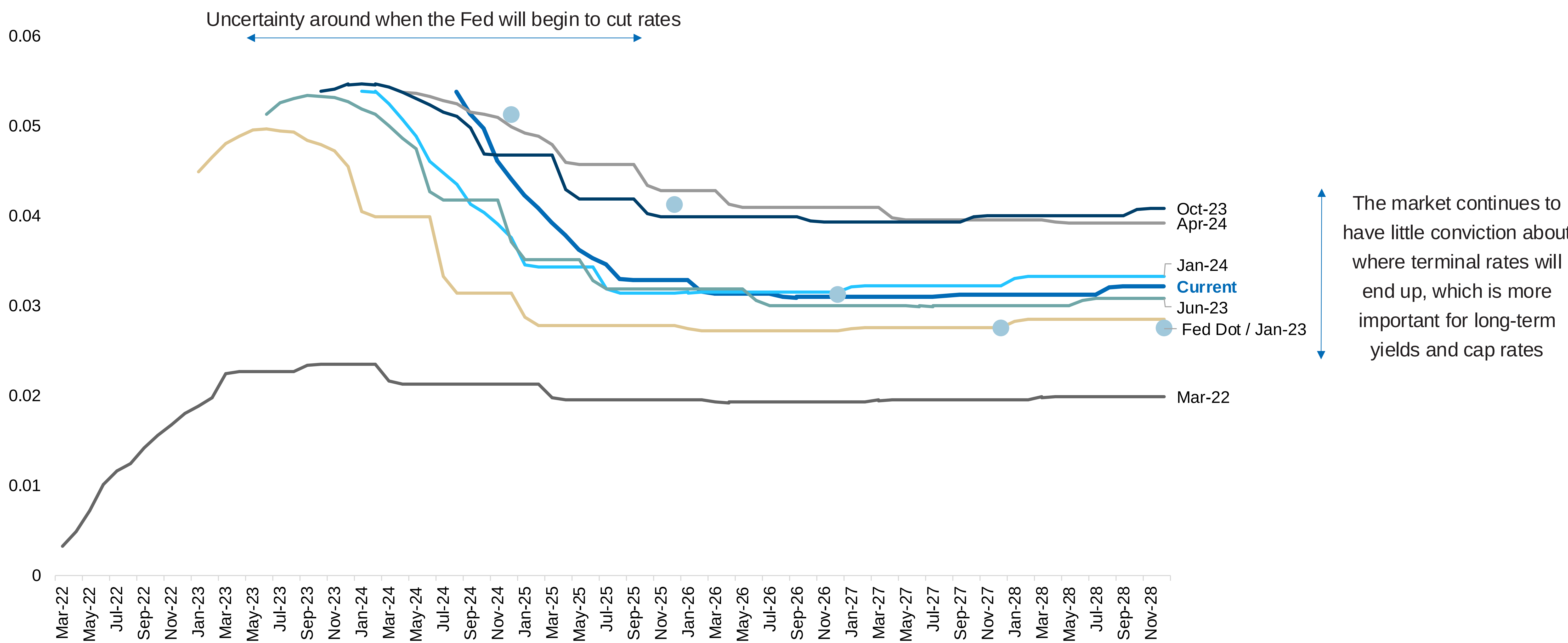
Source: Newmark Research, NCREIF

Debt Capital Markets

Market Is Highly Reactive Amid Low Conviction On Economic Future

Forward rate projections have varied widely over the last 24 months, but at no time have they anticipated a rapid return to post-GFC short rates. Until they have conviction on the question of Recession vs. Soft Landing, expect forward curves to continue to be highly volatile, especially around new Economic data releases.

U.S. Rates Forward Curve: 1-Month SOFR



Source: Chatham Financial, Newmark Research as of 8/6/2024

Markets Are Pricing A Range of Scenarios at All Times

Markets are constantly weighing different narratives about the future. Each new data point shifts the credibility of each outcome vs. all others. Sometimes these shifts are small, but in a low conviction market, like present, small amounts of data tend to produce quantum shifts in what the dominant narrative is. This manifests in nonlinear changes in market pricing. One such shift occurred on Friday (8/2) as a weaker than expected payroll report led to the hard landing narrative becoming dominant. This is unlikely to be the last shift we see in the next six months.

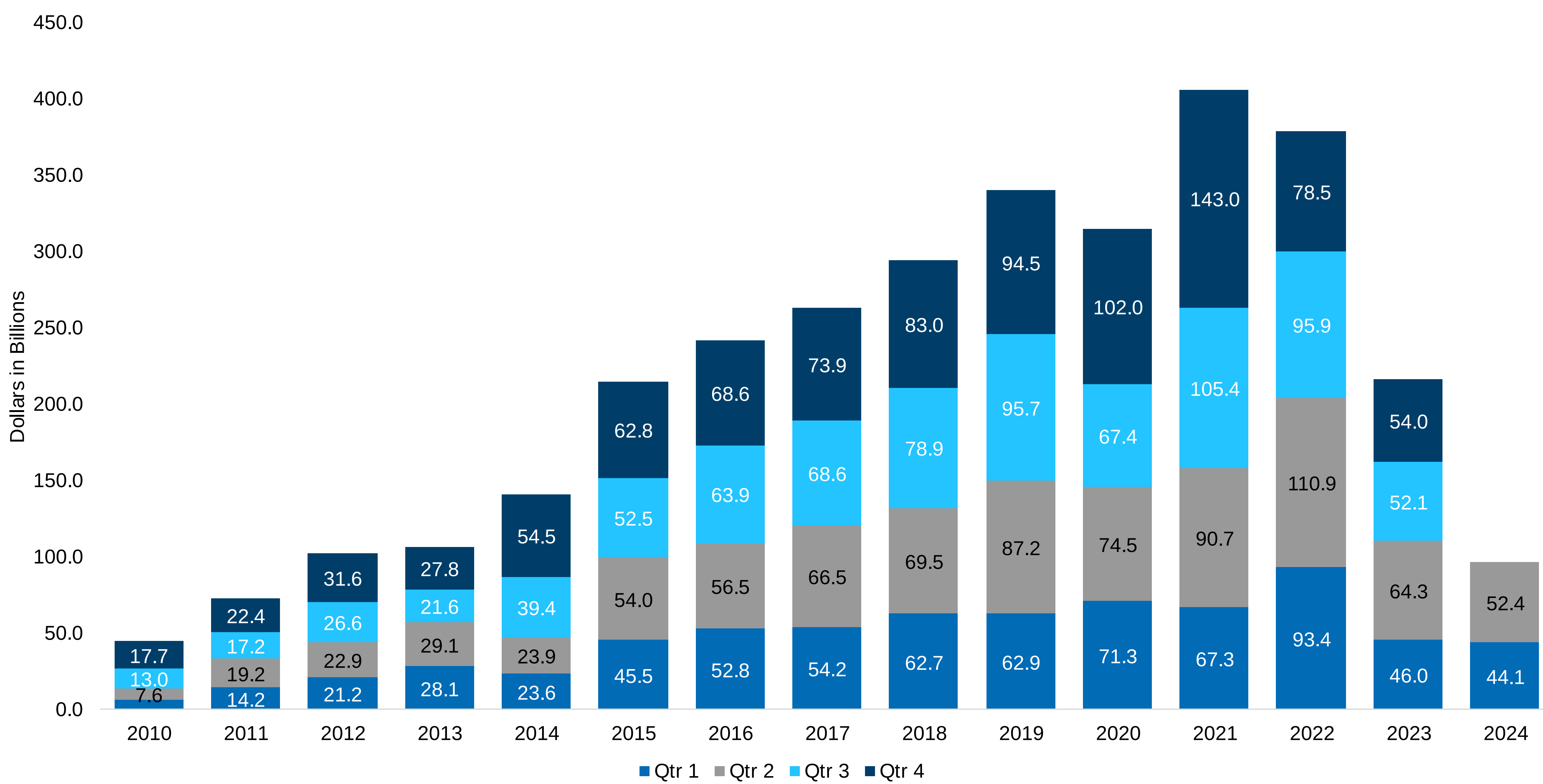
Narrative	Definition	Dominant Narrative Dates	Fed Funds in December 2025	Long-term Fed Funds	10Y Treasury	Credit Spreads (vs. History)	NMRK Research Probability (NTM)
No Landing	Economic growth remains above long-term trend and inflation moderates without significant rate cuts	October 2023	4.0% to 4.5%	4.0% or greater	5.0% or greater	Stay Low	5%
Inflation Stubborn, Growth Moderate	Inflation remains significantly above Fed target even as growth moderates	April 2024	4.0% to 4.5%	3.5% to 4.5%	4.0% to 5.0%	Return to Average	10%
Soft Landing	Inflation returns to target, growth returns to long term average. Fed normalizes monetary policy	June 2023	2.8% to 3.2%	2.8% to 3.2%	3.5% to 4.2%	Return to Average	55%
Hard Landing	Economy falls into recession and inflation drops to target or lower; Fed cuts aggressively	August 2024, Dec/Jan 2023	0%	2.5% to 3.0%	2.5% to 3.5%	High	30%

Source: Newmark Research as 8/5/2024

Multifamily Debt Originations Lowest Since 2015 in 1H24

While recent activity has been anemic compared to pre-pandemic levels, and activity in the 1st half of 2024 was down 12% compared to 1H23. The silver linings is rates began to move down in the late Spring and early Summer, which could help open up credit.

Multifamily Debt Origination Volume*



Source: RCA, Newmark Research as of 7/22/2024
Note: loan origination volumes are adjusted for future expected revisions using Newmark's proprietary models

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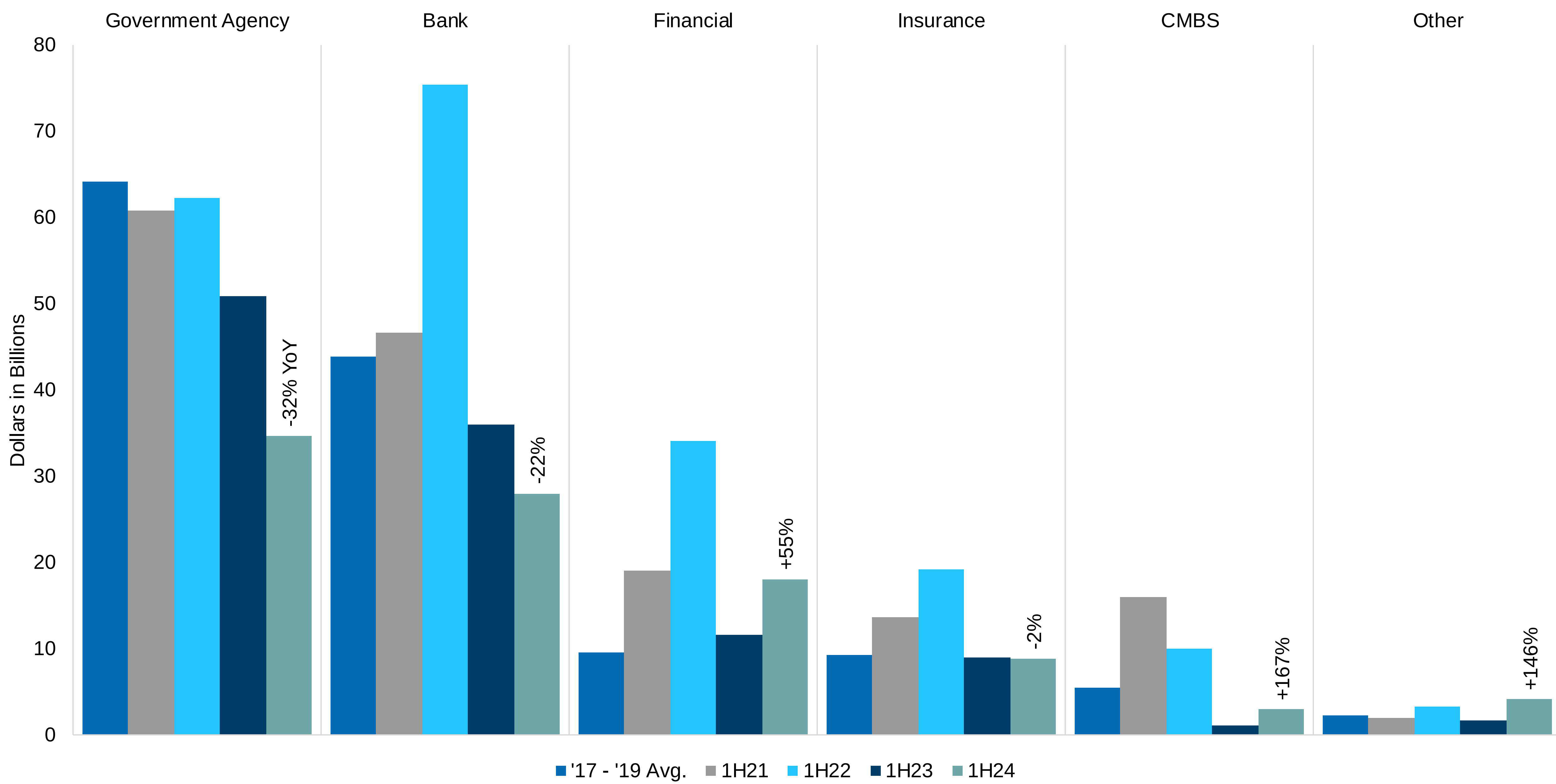
Multifamily Originations Declined in 1Q24 among Largest Lenders

GSEs and banks remain the largest lenders, despite originations declining 32% and 22% year over year respectively. CMBS has been a bright spot, with a 167% year-over-year surge in the first quarter of 2024.

Multifamily Loan Origination Volume



Source: RCA, Newmark Research as of 7/22/2024
Note: loan origination volumes are adjusted for future expected revisions using Newmark's proprietary models

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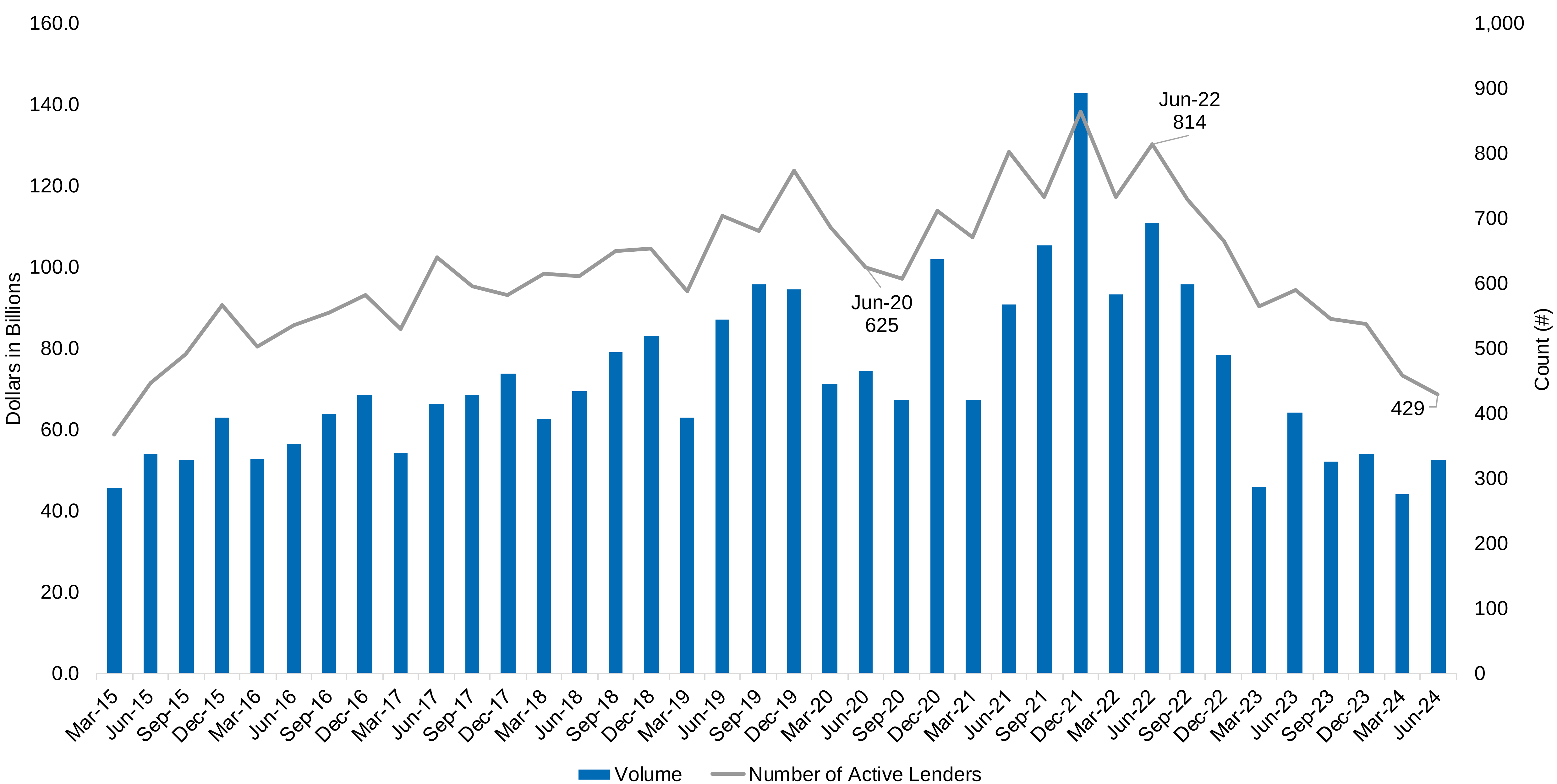
The Number of Active Lenders Has Declined 55% since Peaking in 4Q21

Both the number of lenders and origination volume are now materially below pre-pandemic levels.

Multifamily Debt Origination Volume

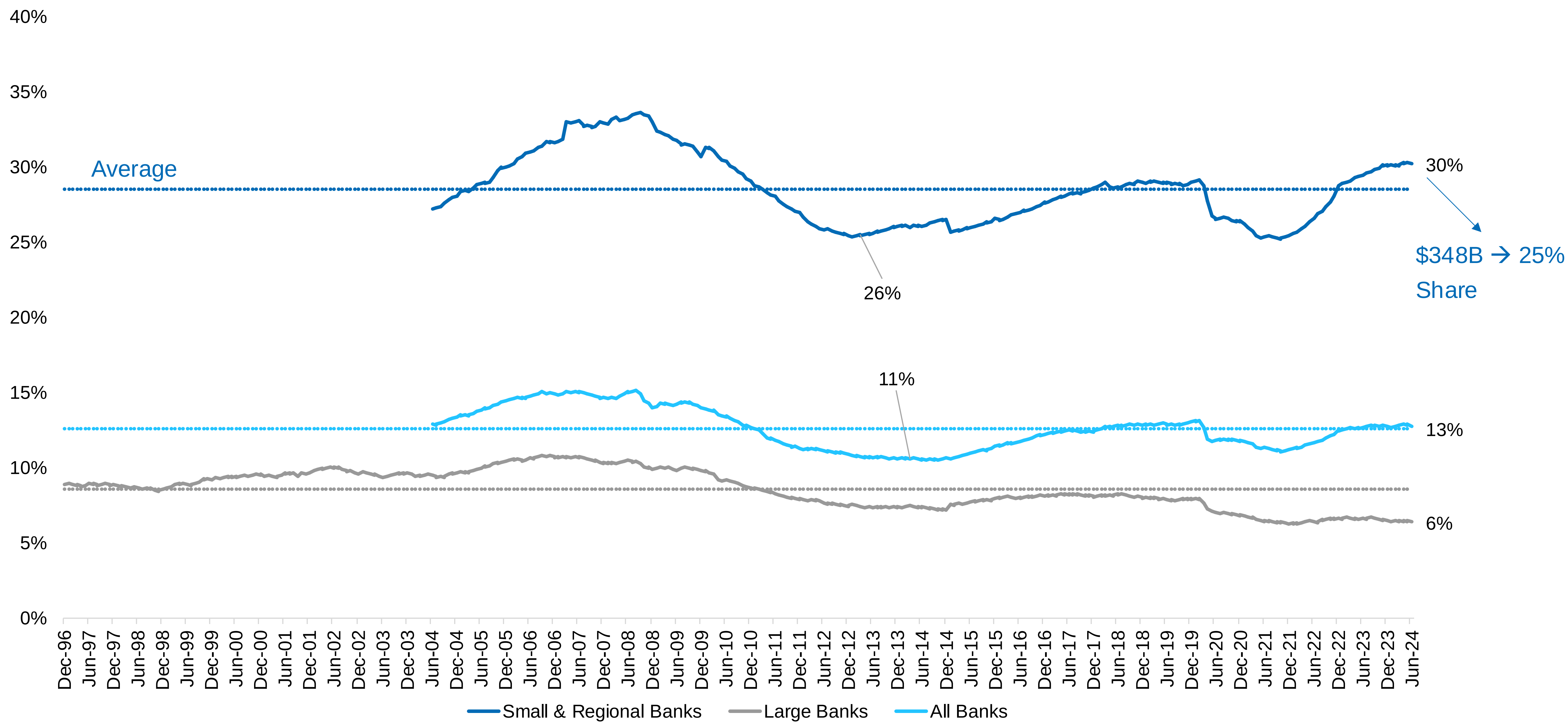


Source: RCA, Newmark Research as of 7/22/2024
Note: loan origination volumes are adjusted for future expected revisions using Newmark's proprietary models

Regional Banks Need to Reduce CRE Exposure (And Haven't Yet Begun)

CRE loan shares are elevated at small and regional banks, while the largest banks' loan share continues to decline. Small and regional banks face mounting pressure to reduce CRE exposure. This will play out over the next several years, during which the CRE loan share is likely to retest cyclical bottoms of 25%, <u>implying a net reduction of $348 billion</u>. Large banks' exposures have been trending downwards since 2007. This is likely to continue, absent a significant increase in relative yields.

CRE Loans as a Share of Total Bank Assets

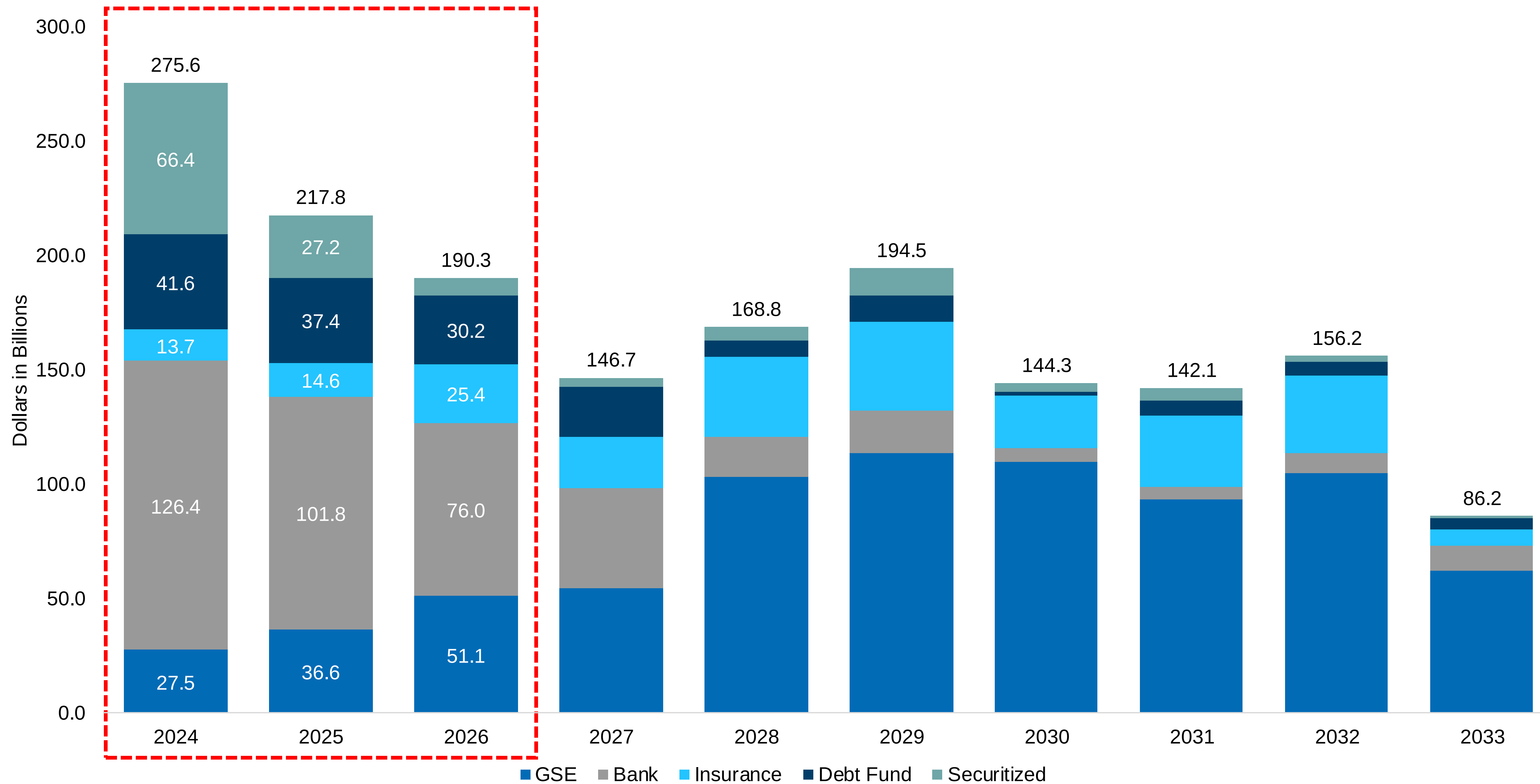


Source: Federal Reserve, Newmark Research as of 7/22/2024

$669 Billion in Multifamily Loans Mature between 2024 and 2026

Banks account for 25% of debt maturities in the full 2024-to-2033 period, but they account for 46% of maturities between 2024 and 2026. Debt fund maturities are similarly frontloaded, accounting for 14% of near-term maturities vs. 9% in the full period. The same is true of securitized lending, driven by CLOs. In contrast, GSE maturities are heavily backloaded.

Multifamily Loan Maturities by Lender Group*

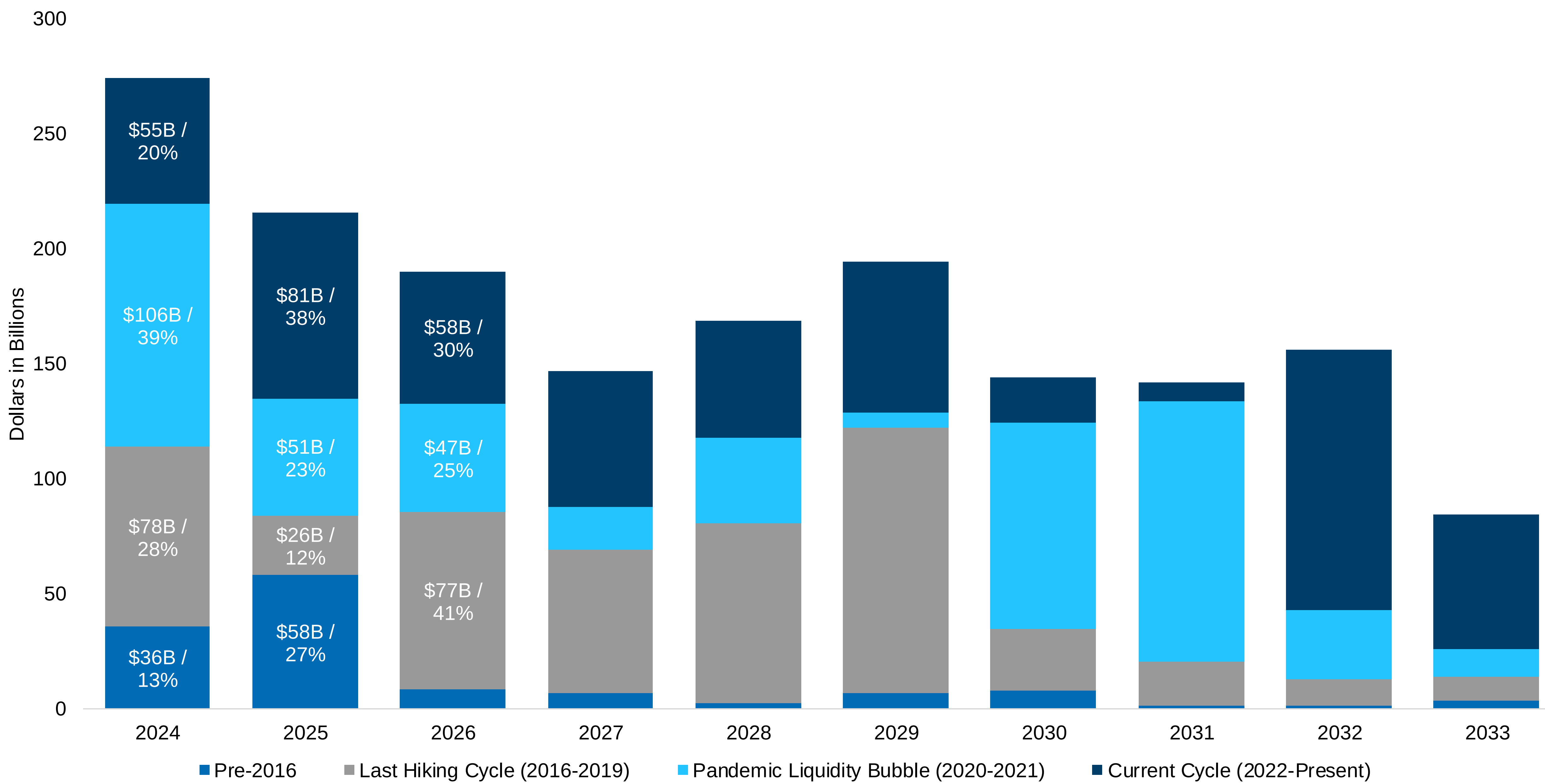


Source: MBA, Trepp, RCA, Newmark Research as of 7/22/2024
*Adjusted for year-to-date estimated loan originations

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: Newmark Research, MBA, Trepp, MSCI Real Capital Analytics as of 722/2024
*Adjusted for year-to-date estimated loan originations

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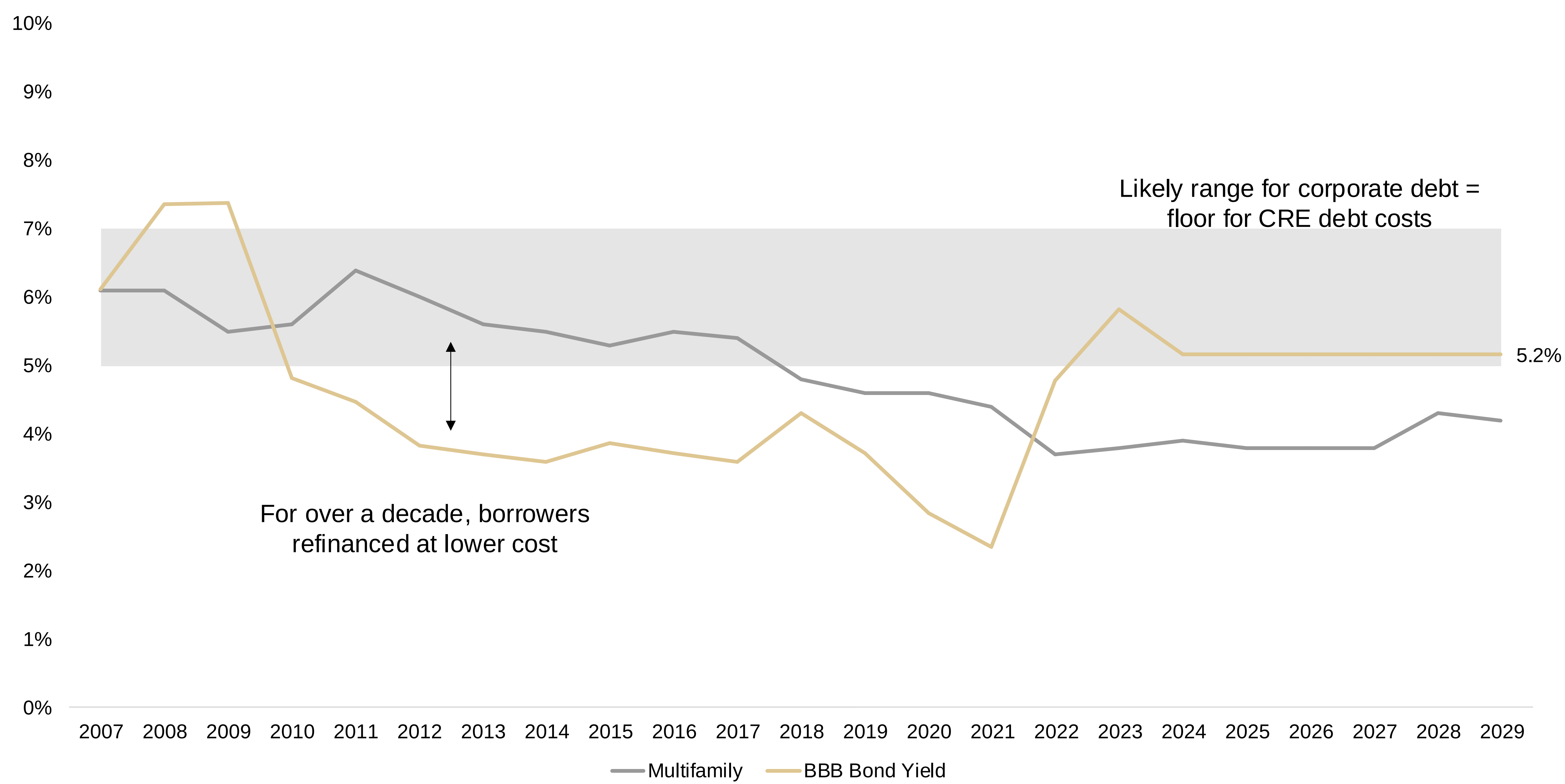
Multifamily Borrowers Face Starkly Higher Costs as Loans Mature

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: Newmark Research, MSCI Real Capital Analytics, ICE Data Indices as of 7/22/2024

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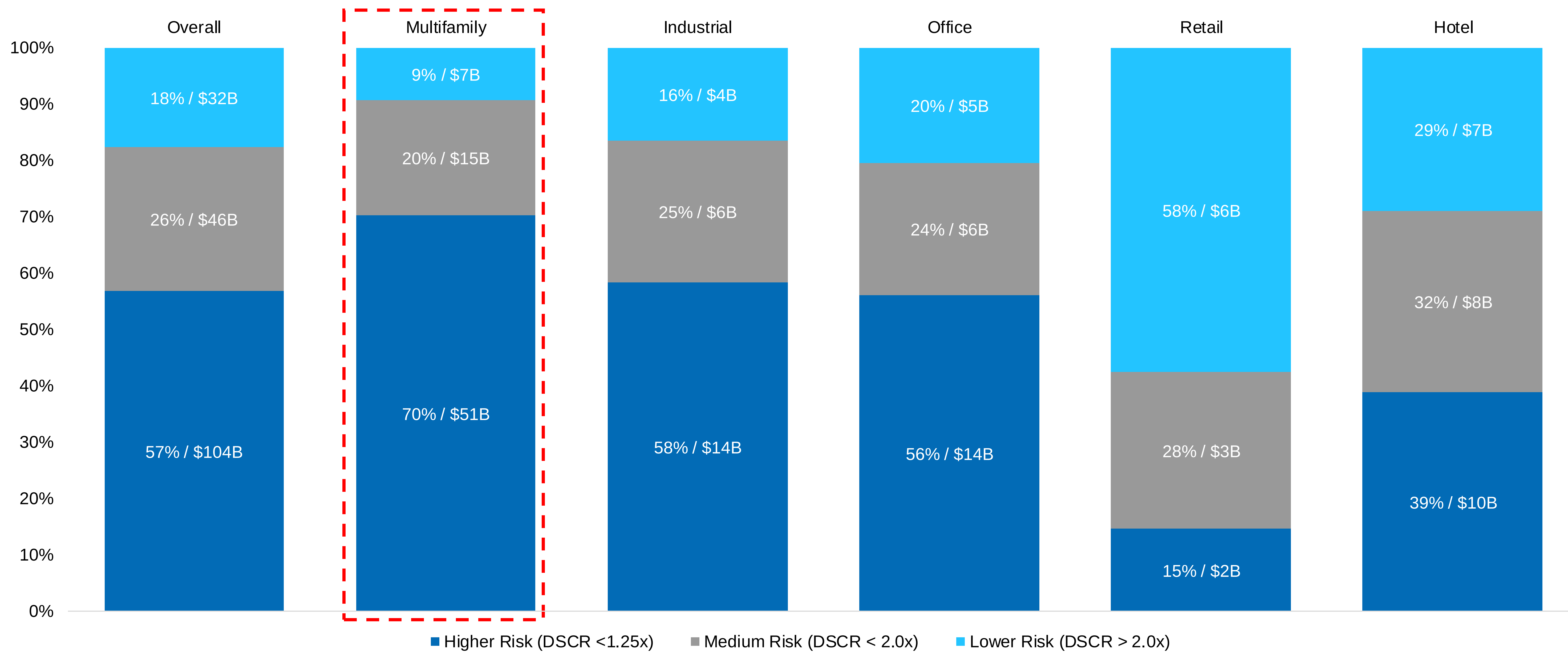
Floating Rate Loans Are an Even Better Indicator of Potential Distress

Floating rate loans are more prevalent in CRE CLO and SASB product, helping to explain their outsized role in driving DSCR risk in upcoming maturities.

DSCR Profile of Securitized CRE Debt Maturing before 2026: Floating Rate Loans Only

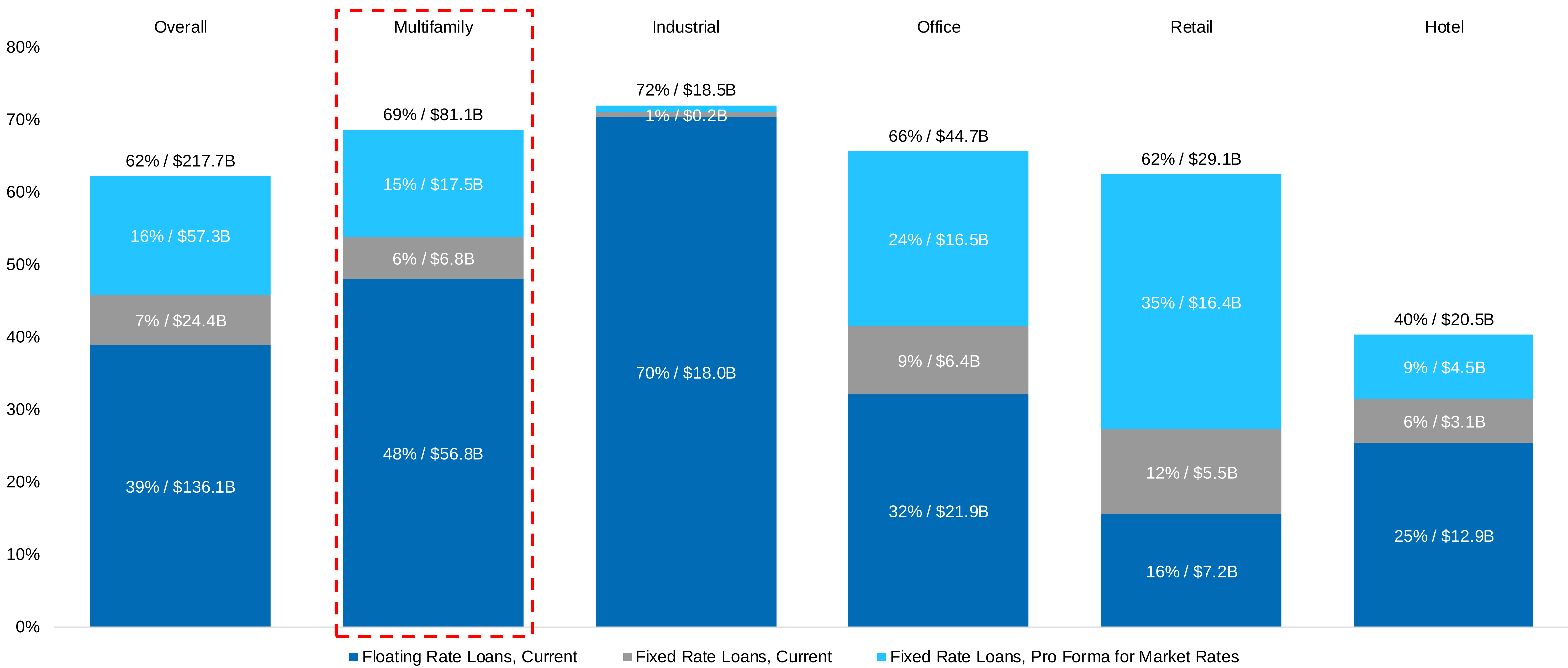


Source: Trepp, Newmark Research as of 7/26/2024

Debt Service Risk Will Rise Dramatically as Fixed-Rate Loans Face Market Rates

At in-place rates, fixed-rate loans are comparatively unexposed to immediate payment risk. As these loans mature, they will face market rates which have risen dramatically. This will be a major impediment to refinancing these loans, particularly as banks have been given much less flexibility in dealing with loans that are unable to pay market rates as opposed to loans that exceed LTV covenants. While this analysis focuses on securitized debt, it has serious implications for the broader landscape.

Securitized Loans Maturing before 2026 with DSCR under 1.25x ("High Risk")



Source: Trepp, Green Street, Newmark Research as of 7/23/2024

Note: To estimate the impact of market rates, we analyzed representative samples of 2023-to-2025 maturity loans for each property type. We calculated a pro forma DSCR by comparing the current loan rate with the current market rate. For the current market rate, we used data from Trepp's weekly balance sheet lender survey for loans with LTV's between 66% and 70%. The assumed market debt rates were 6.1% (multifamily non-agency), 6.2% (multifamily agency), 6.2% (retail), 6.2% (industrial), and 6.6% (office and hotel).

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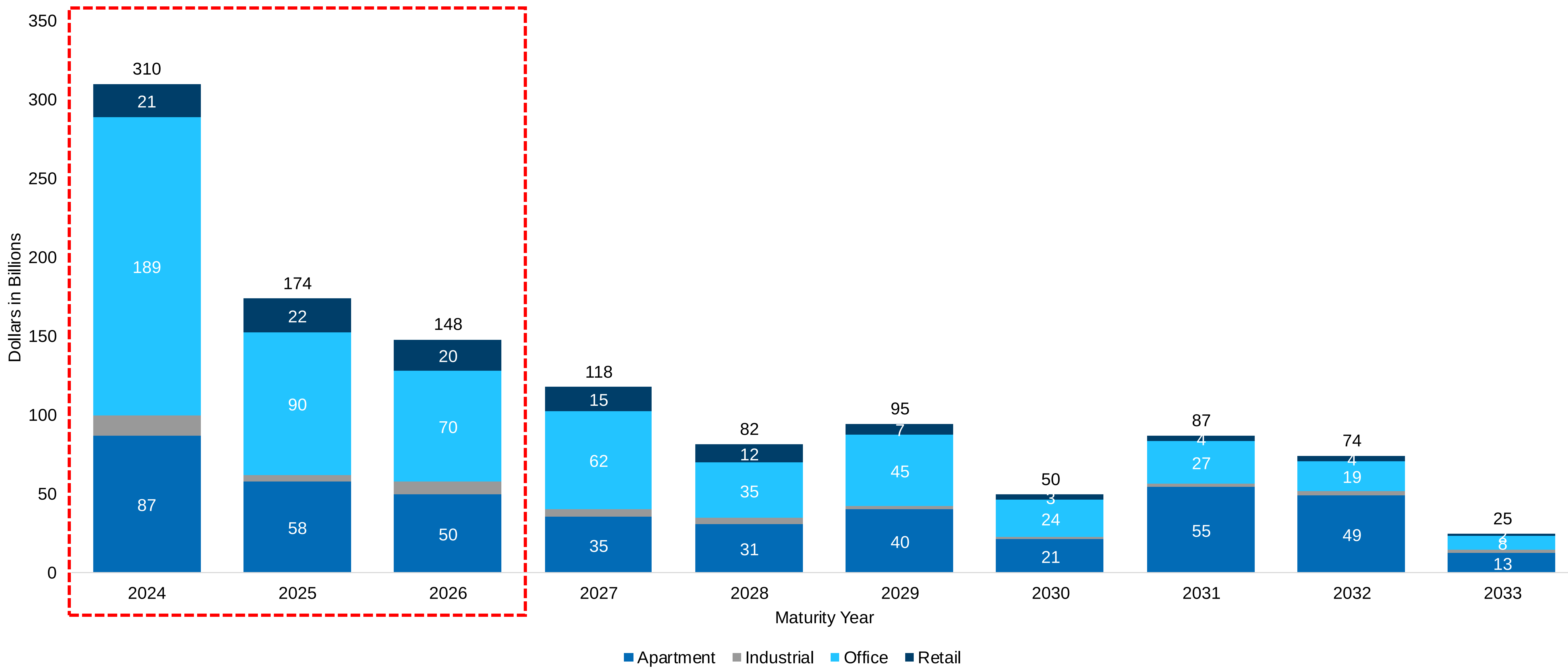
$1.2T of Outstanding CRE Debt is Potentially Troubled, $632B Maturing in ’24-’26

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 2024-to-2026 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 7/31/2024
*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.

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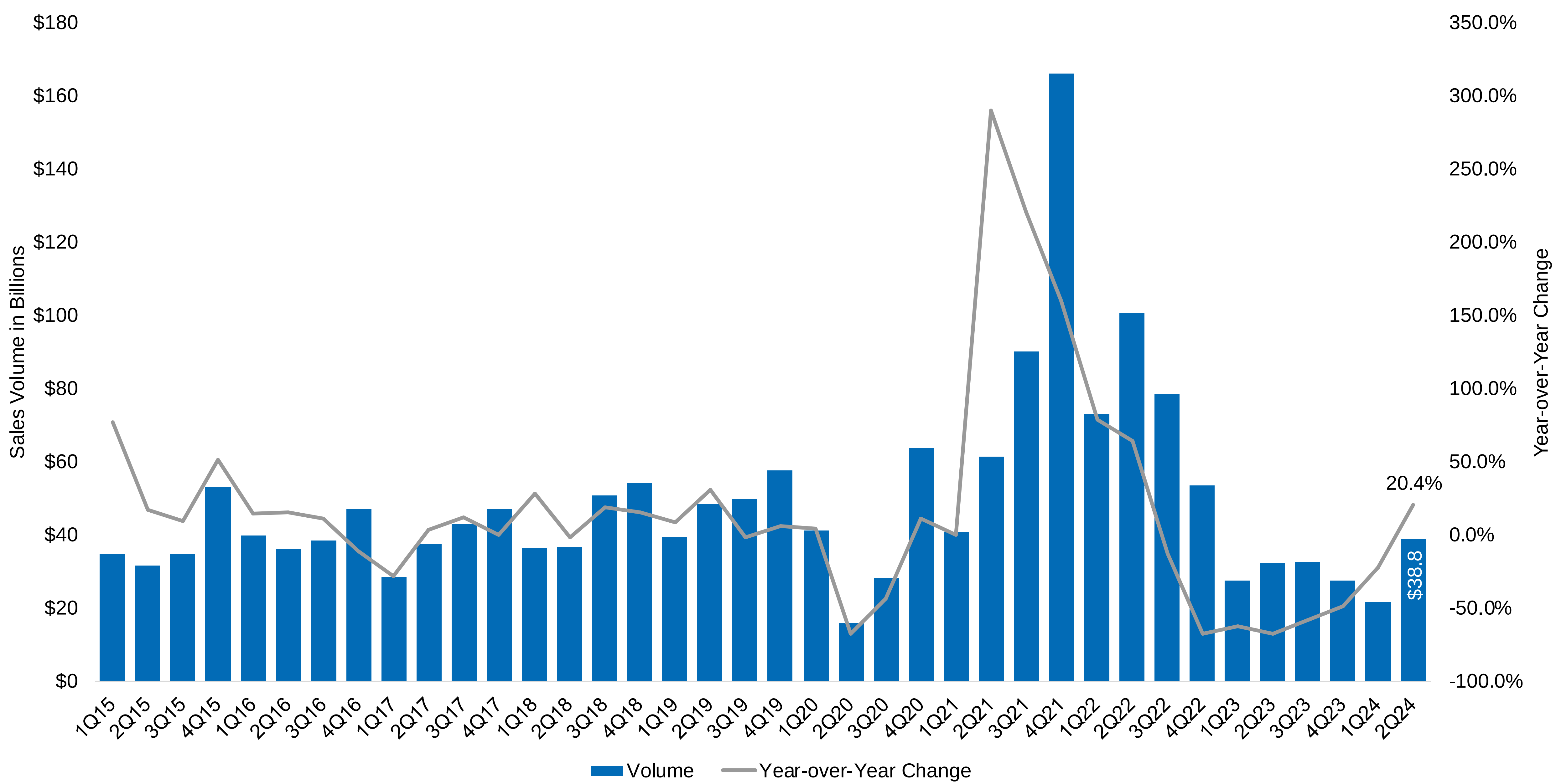
Investment Sales

Volume Rises to $39 Billion in 2Q24; YOY Turns Positive Thanks to Mega Deals

Sales volume rose to $38.8 billion in the second quarter of 2024, representing a 20.4% year-over-year increase in volume as a flurry of portfolio and entity-level transactions closed throughout the quarter. This also signifies the first sequential positive year-over-year change in volumes since the second quarter of 2022.

Quarterly Investment Sales Volume

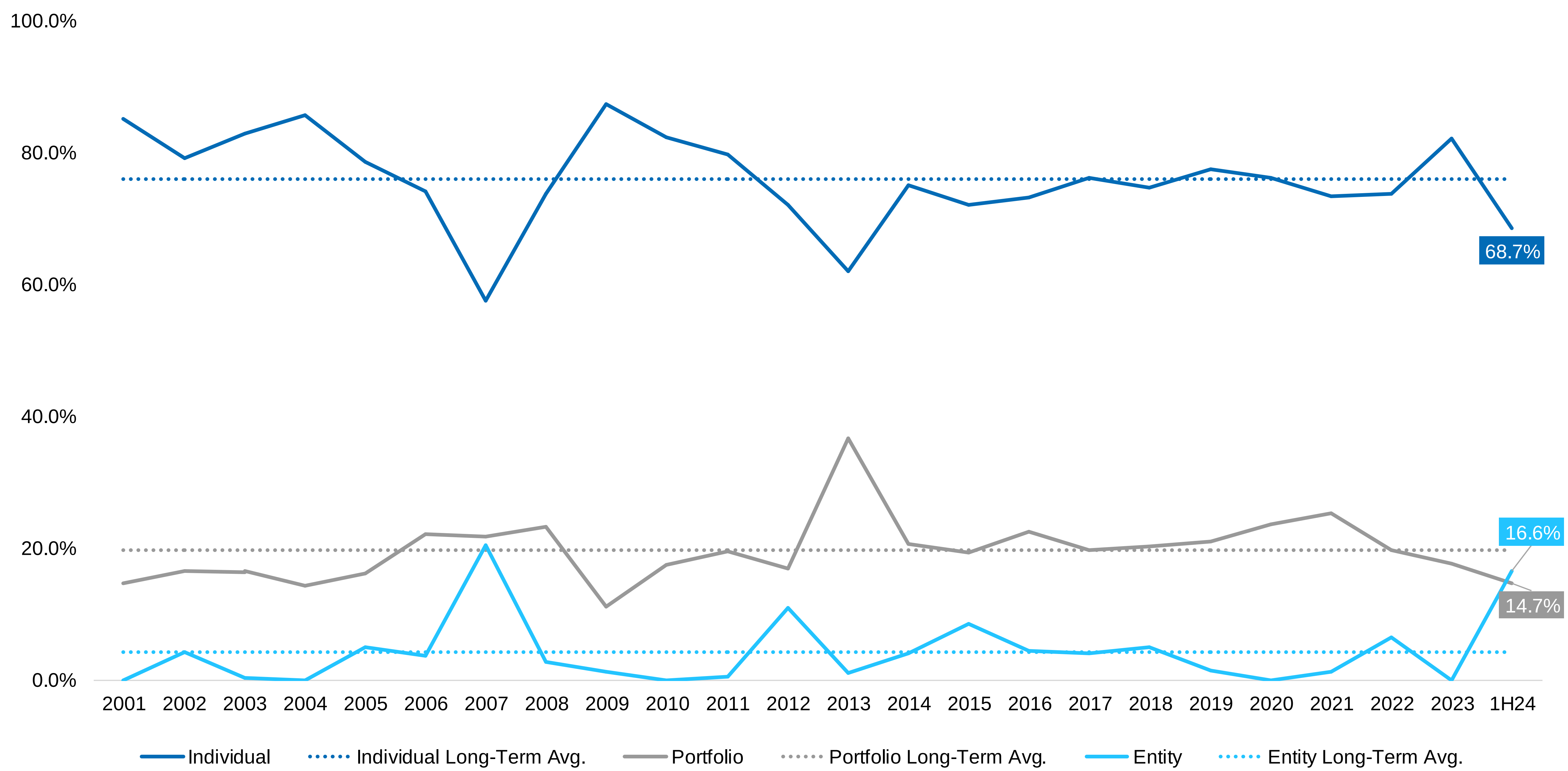


Source: Newmark Research, MSCI Real Capital Analytics

Flurry of Large Portfolio and Entity Deals Closed in 2Q24, Boosting Volumes

Through the first half of 2024, portfolio and entity level transactions accounted for 14.7% and 16.6%, respectively. In addition to Blackstone's privatization of Air Communities for $10.0 billion, institutional buyers were active via portfolio deals including KKR's $2.1-billion acquisition from Quarterra and Brookfield's $1.6-billion acquisition from Starwood.

By Transaction Type

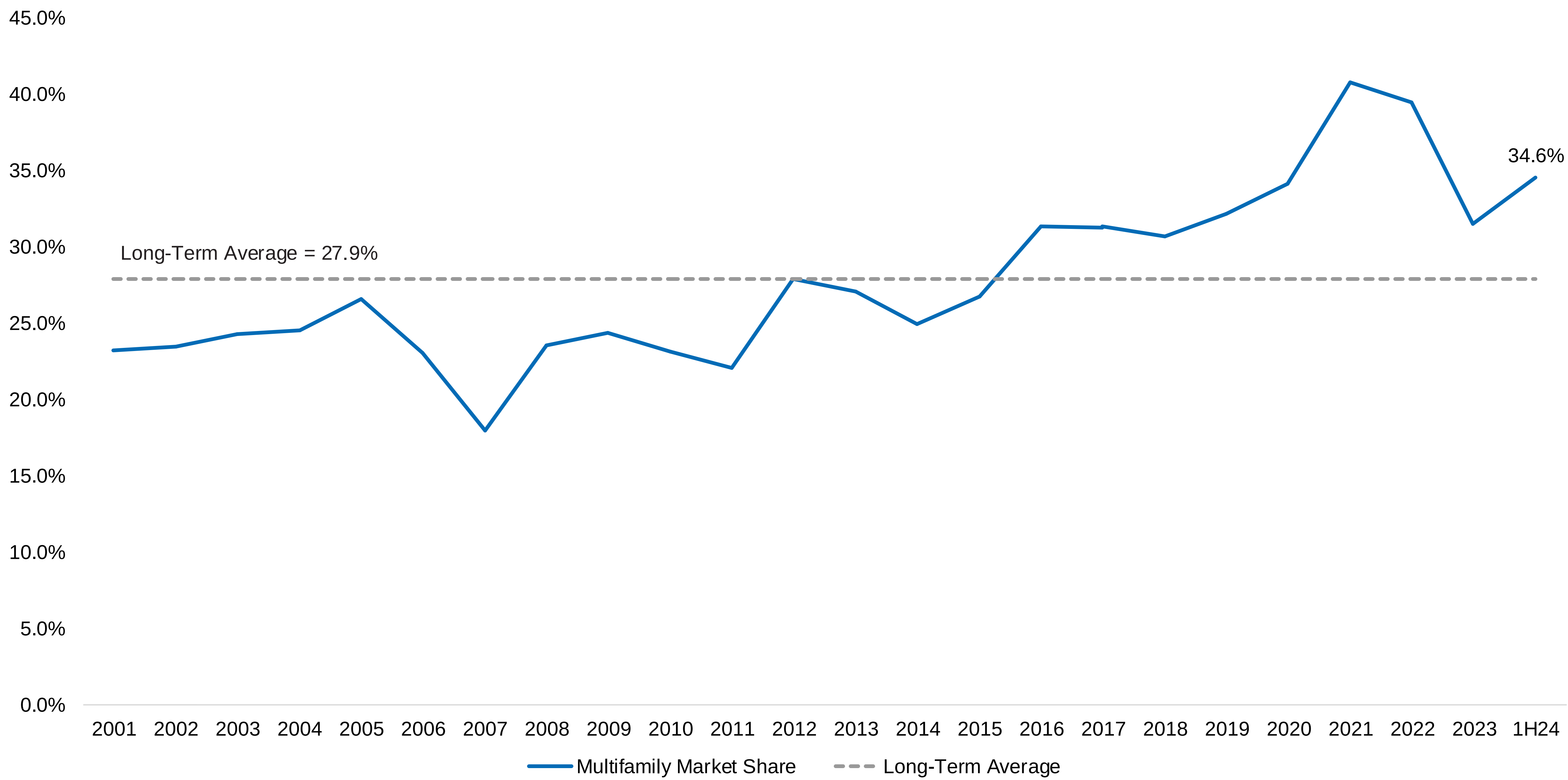


Source: Newmark Research, MSCI Real Capital Analytics

Multifamily Remains Top Recipient of Capital; Market Share Rises in 1H24

Multifamily remains the largest share of investment sales of all US commercial real estate property types at 34.6% through the first half of 2024. While the multifamily market share is below peak levels in 2021, recent large deal activity has propelled market share to increase 31 basis points in the first half of 2024 compared with full-year 2023.

Multifamily Market Share as a Percentage of US CRE Sales Volume

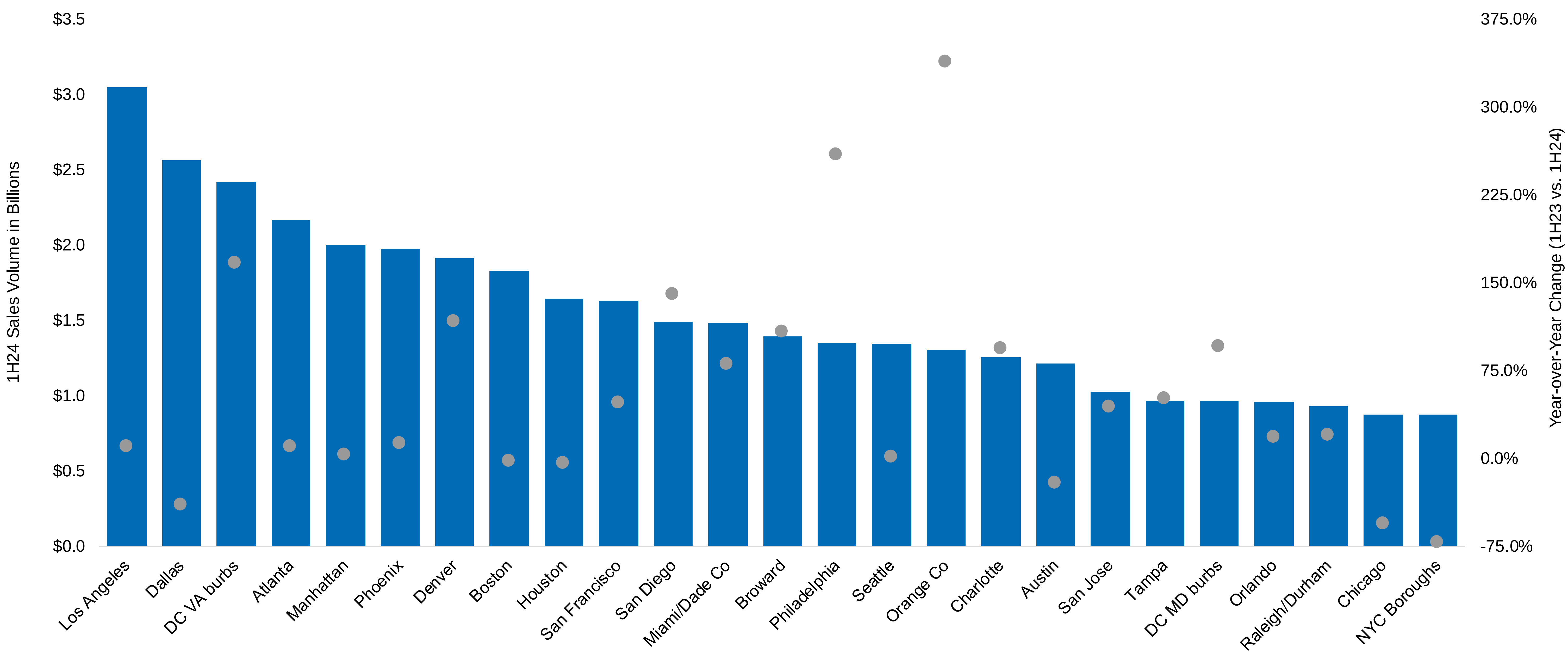


Source: Newmark Research, MSCI Real Capital Analytics

Majority of Top 25 Markets Exhibiting Accelerating Growth vs. 1H23

Through the first half of 2024, 19 of the top 25 markets by sales volume experienced increases compared with the prior half year period. While Los Angeles and Dallas took the top two spots with $3.1 and $2.6 billion, respectively, the largest year-over-year gains came from Orange County and Philadelphia, which increased 339.0% and 259.9%, respectively.

First Half Sales Volume; Top 25 Markets by Volume

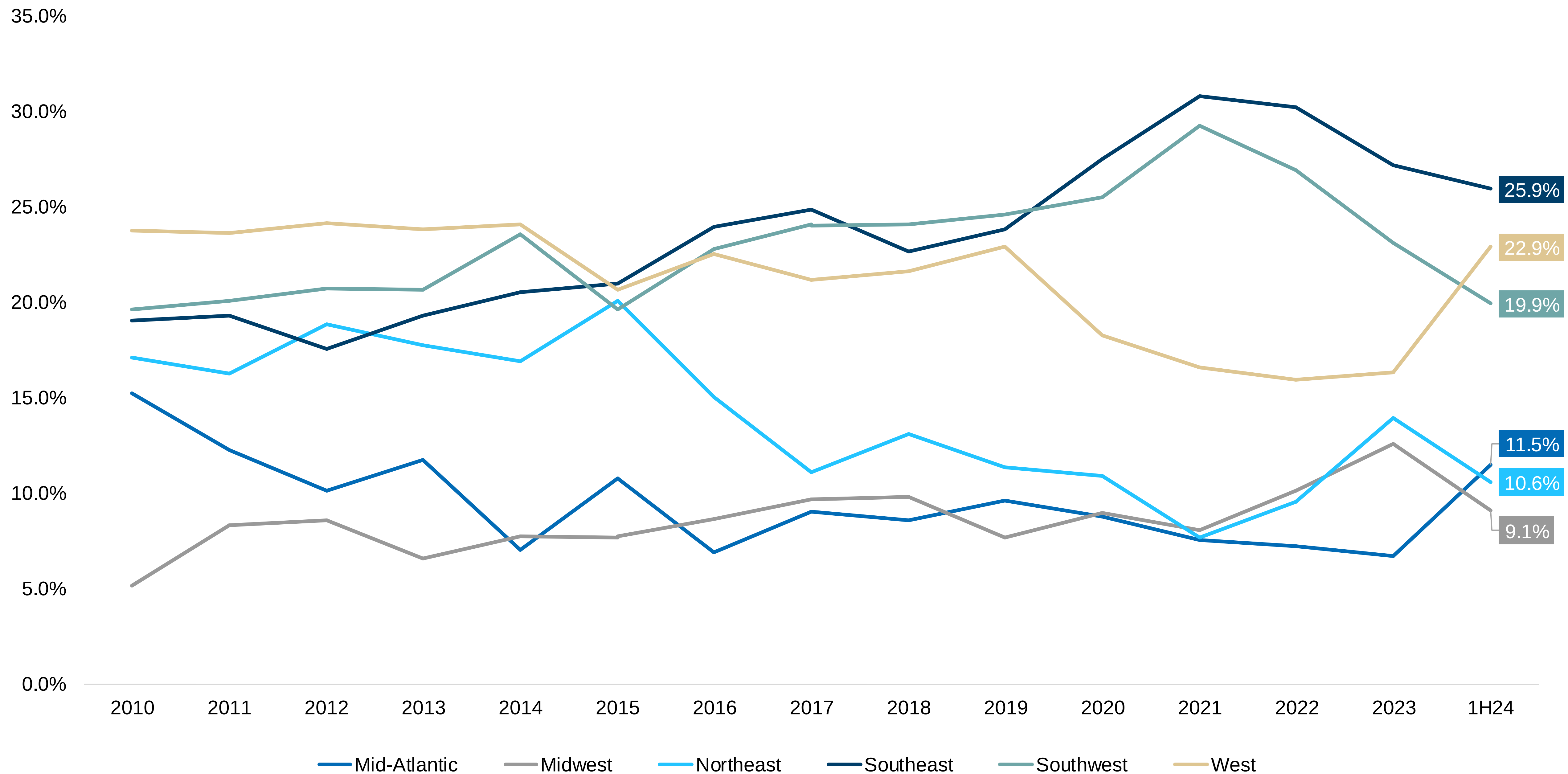


Source: Newmark Research, MSCI Real Capital Analytics

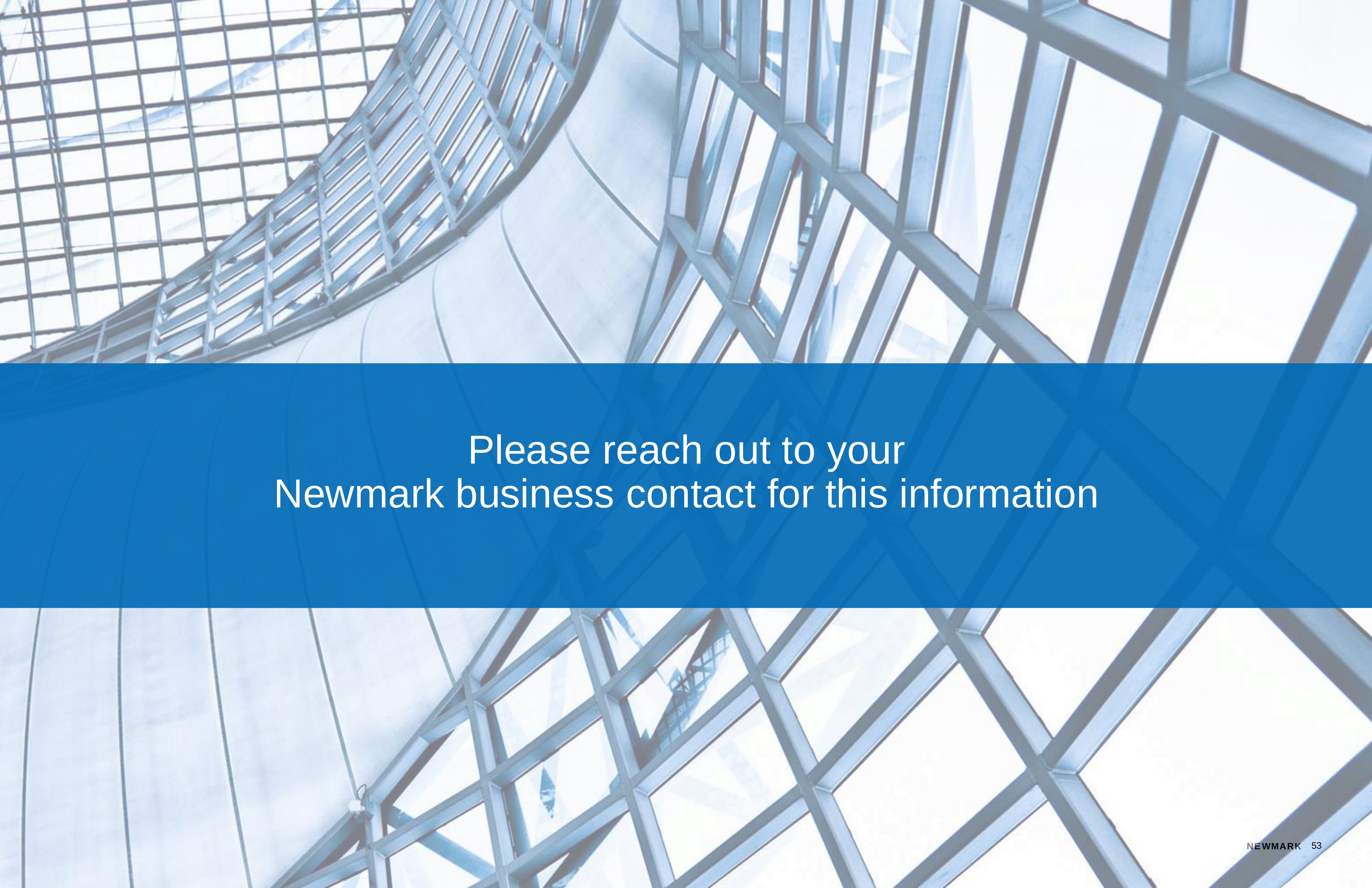
Capital Sources Stay Concentrated on Sun Belt Despite Near-Term Supply Imbalance

The Sun Belt Region, represented by the Southeast and Southwest, combined for 45.8% of all activity year to date, in spite of robust new supply out. Compared with full-year 2023, the Mid-Atlantic and West Regions saw market share increase by 480 and 660 basis points, respectively.

Sales Volume Share by Region



Source: Newmark Research, MSCI Real Capital Analytics



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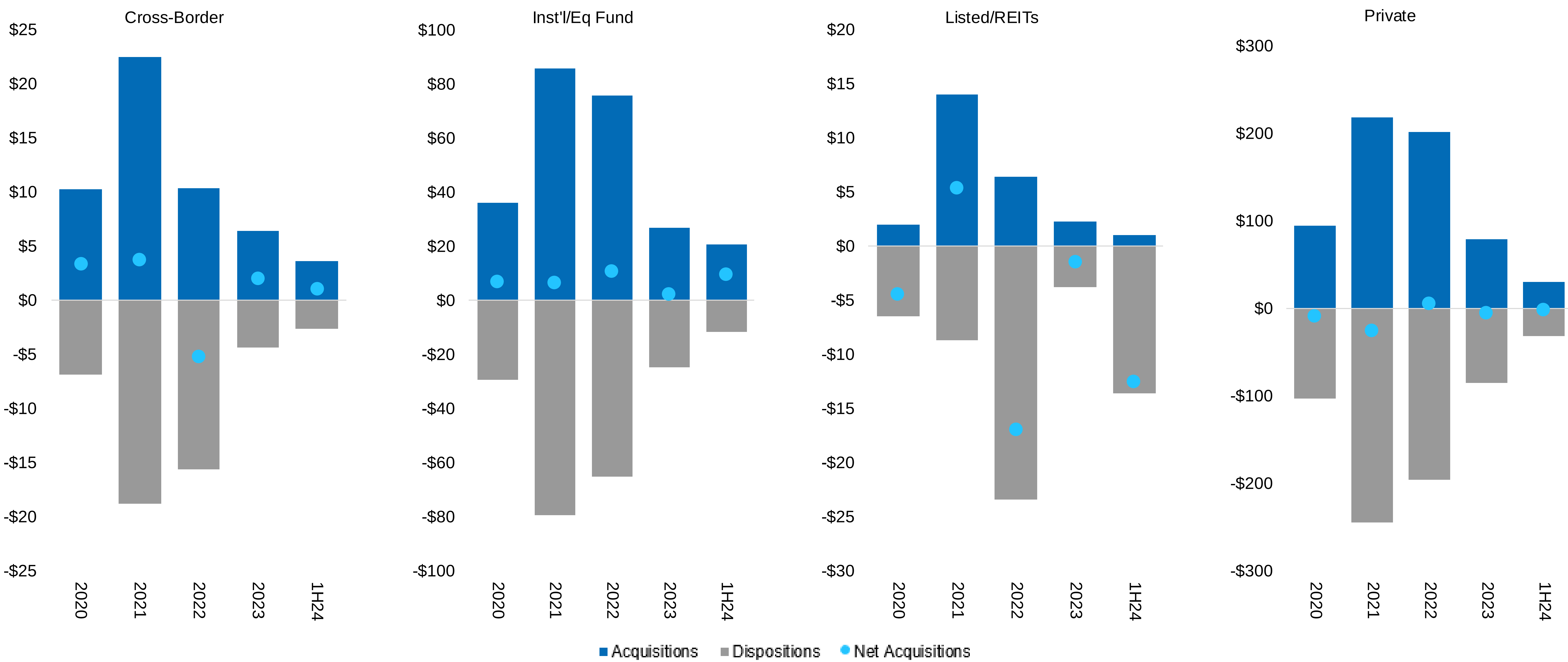
REITs Become Largest Net Seller YTD Following M&A Activity

While private groups remain the most active on a nominal basis, REITs are the largest net sellers year to date following Blackstone's acquisition of AIR Communities. This marks the fifth residential REIT acquired by Blackstone and/or BREIT in as many years, adding approximately 63,000 conventional units and 111,900 student housing beds to its portfolio.

Capital Flows by Investor Group (in Billions)



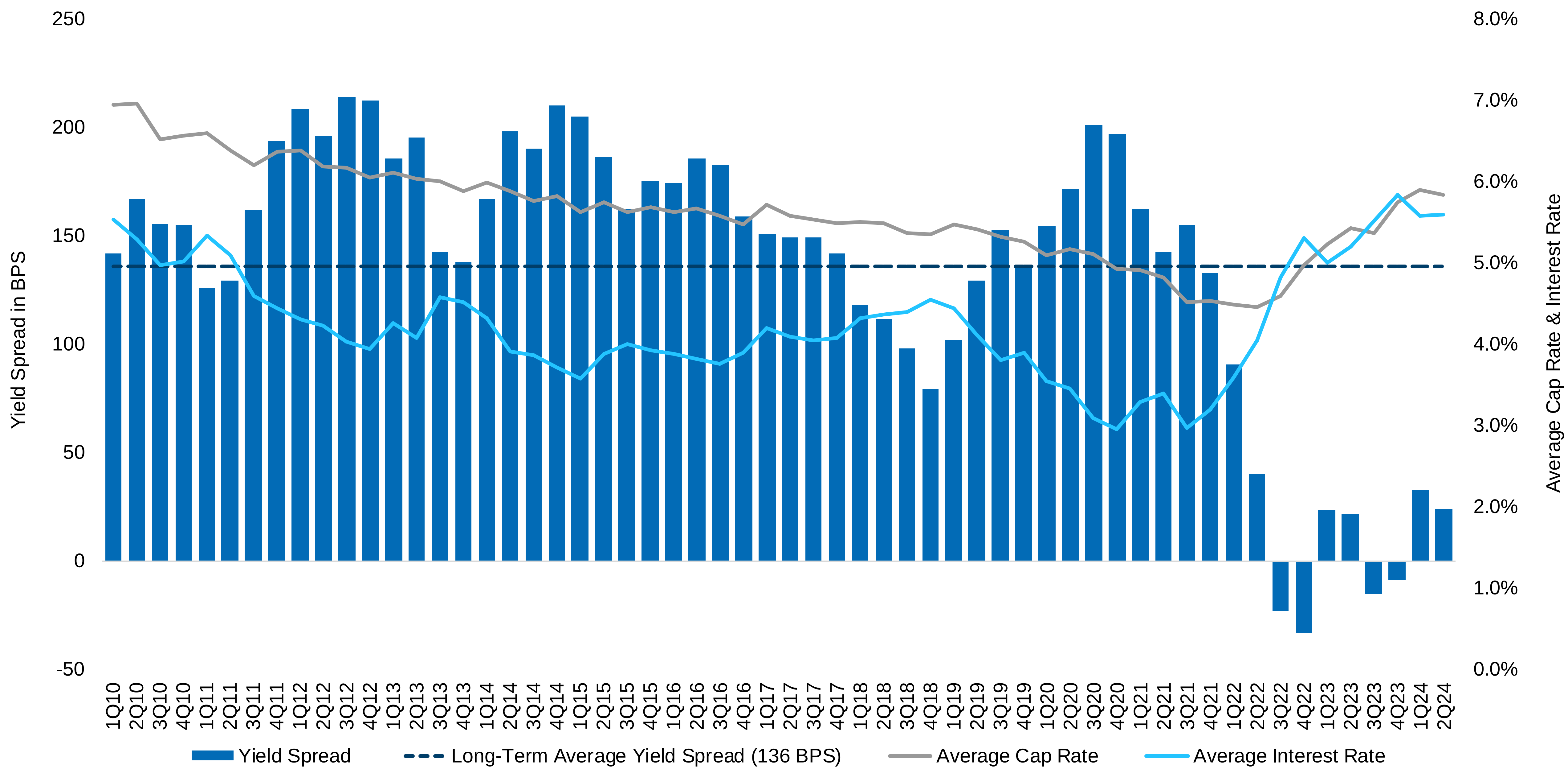
Source: Newmark Research, MSCI Real Capital Analytics

Pricing & Returns

Deals Trading in Positive Leverage, but Well below Long-Term Average

As of the second quarter of 2024, transactions $5 million and greater had a 5.83% average cap rate compared with a 5.59% average interest rate, equating to positive leverage of 24 basis points. While positive, this is 112 basis points below the long-term average yield spread.

Cap Rates and Interest Rates



Source: Newmark Research, MSCI Real Capital Analytics as of 8/7/24 (transactions $5 million and greater)

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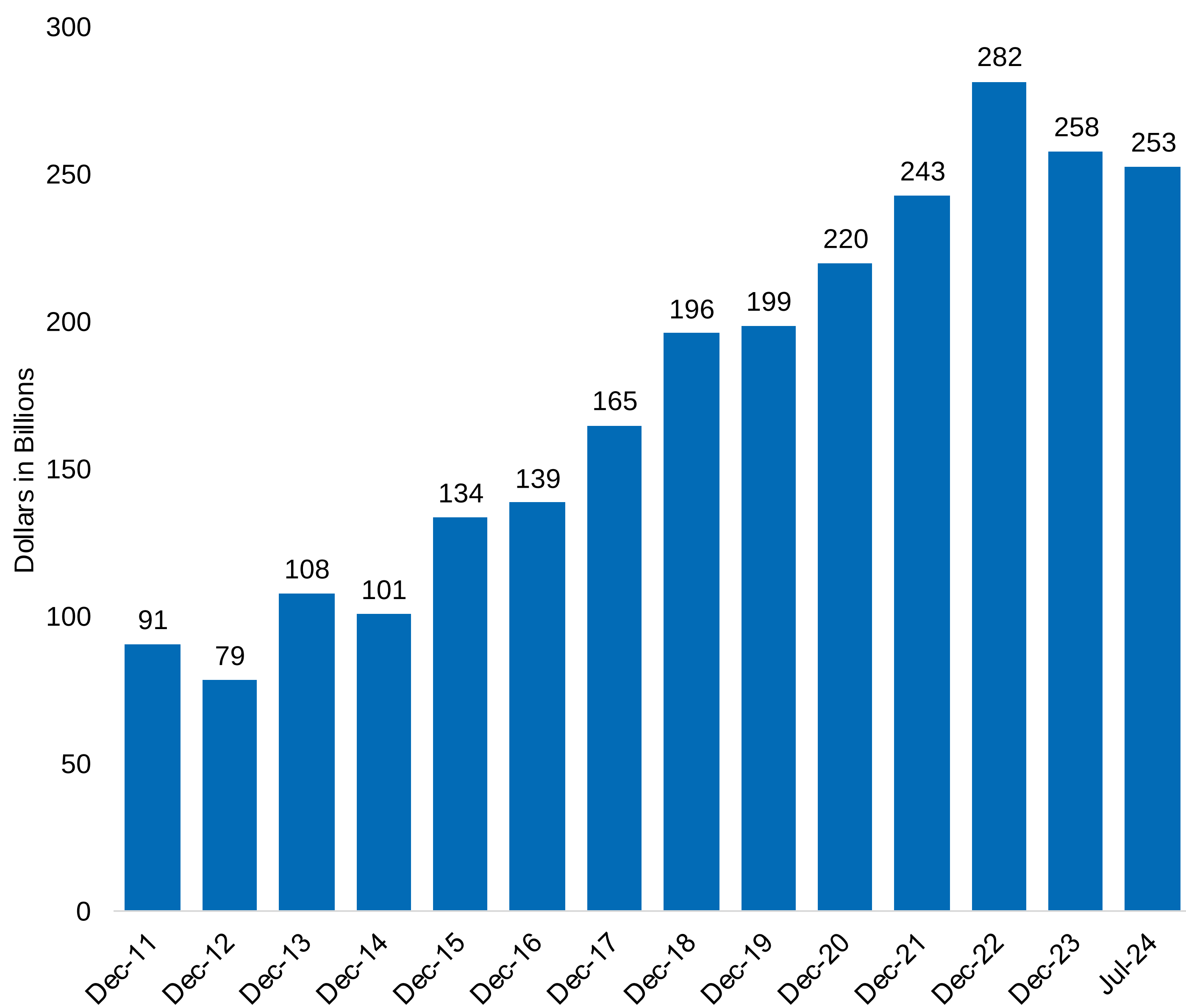
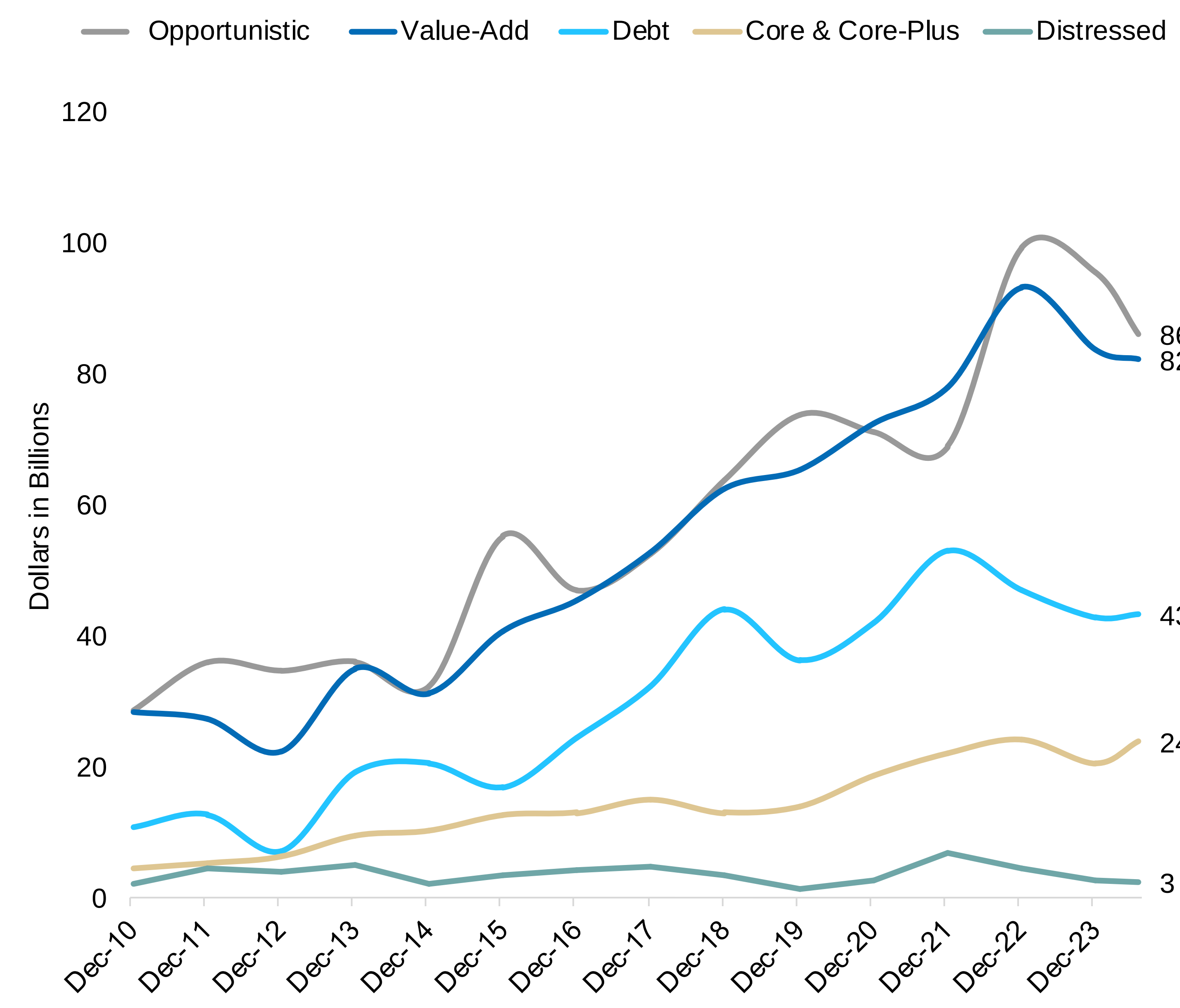
Private Equity Dry Powder Has Declined from 2022 Peak, But Still Elevated Overall

Dry powder at closed-end funds is 10.3% below its December 2022 peak, reflecting declines in dry powder at value-add and opportunistic funds. Debt fund vehicles are also off their peak but by a smaller margin. Similarly, new fundraising has declined from $140.0B in 2022 to $104.8B to $95.8B in the last twelve months. More positively, fundraising in the second quarter ($29.1B) increased 31% quarter-over-quarter. Even more notably, the number of funds raising capital (139) rose sharply to the highest level since 4Q22 (169).

Dry Powder – Closed-End Funds



Dry Powder by Strategy*

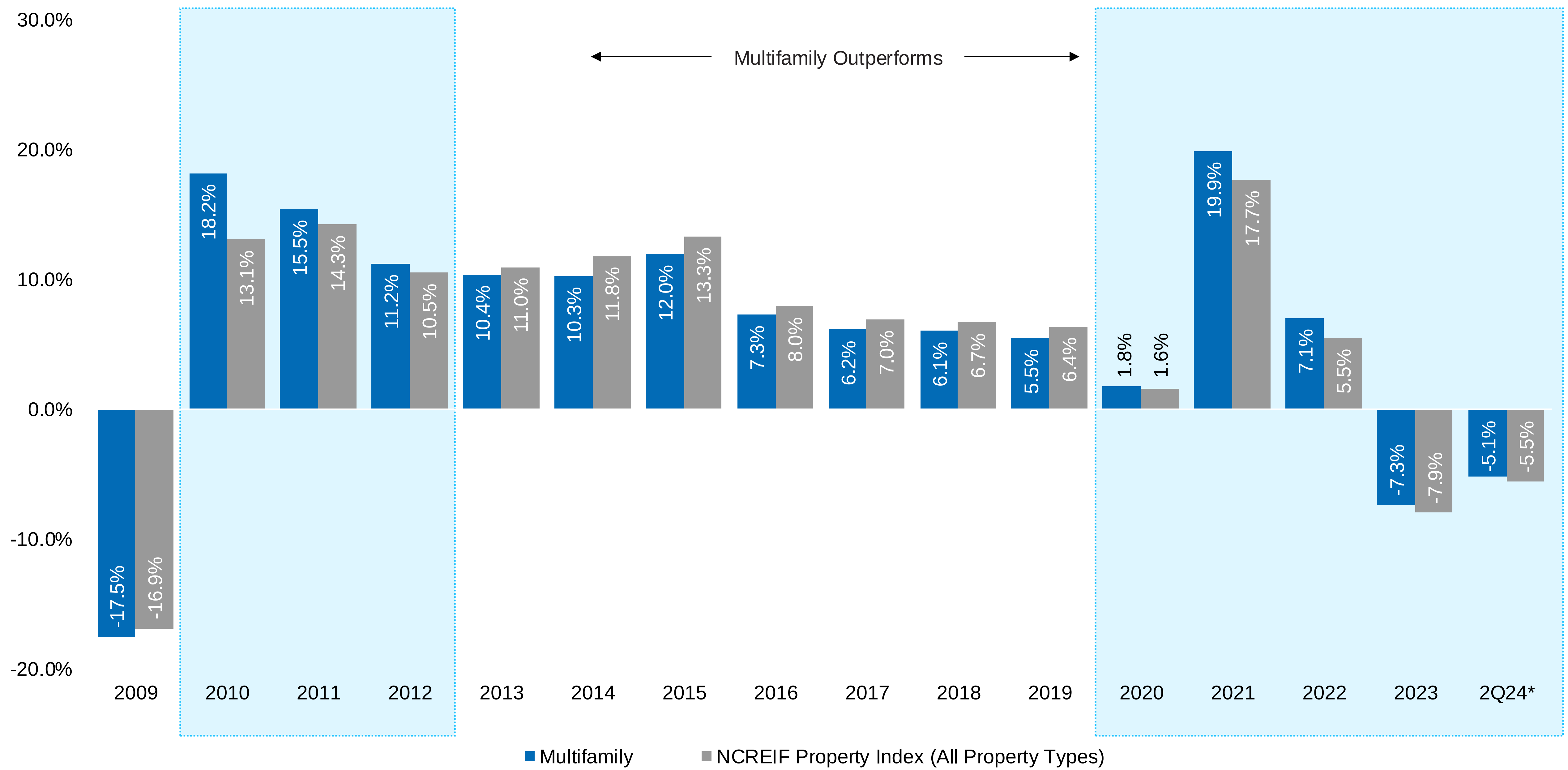


Source: Newmark Research, Preqin as of 7/26/2024
*Not shown: Fund of funds, co-investments, and secondaries strategies

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 2024, multifamily still outperformed the NCREIF All Property Index during through the second quarter of 2024.

Calendar Year Total Returns



Source: Newmark Research, NCREIF

**2Q24 total returns are annualized*

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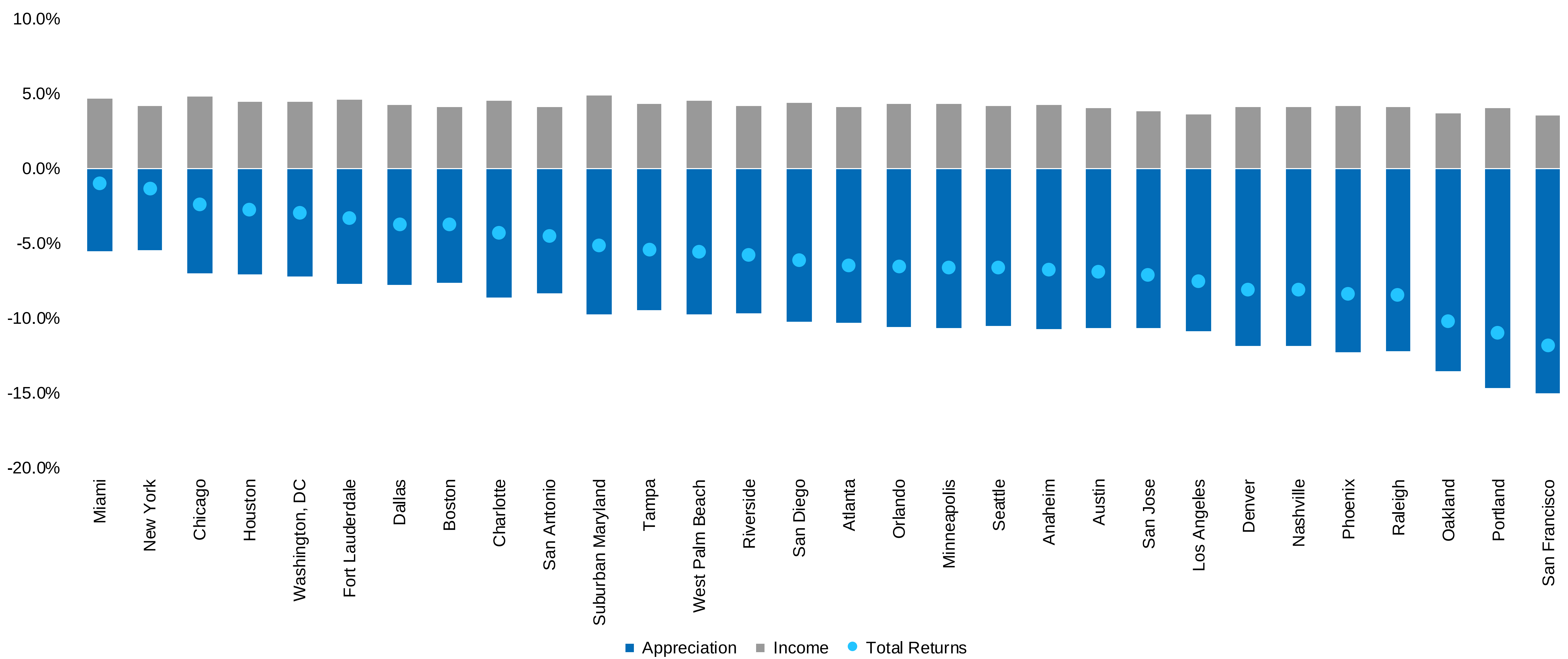
Total Returns Universally Down; Miami and New York Fall the Least

Over the past 12 months, no market in NCREIF's apartment composition has posted positive returns. Miami and New York have performed the best, at negative 1.03% and negative 1.39% total returns, respectively. Additionally, Suburban Maryland and Chicago have performed best for income growth, at 4.91% and 4.85%, respectively.

NCREIF Annualized Apartment Total Returns by Market as of 2Q24

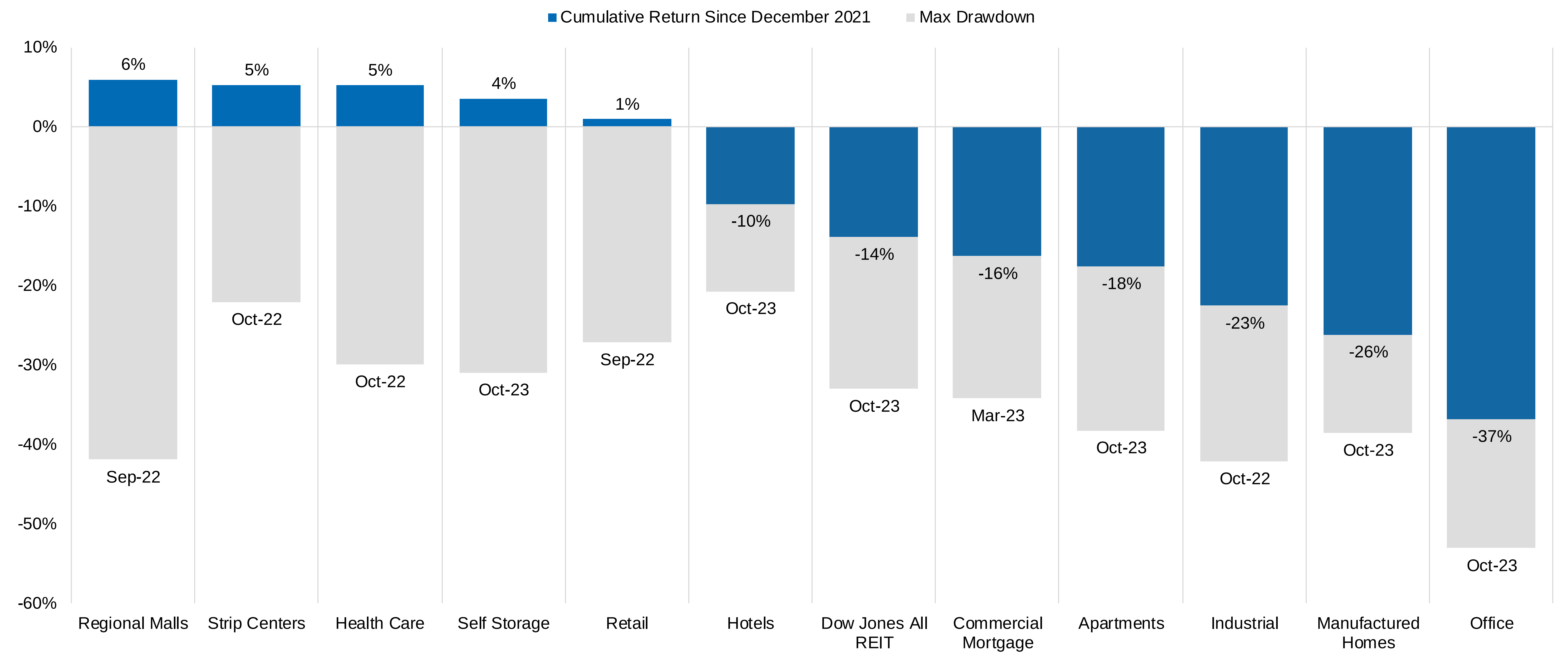


Source: Newmark Research, NCREIF

REIT Returns Have Rallied Significantly from Post-2021 Lows

All REIT sectors experienced significant drawdowns since the beginning of the Fed's hiking cycle; however, all sectors have pared their losses, and the retail, health care and self storage sectors have entirely recovered to post positive cumulative total returns. Office, industrial and apartment REITs continue to be the most negatively impacted sectors overall. Year-to-date, health care (+18.3%), apartment (+13.3%), retail (+6.0%) and self-storage REITs (+10.7%) have outperformed the overall index (+3.1%).

Dow Jones REIT Index Total Returns



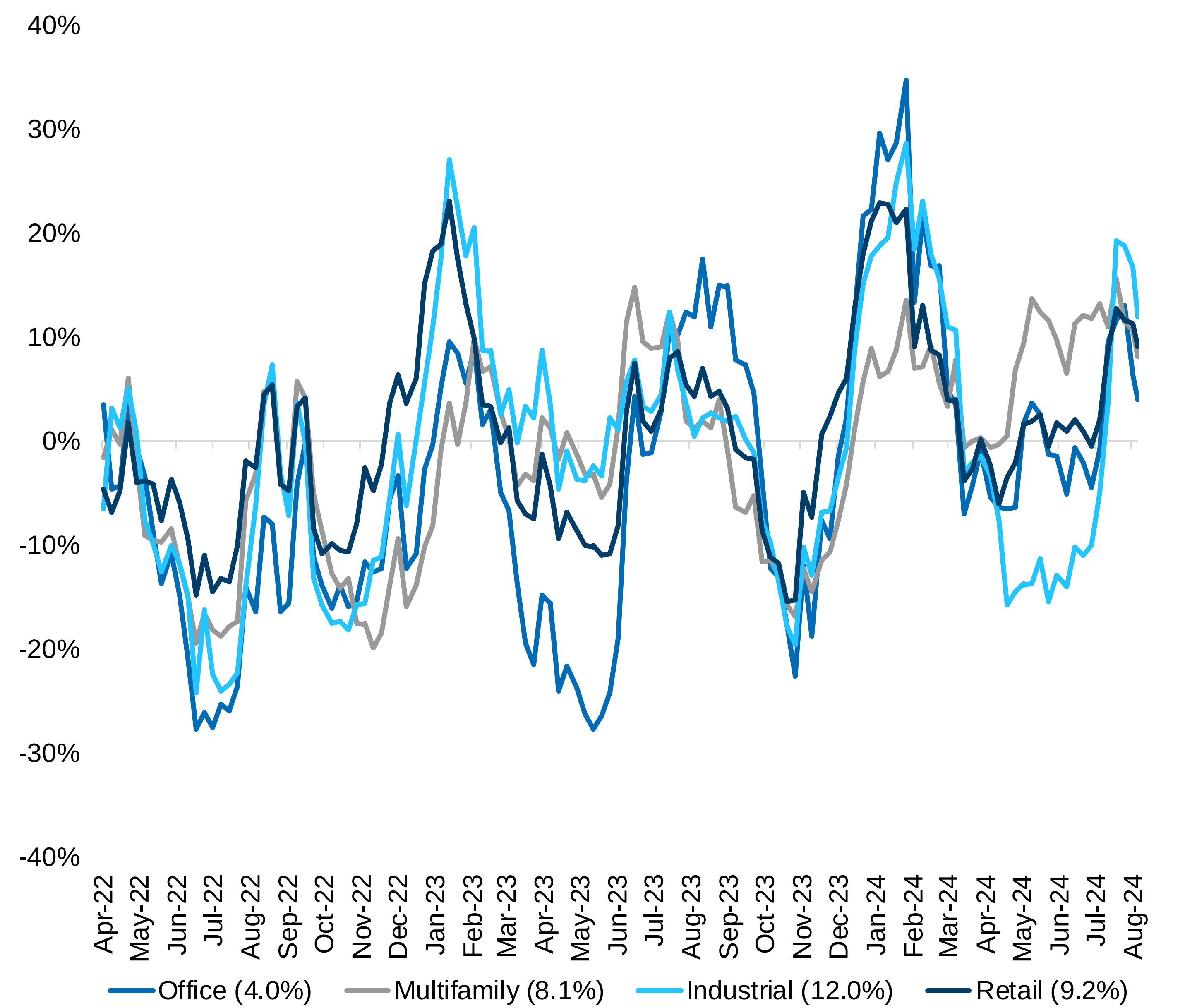
Source: Dow Jones, Moody's, Newmark Research as of 8/5/2024

REIT Returns Have Been Volatile with Periods of Significant Appreciation

As the prospects for declining interest rates have waxed and waned so have REIT returns. Taking a look at cumulative changes (left panel), while volatility is visible, the overall downward impulse from higher rates and, to a lesser extent, softening fundamentals leaves the dominant impression. The rolling 13-week return reveals just how many mini-cycles to which the market has been subject. This underlines the challenge of using public comparable to inform private property valuations on a tactical basis.

Dow Jones All Equity REIT Total Return Index

Dow Jones All Equity REIT Total Return Index: Rolling 13-Week Return

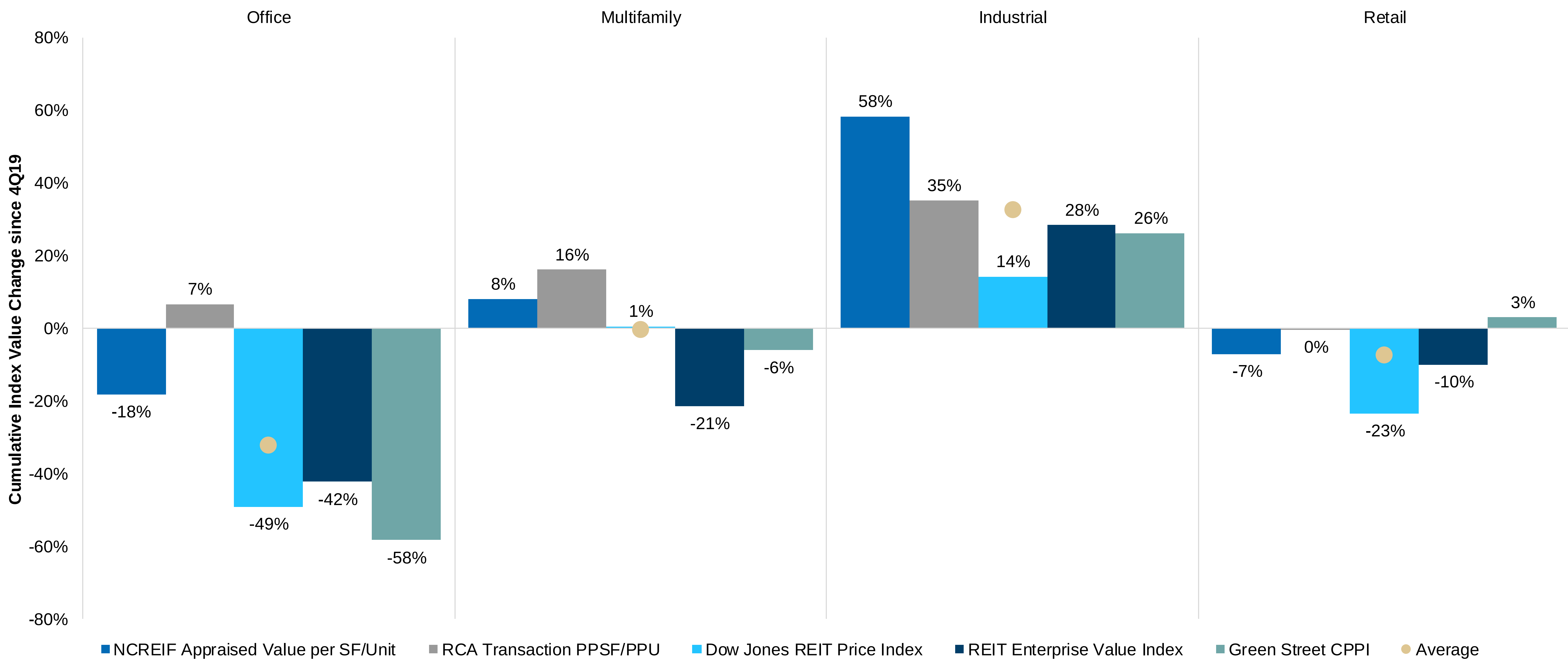


Source: Dow Jones, Moody's, Newmark Research as of 7/31/2024

What Has Happened to Values? Depends on the Benchmark

Industrial is the only sector for which a range of benchmarks show large and significant gains since 4Q19. Conversely, most benchmarks show office values down, but there is a large difference between appraisal / transaction-based measures, which show modest depreciation and measures informed by the public markets. The latter seem far more realistic. Multifamily markets show the same cleavage with the enterprise value and NCREIF measures clear outliers. Retail measures generally point to modest declines in value.

Comparison of Value Benchmarks: Cumulative Index Change since 4Q19

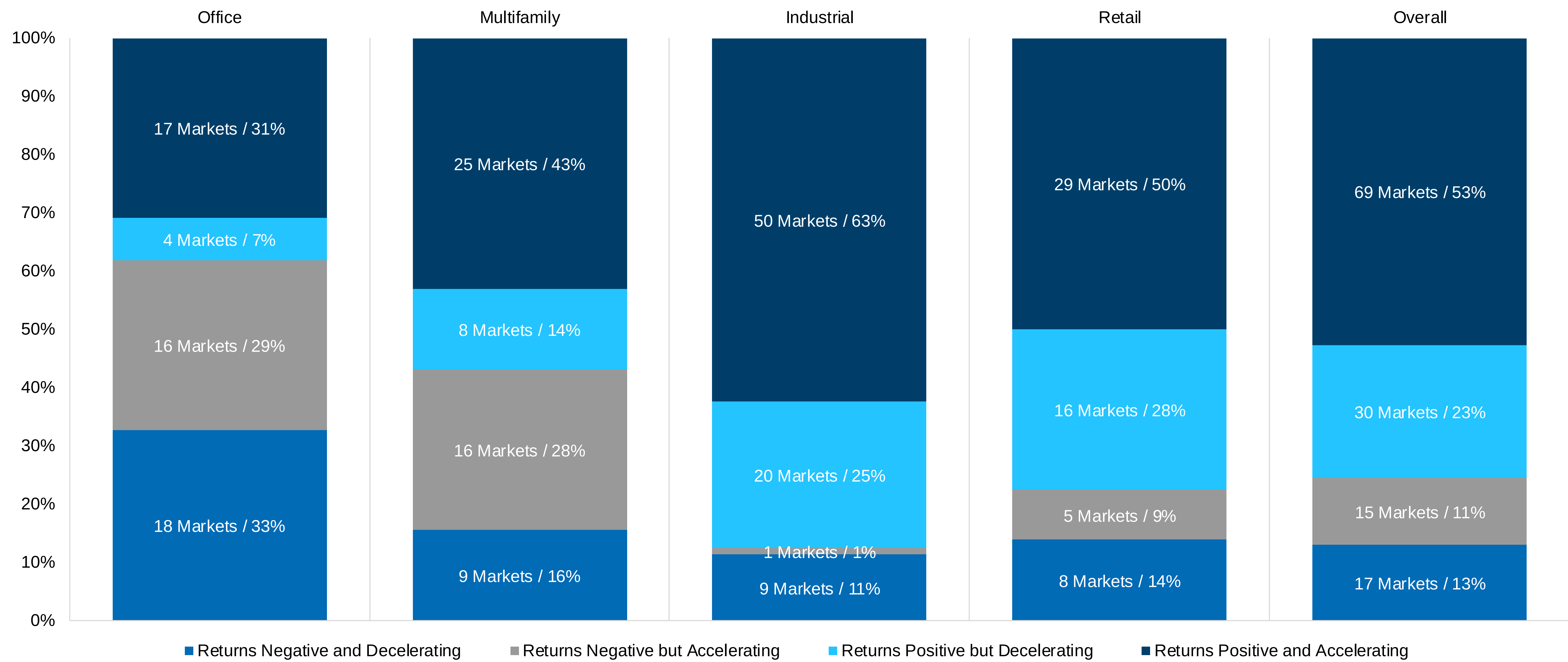


Source: NCREIF, RCA, Dow Jones, Green Street, Moody's Analytics, Newmark Research as of 7/31/2024

NCREIF Returns Positive in 57% of Markets in 2Q24 up from 32% in 2Q23

Markets clearly registered the shift in return momentum in 1H24. For office and multifamily, this shift manifested as a shift in markets from negative but accelerating to positive and accelerating. On the other hand, industrial and retail saw some markets shift from positive and accelerating to decelerating. That being said, retail (78% of markets), industrial (88%), and multifamily (57%) reported positive returns in the majority of markets according to NCREIF for the first time since mid 2022.

Breakdown of NCREIF CBSA Total Returns: 2Q 2024



Source: NCREIF, Newmark Research as of 7/25/2024

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