3Q23

The National Industrial Market: Conditions & Trends

NEWMARK

Market Observations

Economic Conditions and Demand Drivers

- The pace of U.S. economic growth picked up in the third quarter of 2023, growing 4.9% due in part to strong consumer spending amid ongoing inflation and interest rate burdens. Key recession indicators persist in signaling a downturn, although every cycle is different. A soft landing is not out of the question.
- An increasingly constricted credit environment, elevated interest rates, and shifting consumer demand is causing a significant uptick in bankruptcies, which has contributed to some sublease space and vacancies in the industrial market.
- While many firms are pausing or slowing capital investments, advanced manufacturers are investing heavily in new construction. A snapshot of recent major investments reveals approximately $400 billion pledged, 210,000+ new jobs and a minimum of 250 MSF of new industrial projects to come between now and 2030.

Leasing Market Fundamentals

- Nationally, absorption measured 47.0 msf in the third quarter of 2023, demonstrating solid if muted demand. Secondary markets are absorbing an increasingly larger share of net absorption.
- Deliveries this quarter measured 140 msf, the second-highest quarterly volume on record. The construction pipeline has depleted substantially amid sharply decelerating new starts although at 537 msf, it is still 62% above 2019 measures.
- Asking and taking rents alike continue to grow at double-digit annual percentages, but quarterly growth is slowing substantially. Still-low vacancy is holding rates higher in many markets, but pricier, quality availabilities delivering in larger volumes are also impacting rent growth averages.

Capital Markets

- 3Q23 marked the fifth consecutive quarter of significant annualized declines in industrial capital markets volume, with users – a small slice of the pie - the only investor group to increase acquisitions year-over-year.
- Appetite for smaller deals (under $50M) is visible in markedly less decline in activity than larger deals (over $100M), as well as less of a reset in cap rates.
- Record industrial loan maturities (heavily concentrated in bank and securitized borrowings) are coming due. However, among all property types, the industrial sector has the lowest share of potentially troubled loans maturing over this timeframe. The larger challenge will come from debt service covenants where 38% of upcoming maturities have DSCR of 1.25x or less.

Outlook

- Economic uncertainty continues to exert pressure on consumers, developers, occupiers and investors. Demand for industrial space will likely remain resilient but muted going into 2024.
- Vacancy will increase further as record volumes of new construction deliver over the next four quarters. Supply – both in deliveries, and in development – will fall back to pre-pandemic levels by 2025, and possibly sooner, depending on how few projects kick off next quarter.

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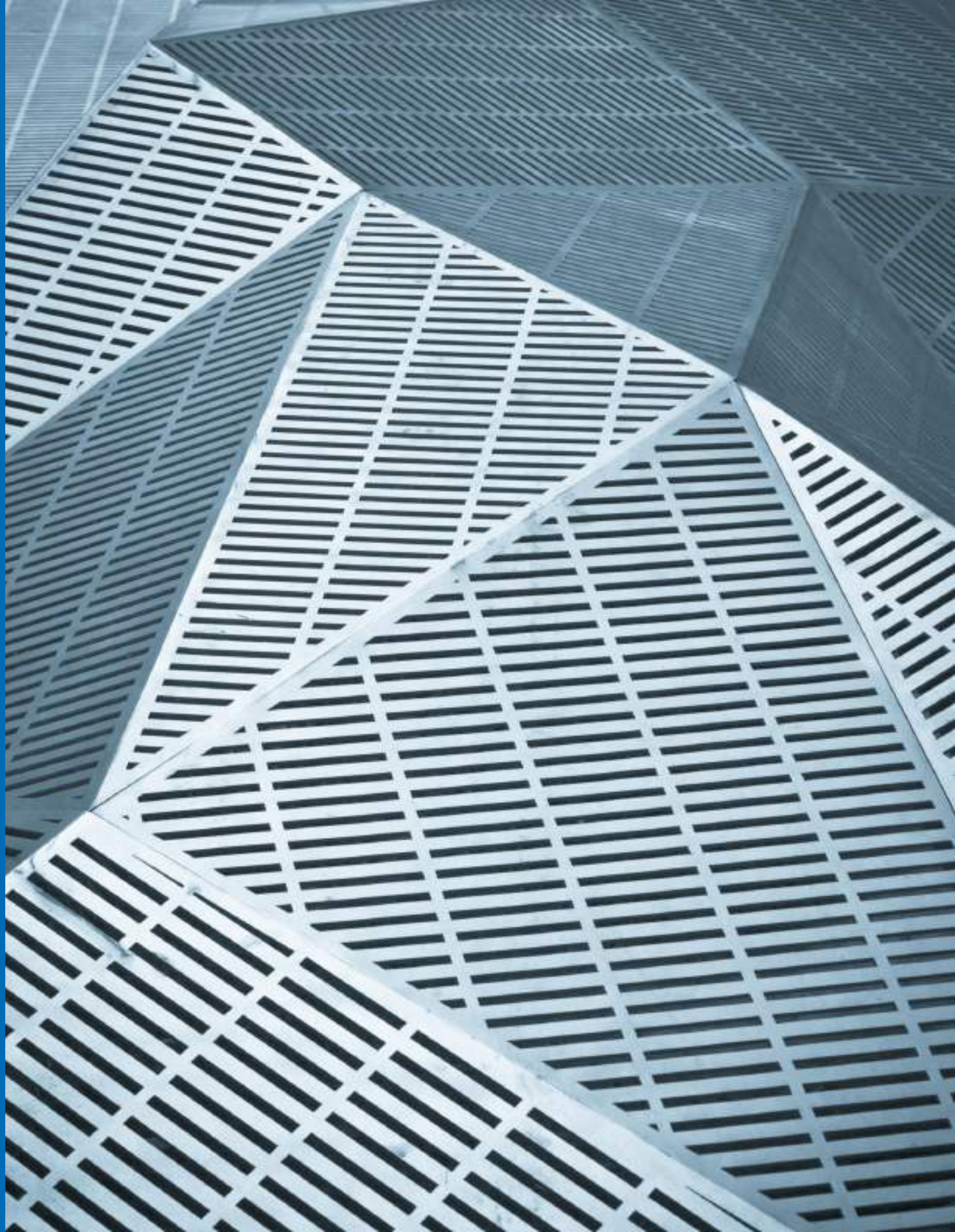
Economy and Demand Drivers



Outlook for Economic Conditions in 2024: Still Cloudy

The pace of U.S. economic growth picked up in 3Q23, growing 4.9% due in part to strong consumer spending amid persistent inflation concerns and elevated interest rates. Economic volatility and uncertainty manifests in key recession indicators although the country is still within historical ranges – and every cycle is different. A soft landing is not out of the question.

Two Key Recession Indicators and Range of Lag Since Initial Signal

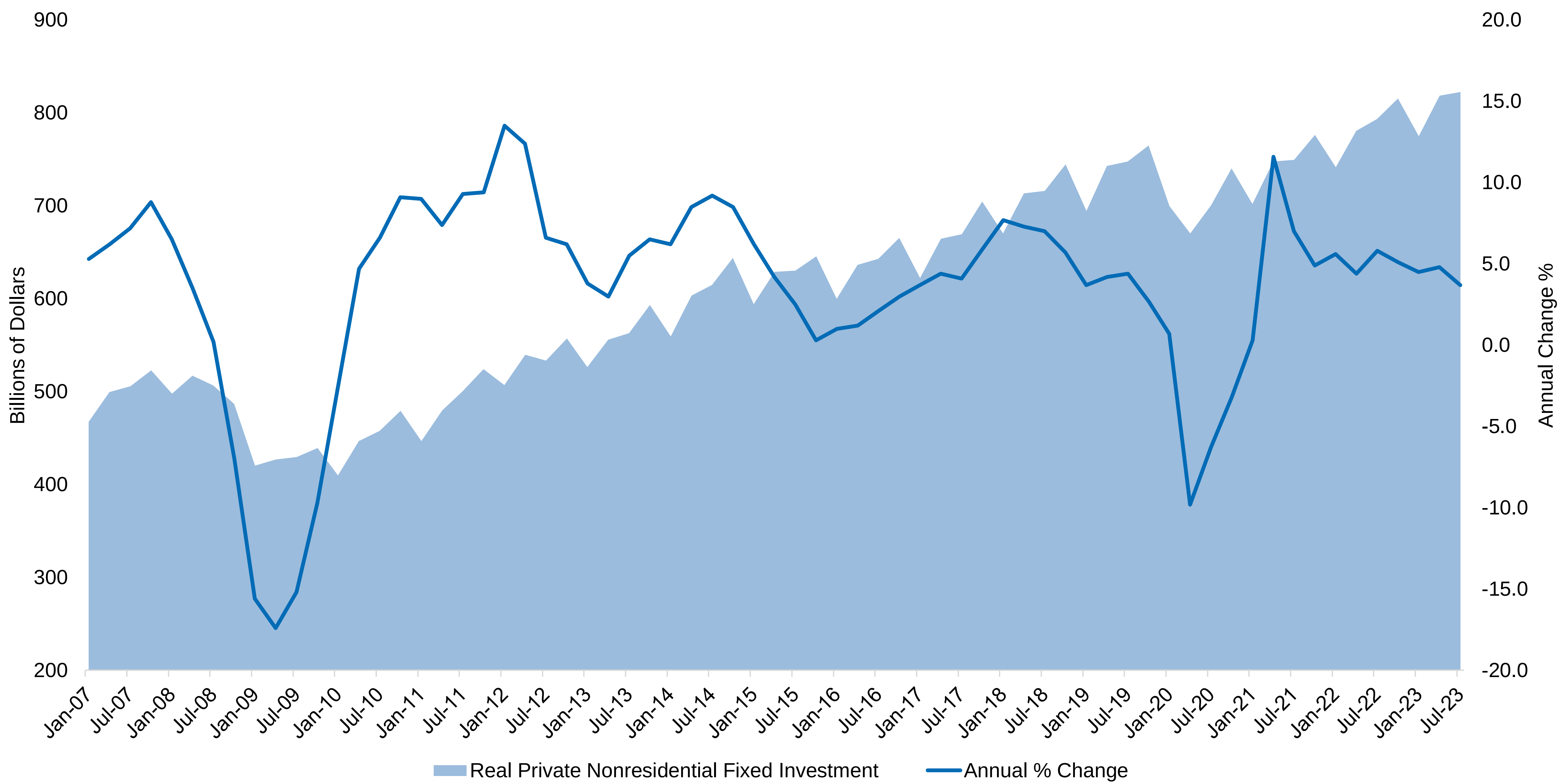
Recession Indicator	Range of Lags 1990, 2001 and 2007	Time Since Recession Signal, This Cycle
Yield Curves (10 Yr vs 2 Yr Treasury Yield Curve Inverted)	11-22 months	15 months (continuous since July 2022)
Conference Board Leading Economic Index	16-23 months	17 months (continuous since April 2022)

Source: Newmark Research, St. Louis Federal Reserve, The Conference Board

Private Capital Investment Slowing in Most Sectors

Higher interest rates, tight inventory management and lower profit margins are weighing on business investment. Soaring growth in fixed-asset capital expenditures coming out of the depths of the pandemic has trended downward since 2021, as has industrial market expansion. Real private investment in manufacturing construction (subsided by federal incentives) bucks the overall trend – suggesting capex in other fixed assets like equipment and durable goods may see recovery in some industry segments soon.

Real Private Nonresidential Fixed Investment and Annual Change

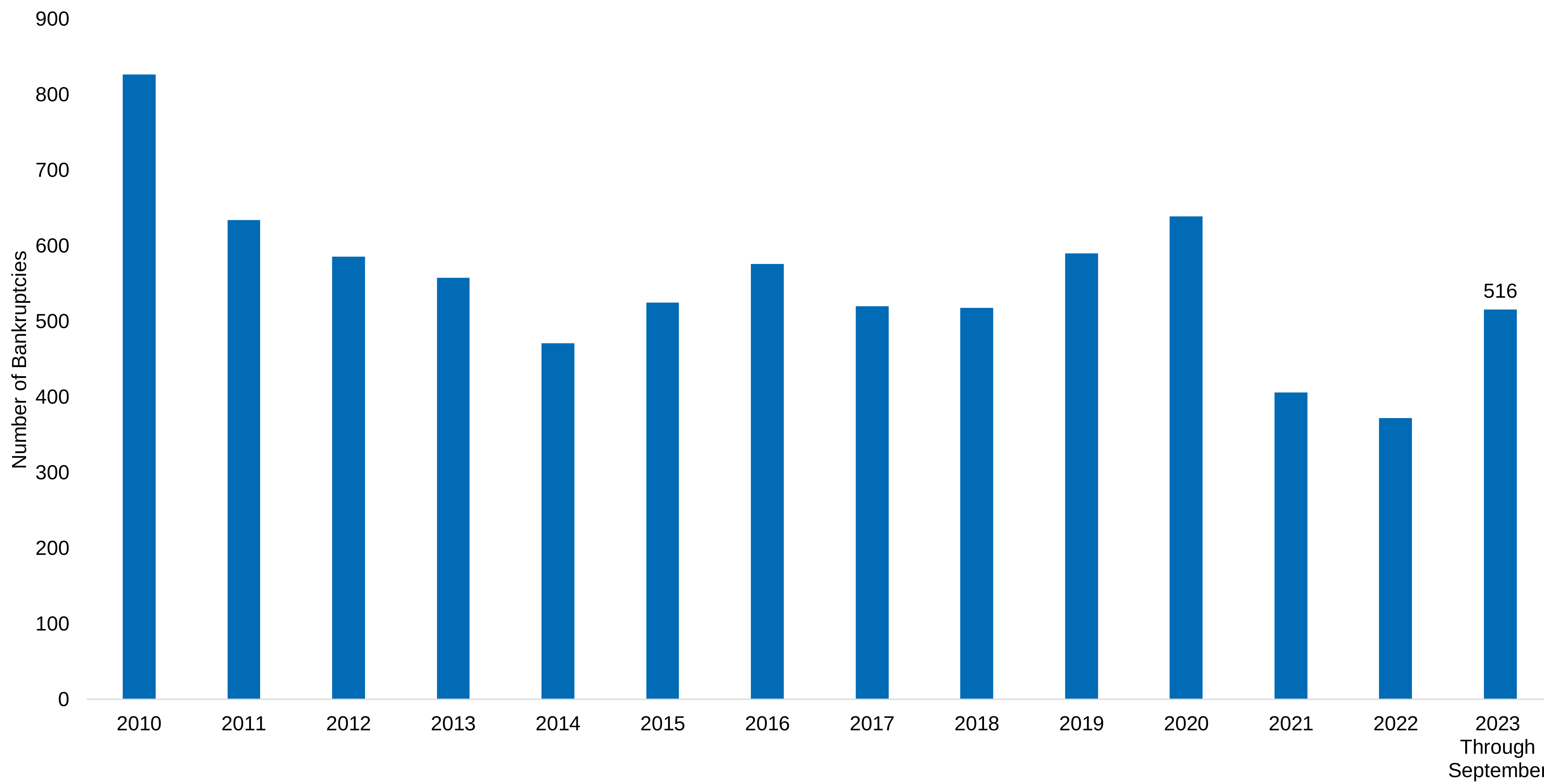


Source: St. Louis Federal Reserve, Chained 2017 Dollars, Not Seasonally Adjusted

U.S. Bankruptcy Filings Remain Elevated

Corporate bankruptcies have been increasing during 2023, with September registering the highest monthly volume year-to-date. The attendant industrial footprint has been seen as an opportunity in some cases (Yellow’s truck terminals) or in other cases, has contributed to overall rising availabilities amid softer demand for second-generation space.

U.S. Bankruptcy Filings by Year

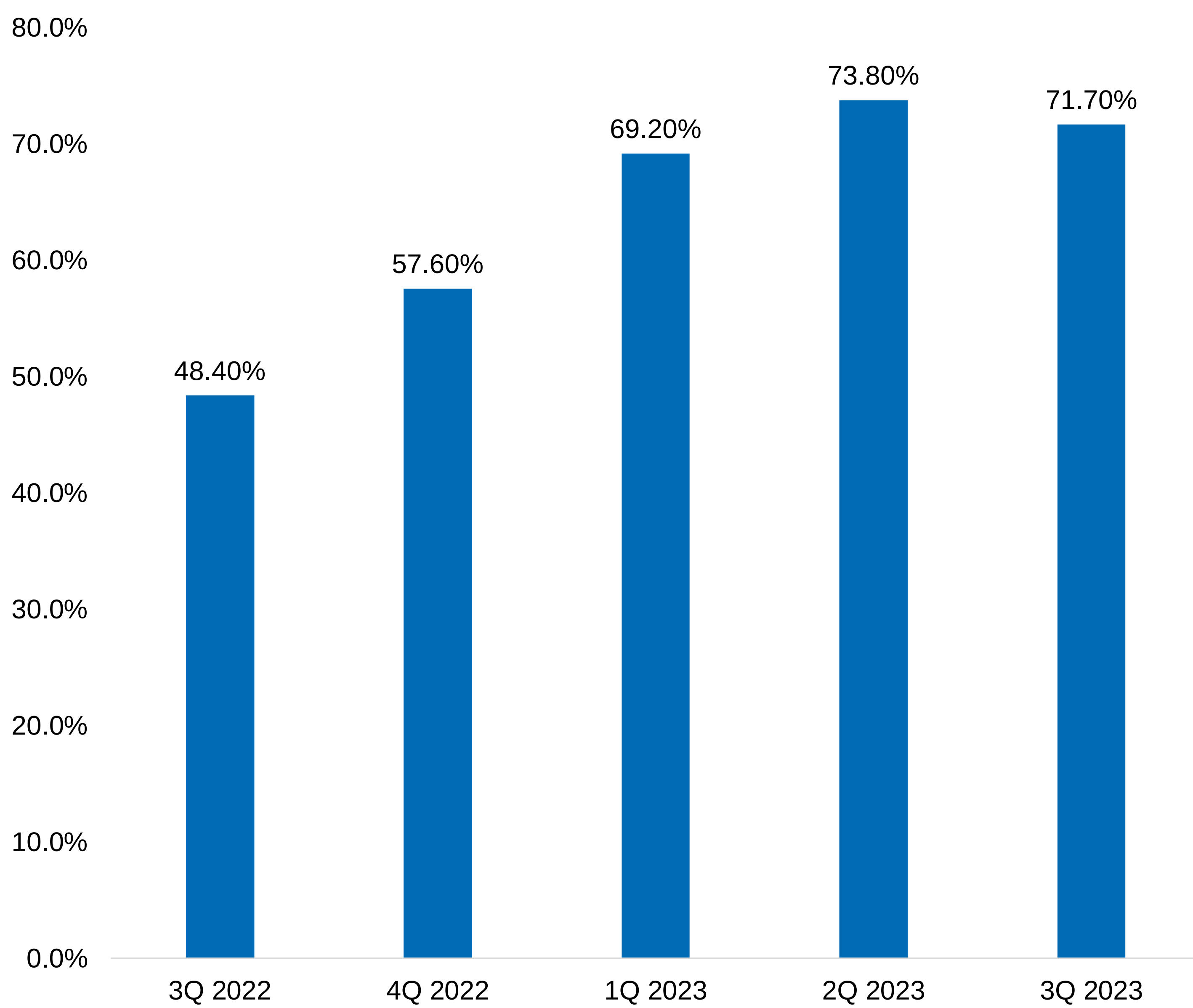


Source: Newmark Research, S&P Global

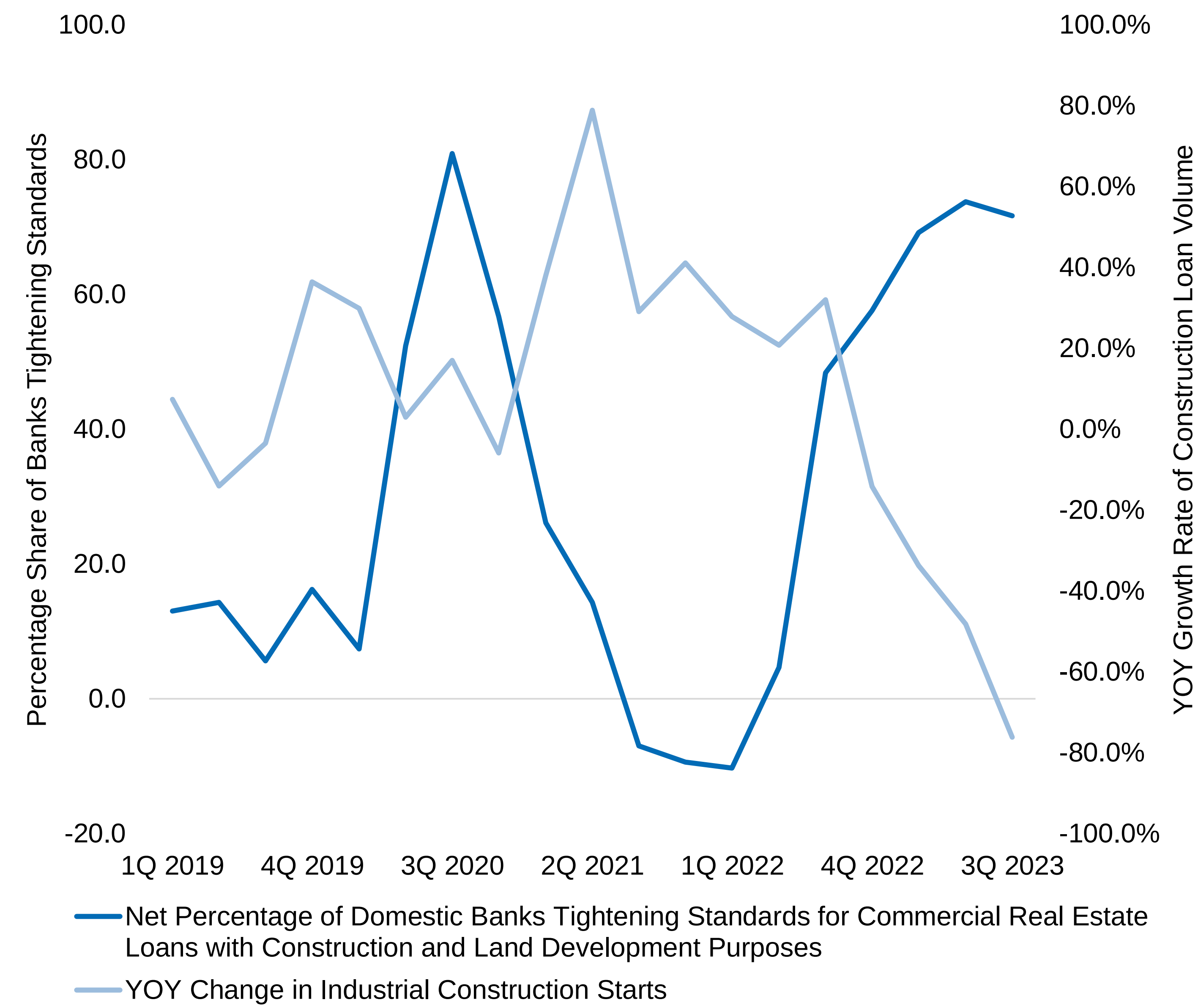
CRE Lending Standards Have Tightened the Most for Construction Loans

Domestic banks continue to tighten lending standards to reduce risk exposure in an uncertain financial landscape. Less credit available for developers is contributing to a slowdown in the industrial pipeline.

Net Share of Banks Tightening Standards for CRE Construction Loans



Tightening Lending Standards Vs New Industrial Construction Starts

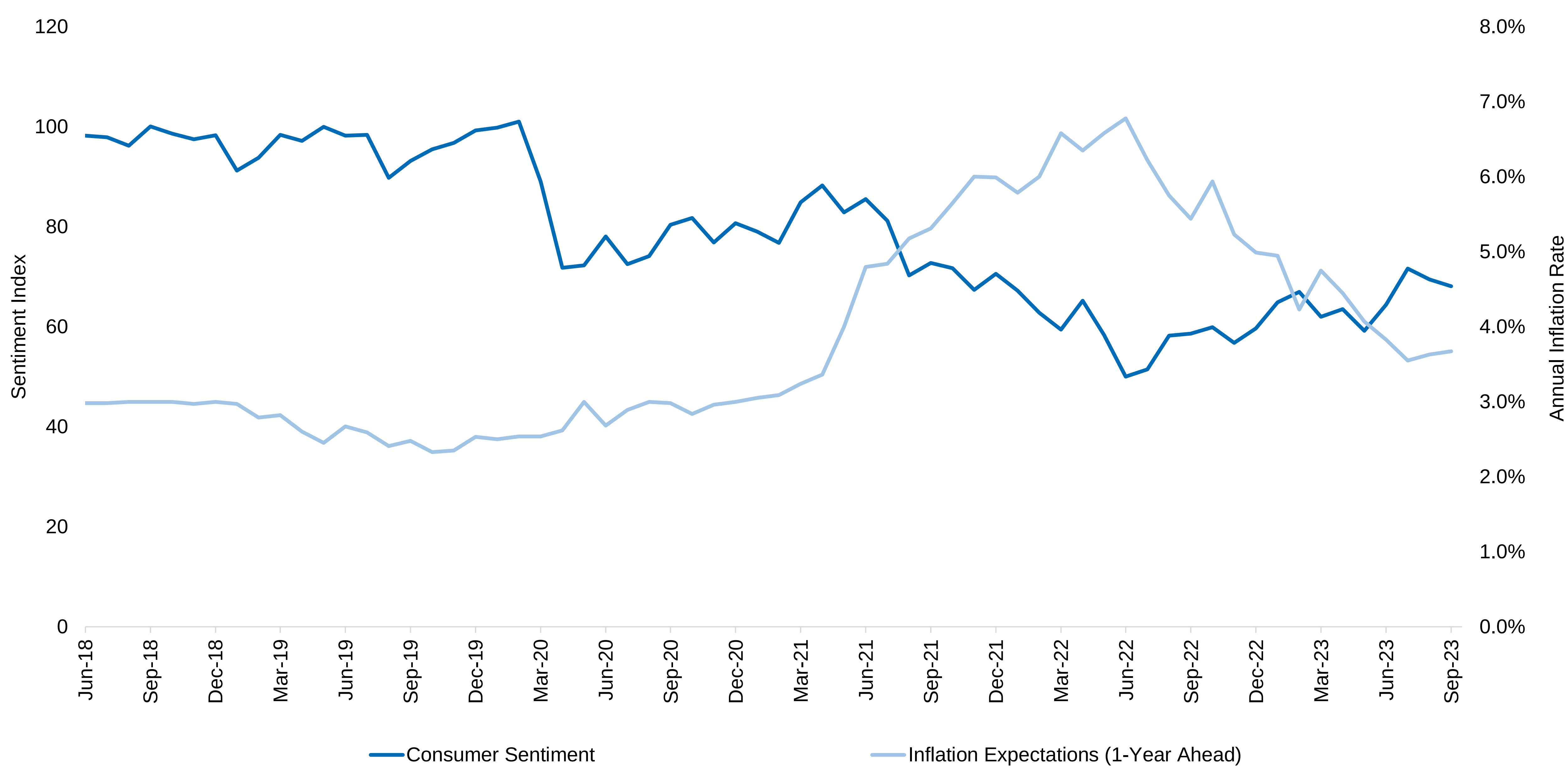


Source: Newmark Research, Board of Governors of the Federal Reserve

Consumer Opinion: Still Mixed

Stubborn inflation, resumption of student loan payments, and persistent economic uncertainty have left consumers feeling less confident about their financial standing demonstrated in recent sentiment measures and inflation expectations inflecting in the “wrong” direction.

Consumer Sentiment and Inflation Expectations

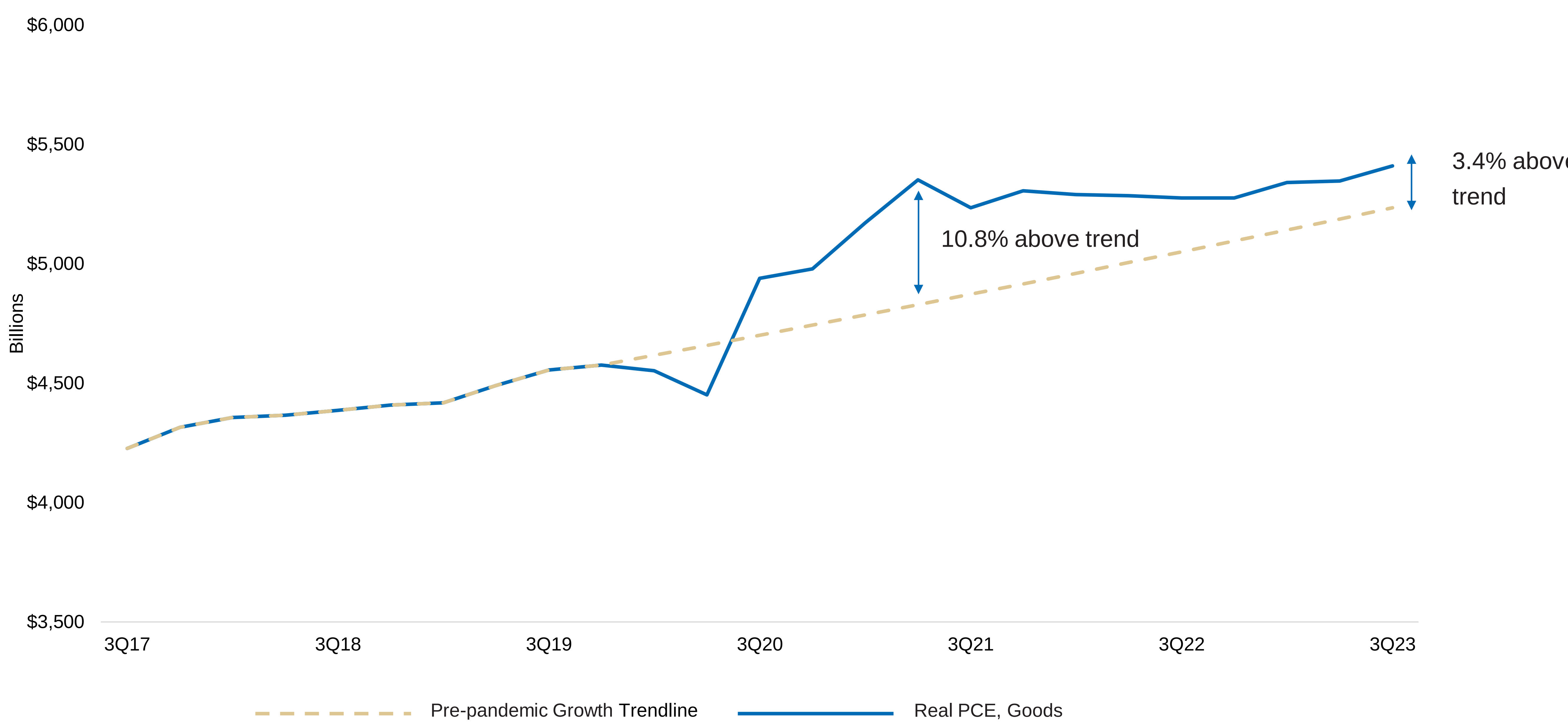


Source: Newmark Research, Federal Reserve of NY, University of Michigan

Spending on Goods Was More Resilient than Expected in 3Q23

Inflation-adjusted spending on goods, while on a decelerating trend since midyear 2021, remains above the pre-pandemic trendline, and increased by 1.2% from the second to the third quarter of 2023, helping to propel the third quarter's strong GDP growth.

Real Personal Consumption Expenditures, Goods

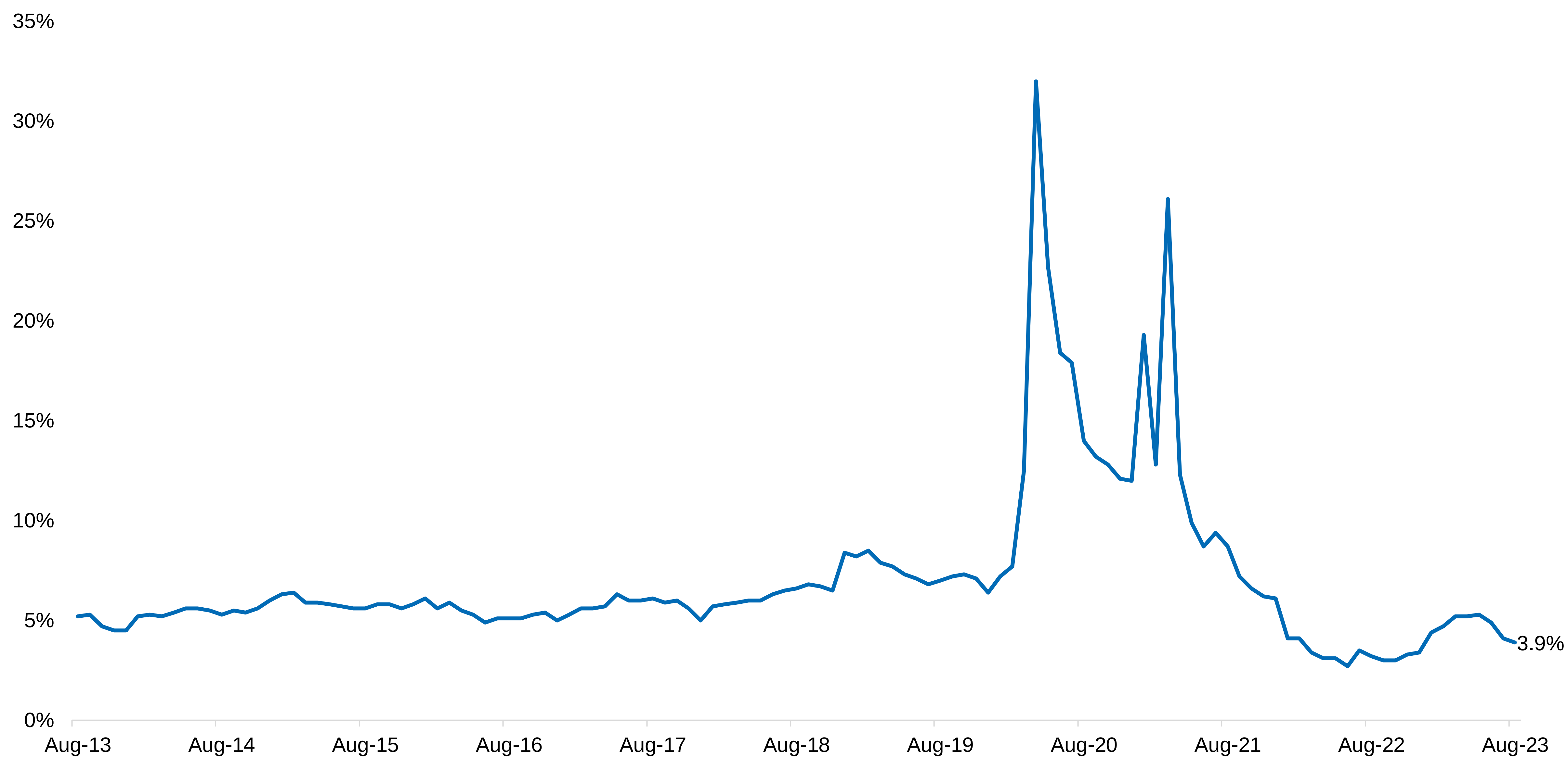


Source: St. Louis Federal Bank, Newmark Research

While Spending Was Up, Saving Was Down

Household incomes continue to grow, but are rising slower than consumer spending, resulting in dwindling savings. While consumers are saving more now than the 2.7% rate observed in June 2022, measures are well below the pre-pandemic 10-year average of 6.1%.

Personal Savings Rate

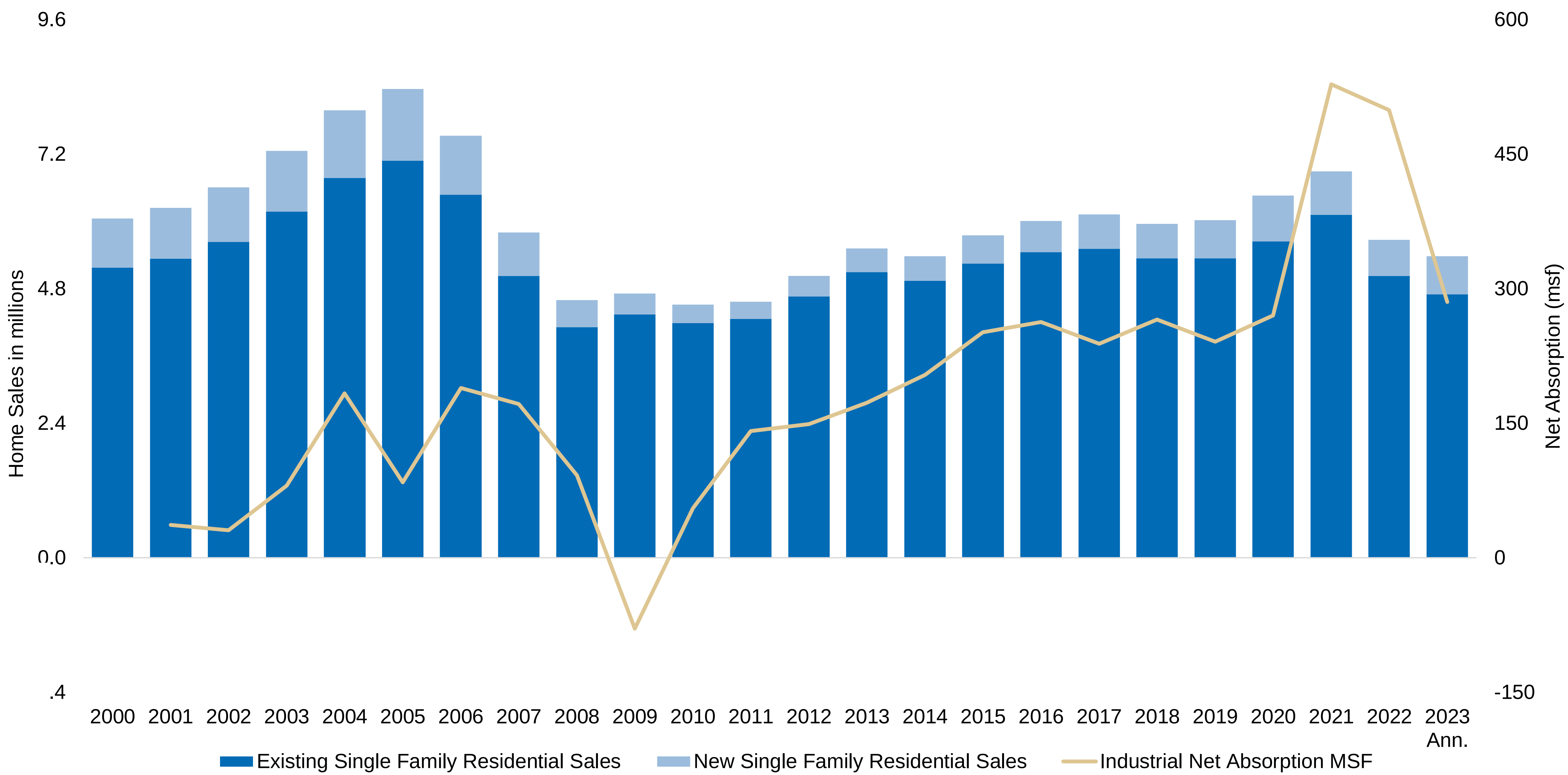


Source: St. Louis Federal Bank, Newmark Research

Home Sales Lowest in Over a Decade

Home sales drive a significant amount of goods consumption and thus, industrial demand. Sales have been slowing since a cyclical peak in 2021 because of 20-year-high mortgage rates, elevated home prices and a limited inventory of homes for sale and are likely to remain depressed until these conditions improve.

Single Family Residential Sales and Industrial Net Absorption[1]

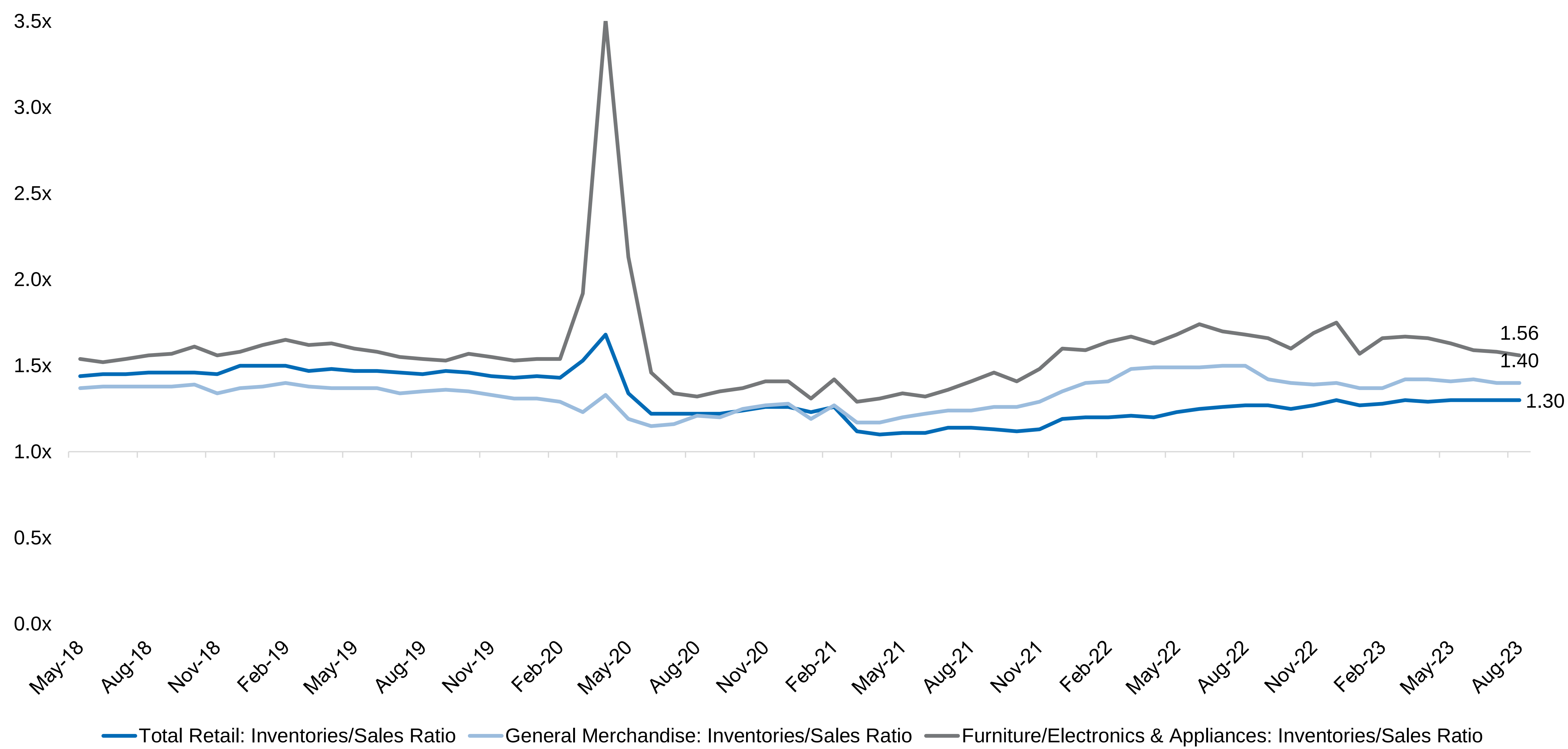


[1]Single Family Residential Sales not seasonally adjusted, 2023 annualized.
Source: Newmark Research, CoStar, St. Louis Federal Bank, National Association of Realtors, U.S. Census Bureau, October 2023.

Retailers Carefully Managing Inventories with Slower Sales Expected

The total retail inventories/sales ratio has remained flat throughout 2023 as modest increases in sales and inventories offset each other. Retailers have largely reported a return to normal turnover of stock, after some tumultuous years. In the longer-term outlook, manufacturers reshoring and nearshoring to the U.S. will be able to keep leaner inventories and turnover stock faster.

Inventories to Sales Ratio, Total Retail and Sector-Specific

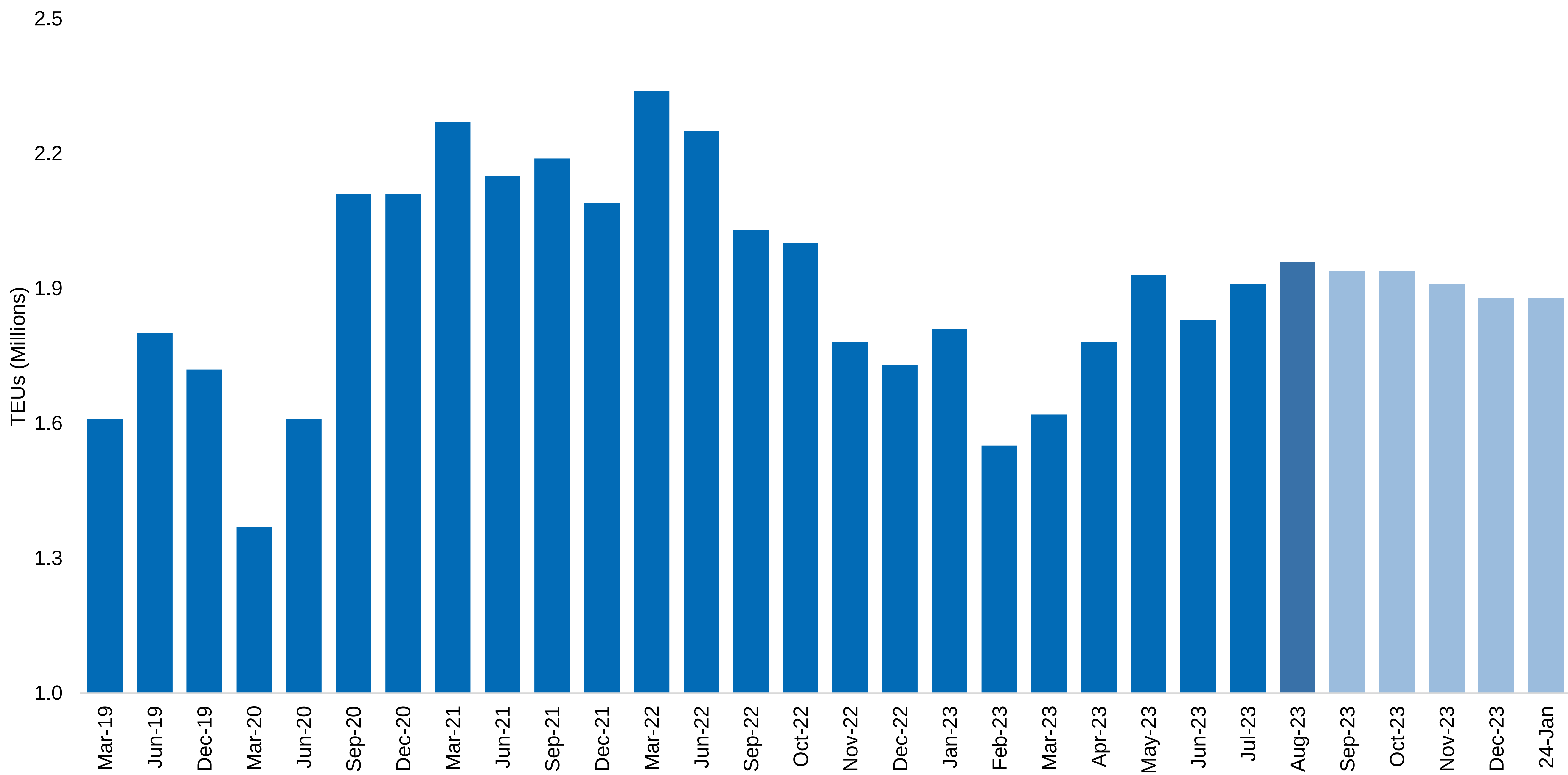


Source: St. Louis Federal Bank, Newmark Research, ISM

More Sustainable Containerized Import Growth Expected

Retail imports are normalizing after a nearly three-year low observed in February 2023. Forecasts signal that August was likely the peak month for imports during 2023, as retailers stocked up earlier this year for the holiday season.

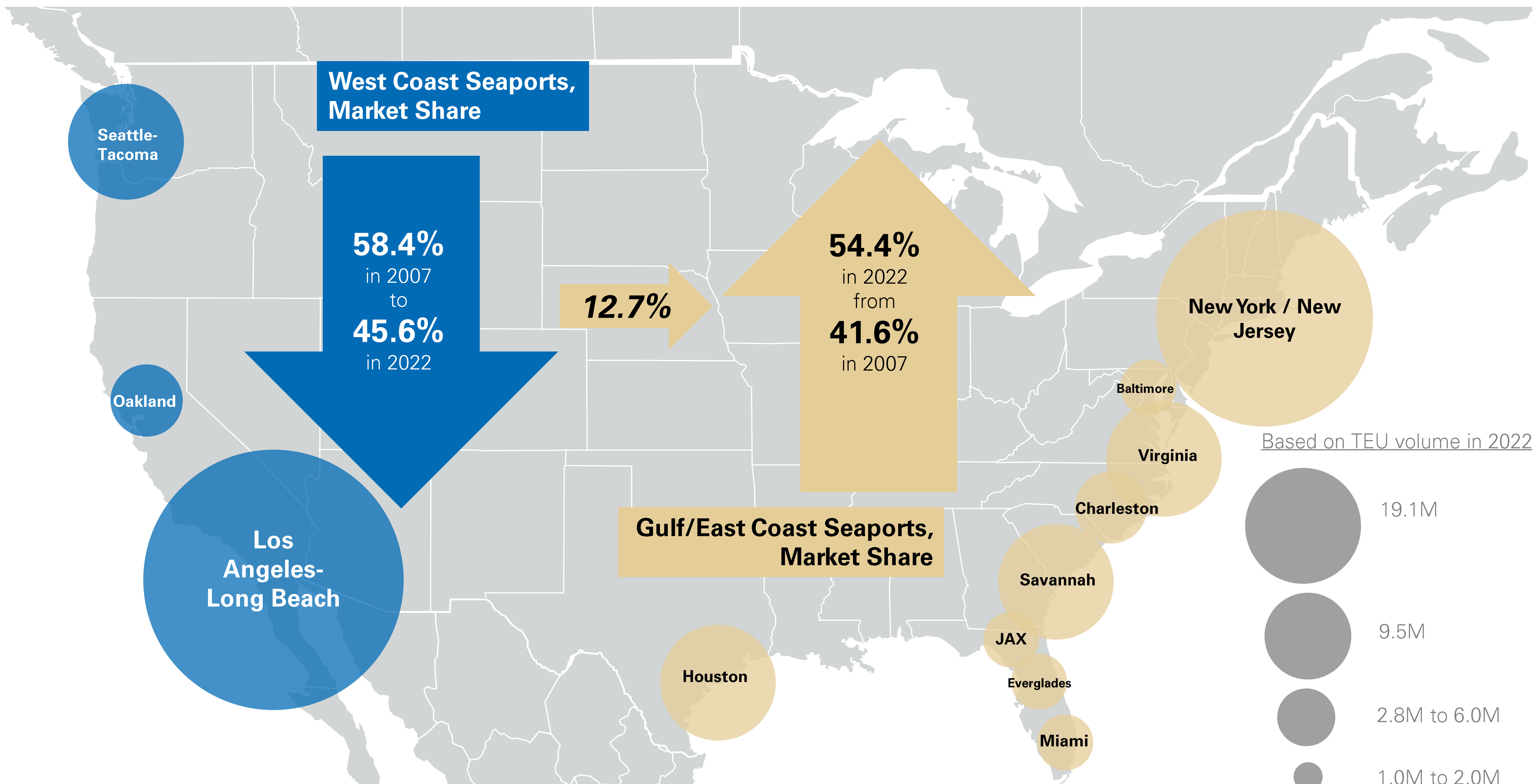
Global Port Tracker: U.S. Retail Imports



Source: National Retail Federation, Newmark Research

Import Market Share Is Shifting from the West to the East

U.S. Gulf and Eastern seaports have steadily gained market share from the West Coast seaports thanks to the investment in accommodating larger container vessels and other supportive infrastructure. Additionally, some global supply chains are moving from China toward friendlier South Asian countries, which align with East Coast sea routes for cost and speed to delivery considerations. As firms set sights on de-risking operations, some TEU share may be gained back by the West due to upcoming contract negotiations with the East and Gulf Coasts' International Longshoremen's Association.

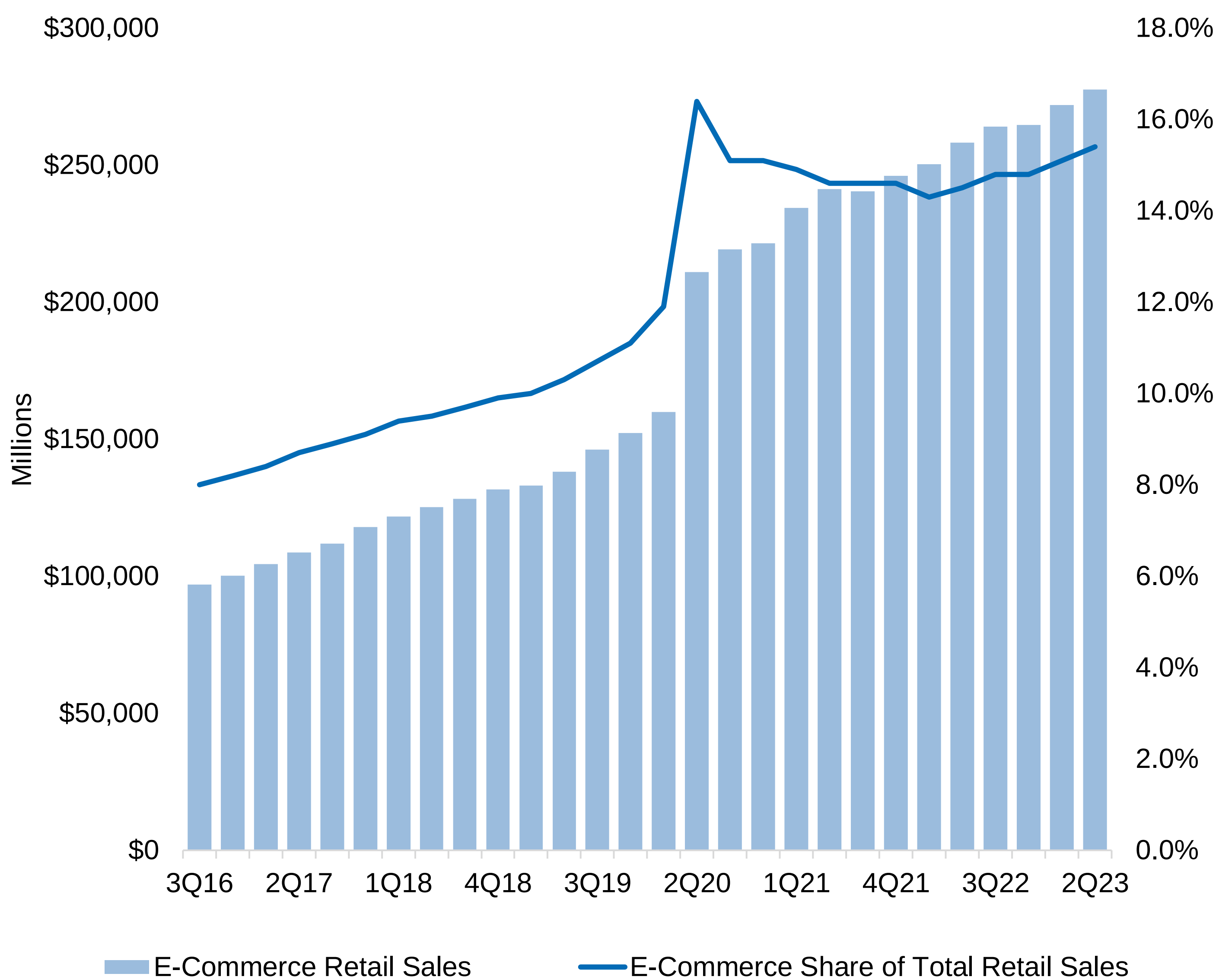


Source: Newmark SoCal Research, port websites

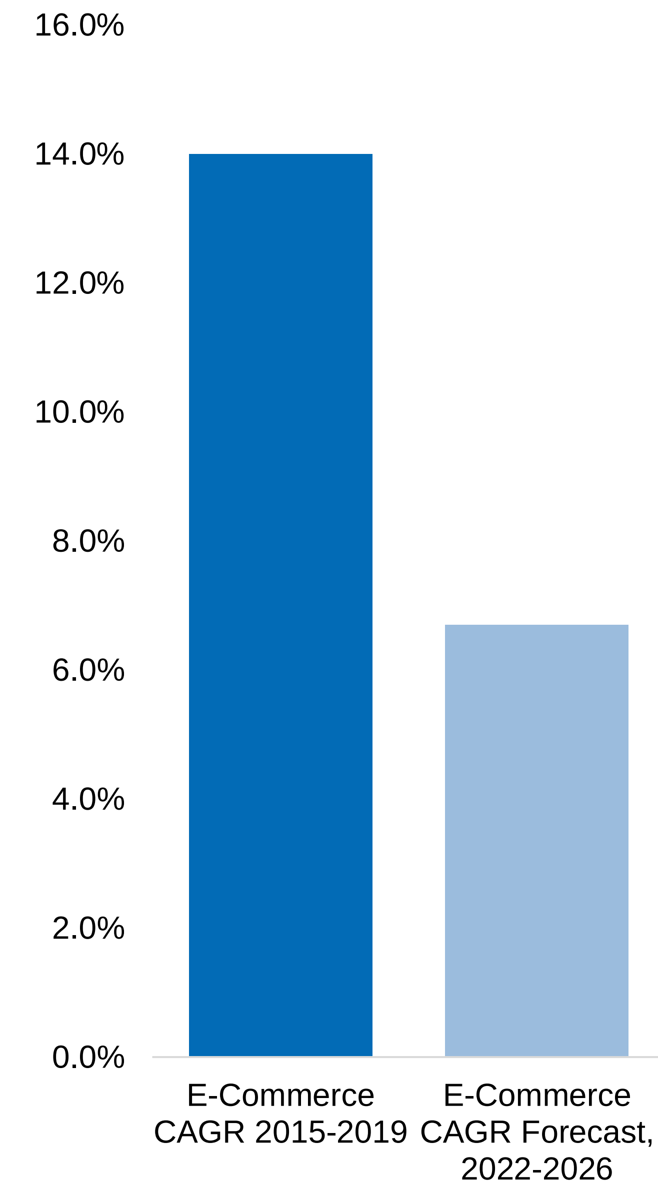
E-commerce Will Continue to Be a Secular Growth Engine (At Moderating Rates)

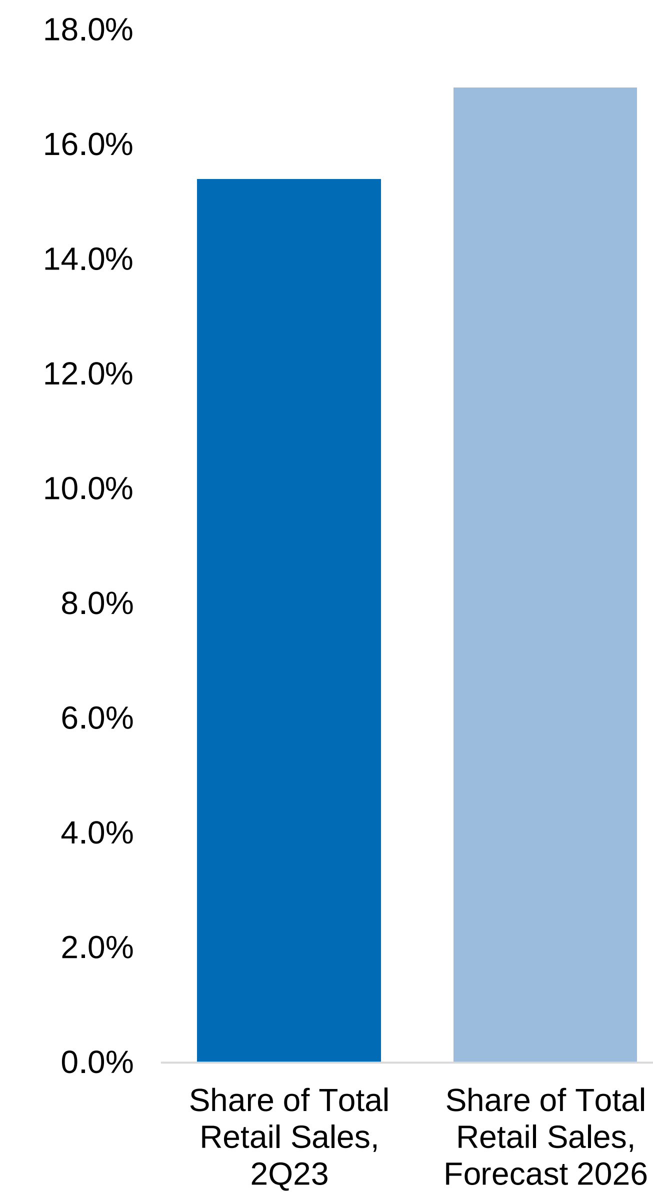
During the pandemic, e-commerce sales soared, growing in two years what pre-pandemic trends signaled would take four. Uncertainty around the “stickiness” of consumer behavior has cleared; as spending normalizes back to mixing in-store, online and omnichannel patterns, expectations for e-commerce sales and share of total retail expenditures have adjusted in turn. Even at lower annual rates than previously expected, e-commerce growth will drive industrial demand. An estimated 1.2 msf of logistics space is needed to support every additional $1.0 billion in e-commerce sales gains.

E-commerce Sales and Share of Total Retail Sales



Historical and Forecasted E-commerce Growth and Penetration Rate



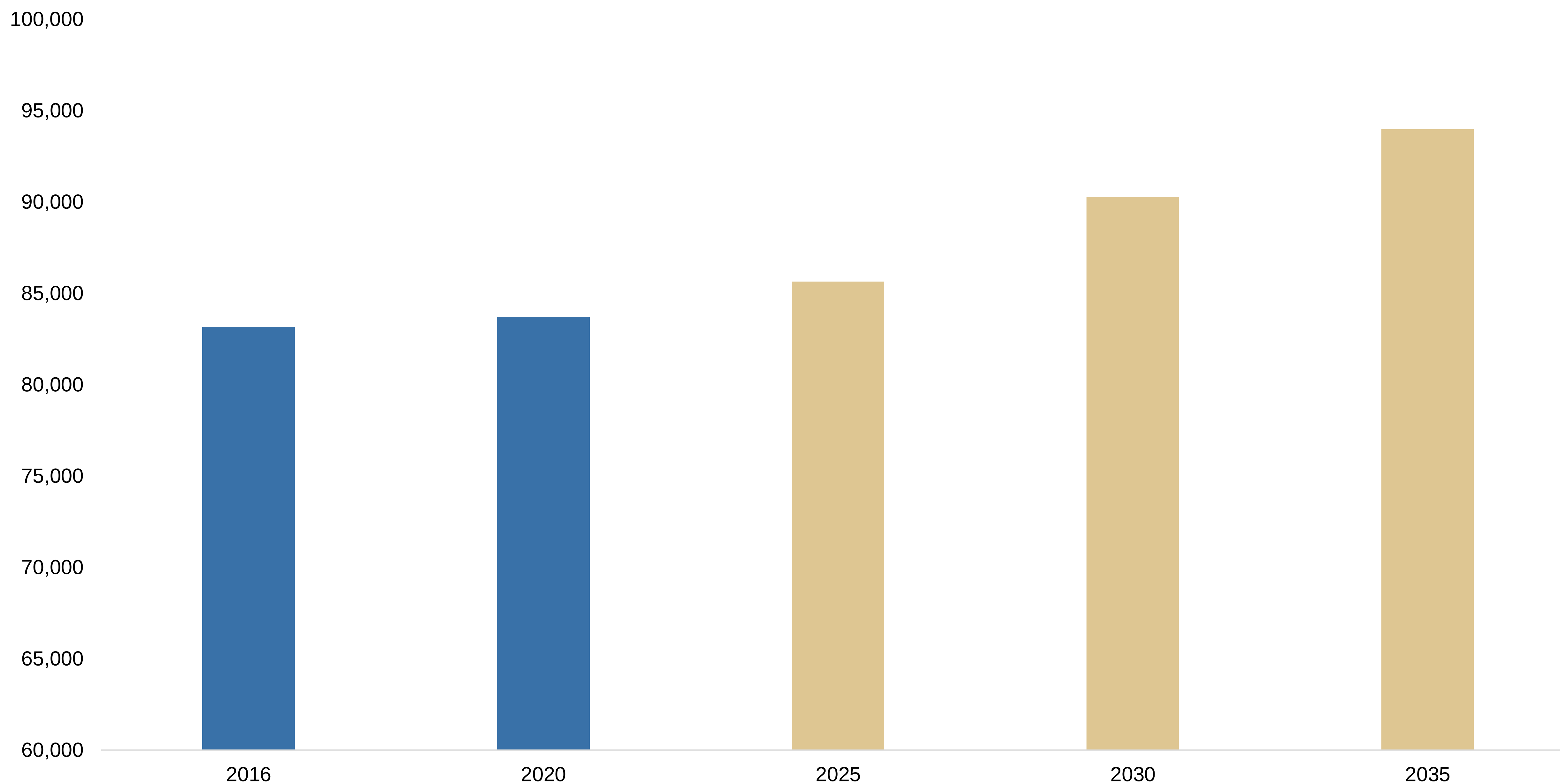


Source: U.S. Census Bureau, St. Louis Federal Bank, Green Street, Prologis, Emarketer.

Millennials, the Leading E-commerce-Using Cohort, Are Entering Top Spending Years

For consumers, spending power is at its highest between ages 35 and 54. Millennials, the largest generation in the U.S. workforce, will be fully aging into this cohort between now and 2035. Millennials are the leading generation of online shoppers, thus e-commerce spending (and the industrial real estate needed to support) will continue to be fueled by this group reaching their prime spending years.

U.S. Population and Projections, Age Cohort 35-54 (Thousands)

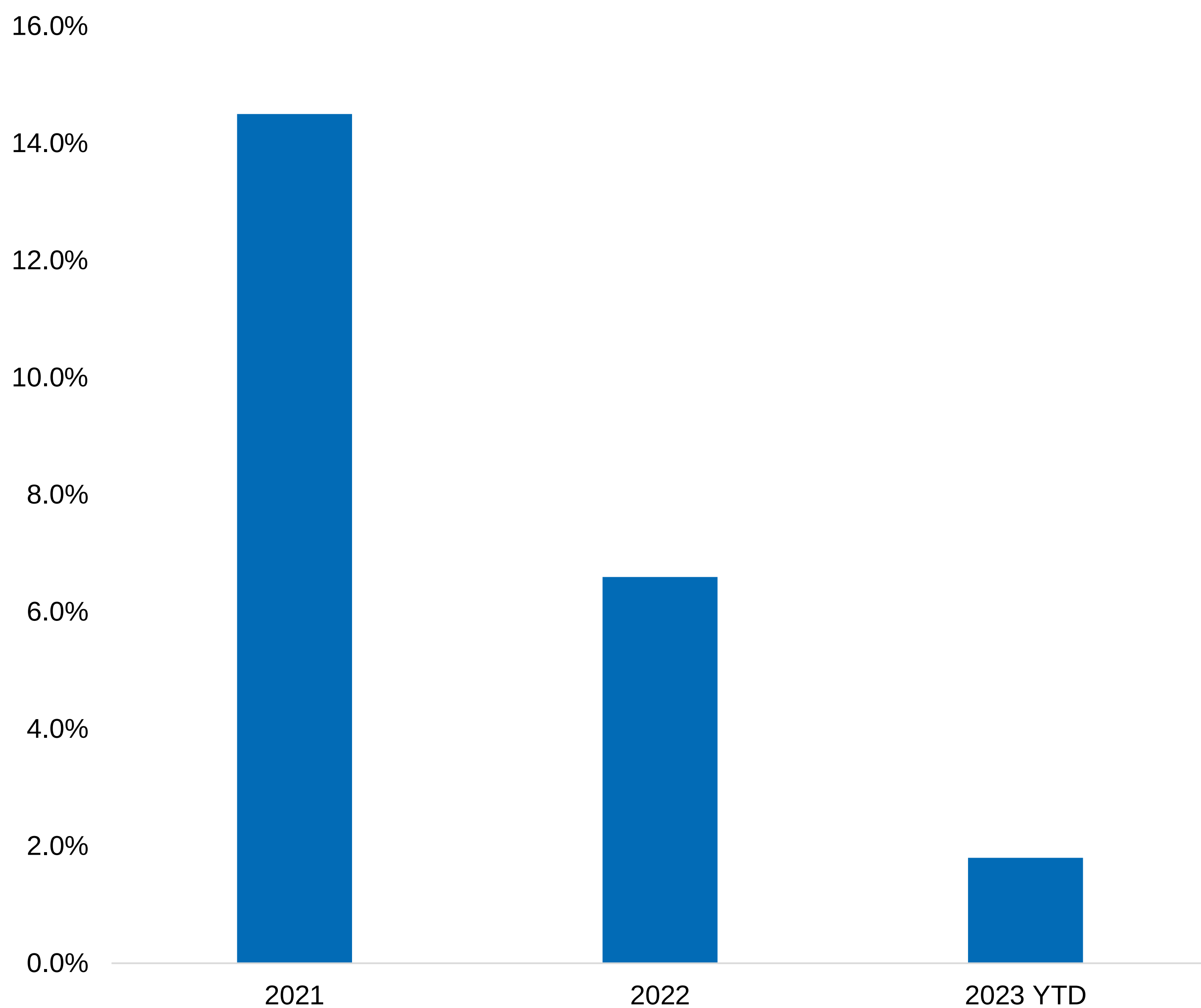


Source: Newmark Research, U.S. Census, Moody's Analytics, Statista

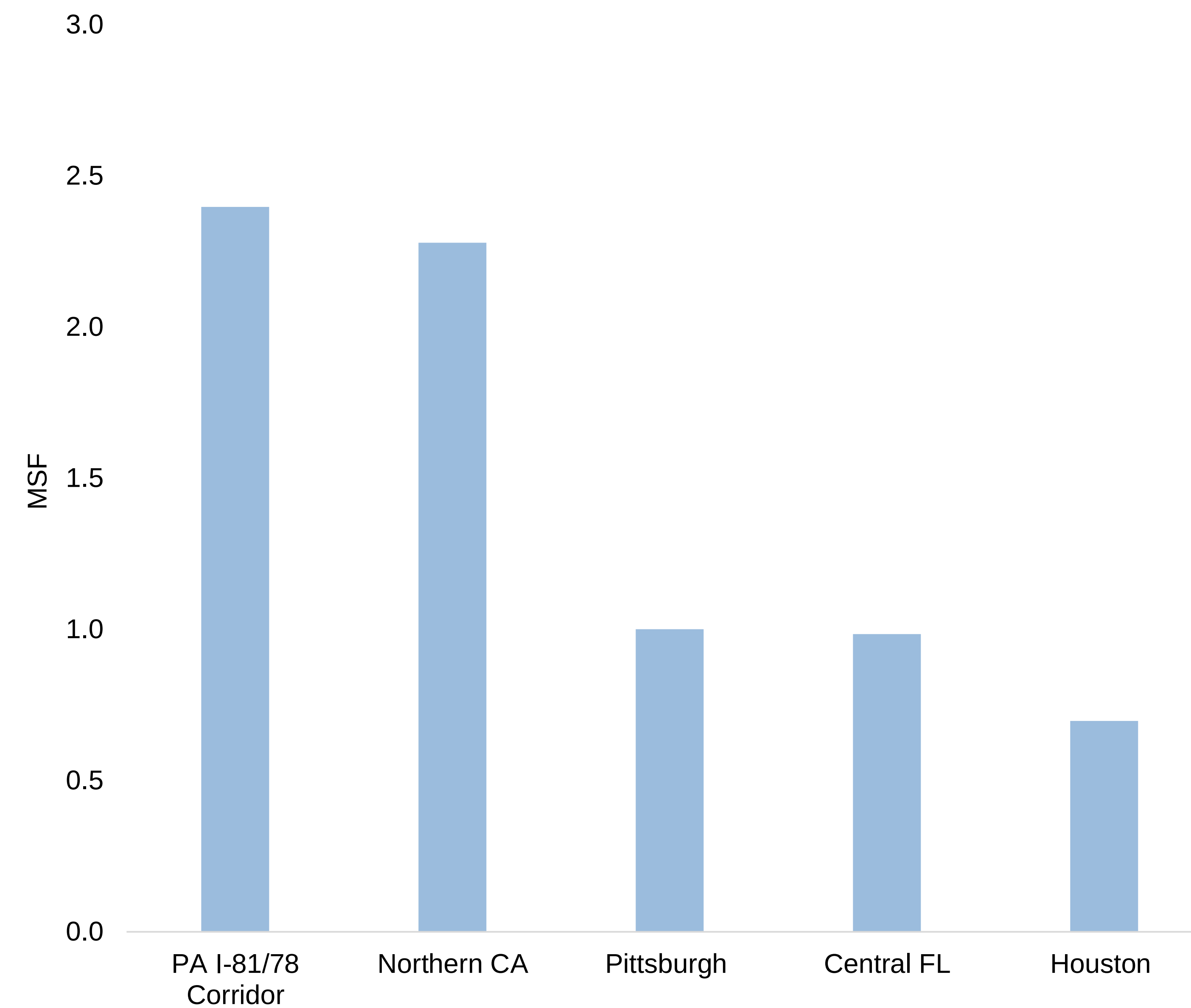
E-commerce Fulfillment Expansion Necessary for Firms to Remain Competitive

Overall, e-commerce leasing has softened since the pandemic boom but will remain a long-term tailwind even as firms reevaluate strategy. Despite high profile announcements last year about subleasing excess space, Amazon's 2023 restructure to a regionalized logistics model has driven new requirements, placing more inventory closer to the end consumer.

E-Commerce: % Share of Top Leasing Activity



Amazon Leasing by Top Markets, 2023 YTD

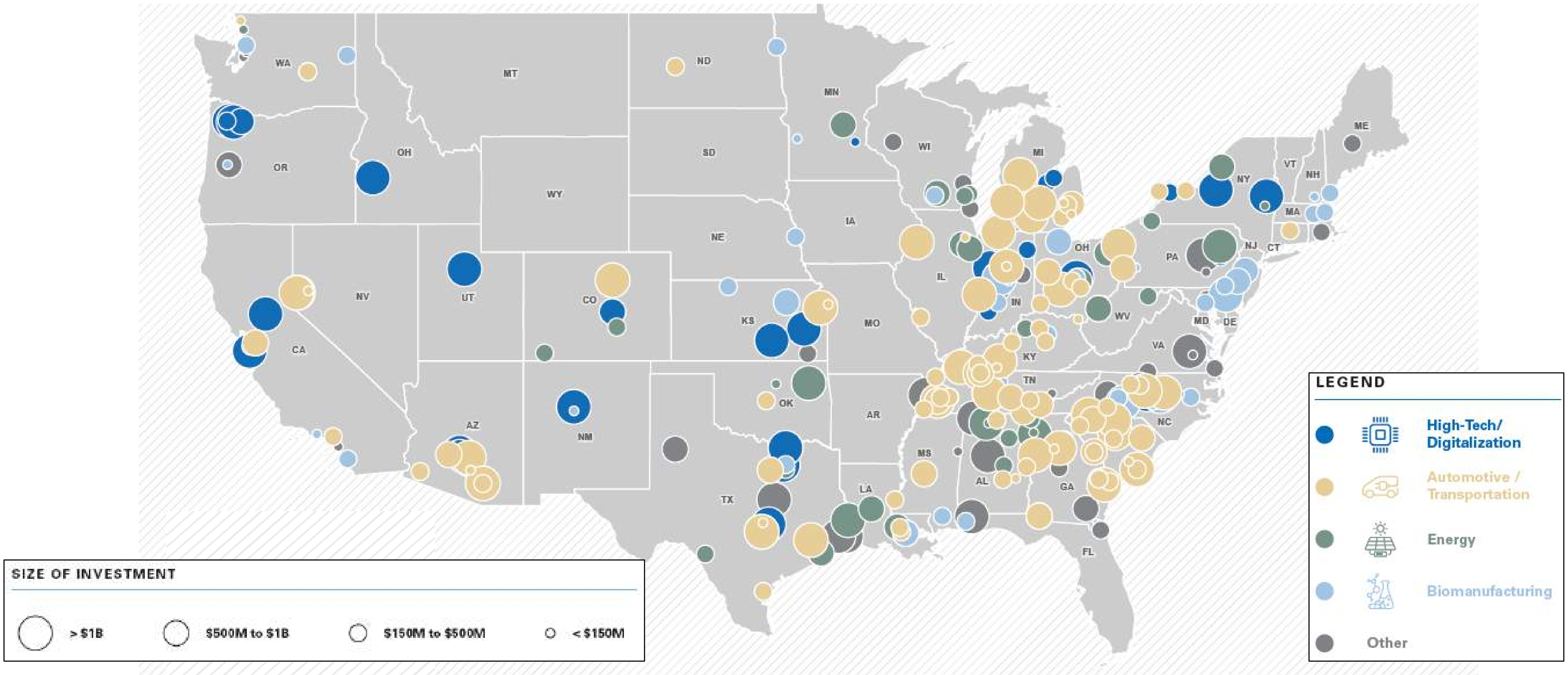


Source: Newmark Research.

Monumental Growth in Domestic Manufacturing is Underway

A snapshot of initial manufacturing investments totaling a minimum of $100 million since 2020 reveals approximately $400 billion in investments pledged, 210,000+ new jobs and a minimum of 250 MSF of new industrial projects to come between now and 2030. Four key advanced manufacturing sectors are driving the greatest volumes of investment and development, capturing over 90% of the major investments pledged: High-tech/digitalization, Automotive/transportation; Energy; and Biomanufacturing.

U.S. Major Manufacturing Announcements, 2020-2023 YTD

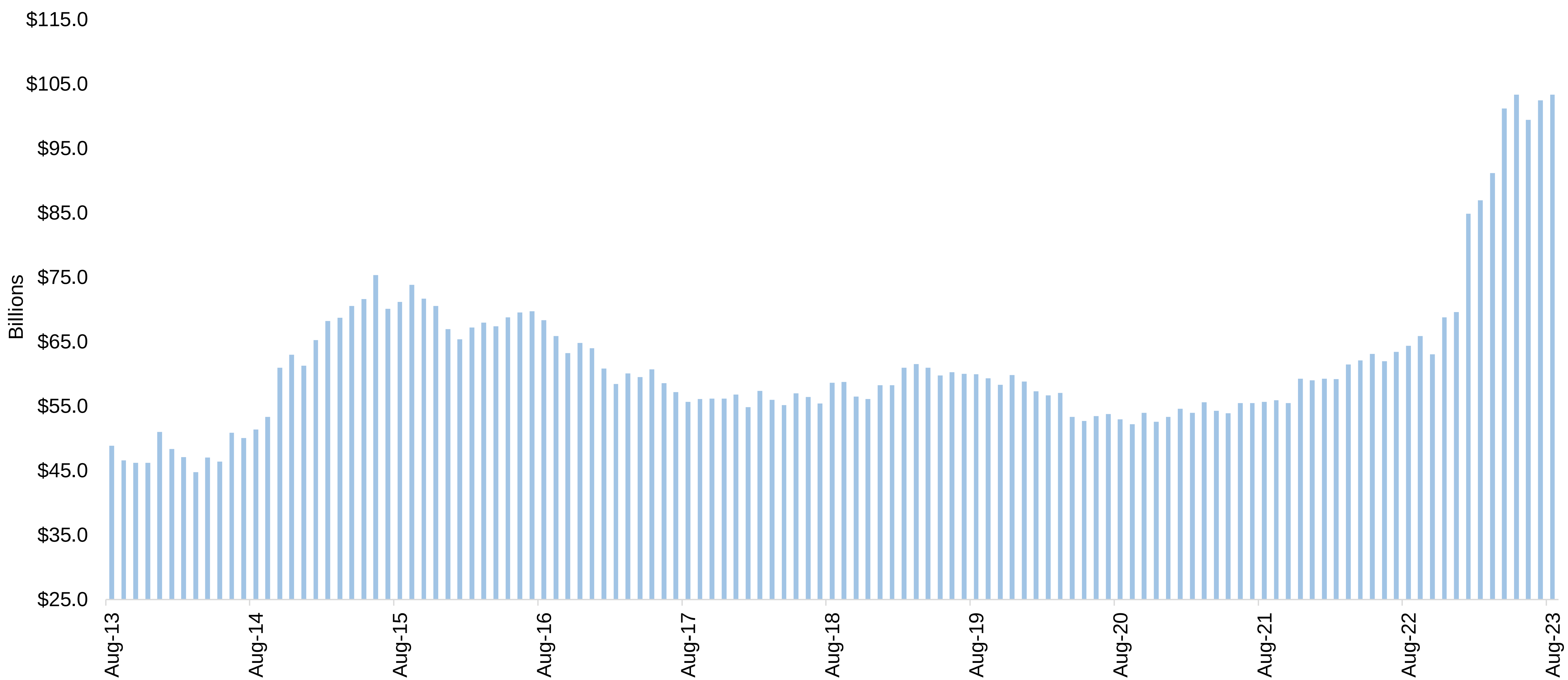


Note: Investments of at least $100 million. Investment dollars may include allocations to real estate and equipment, infrastructure, intellectual property, and other outlays.
Sources: Newmark Research, Newmark Global Strategy & Consulting, various press releases and articles

U.S. Manufacturing Construction Spending Has Accelerated to New Heights

While many companies are pausing or slowing capital investments as the economy decelerates, EV, batteries, chips, pharmaceutical and solar advanced manufacturers are investing heavily in new construction. Growth in these advanced manufacturing sectors is driven by recently passed legislation (Infrastructure and Investment Jobs Act, Inflation Reduction Act and CHIPS and Science Act), prompted by geopolitical and supply chain risk to these critical sectors.

Total Real Private Manufacturing Construction Spending

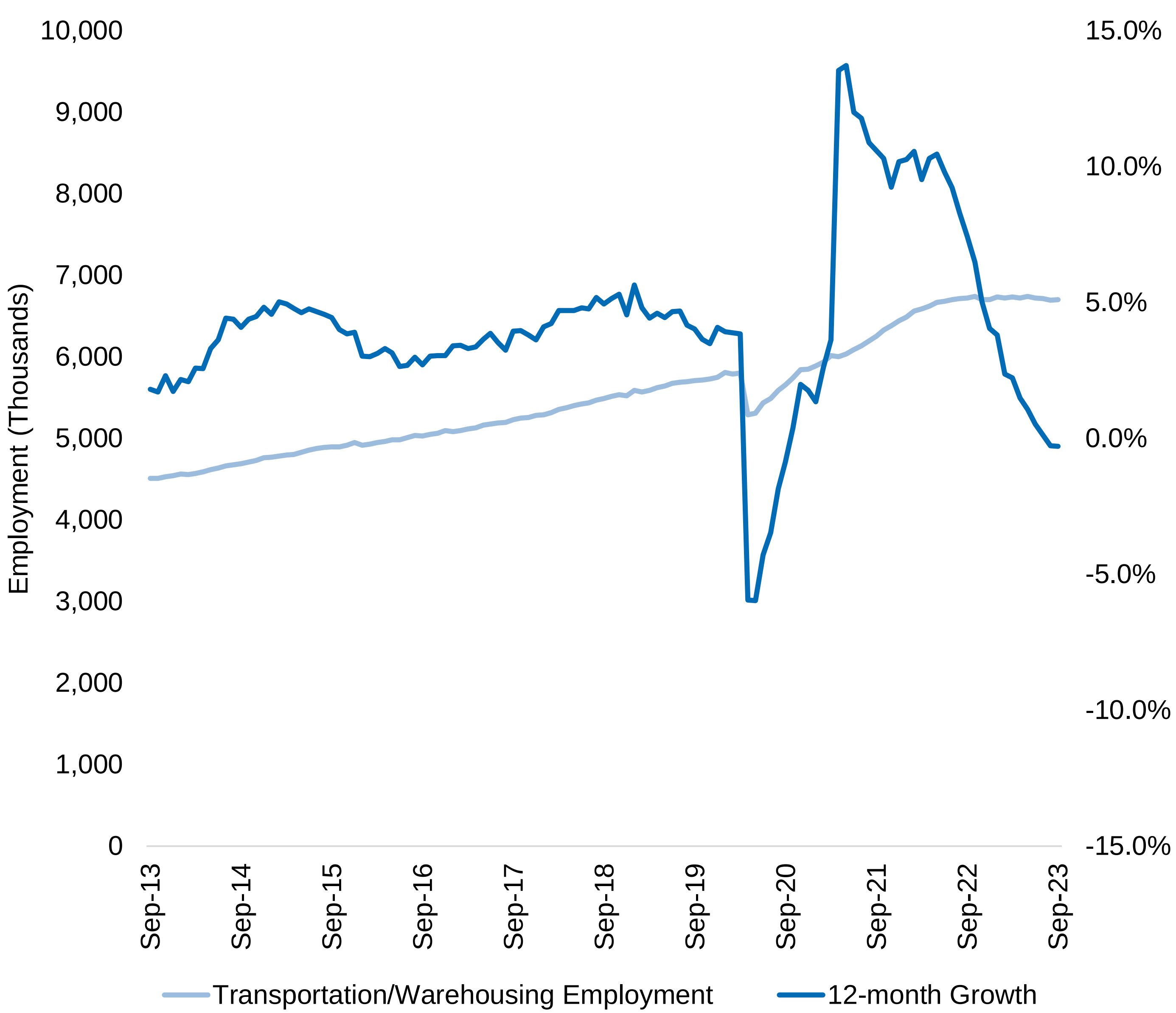


Source: Newmark Research, U.S. Census Bureau, FRED
Note: Seasonally adjusted annual rate deflated by New Industrial Construction PPI, chained to 06/2007.

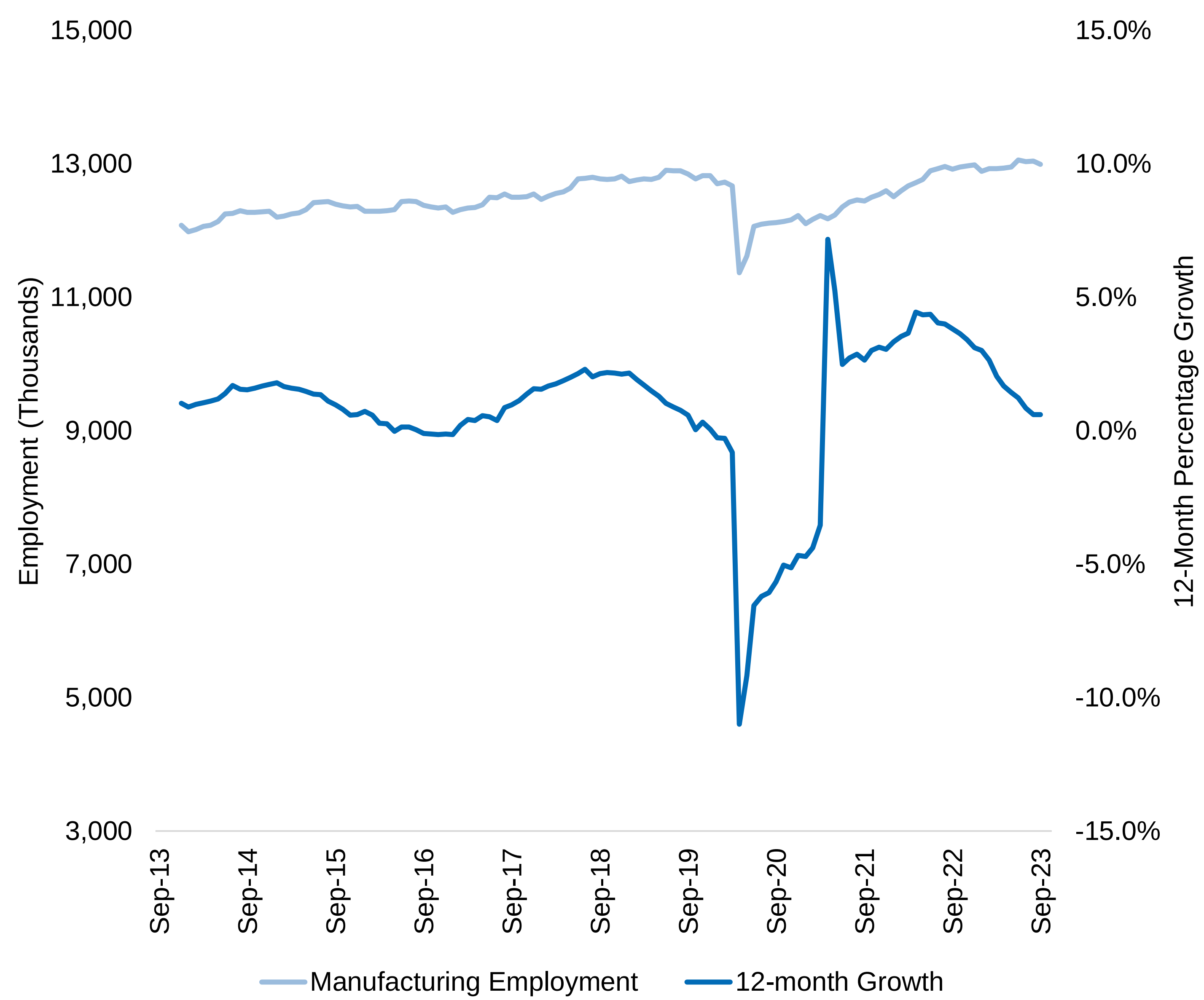
Industrial Staffing Remains High, If Flat

The transportation/warehousing and manufacturing sectors are responding to slowing goods spending by assessing occupancy and employment needs, visible in stagnating hiring trends. Logistics firms are taking a cautious approach to seasonal hiring with only a few exceptions, including a significant hiring push by Amazon.

Total Employment and 12-Month Growth Rate, Transportation/Warehousing



Total Employment and 12-Month Growth Rate, Manufacturing



Source: Newmark Research, U.S. BLS

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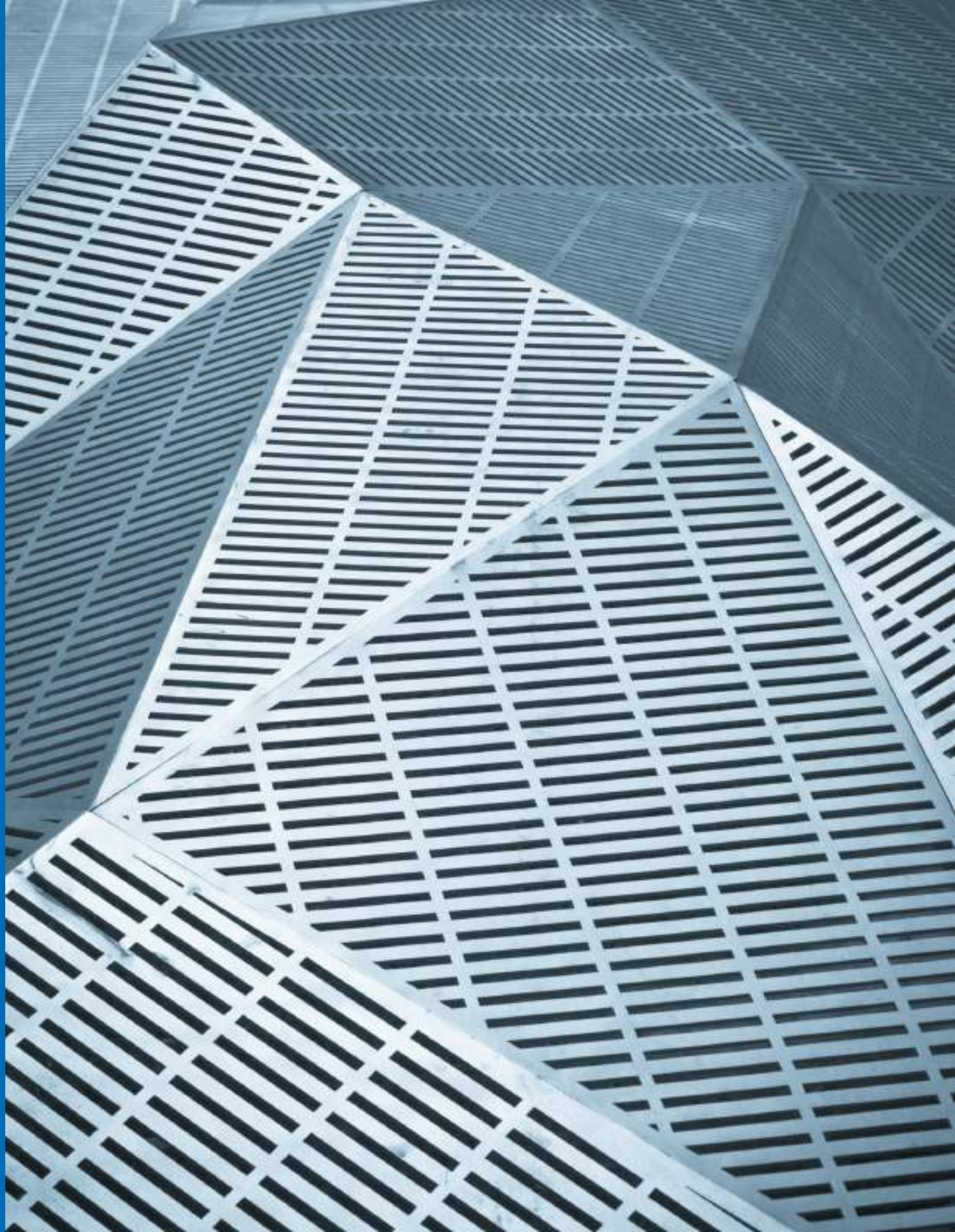
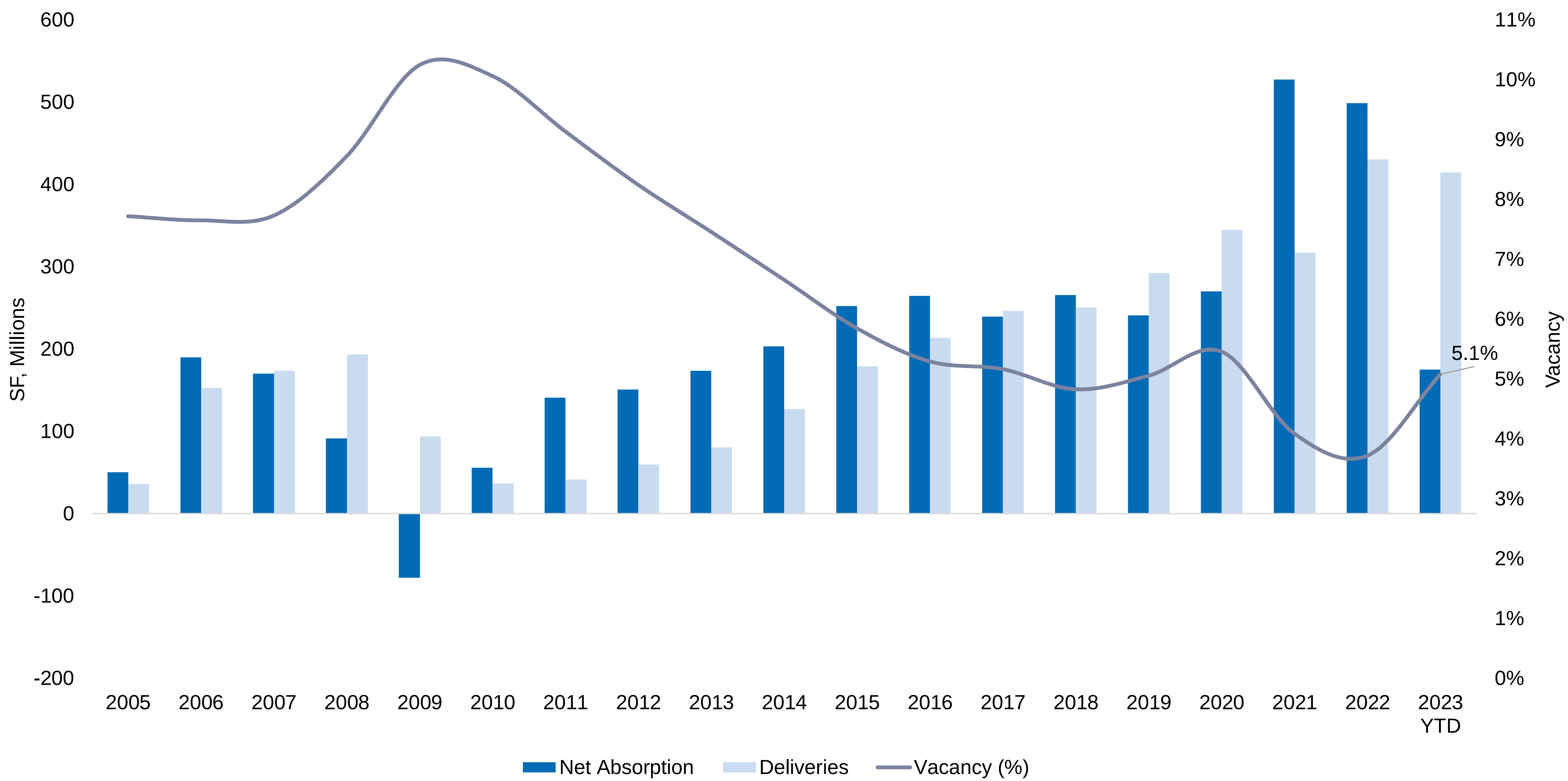
Leasing Market Fundamentals



Vacancy Remains Tight, but Will Continue to Loosen as Deliveries Outpace Absorption

During the past 12 months, the vacancy rate has increased from 3.6%, an all-time record low, to 5.1% as new deliveries outpaced absorption. Elevated volumes of completions expected to deliver for the next several quarters coupled with softer leasing demand will put upward pressure on the national vacancy rate, but it is not expected to come close to double-digit levels charted during the GFC.

U.S. Industrial Deliveries, Net Absorption, and Vacancy

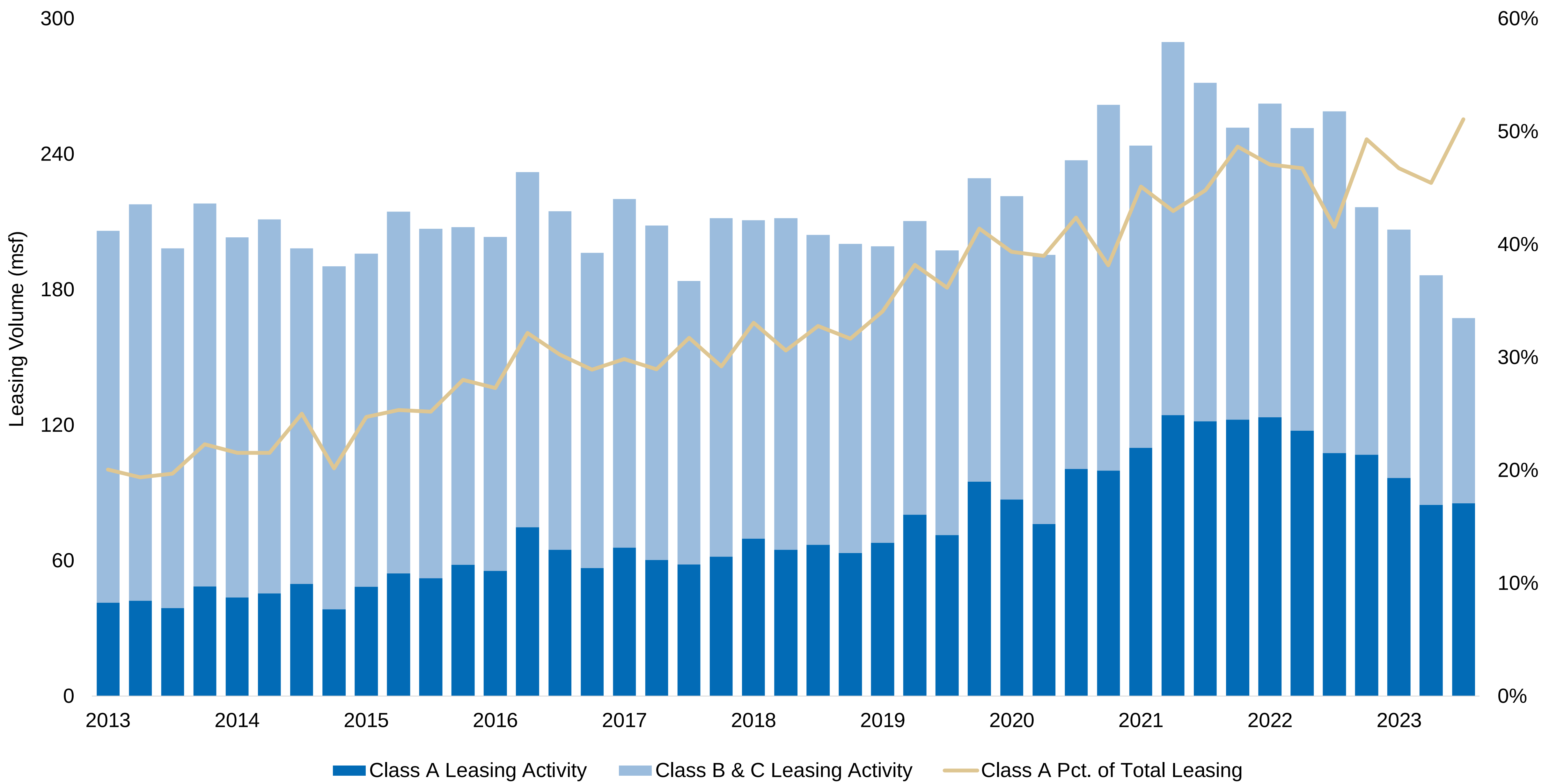


Source: Newmark Research, October 2023.

Amid Overall Softer Leasing, Pursuit of Quality Space Increases with Opportunity

After two years of acute market abnormality, industrial leasing has successively decelerated every quarter since mid-2022, falling below pre-pandemic norms in the third quarter of 2023 with approximately 167 msf of leasing volume totaled. With greater volumes of modern, efficient space now becoming available to tenants, flight-to-quality is demonstrated in the share of Class A leasing reaching a new height of over 50%.

U.S. Industrial Leasing Activity by Class

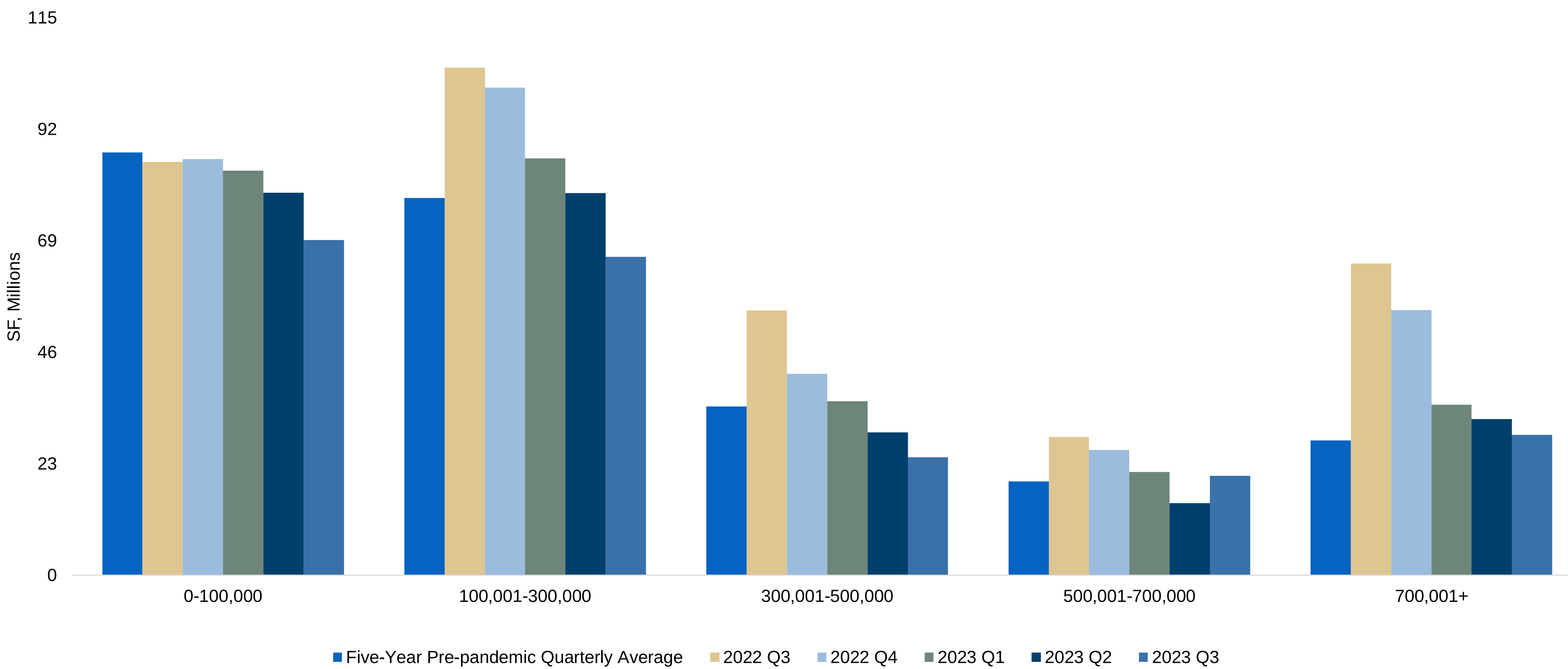


Source: CoStar, Newmark Research. Quarterly leasing volume data compiled October 2023. Class A is defined as 21st century build, 100,000+ square feet with clear heights that accommodate today's modern occupiers.

Buildings under 300,000 SF Account for the Largest Share of Leasing Volume

Leasing activity in buildings sub-300,000 SF accounted for 67% of total activity for the quarter, illustrating that the average industrial tenant occupies space in this size range. Q3 leasing totals in this segment have fallen below pre-pandemic levels, however, while leasing in the big-box segment (500K+ SF) has essentially stabilized to historic norms.

Leasing Activity by Building Size

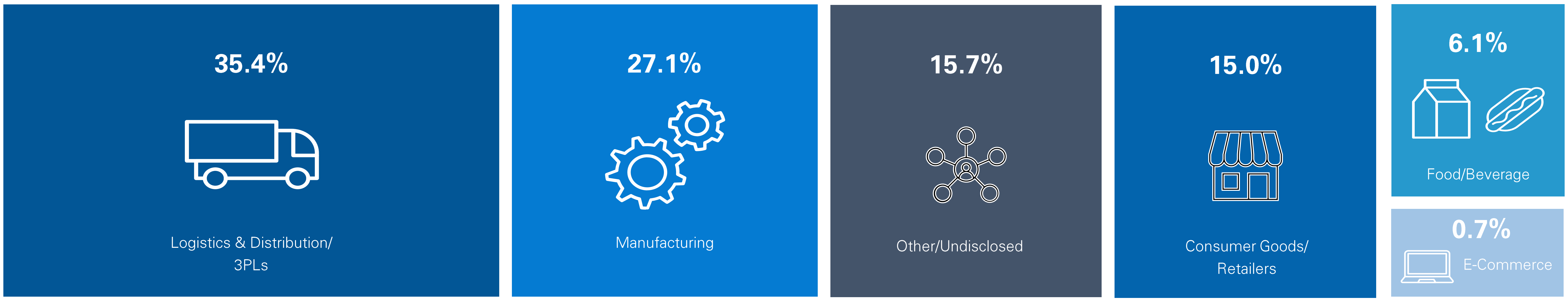


Source: CoStar, Newmark Research, October 2023.

Industrial Leasing Trends by Sector

While logistics, distribution and 3PL firms continue to represent the largest share of leasing activity by industry, manufacturing has seen the largest growth in leasing share over the past year, growing from 17% of top leasing activity in 3Q22 to 27% in 3Q23. On the other hand, e-commerce and consumer goods shares have trimmed substantially over the same period.

Top Industrial Leasing Activity by Sector, 3Q23



Notable 3Q23 Lease Transactions

Tenant	Address	Market	Type	Square Feet	Industry
Ryder	8620 Congdon Hill Drive	Penn. I-81/78 Corridor	Direct New	1,200,000	Logistics & Distribution/3PLs
Distribution Alternatives	30815 Kingsland Blvd	Houston	Direct New	855,610	Logistics & Distribution/3PLs
Flexport	2900 S Valley Parkway	Dallas	Direct New	799,460	Logistics & Distribution/3PLs
General Motors	14250 Plymouth Road	Detroit	Direct New	790,000	Automotive
CEVA Logistics	12415 6th Street	Inland Empire	Direct New	745,595	Logistics & Distribution/3PLs

Source: Newmark Research, October 2023.
*Note: Based on top leasing activity in markets tracked by Newmark

United States Industrial Demand Rankings

Quarterly net absorption measured 46.8 msf, a solid volume but approximately 15 msf less than 2019's quarterly average. Over the coming quarters, preleased construction deliveries will continue to contribute positively to quarterly net absorption, although pressures from tenants facing credit loss and right-sizing occupiers subletting or giving space to landlords will detract. Net absorption is likely to be muted, but positive, going into 2024.

Net Absorption: Top 10 Markets

Market	2023 YTD Net Absorption (msf)
Dallas	25.1
Chicago	15.9
Houston	15.6
Phoenix	14.8
Penn. I-81/78 Corridor	11.2
Indianapolis	9.0
Savannah, GA	7.6
Charlotte	6.8
Greenville, SC	6.4
Detroit	6.0
United States	**175.3**

Demand Growth: Top 10 Markets

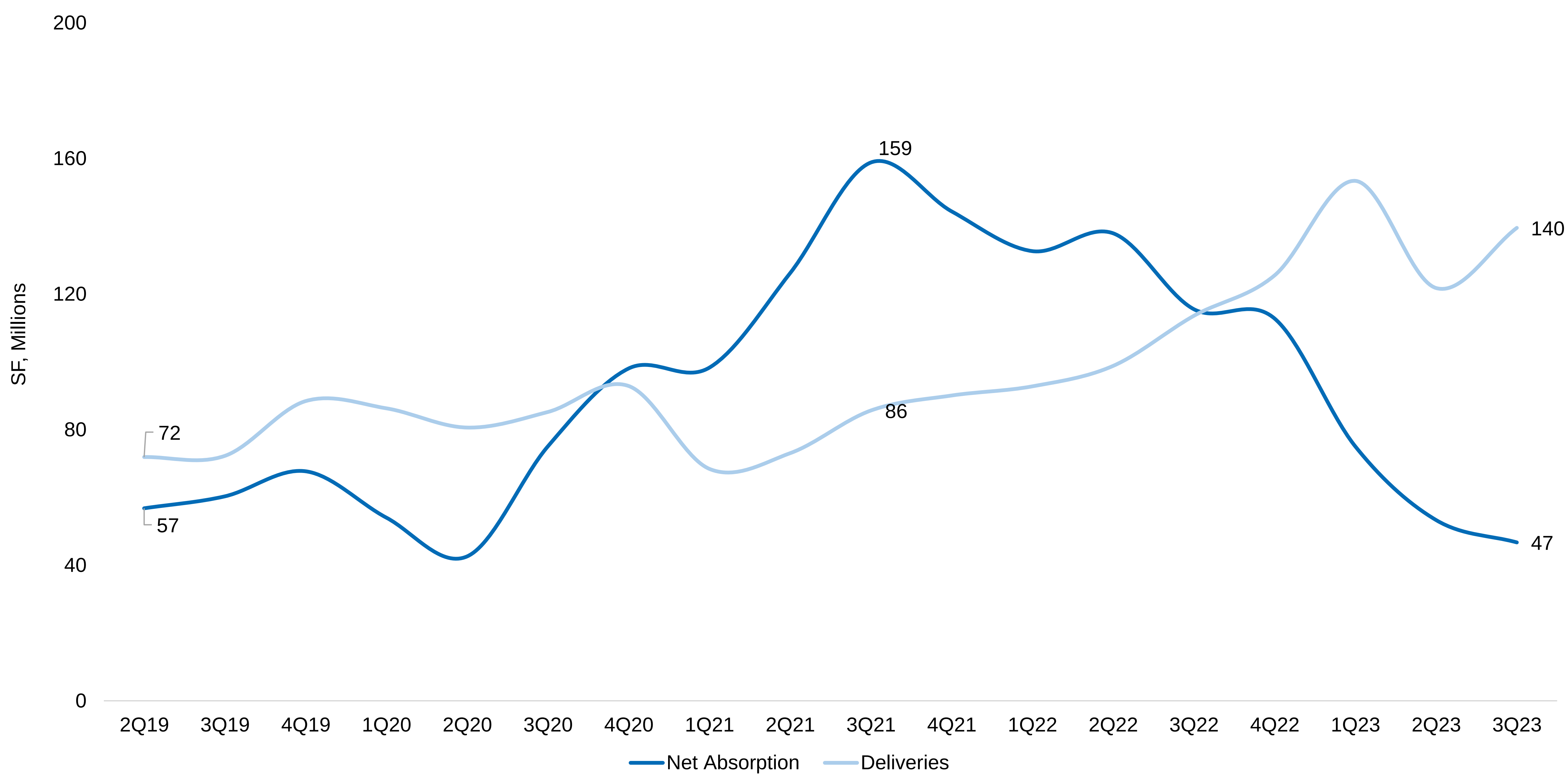
Market	2023 YTD Net Absorption (% of Inventory)
Savannah, GA	6.4%
Phoenix	3.9%
Las Vegas	2.9%
Austin	2.5%
Greenville, SC	2.5%
Penn. I-81/78 Corridor	2.4%
Dallas	2.3%
Indianapolis	2.2%
Houston	2.1%
Orlando	2.1%
United States	**1.0%**

Source: Newmark Research, October 2023.

Supply and Demand Gap Will Remain Wide through the Next 12 Months

Deliveries outstripped net absorption by approximately 93 msf in the third quarter of 2023, and the gap between the two metrics is expected to remain large over the coming quarters as a historically high pipeline delivers. As fewer projects break ground, these two metrics will come back into balance in 2025.

National Industrial Supply vs. Demand

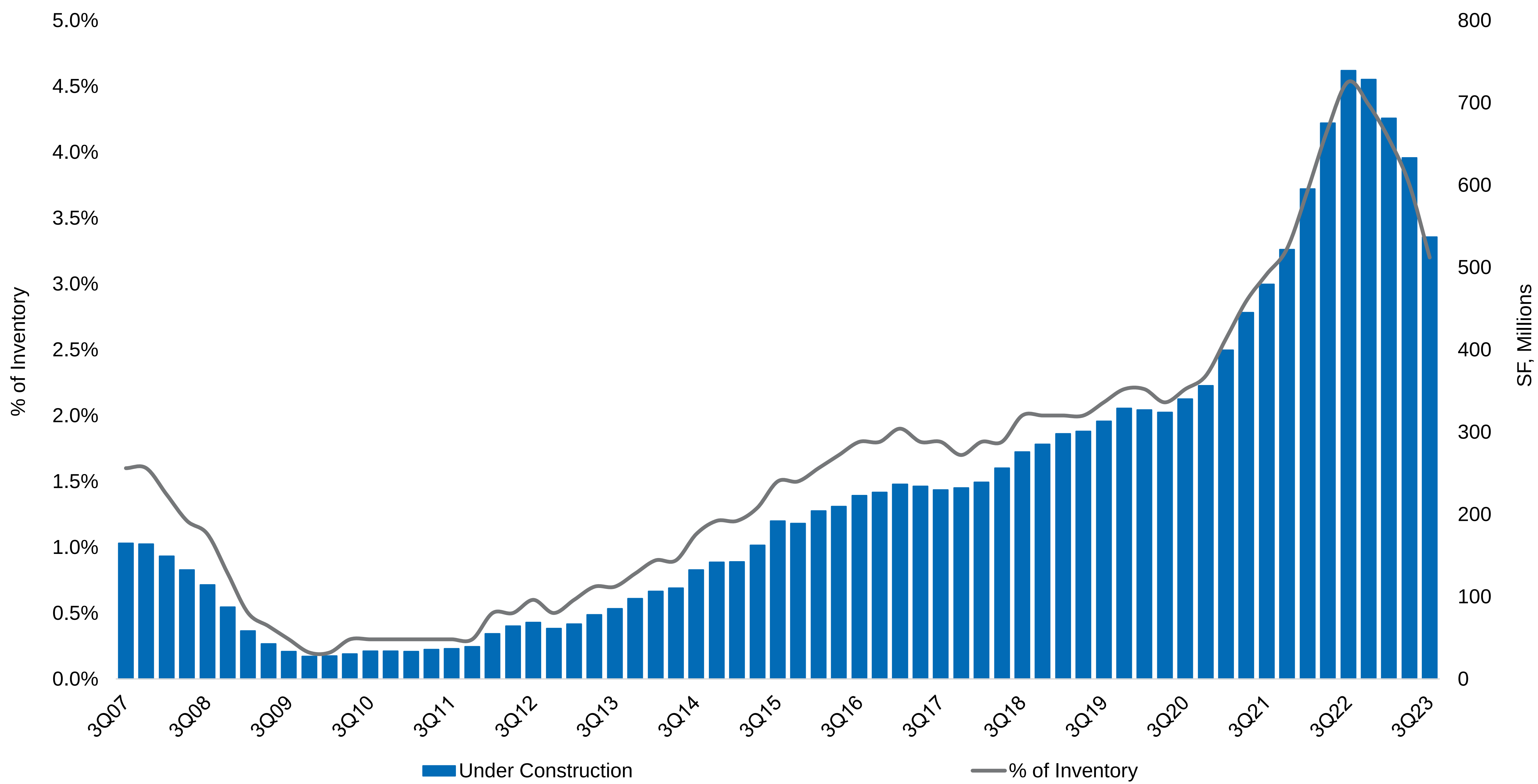


Source: Newmark Research, October 2023

Industrial Supply Pipeline Still High, But Sharply Declining

The construction pipeline, totaling 537 msf in the third quarter of 2023, is down approximately 200.0 msf from the third quarter of 2022 when it reached its peak. This current volume is still over 60% higher than the pipeline measured at year-end 2019 but will be increasingly depleting over the next four quarters as fewer and fewer projects enter the pipeline to backfill.

U.S. Industrial Under Construction and % of Inventory

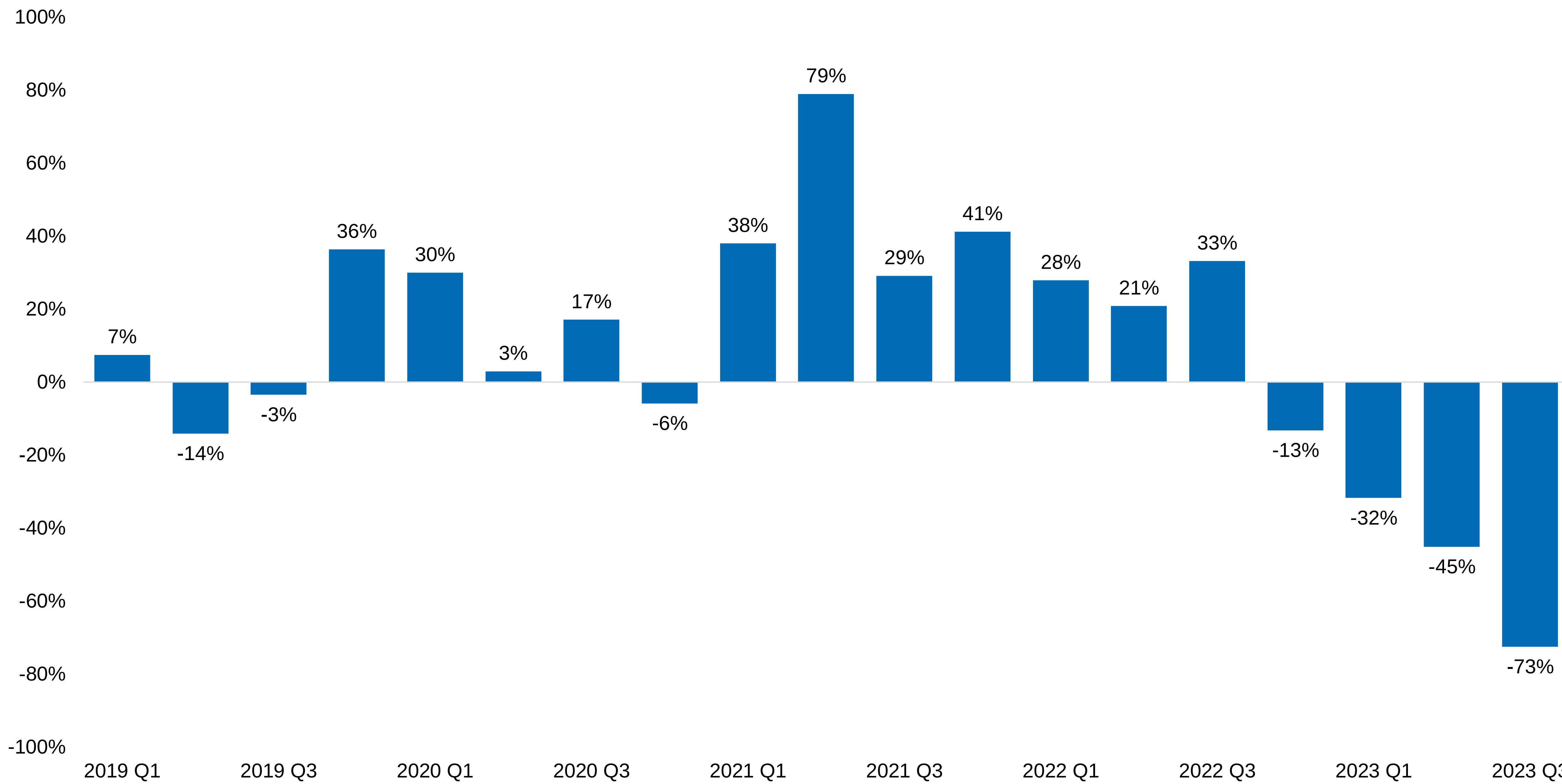


Source: Newmark Research, October 2023

New Industrial Construction Starts Are Down 73% Year over Year

Construction starts in the third quarter of 2023 measured less than 55 MSF - the quietest quarter for commencements since 2015. One year ago, the largest volume of new industrial starts ever, 193 MSF, was recorded. Rapid tightening of lending standards and shifting market fundamentals in the ensuing 12 months have driven the precipitous drop-off.

Construction Starts, Year Over Year Percentage Change

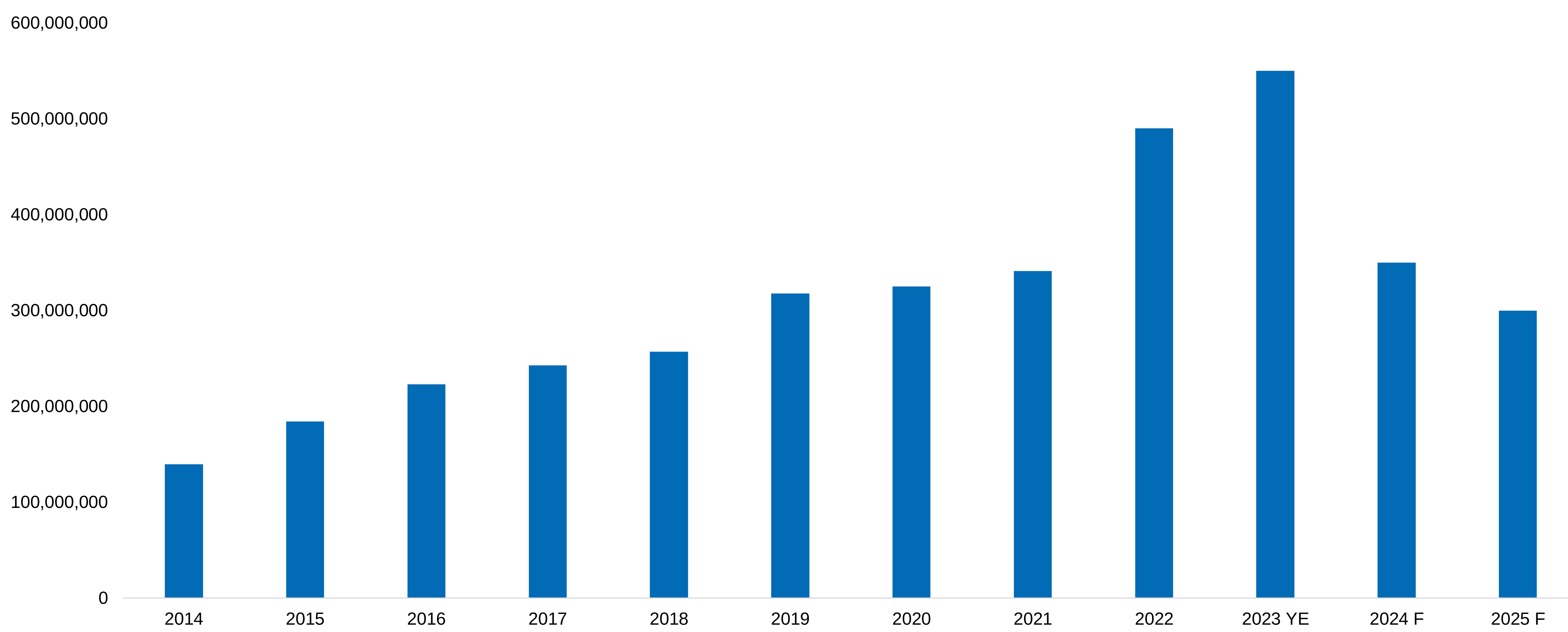


Source: Newmark Research, CoStar

National Industrial Deliveries Will Reach Pre-Pandemic Levels by 2025

By 2025, both the development pipeline and the volume of space delivering to the market are likely to reach parity with pre-pandemic volumes. This timeline could be shortened further depending on the next few quarters of construction starts. If the volume of new project starts, especially for speculative product, falls below already-low levels, the pipeline would fall below 2019 levels by 2025.

U.S. Industrial Deliveries (SF), Historical and Forecast

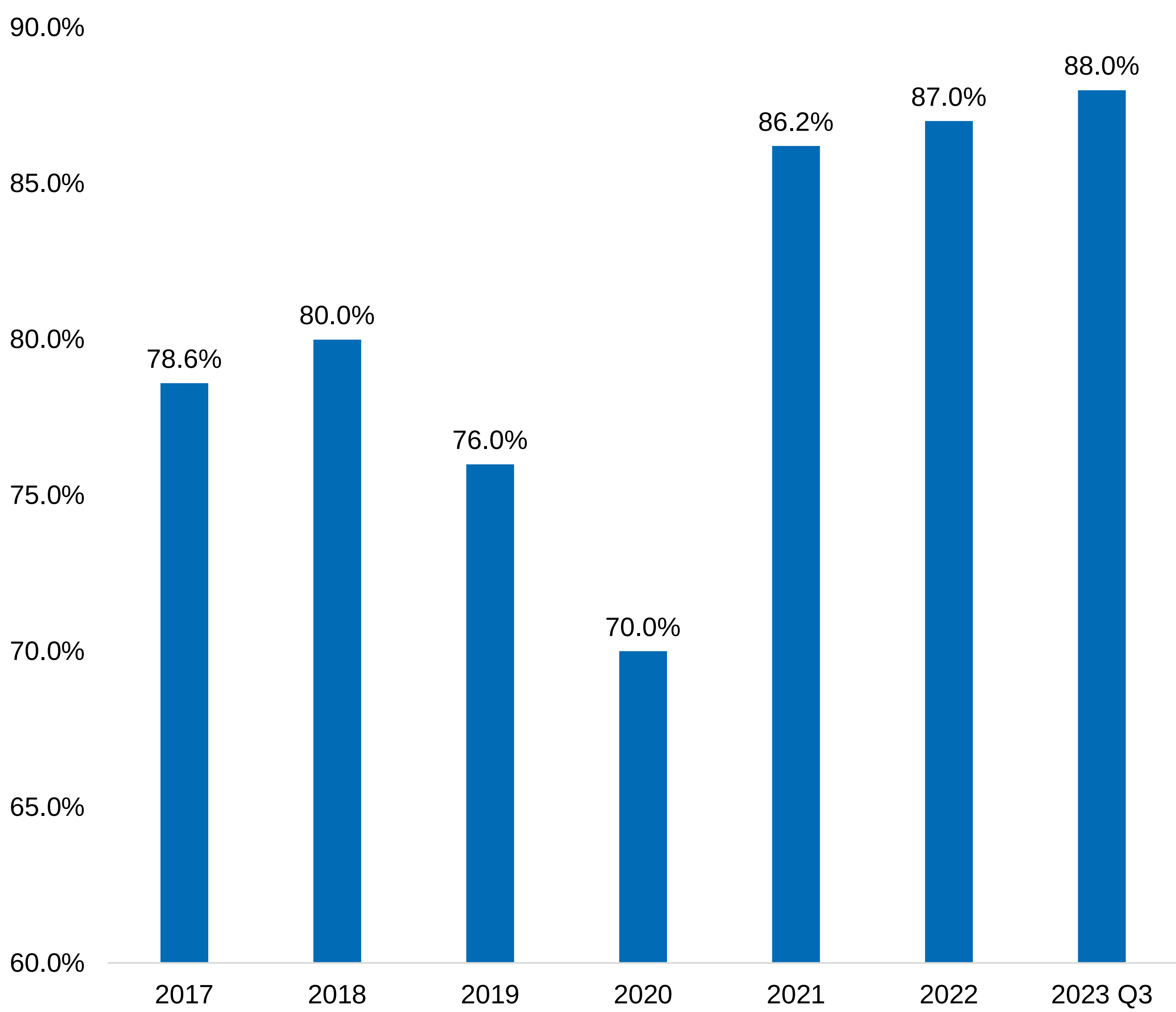


Source: Newmark Research, Green Street, CoStar.

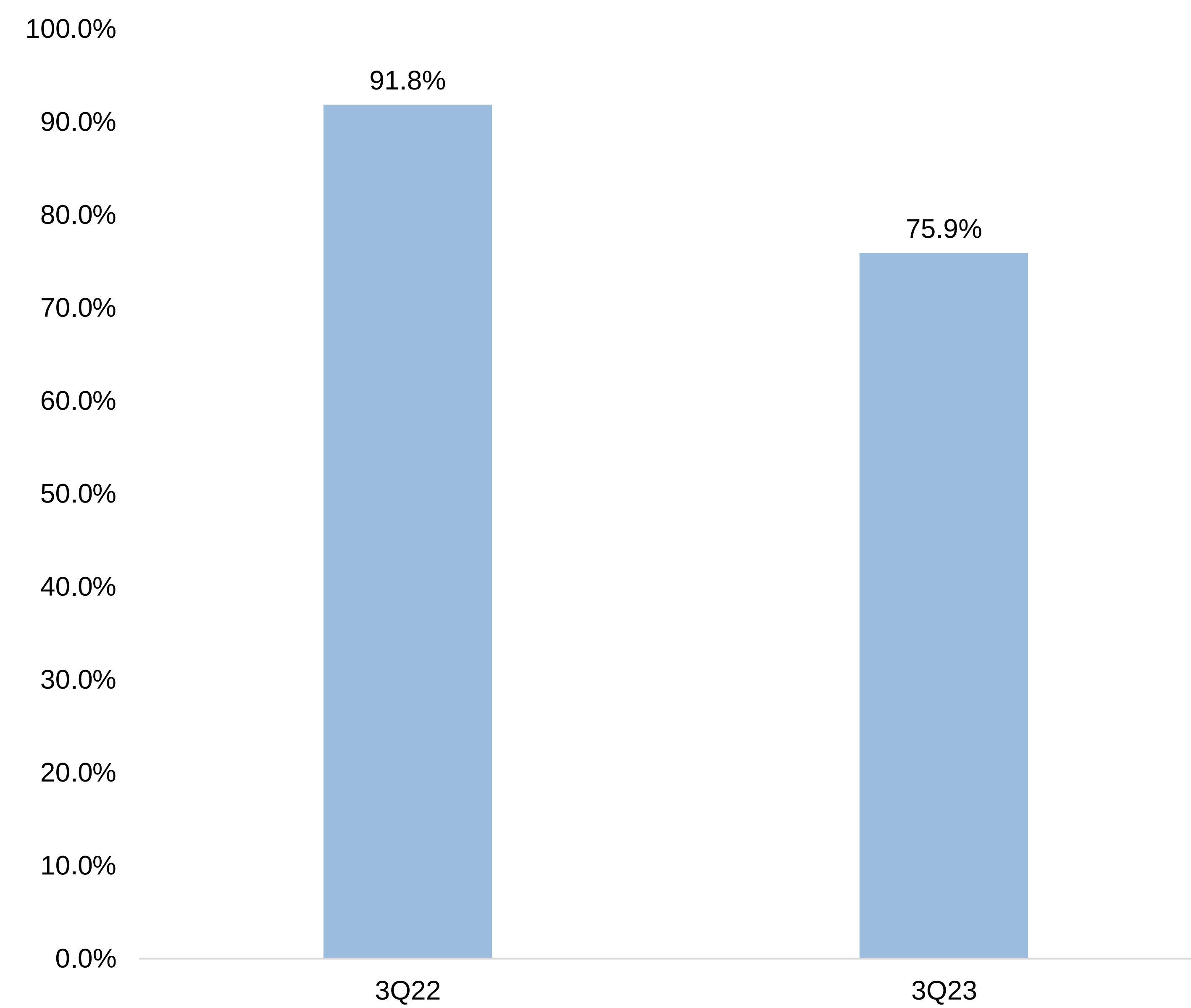
Spec Development Still Comprises Majority of Pipeline, but the Balance is Shifting

New warehouse design is now quite uniform across the country, which has led to a rise in speculative construction which offers tenants with immediate-occupancy requirements the agility to move in swiftly. The current pipeline is 88% spec – the highest share in years. Going forward, BTS is expected to reclaim share, already visible in the balance between spec and BTS in third-quarter groundbreakings. An increasing number of spec projects are shifting to 'spec-to-suit' upon prelease, blurring the lines between pure BTS and spec.

Speculative Share of the Industrial Development Pipeline



Speculative Share of New Construction Starts, 3Q22 vs 3Q23

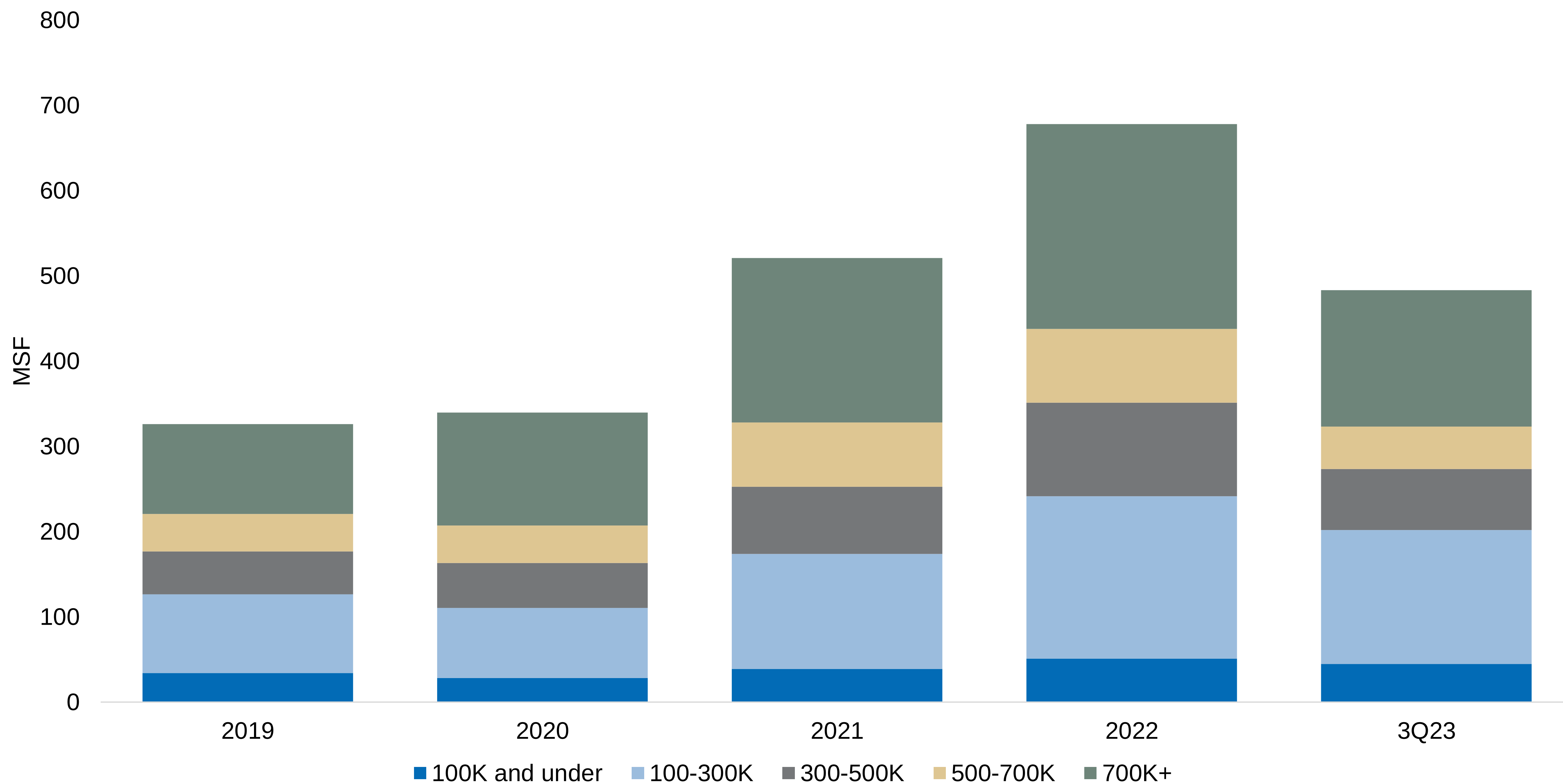


Source: Newmark Research, October 2023.

Warehouse Construction Most Concentrated in Big-Box Product – For Now

The development pipeline remains 50% above 2019 levels, with growth most robust in the 100,000 to 300,000 SF segment and in mega-warehouse product. About half of the current pipeline is concentrated in product greater than 500,000 SF, but its share will lessen as this segment has also seen a major drop-off in the pipeline: over 100 mega-box projects commenced in 3Q22; approximately 25 kicked off during 3Q23.

Active Warehouse Development Pipeline by Size Range

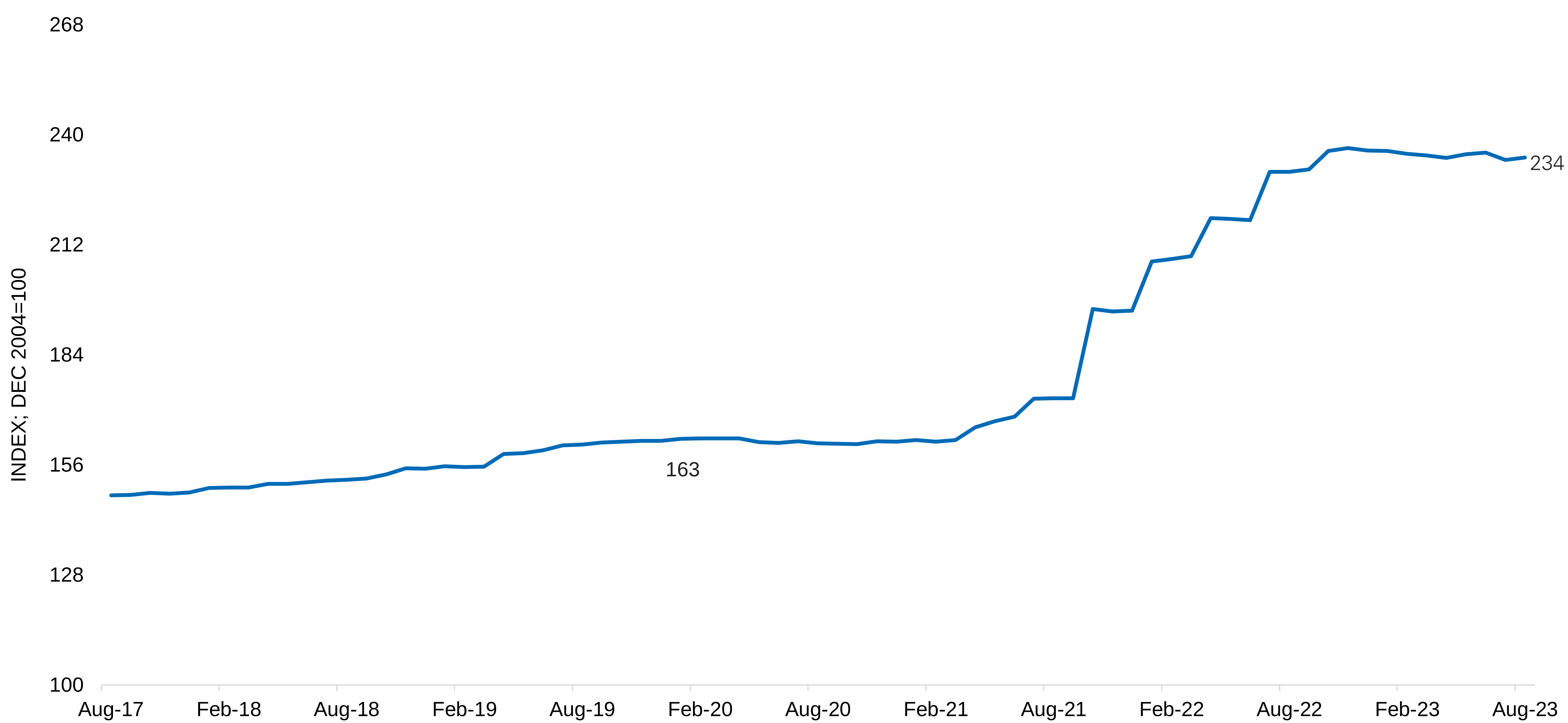


Source: Newmark Research, CoStar

Warehouse Construction Costs Have Plateaued

Construction-input costs have not yet meaningfully come down from the skyrocketing journey upward between 2021 and 2022.

Producer Price Index: New Warehouse Building Construction

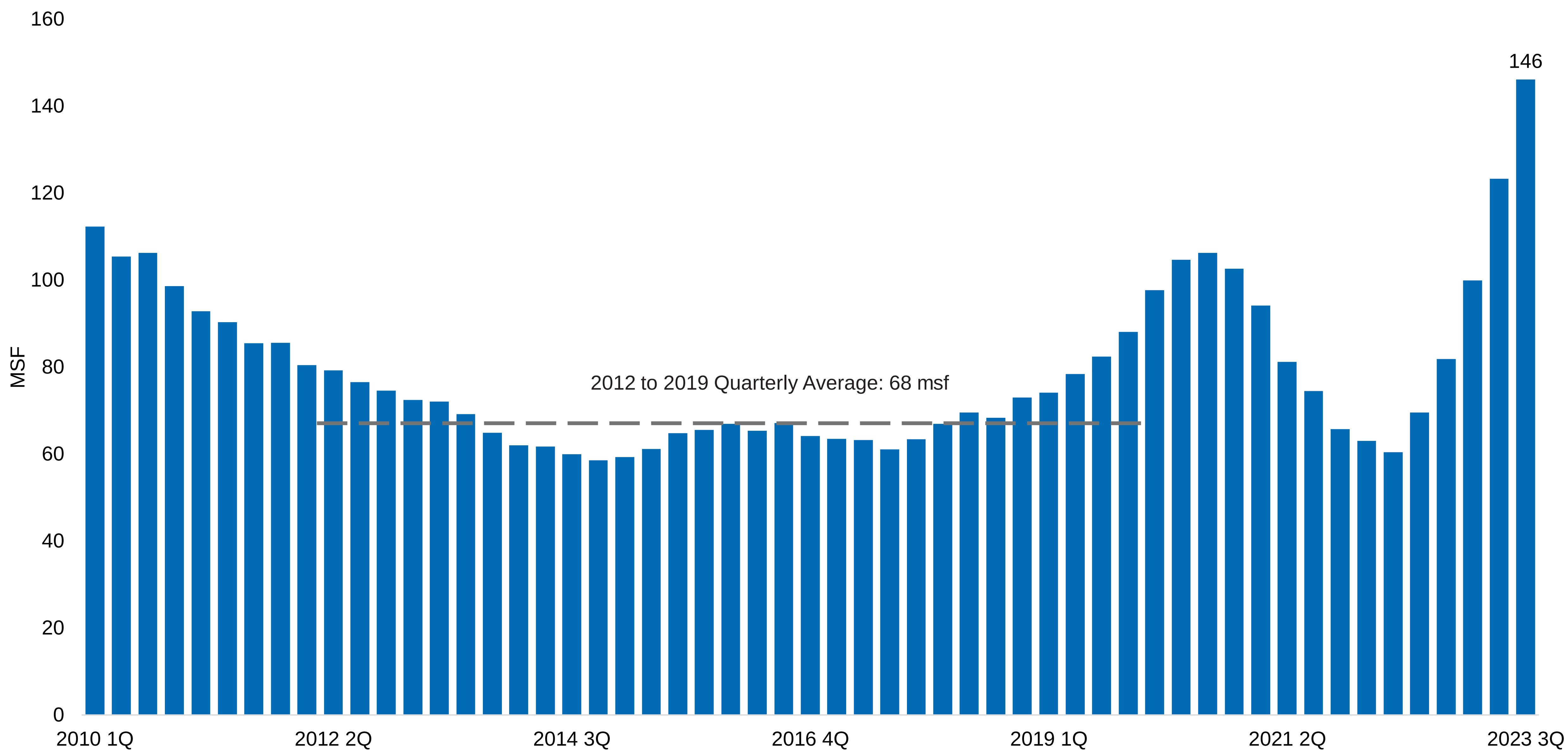


Source: Newmark Research, St. Louis Federal Bank, RSMeans

Industrial Sublease Availability: Historically High, Small in Context

The rate at which subleases were added to the market has accelerated substantially over the past year, culminating in an all time high of 146 msf on the market during the third quarter of 2023. While impactful on a local market and submarket basis, nationally this volume is only around 11% of total availability.

Available Industrial Sublease Volume

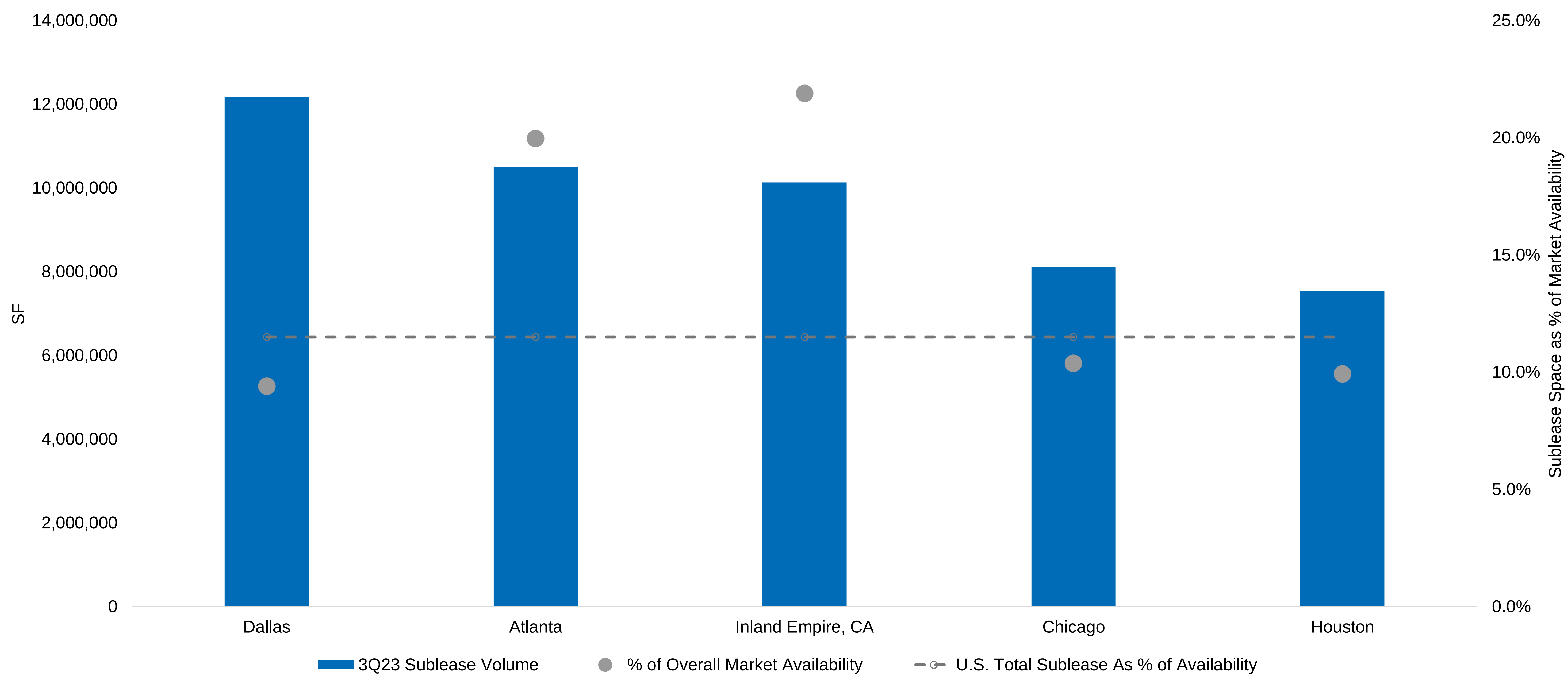


Source: Newmark Research

Sublease Space Weighs More Heavily on Some Markets (and Submarkets) than Others

Some volume of sublease space is available in all 50 U.S. markets, but a full third of the nation's sublease space rests in just five. Dallas, Chicago and Houston have large volumes of sublease space nominally, but that volume represents a below-average share of their total market availability. In the Inland Empire and Atlanta, sublease concentration is heavily weighted to specific submarkets (East and West Inland Empire ; Airport/South Atlanta, respectively).

Available Industrial Sublease Volume and Share of Overall Market Availability



Source: Newmark Research

United States Industrial Vacancy Rankings

The national vacancy rate increased to 5.1% in the third quarter of 2023, up from its all-time low of 3.6% charted one year ago and approaching the 10 year historical average of 5.6%. Mirroring the national trend, nearly all industrial markets experienced increased vacancy as new construction delivers and demand moderates.

Lowest Vacancy: Top 10 Markets

Market	3Q23 Vacancy
Los Angeles	2.1%
Las Vegas	2.8%
Orange County, CA	2.8%
Portland	3.0%
Detroit	3.2%
Miami	3.4%
Sacramento	3.4%
Milwaukee	3.4%
New Jersey Northern	3.5%
Minneapolis	3.8%
United States	**5.1%**

Most Minimal Changes in Vacancy 3Q22 to 3Q23: Top 10 Markets

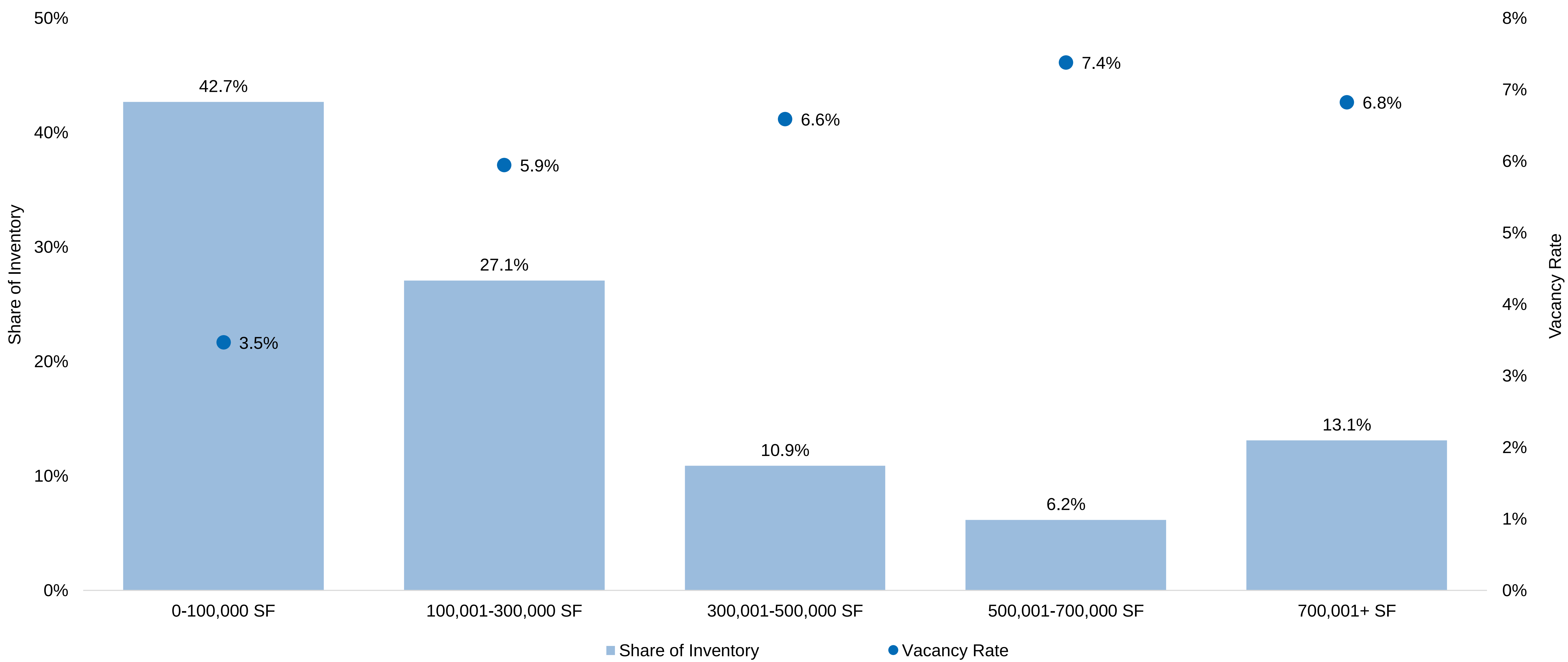
Market	3Q22-3Q23 Vacancy Change (BPS)
Detroit	-50
Silicon Valley	-4
Portland	-1
Phoenix	7
Miami	12
Kansas City	27
Chicago	40
Oakland/East Bay	46
Milwaukee	46
Minneapolis	48
United States	**146**

Source: Newmark Research, October 2023

Buildings under 100,000 SF Have the Lowest Vacancy of Any Size Segment

Vacancy remains below 9.0% for 50 industrial markets tracked by Newmark in the third quarter of 2023. The 0- to 100,000-square-foot building tranche is the largest in terms of share of inventory and lowest in vacancy and contains a significant portion of the industrial buildings built before 2000. This segment is growing the slowest, as most industrial developers are building for larger warehouse and distribution users, requiring more space for efficient operations.

3Q23 Industrial Vacancy Rate by Building Size

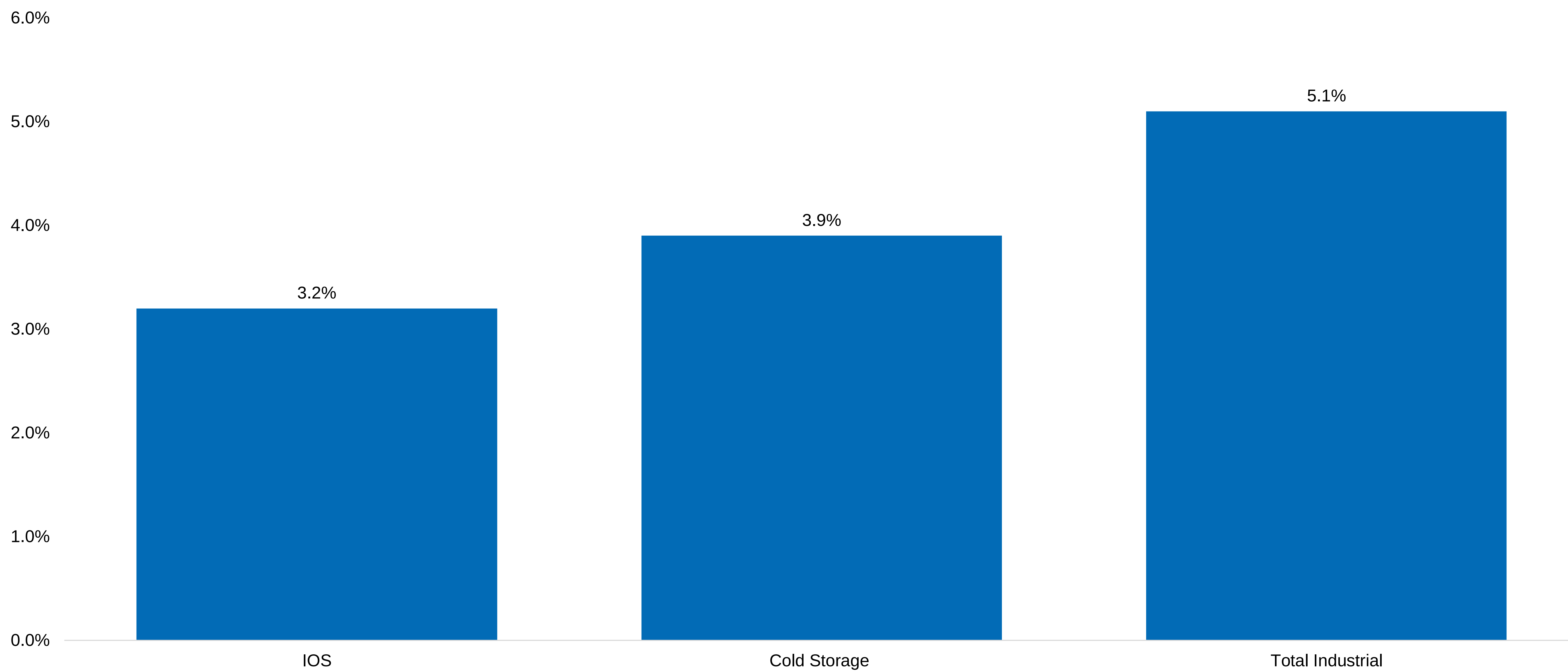


Source: CoStar, Newmark Research

Vacancy is Lowest in Alternative Industrial Sectors

Fundamentals in niche industrial sectors such as industrial outdoor storage (IOS) and temperature-controlled warehousing/distribution are tighter than the overall industrial average, owing to limited supply with high barriers to new development, coupled with consistent demand.

3Q23 National Vacancy Rate (%), Select Alternatives and Total Industrial

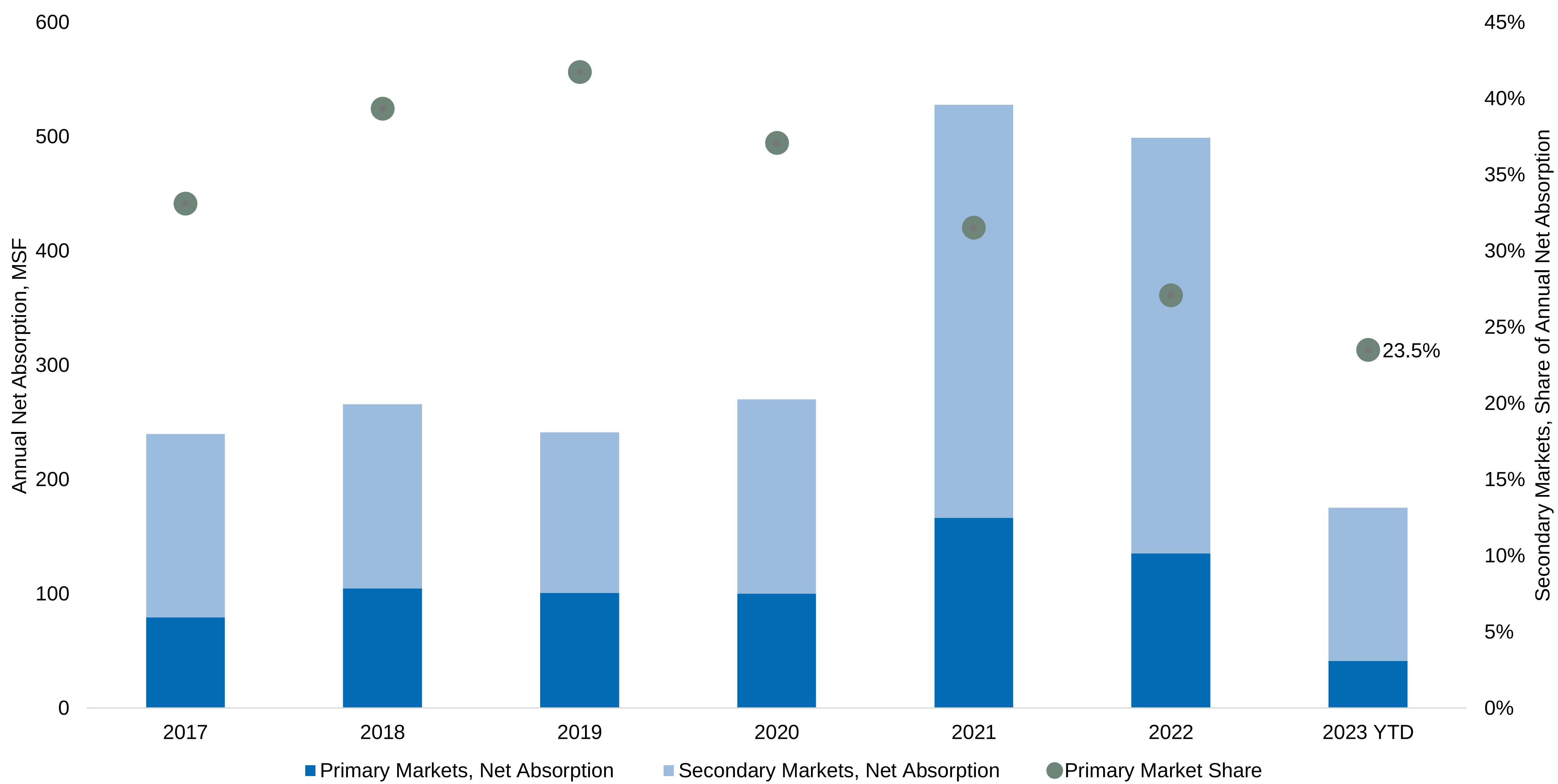


Source: Newmark Research, CoStar, October 2023.

Secondary and Less Expensive Markets Absorb Larger Share of Demand

The Big Five – Atlanta, Chicago, DFW, SoCal and North Jersey – make up about a third of total U.S. industrial inventory and typically account for 35% to 40% of total U.S. annual net absorption. Year to date, secondary markets have taken the greatest share of total U.S. net absorption, climbing to over 75%. Looking at markets on a cost basis, the difference is even more striking; 87% of net absorption YTD was in markets posting average asking rents less than the national average., up from 75% in 2022.

Annual U.S. Net Absorption by Market Tier

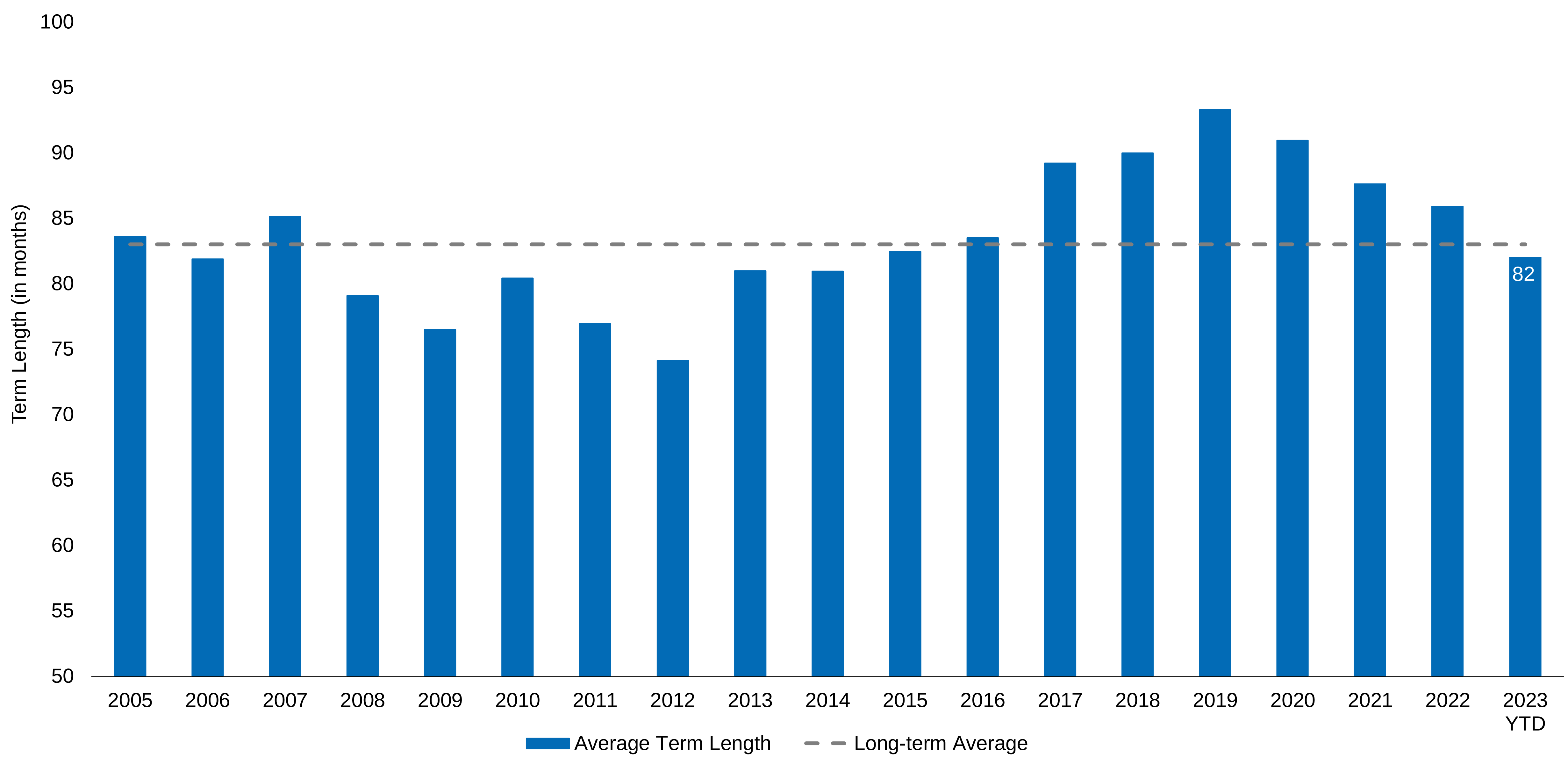


Source: Newmark Research, October 2023.

Average Weighted Lease Terms Are Declining

The has two implications: a) Tenants are exercising more caution (e.g., why commit to a long-term lease if rents are anticipated to soften?) and b) Landlords are more willing to work with tenant needs than they were one year ago; a time when rents were on the upswing.

National Industrial Average Weighted Term Length for Leases 100,000 +

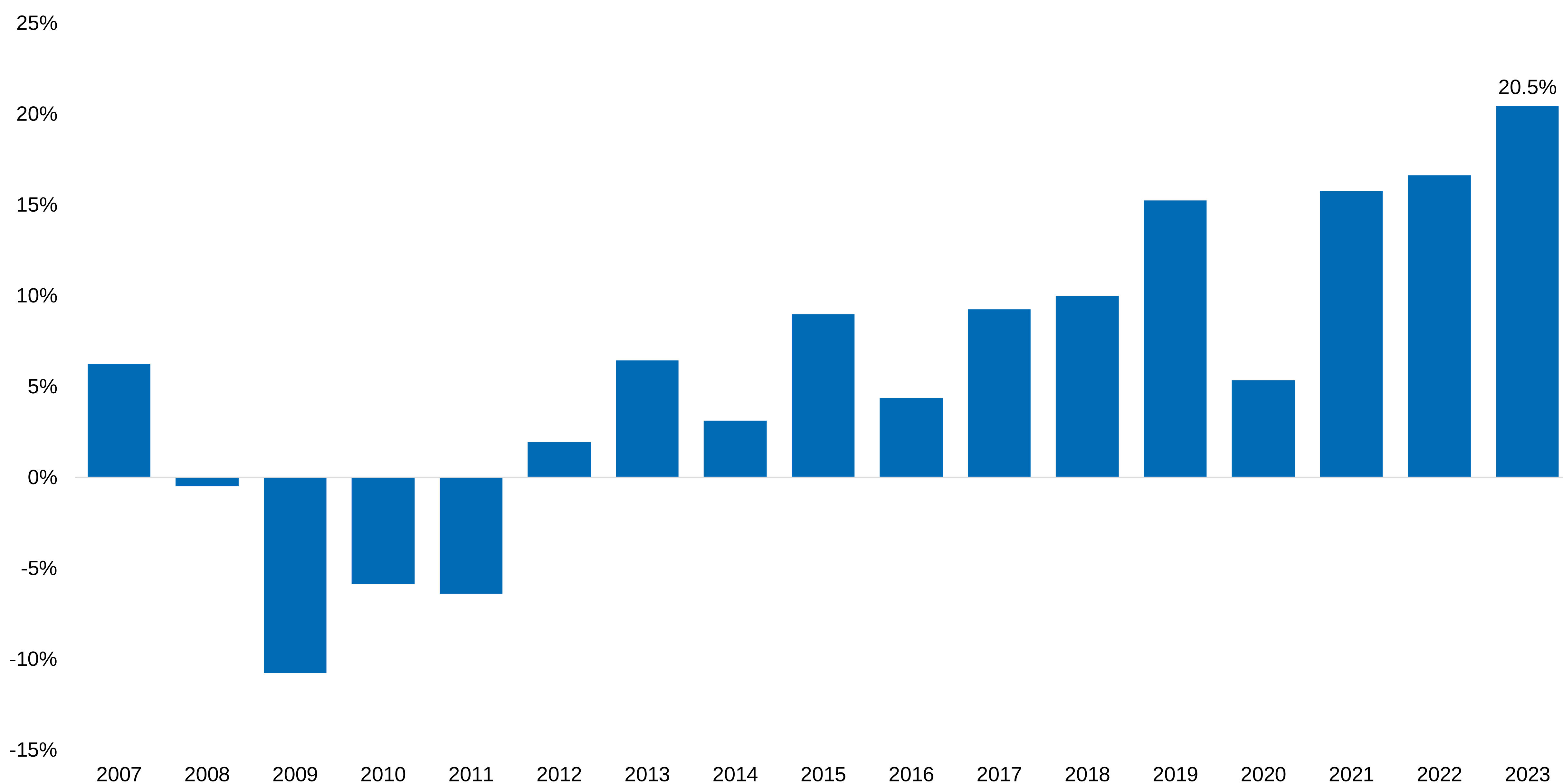


Source: Newmark Research, October 2023.
Note: Includes leases with 24+ month terms and excludes flex.

Record-Pace Industrial Asking Rent Growth Continues

Industrial average asking rents grew by 20.5% year-over-year in the third quarter of 2023. While rent growth is remaining sticky in many markets, higher-priced quality space coming online in larger quantities is increasingly contributing to higher asking rent growth averages.

Year-Over-Year Industrial Asking Rent Growth

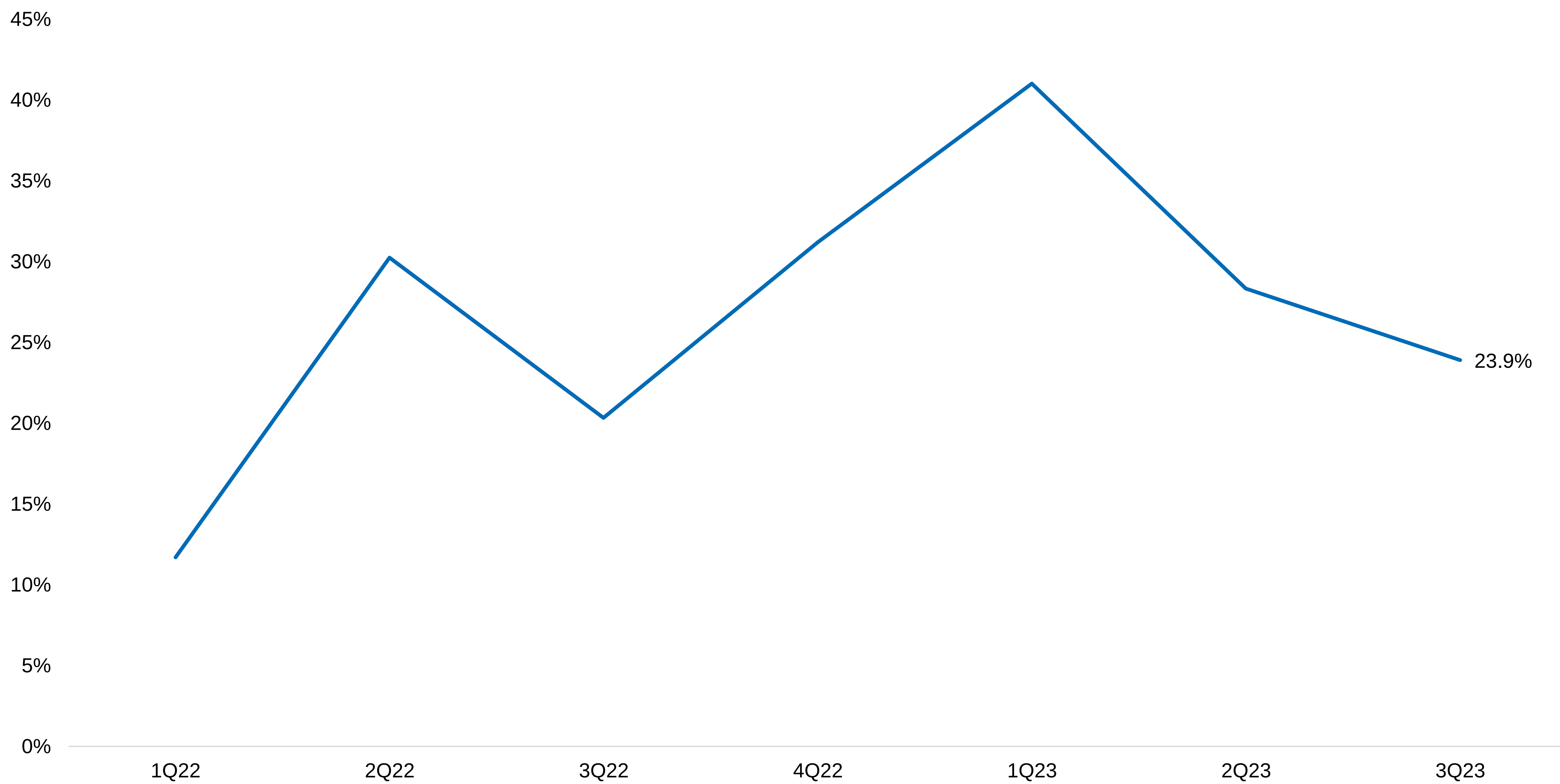


Source: Newmark Research, October 2023.

Slowing Yet Sticky: Annual Contract Rent Growth Also Remains in Double Digits

The average U.S. industrial contract rent for new industrial leases was $12.72/SF in the third quarter of 2023, nearly 24% higher than one year ago. This is a deceleration from the 28.3% annual growth realized last quarter; indeed, quarter-over-quarter, average contract rents actually fell by a couple cents/SF. While markets with the most vertiginous recent run-up in rents may see modest rent depreciation in some segments, overall annual contract rent growth will likely settle into the mid- to high-single digits by year-end.

Year-Over-Year Industrial Taking Rent Growth



Source: Newmark Research, October 2023. Direct new leases of at least 24 months and 30,000 SF, exclusive of flex.

United States Industrial Asking Rent Rankings

Industrial markets across the U.S. are still realizing annual asking rent growth with only a handful seeing flat or modestly lower average asking rents in 3Q23 compared to 3Q22. The shift over the past year in top rent-growth rankings from California markets to, now, burgeoning inland distribution hubs and alternative port markets, reflects increasing occupier cost-consciousness and growing volumes of higher-priced space delivering in these regions.

Highest Asking Rent: Top 10 Markets

Market	3Q23
Silicon Valley*	$28.62
Los Angeles	$21.13
Orange County, CA	$19.73
Inland Empire, CA	$18.04
Long Island	$17.59
Oakland/East Bay	$17.40
San Diego	$16.71
Boston	$15.69
New Jersey Northern	$15.60
Miami	$14.93
United States	**$11.66**

Largest Asking Rent Growth: Top 10 Markets

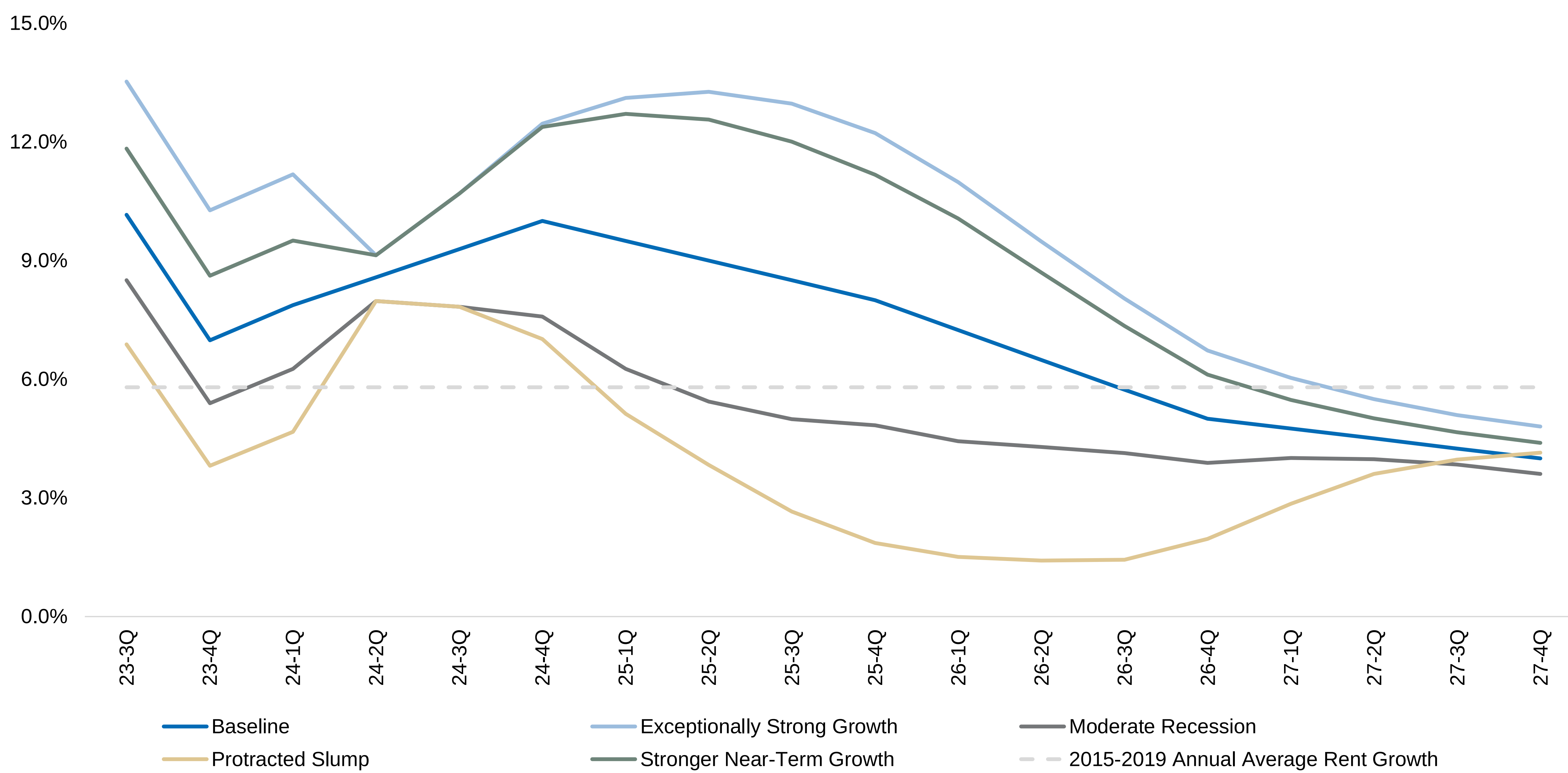
Market	3Q22-3Q23 Pct. Change
Indianapolis	34.1%
Baltimore	24.8%
Savannah, GA	24.2%
Miami	22.6%
Charlotte	22.1%
Broward County, FL	21.3%
Jacksonville	20.8%
Nashville	17.5%
Greenville, SC	16.6%
Minneapolis	16.2%
United States	**20.5%**

Source: Newmark Research, October 2023.
*Note: An outsized share of the Silicon Valley industrial market is R&D space which contributes to the relatively high overall asking rent.

Green Street Industrial Asking Rent Forecast

The U.S. industrial market faces in a period of uncertainty and unpredictability as economic headwinds and demand dynamics cloud rent forecasting. Under all scenarios, annual rent growth remains positive, and the baseline scenario doesn't drop below the pre-pandemic five-year annual asking rent growth average of 5.8% until 2026.

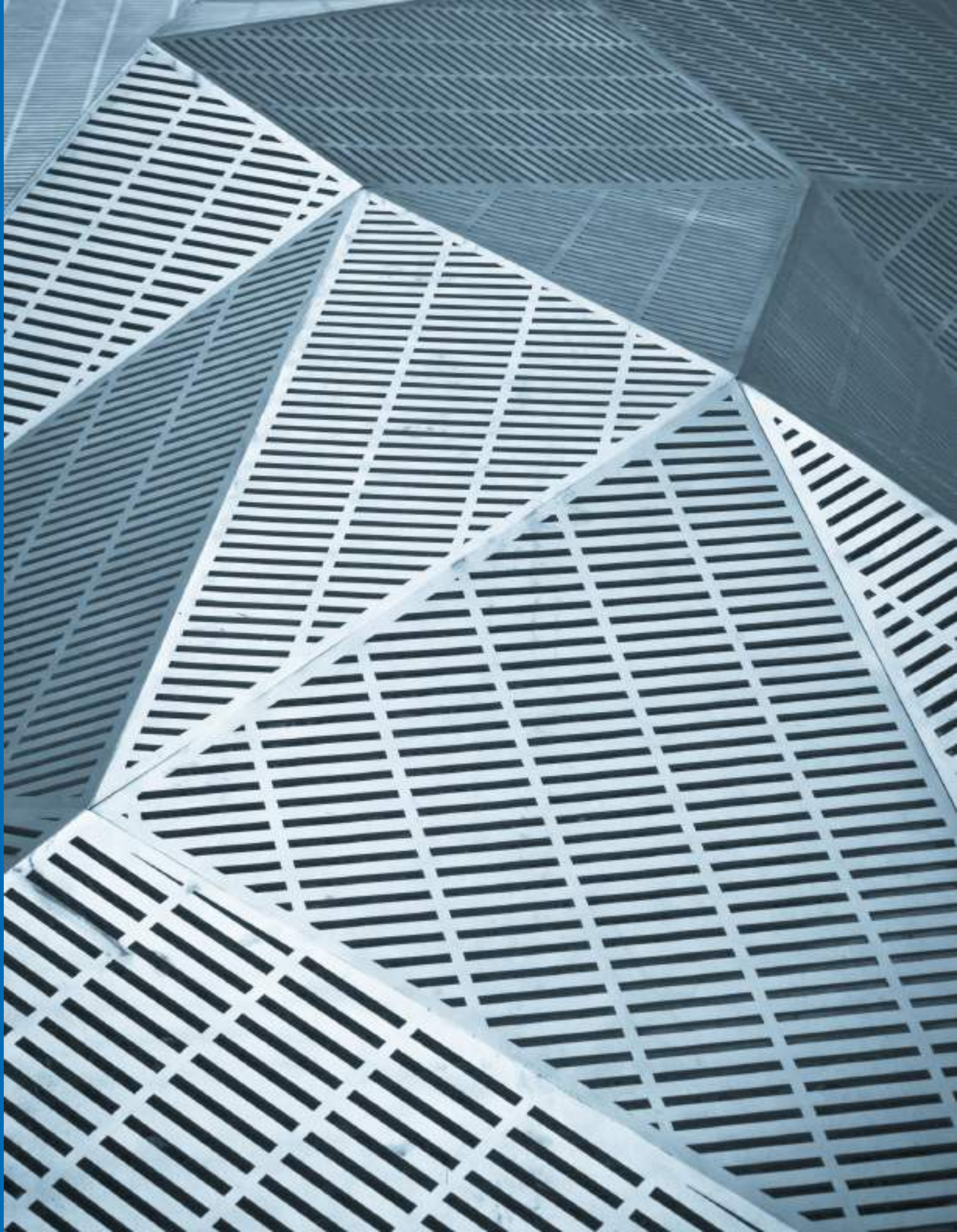
Green Street's Top 50 Industrial Markets: Annual Rent Growth Forecasts



Source: Newmark Research, Green Street, October 2023.

3Q23

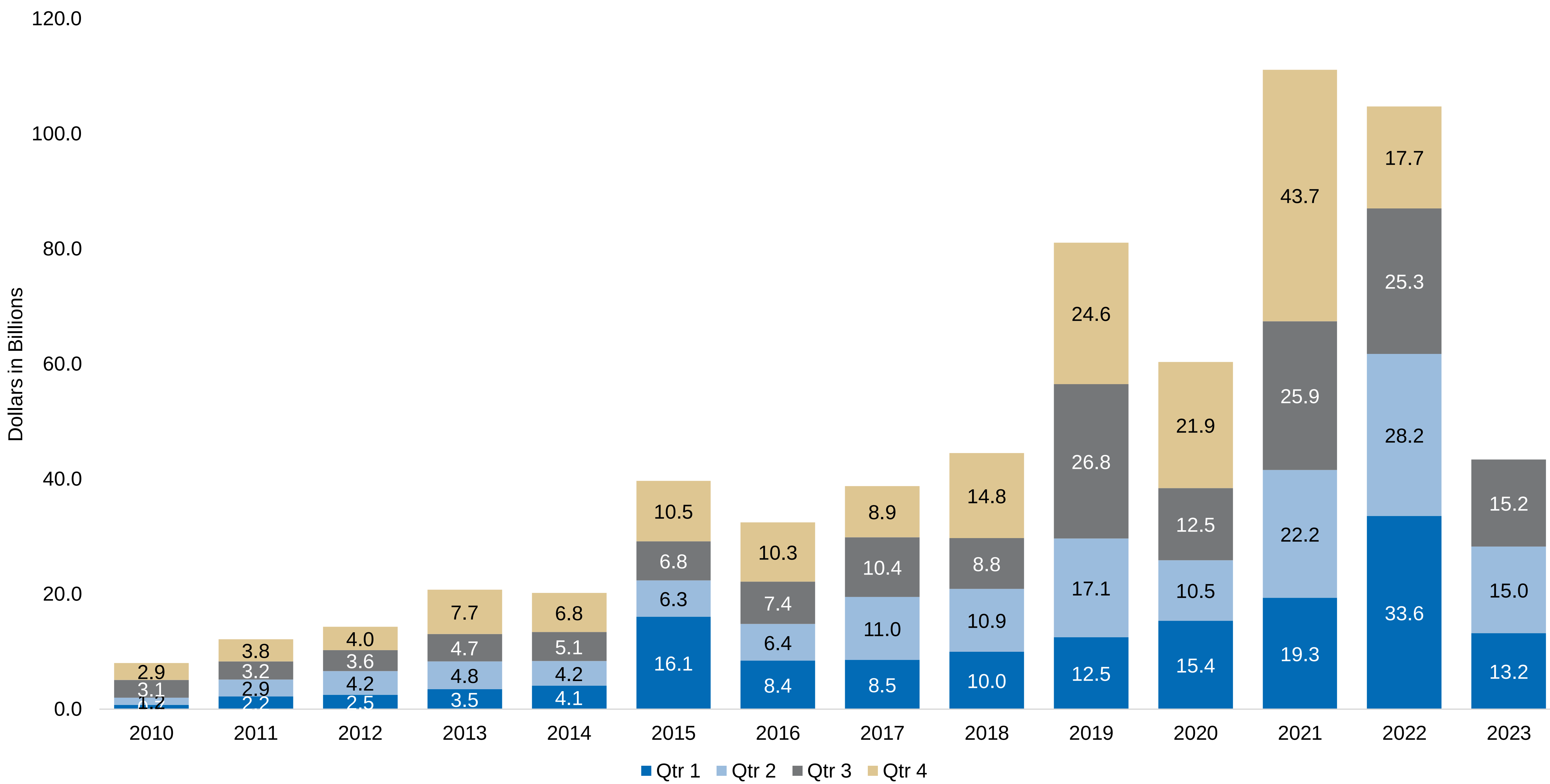
Capital Markets



Industrial Debt Originations Down 50% Year-Over-Year in Year through Q3

While these figures are based on still preliminary data, the overall message is confirmed by other sources. For example, the Mortgage Bankers Association shows industrial originations down 57% YoY through the third quarter. That said, year-over-year comparisons are bound to be difficult given the tremendous deal activity in the 2021 to 2022 period. While deal activity falls short of 2019 as well, originations are running ahead of prior years. As with leasing, this looks more like a return to pre-bubble activity levels.

Industrial Debt Origination Volume*

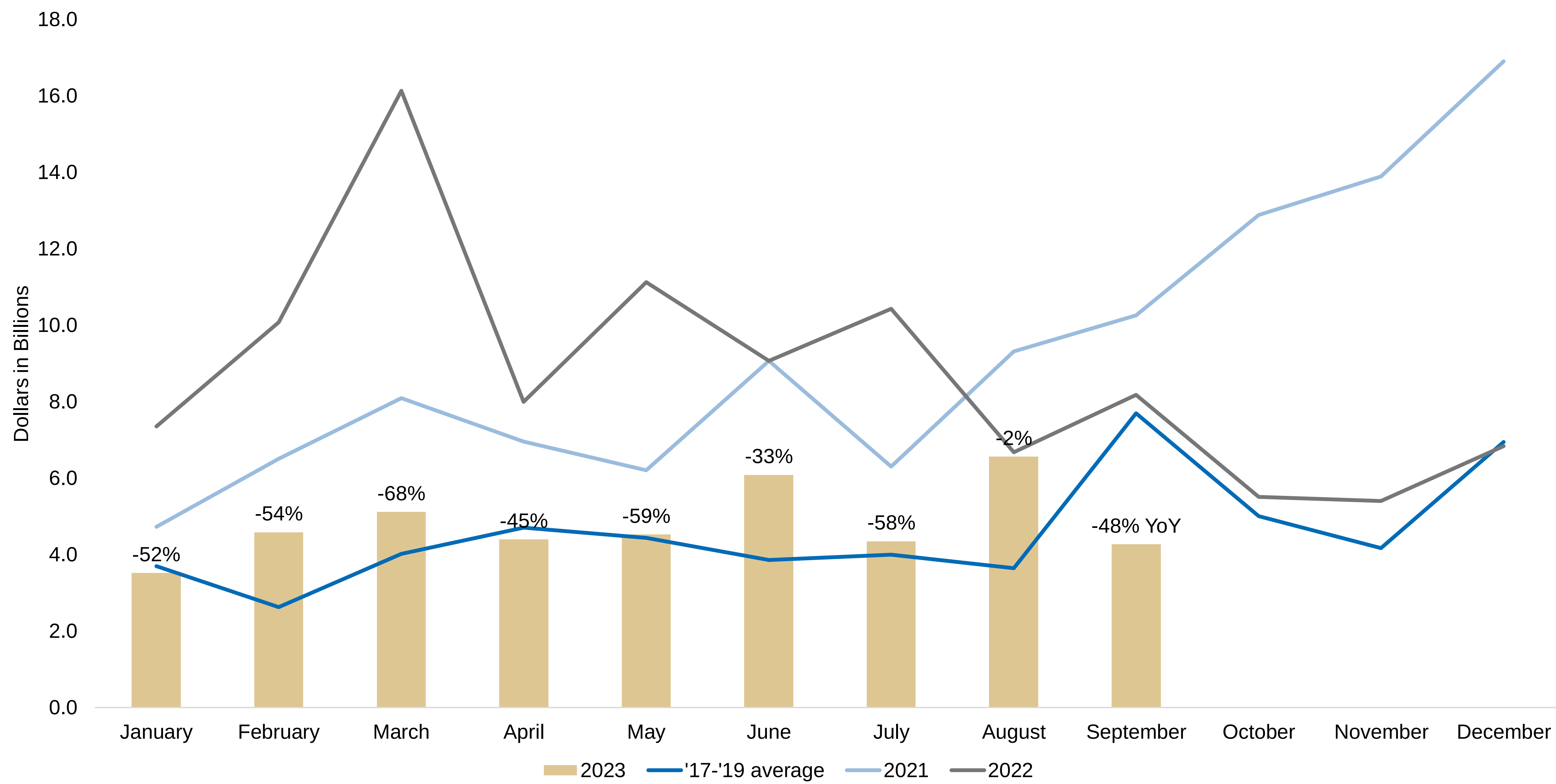


Source: RCA, Newmark Research as of 10/24/2023
* Preliminary data. Excludes construction finance. Data is based preliminary loan sums, which are subject to future revision – potentially significant.

Originations Down Sharply YoY, But Remain Above Pre-Pandemic Levels

Originations exploded during the liquidity bubble of H2 2021 to H1 2022. Rising interest rates brought those ambitions back to earth. By the end of 2022, originations had converged with pre-pandemic levels (hardly a quiet time for industrial). In 2023, while originations have been consistently down from 2022, they have exceeded the pre-pandemic pace in most months so far this year. Indeed, first and second quarter originations were 28% and 15% above 2017 to 2019 levels while Q3 is down just 1% with still preliminary data.

Monthly Industrial Debt Originations Volume*

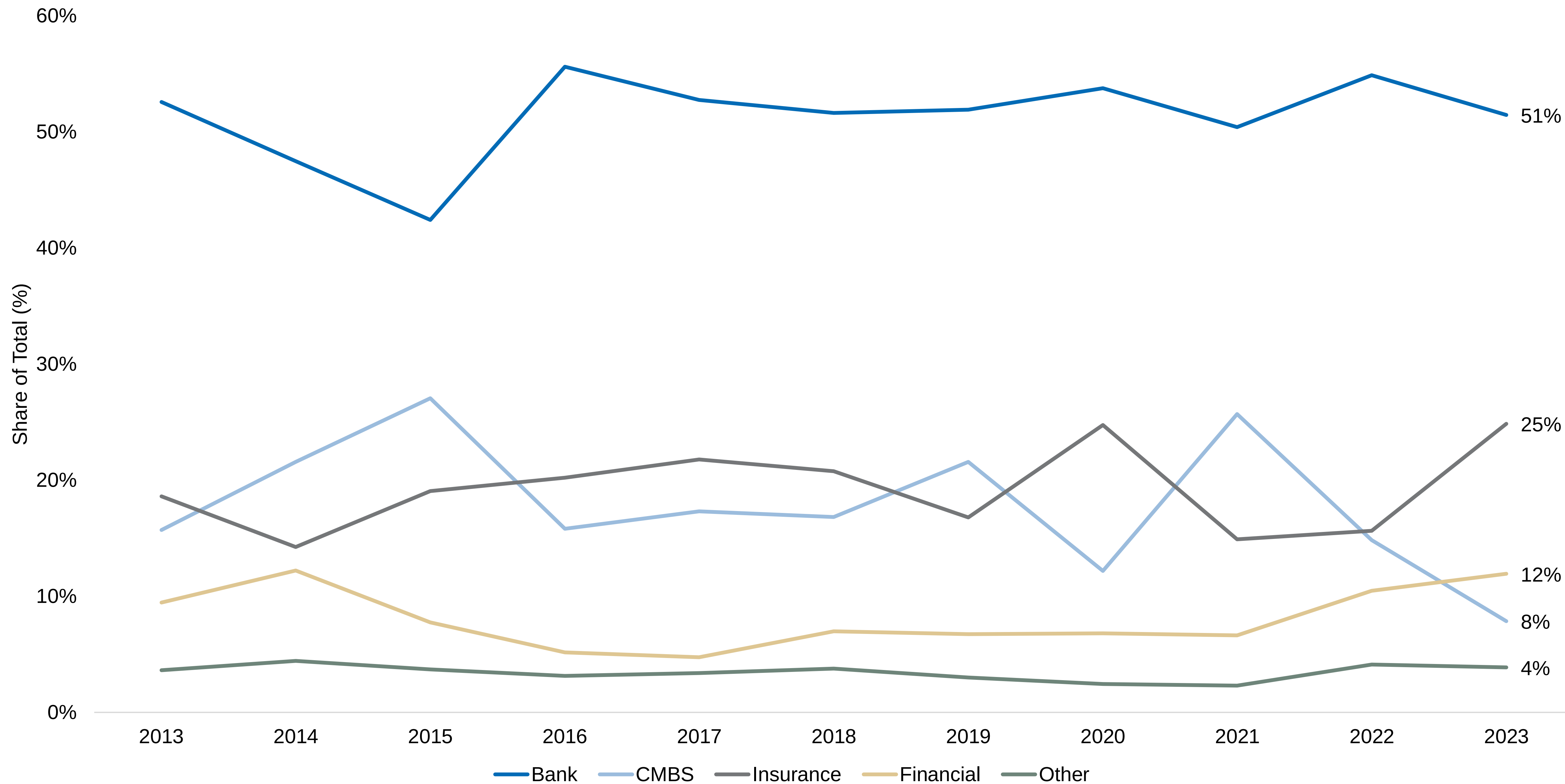


Source: RCA, Newmark Research as of 10/24/2023
* Preliminary data. Excludes construction finance. Data is based preliminary loan sums, which are subject to future revision – potentially significant.

Industrial Borrowers Heavily Dependent on Bank Finance

Banks continued to dominate industrial property finance in the first three quarters of 2023. Securitized debt finance by contrast has fallen sharply from its recent peak in 2021 amid a depressed issuance market. On the other hand, insurance lending have picked up share in 2023, particularly in the third quarter. There are also signs of debt funds shifting allocations to industrial. This is consistent with anecdotes coming in from the markets.

Origination Share by Lender Group

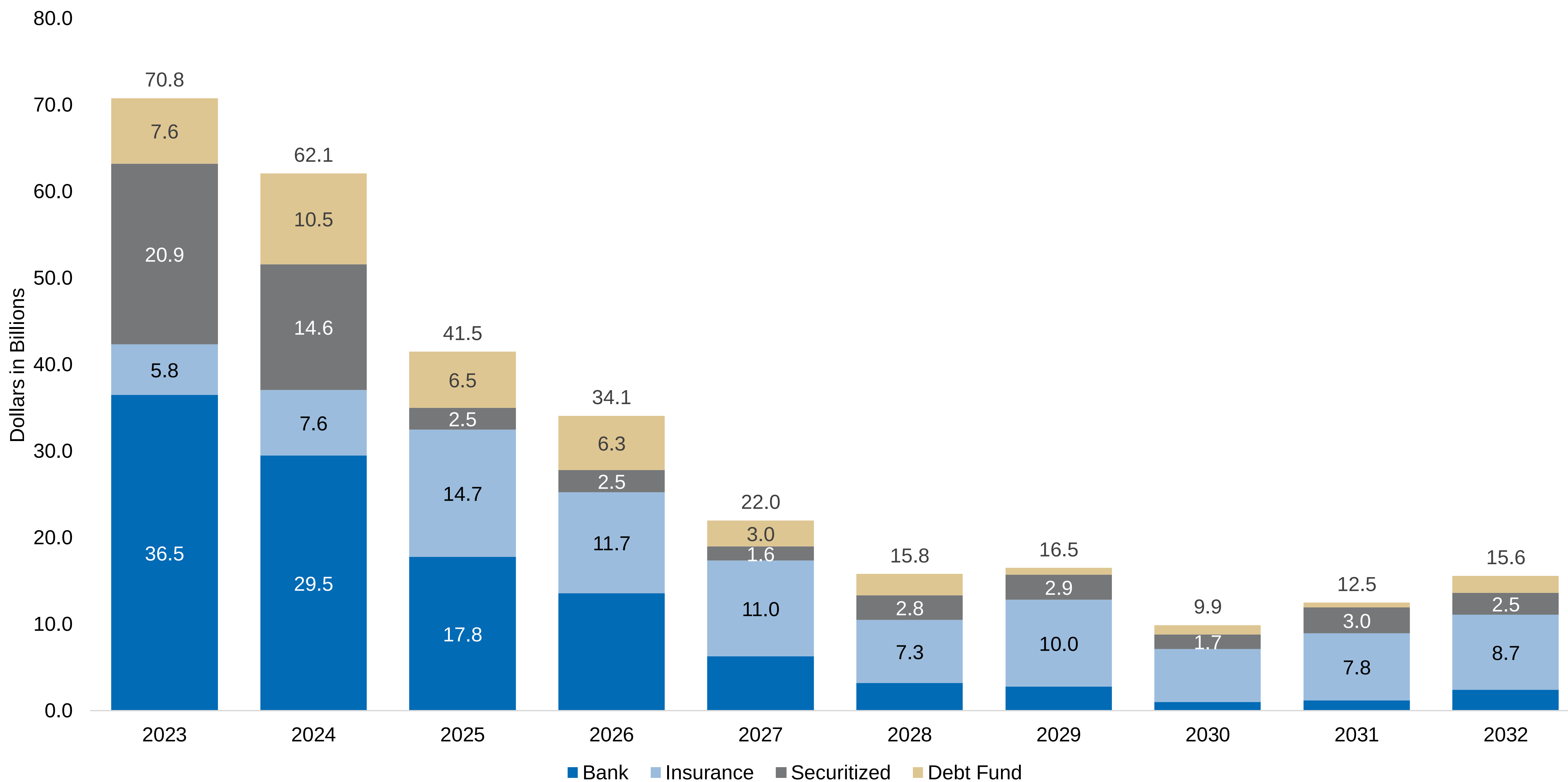


Source: RCA, Newmark Research as of 10/24/2023
*Excludes construction finance. Data is based preliminary loan sums, which are subject to future revision – potentially significant.

Elevated Industrial Maturities in 2023-2024

Upcoming debt maturities are heavily concentrated in bank and securitized borrowings. In contrast, insurance loans are concentrated in the middle of the decade. Debt funds have become active in the space. While debt funds have become more active in the industrial funding market, their share of upcoming maturities is lower than for the office and multifamily markets.

Industrial Loan Maturities by Lender Group

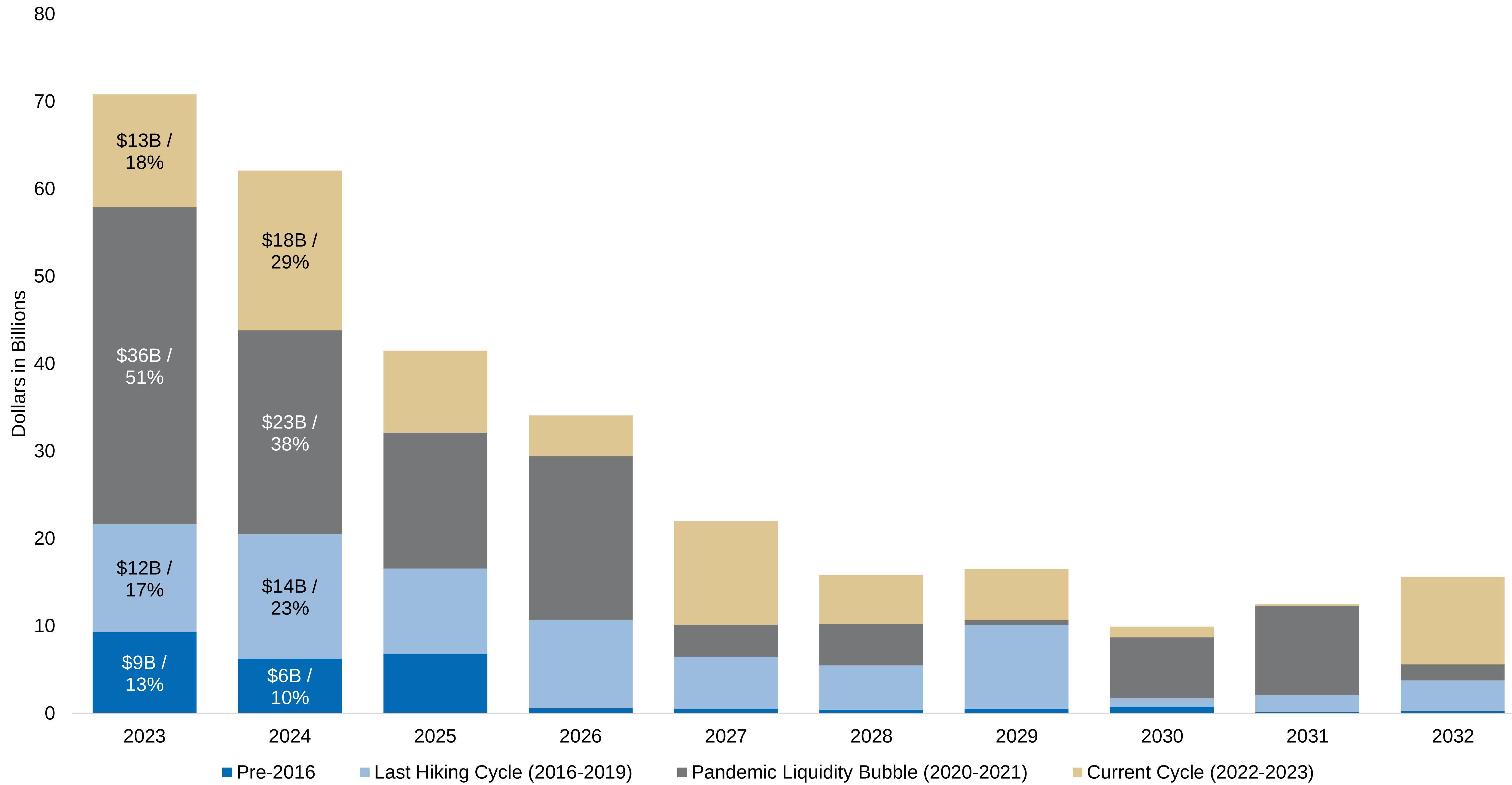


Source: MBA, Trepp, RCA, Newmark Research as of 10/24/2023

Maturing Loans Originated At Peak Prices, Record Low Cost of Capital

66% of the debt maturing in the 2023-2025 period was originated after in 2020 or later. This means most of this debt was originated at record low cap rates and interest rates.

Industrial Loan Maturities by Origination Period

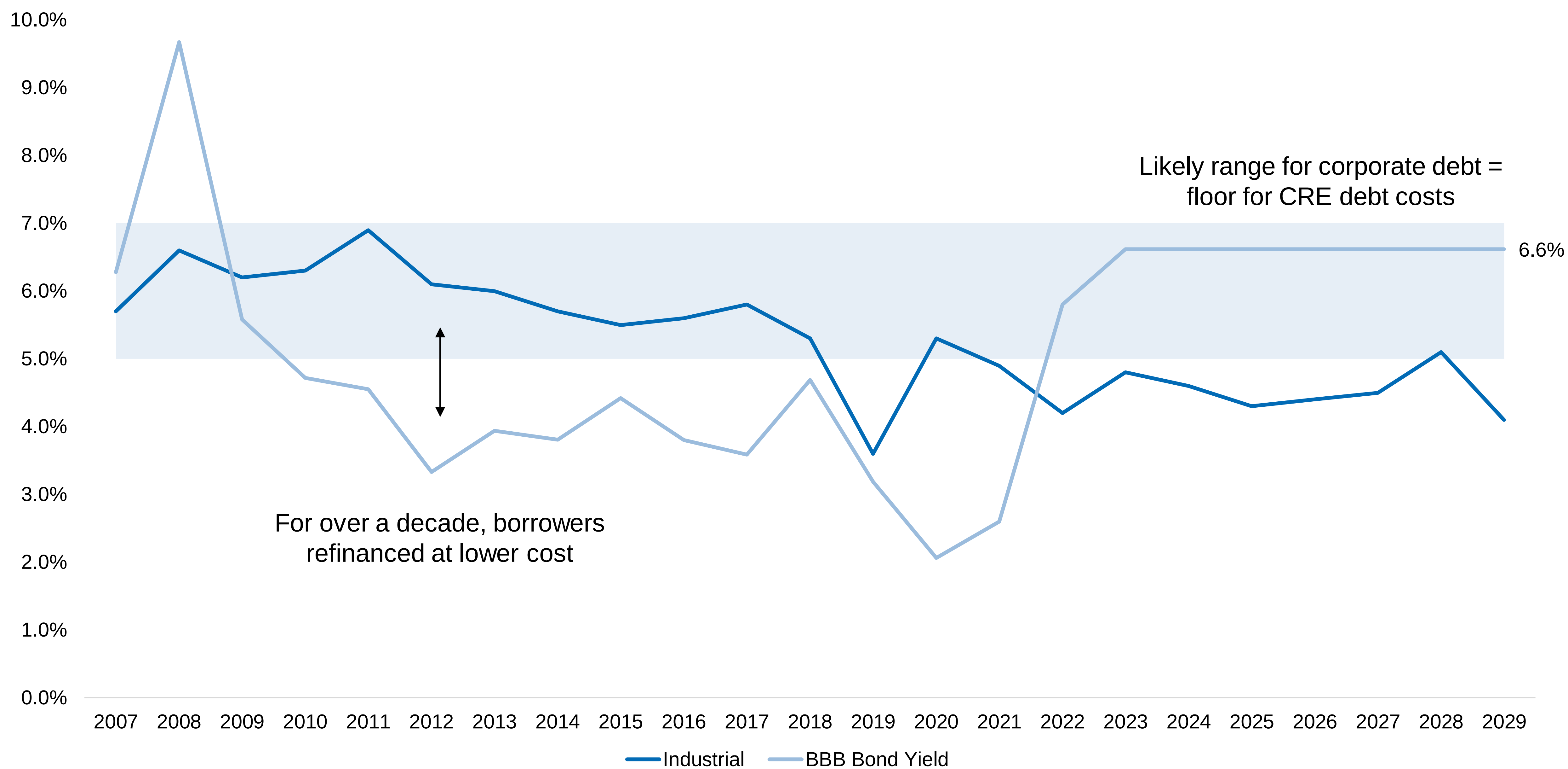


Source: MBA,Trepp, RCA, Newmark Research as of 10/24/2023

Maturing Loans Face Significantly Higher Costs, Driving Payment Stress

Following the recent surge in long-term rates, corporate bonds yields are now at the top of our estimated range while spreads are still close to long-term averages. CRE debt costs will be driven higher still. Maturing fixed rate CRE debt faces a much higher burden on refinance. In some cases, organic deleveraging will have made it possible for higher interest expenses to be absorbed, but where values have been stable or declining, sponsors will need to inject equity or else face the prospect of default.

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

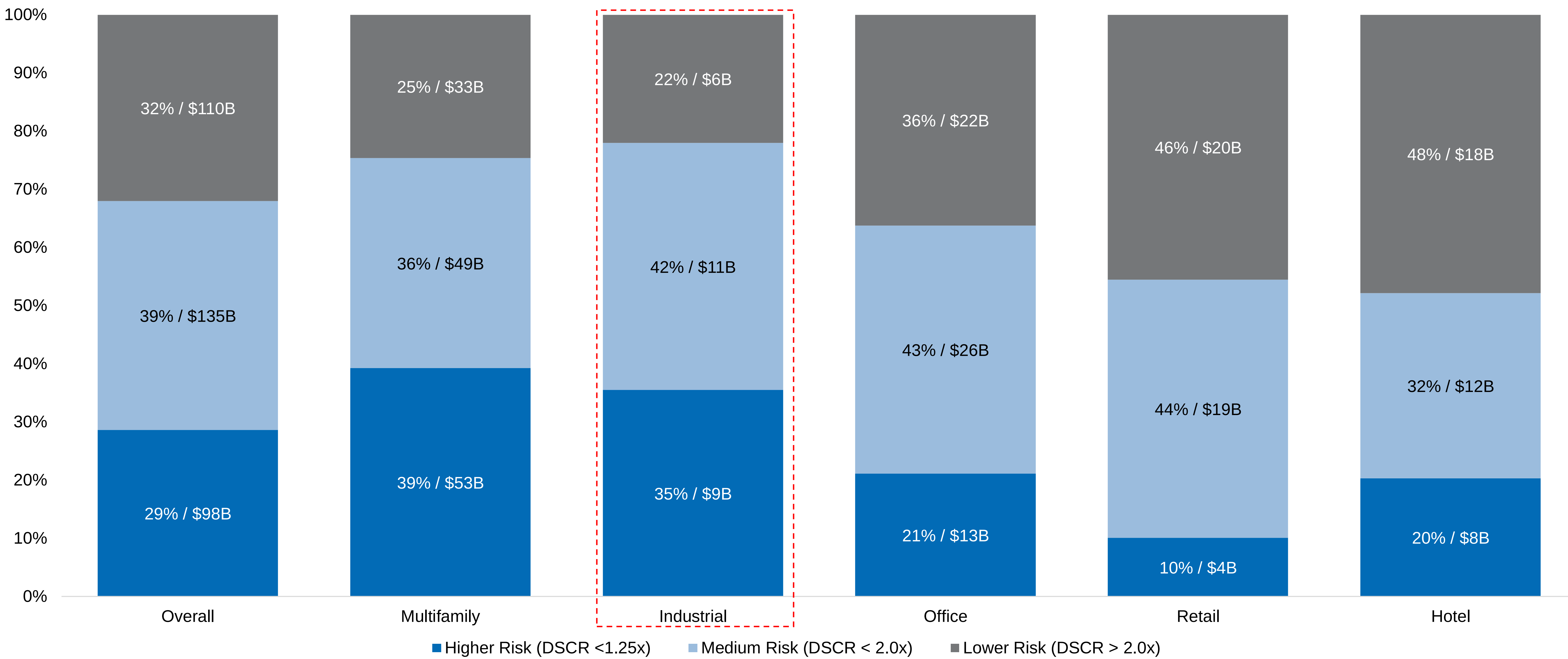


Source: RCA, ICE Data Indices, Newmark Research as of 10/24/2023

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

Even property types with strong operating fundamentals could face challenges covering new, higher interest costs. Floating rate loans on transitional product – a significant portion originated by debt funds and securitized in CRE CLO – are particularly fraught. This is largely responsible for the high portion of at-risk loans in the multifamily and industrial sectors. The securitized markets are not an isolated problem: banks engaged in a great deal of this newly risky lending. New bank regs give them a pass on underwater loans but not DSCR's.

DSCR Profile of Securitized CRE Debt Maturing between 2023 and 2025

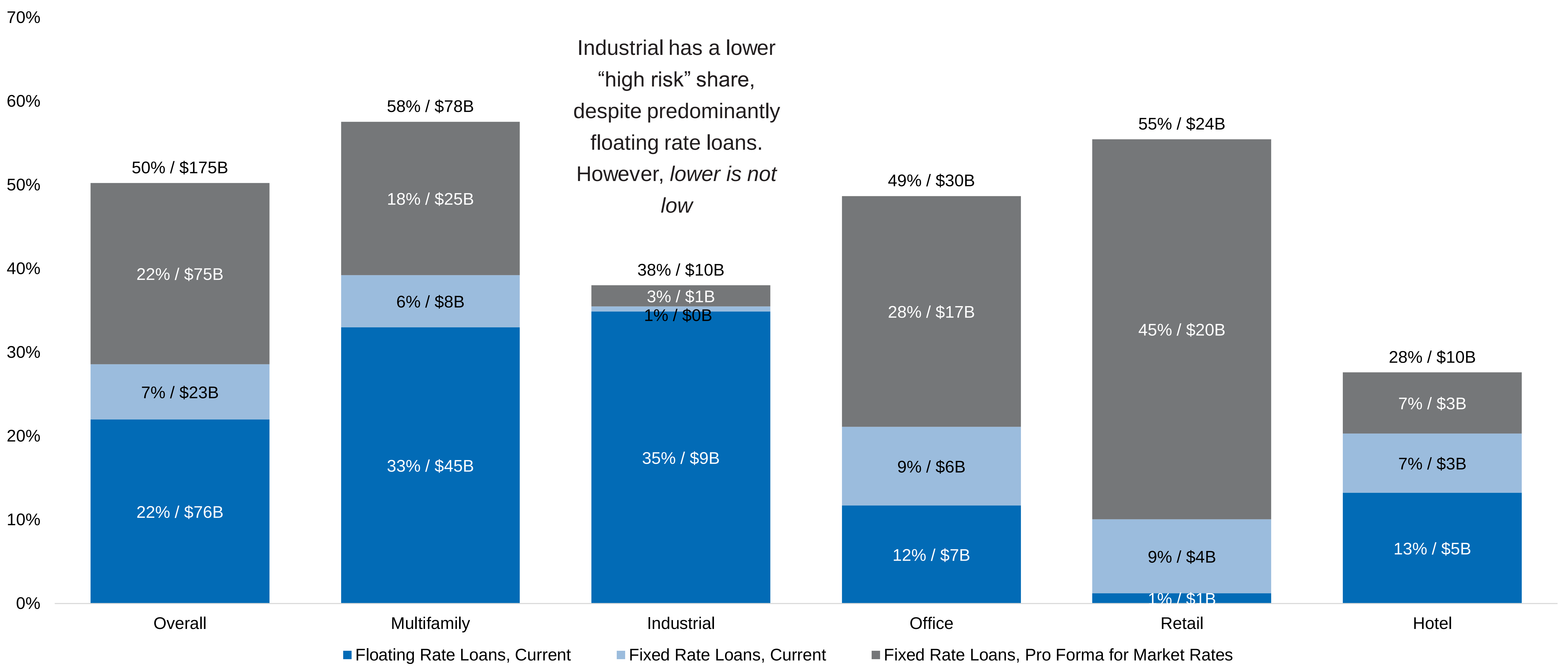


Source: Trepp, Newmark Research as of 10/26/2023

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. However, 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 (or are even underwater). While this analysis focuses on securitized debt, it has series implications for the broader landscape

Share of Securitized Loans Maturing between 2023 and 2025 with a DSCR under 1.25x ("High Risk")

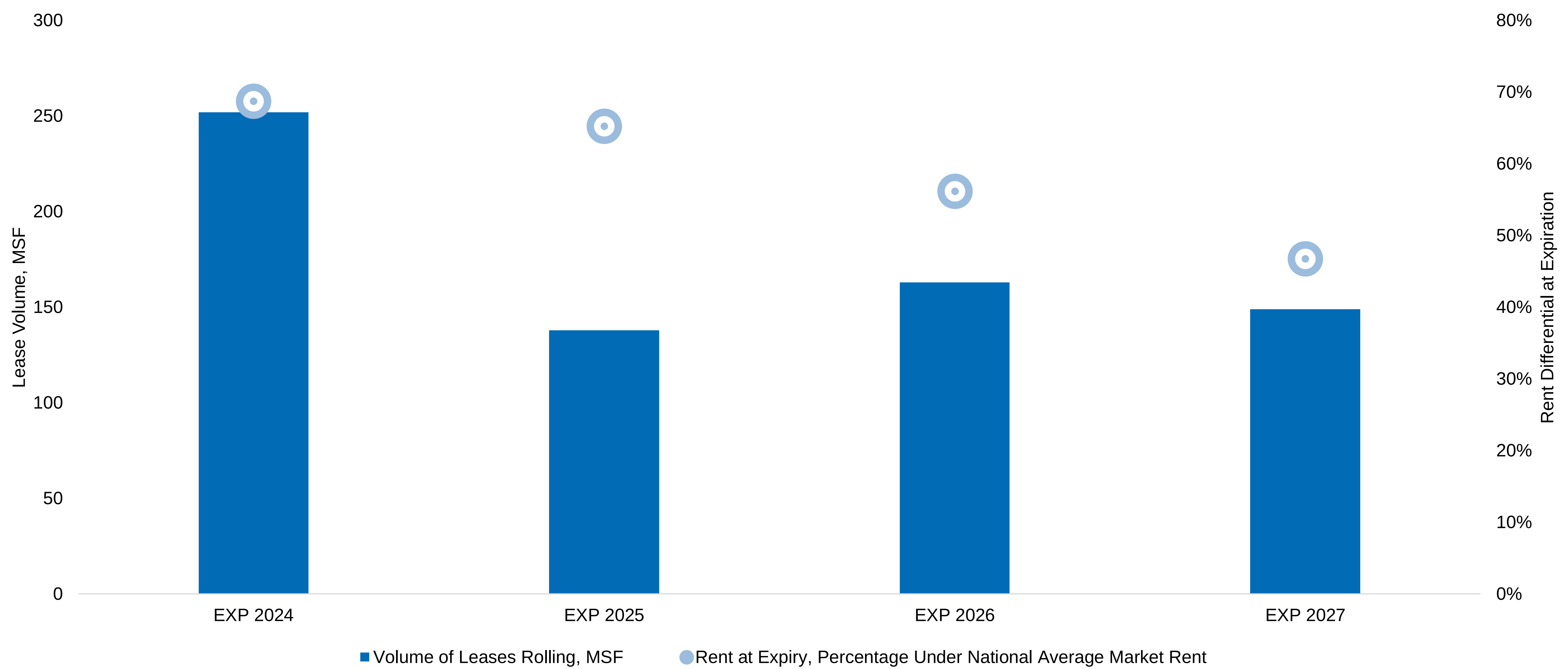


Source: Trepp, Green Street, Newmark Research as of 10/26/2023
Note: to estimate the impact of market rates. We analyzed representative samples of 2023 to 20-25 maturities for each property type. We calculated a pro forma DSCR by comparing the current loan rate with the current market rate. For the current market rate, we used Greeen Street's Agency benchmark rate for multifamily and their conventional secured benchmark for all other property types. These rates were 6.1% and 6.9%, respectively.

Continuing Mark-to-Market Opportunity a Strong Tailwind for Investors

Nearly a billion square feet of leases set to expire in the next five years will be rolling into a market only now just beginning to normalize after an unprecedented run-up in rents starting in 2021. Even with a conservative growth forecast, in-place rents will play catch-up for years to come. In-place rent for a typical lease inked in 2017 would be a whopping 69% below projected market rent at 2024 expiry. While this is a strong tailwind, cost-consciousness is driving some firms to consolidate or relocate when faced with major increases upon rollover.

Industrial Lease Volume and Average Rent Differential from Current* Market Rates By Year of Expiration

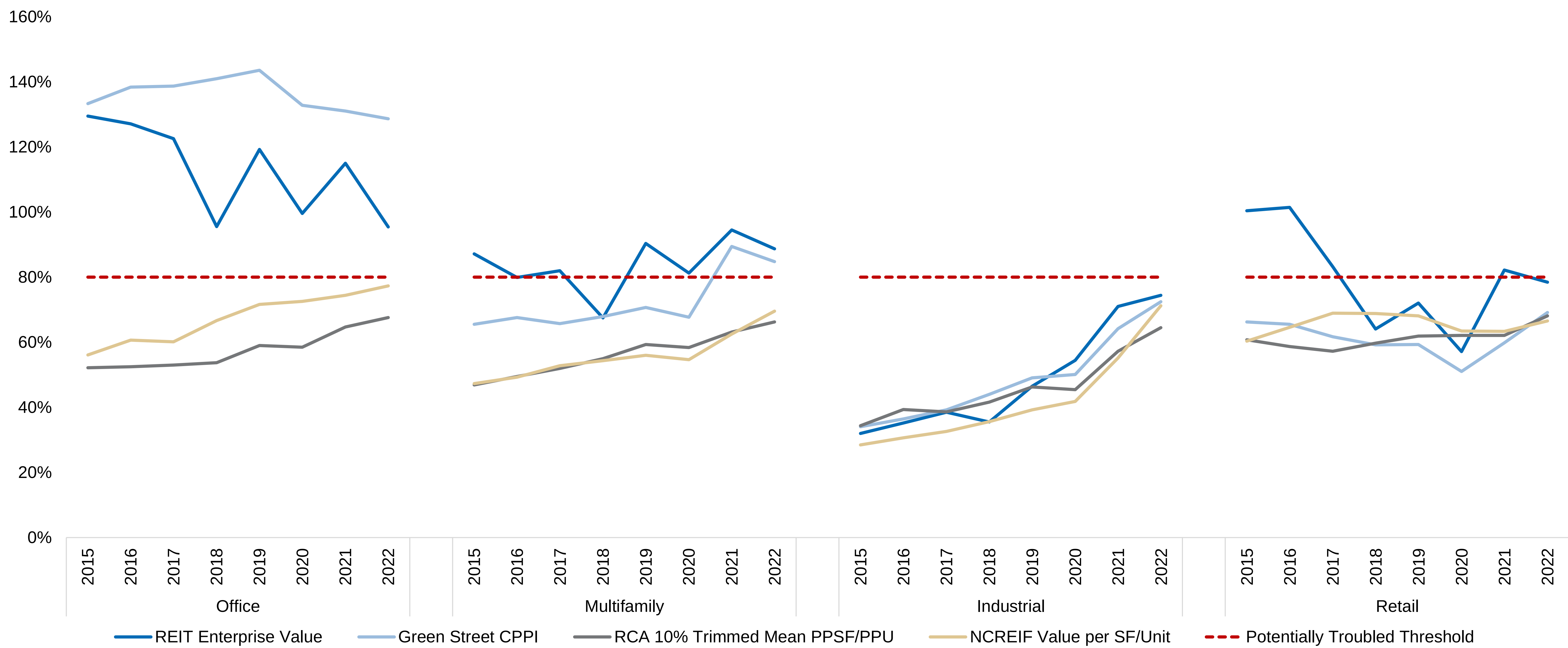


Source: Newmark Research, Green Street. Survey of leases includes 50,000 SF+ with at least 2.5 years of term. 2.5% escalations assumed.
*Current assumes forecasted market avg. taking rents at time of expiry

Strong Price Appreciation Helps Protect Against Industrial Distress

Industrial values have risen tremendously since 2015. As a result, most recent loan vintages have organically deleveraged even when accounting for the recent reduction in market values. That said, industrial loans originated in 2021-2022 are at greater risk, having been struck at the top of the market though this is counterbalanced by further-off maturity dates. Transitional debt and construction loans will also bear watching.

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

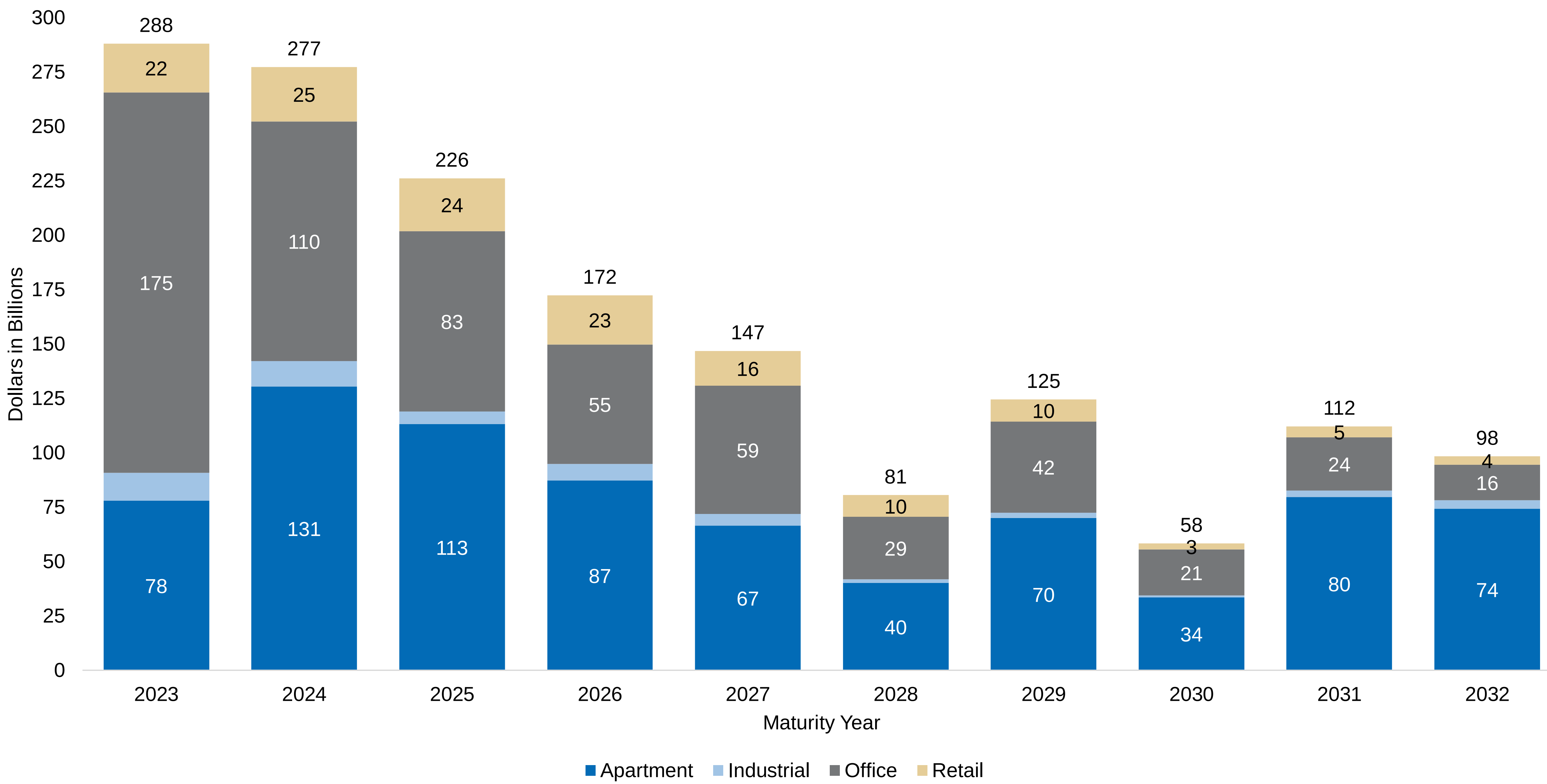


Source: RCA, Green Street, NCREIF Newmark Research as of 11/7/2023
*We take the average loan-to-value ratio of loans originated in each respective year based on an analysis of RCA data, then we mark the value of the assets to market using the various proposed benchmarks.

$1.6T of Outstanding CRE Debt is Potentially Troubled, But Only $55B is Industrial

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 the vast majority of potentially troubled loans, particularly in the 2023-2025 period. The high office volume results from most loans being underwater. The distribution of LTV's 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*

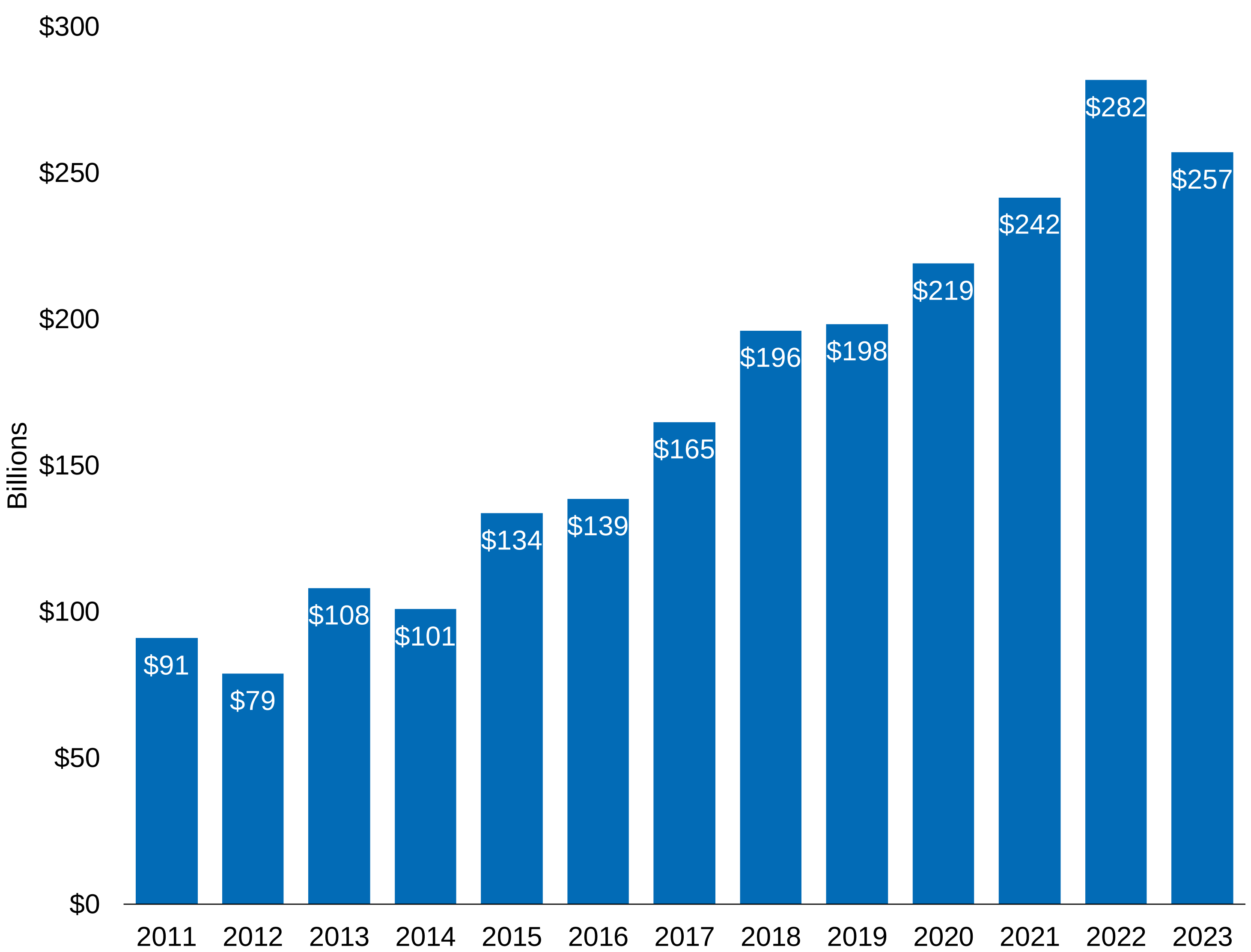


Source: Green Street, NCREIF, RCA, Trepp, MBA, Newmark Research as of 11/7/2023
*Loans with an estimated senior debt LTV of 80% or greater are potentially troubled. The loans are marked-to-market using an average of cumulative changes in the Dow Jones REIT sector price indices, REIT sector enterprise value indices and Green Street sector CPPI.

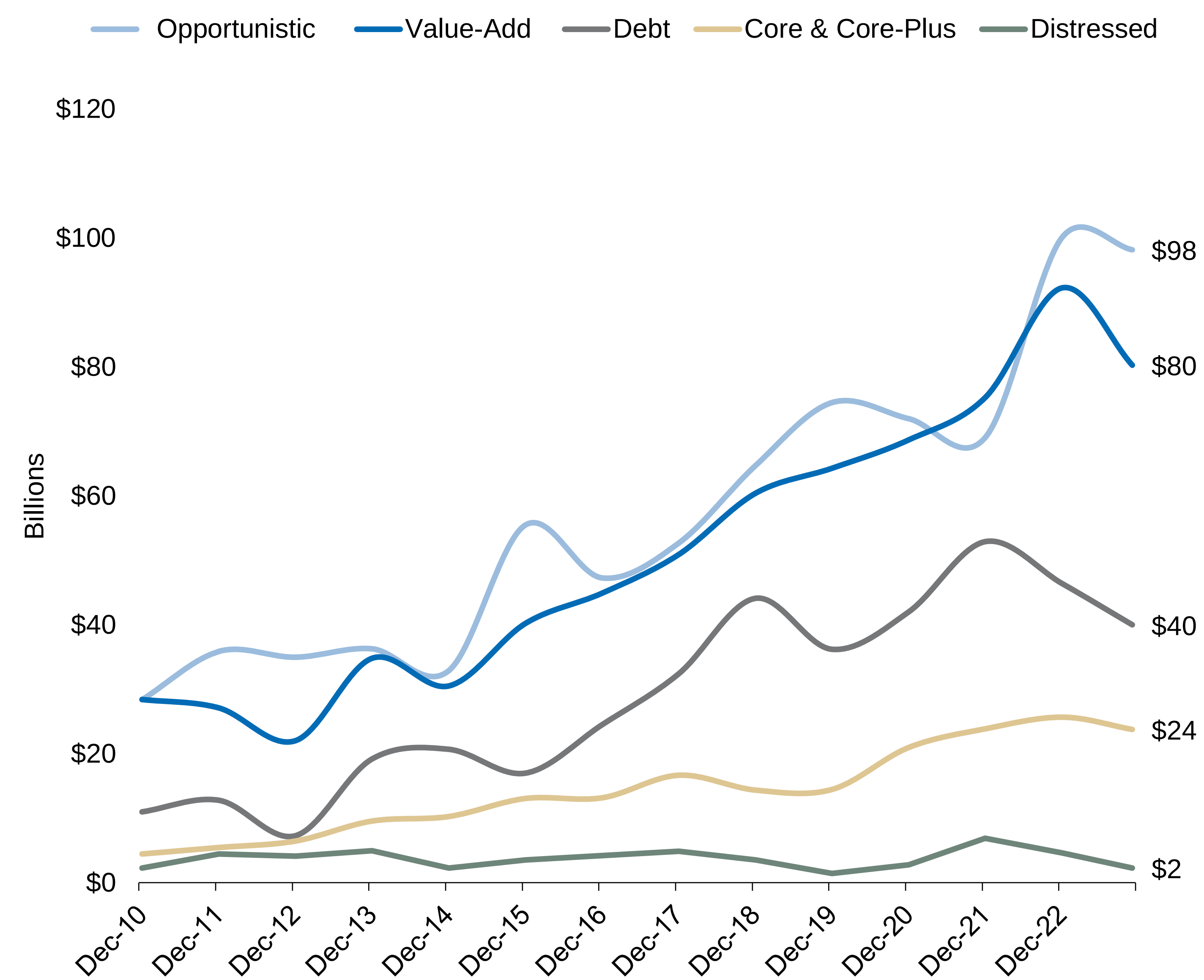
Private Equity Dry Powder Has Declined, But Still Elevated Overall

Dry powder at closed-end funds has declined 9% since the start of the year. However, this is mostly due to revisions to previous estimates rather than negative developments in Q3. The revised picture shows that debt fund dry powder continues to moderate while both value-add and opportunistic funds continue to have above trend levels of dry powder, despite a sharp decline for the former since year-end 2022.

Dry Powder – Closed-End Funds



Dry Powder by Strategy*

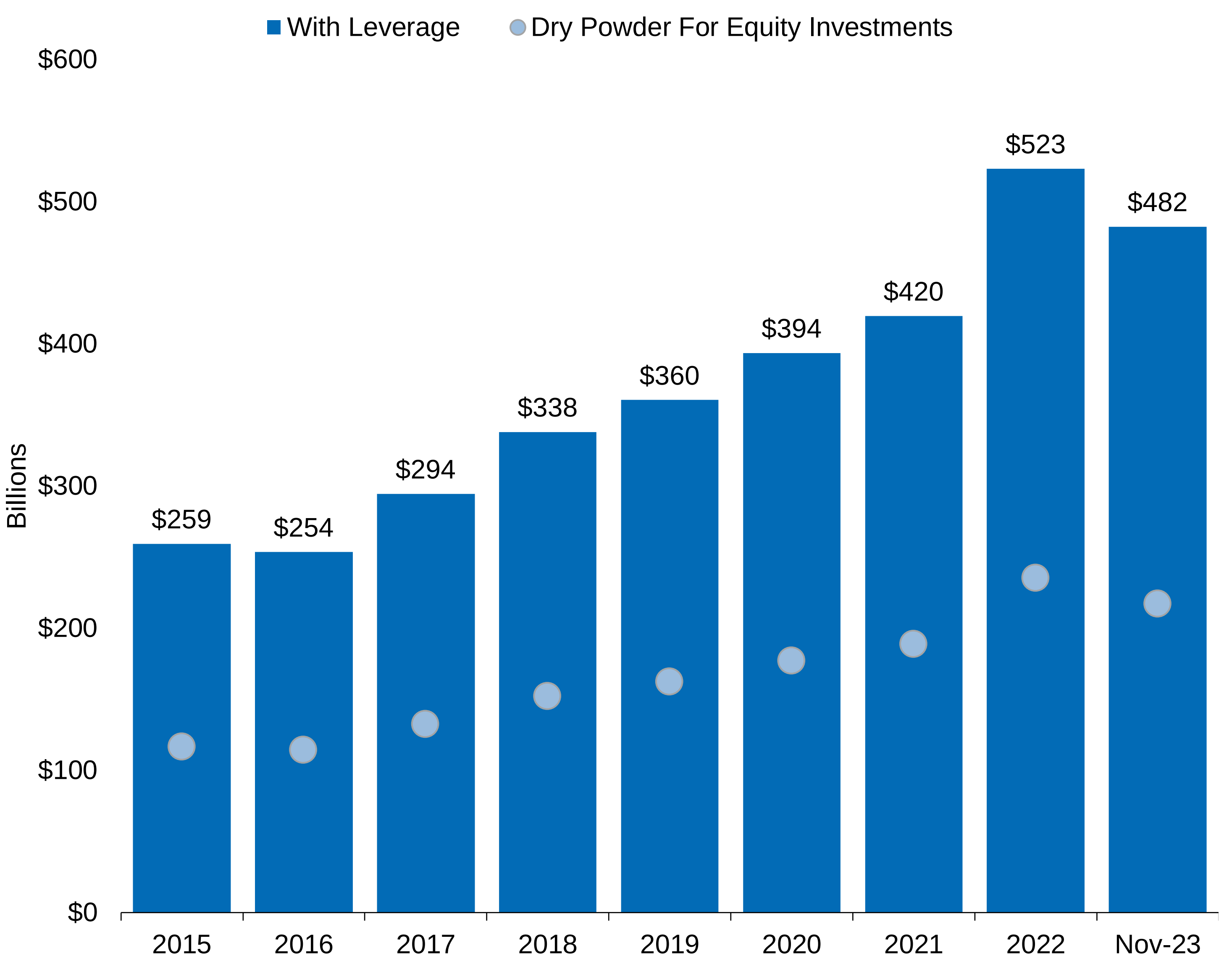


Source: Newmark Research, Preqin as of 11/8/2023
*Not shown: Fund of funds, co-investments, and secondaries strategies

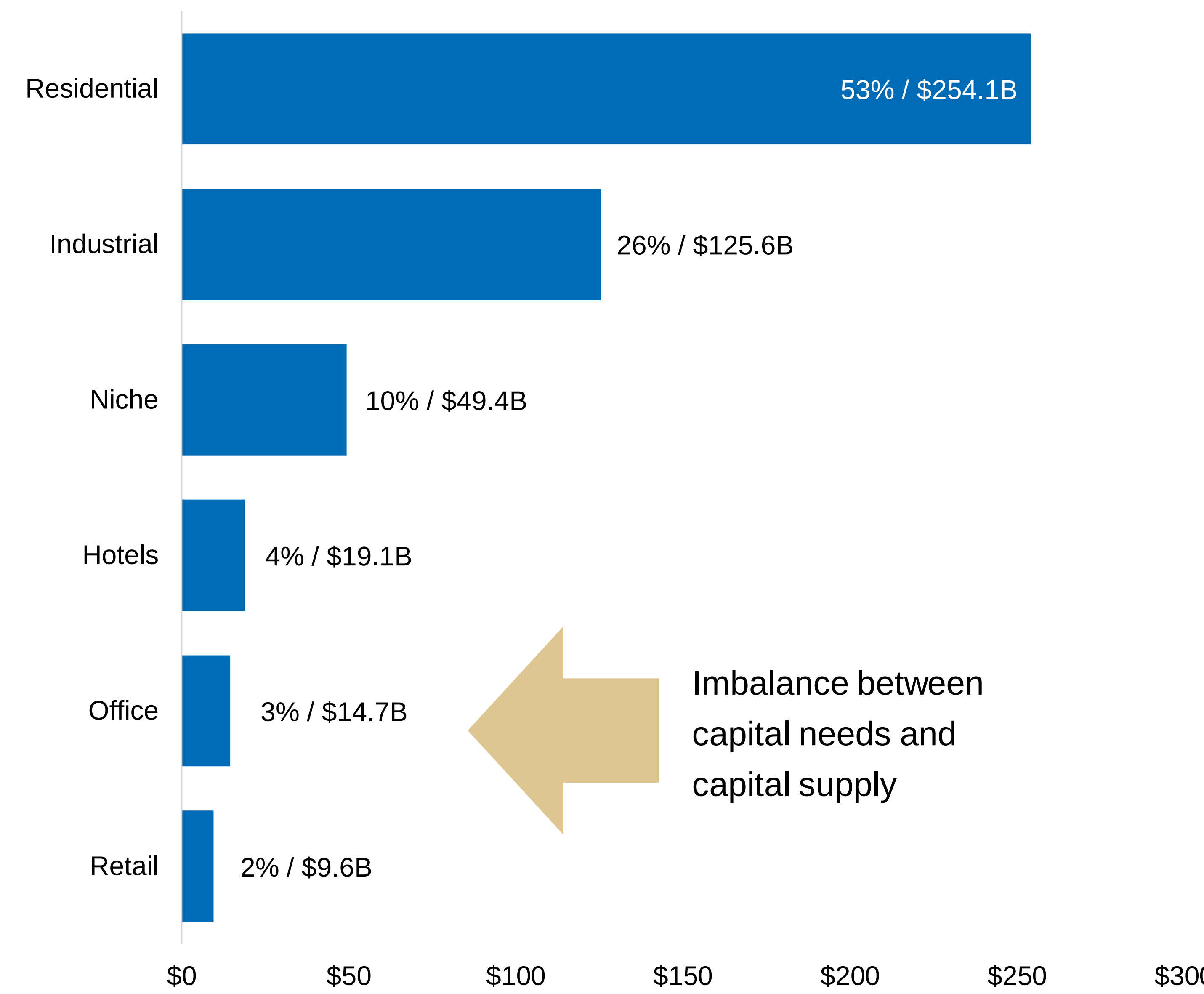
Ample Capital for Industrial Investment, Recapitalization

The $217 billion in dry powder raised for equity investments, not including dry powder raised for debt strategies, equates to a leveraged purchasing power of $482 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*



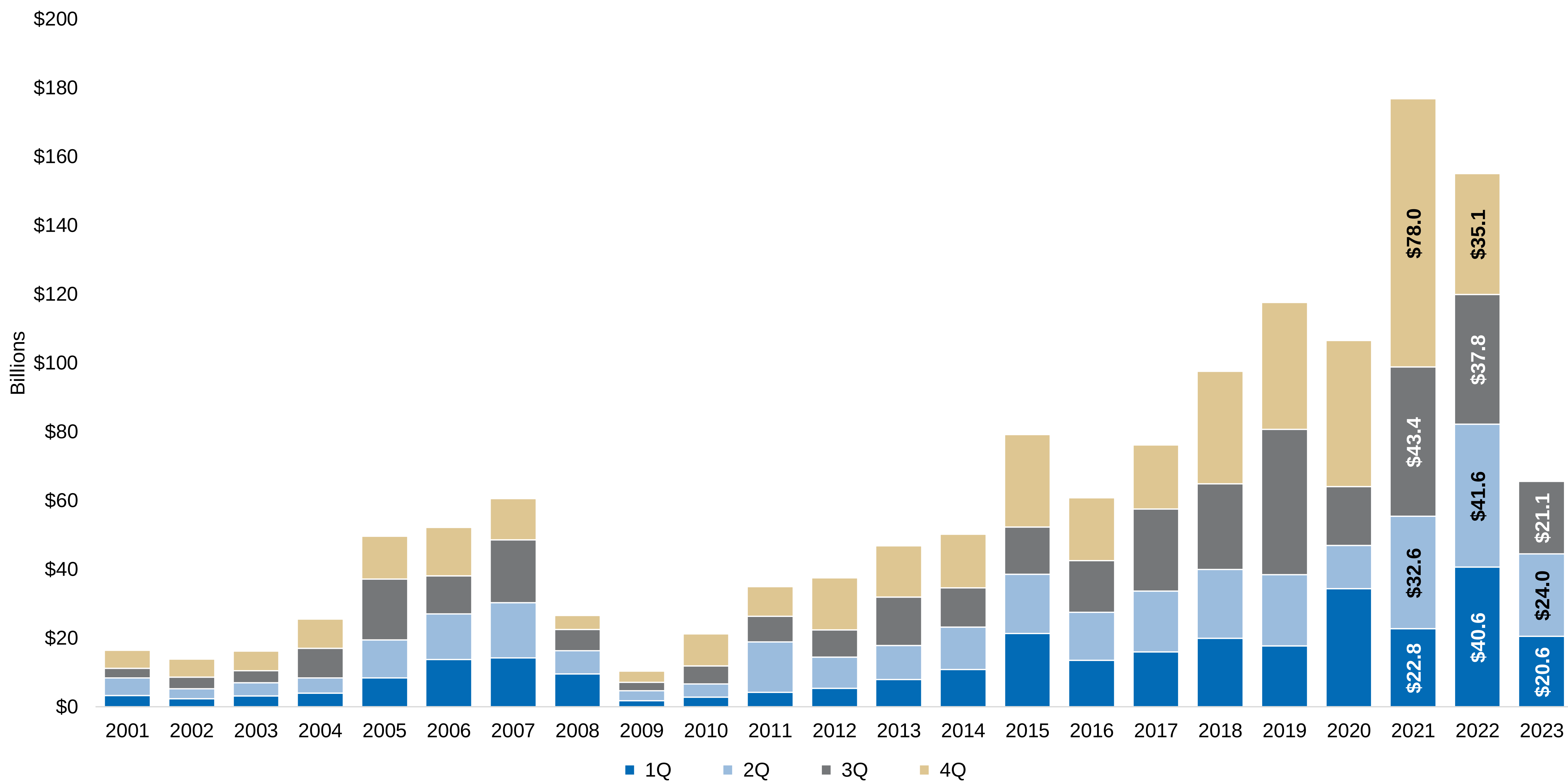
Source: Newmark Research, Preqin as of 11/8/2023

*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.

Annual Sales Volume Shaping Up to Be on Par With 2017-18 Levels

Third-quarter sales volume measured $21.1 billion, a 44% decrease year-over-year and the fifth consecutive quarter of significant annualized declines. Historically, fourth quarters have most often been the strongest quarters of any given year; an expected uplift in volume during the final quarter of 2023 will bring annual totals to 2017-2018 levels.

Investment Sales Volume

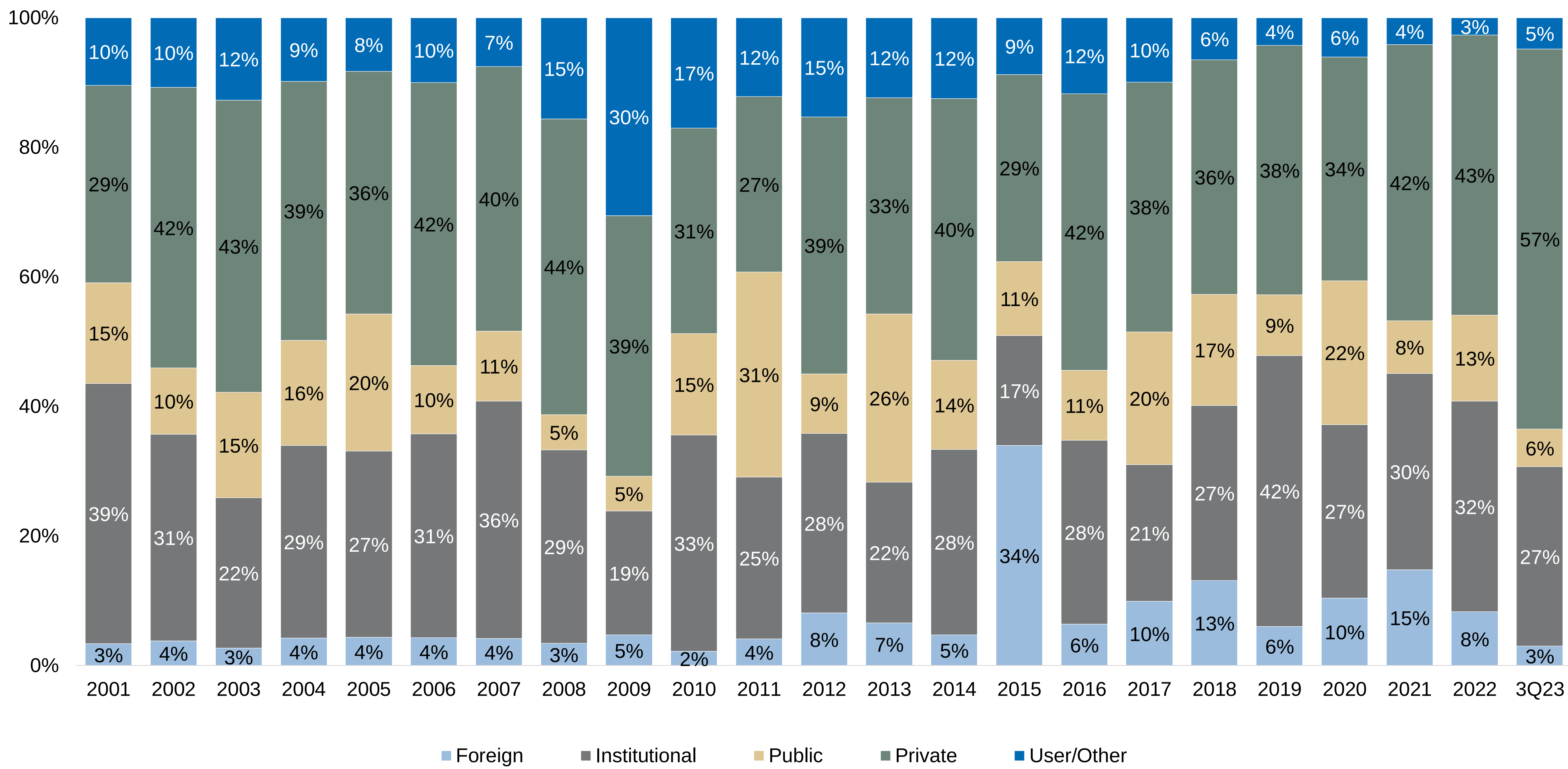


Source: Newmark Research, MSCI Real Capital Analytics

Private Buyers Accounting for Increasingly Larger Share of Volume

Across the ecosystem of investor profiles, only users acquired more in 3Q23 than in 3Q22, as attractive opportunities for site acquisitions increase. Private capital expanded market share the most, accounting for a record 57% of total acquisitions.

Composition of Industrial Buyers

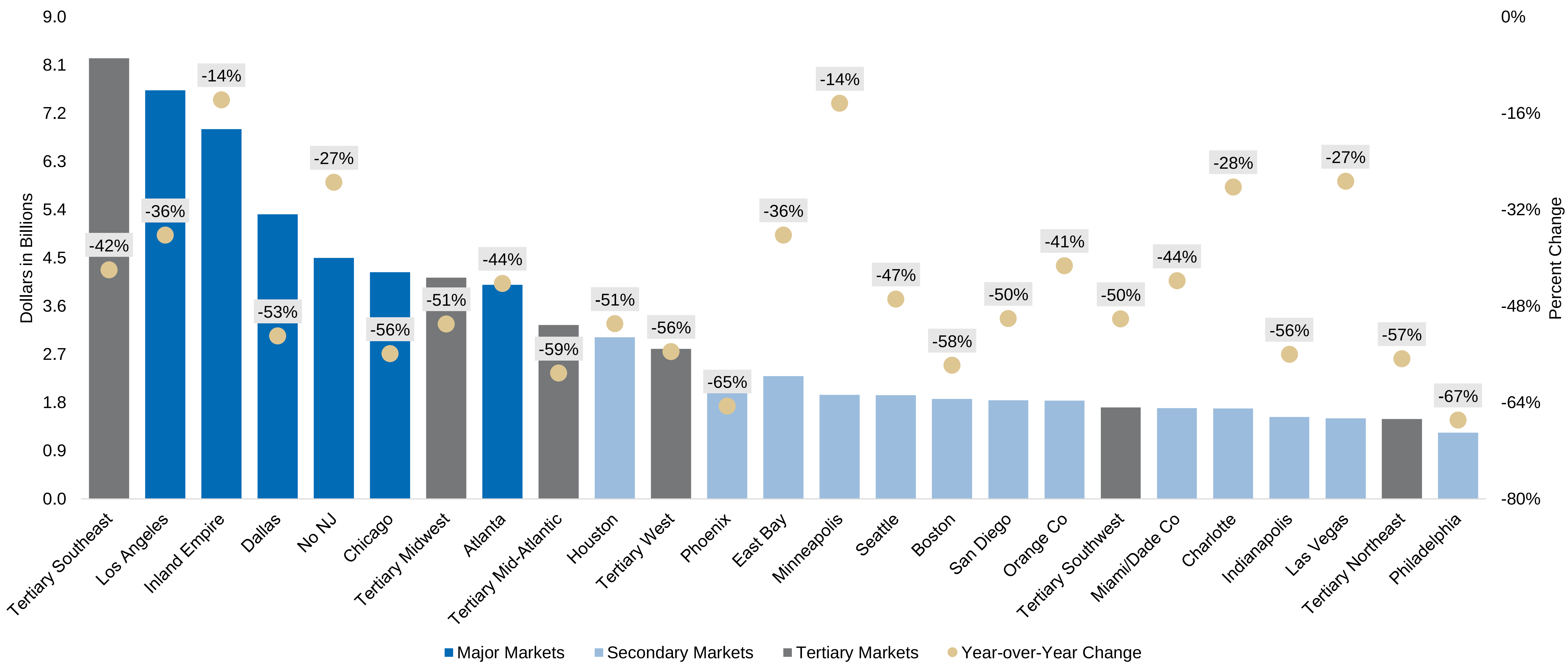


Source: Newmark Research, MSCI Real Capital Analytics

Volumes Down Universally; Primary Markets See Less Decline

None of the top 25 markets experienced positive sales volume growth year-over-year, with primary markets demonstrating the most resilience with an average 38% drop-off compared to secondary and tertiary markets experiencing an average 45% and 52% decline, respectively. With the significant amount of investment in mega manufacturing projects throughout the Midwest, Mid-Atlantic and Southeast most prominently, tertiary markets with less existing exposure to institutional ownership may draw increasing interest as projects kick off.

Top 25 Industrial Markets by 12-Month Rolling Sales Volume, 3Q23

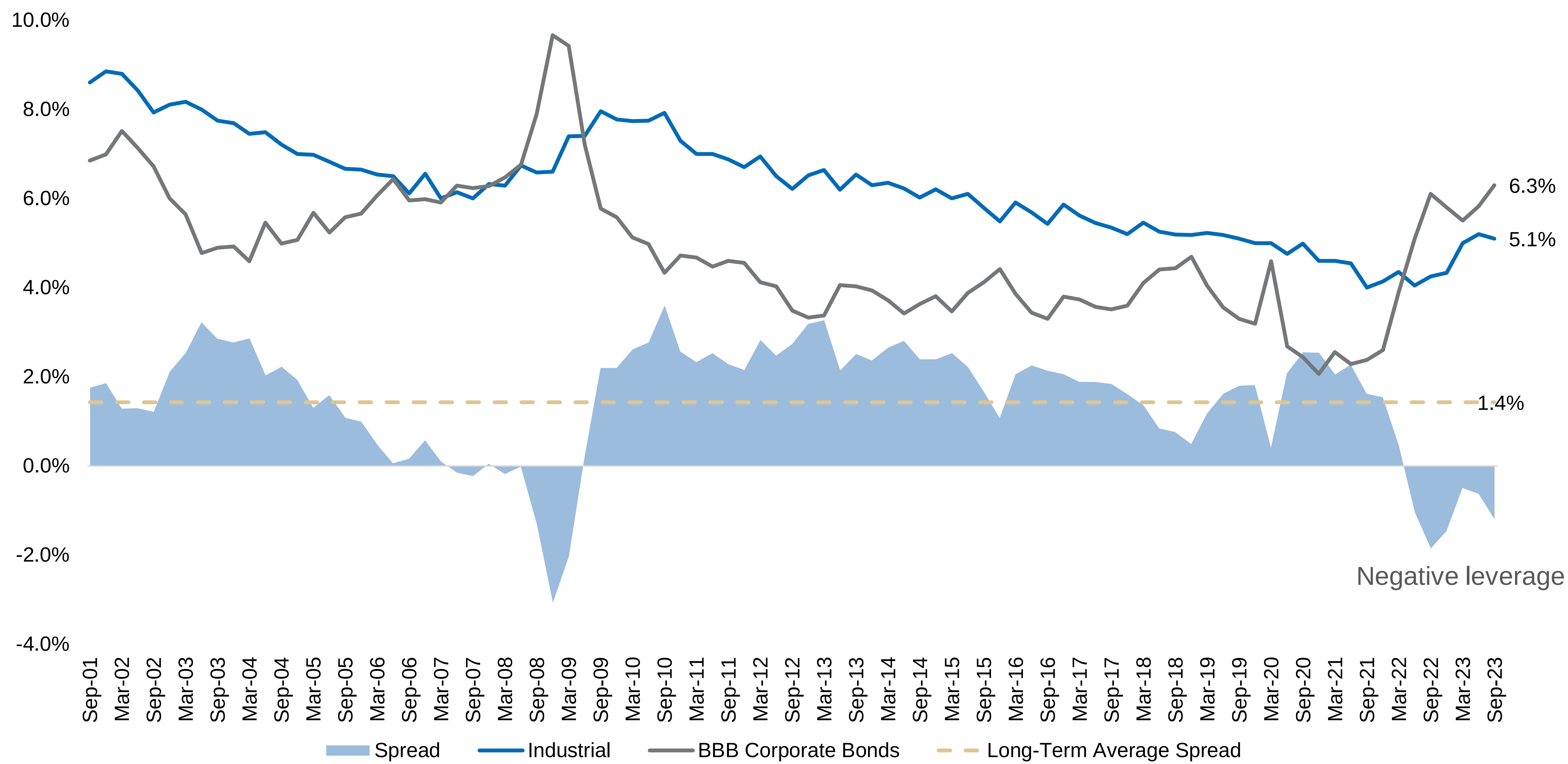


Source: Newmark Research, MSCI Real Capital Analytics

Cap Rate Optics At Odds with Cost of Debt

Industrial transaction cap rates have increased 80 basis points from the end of 2022. Further increases stalled in the third quarter even though the market is still far from equilibrium. The long-term average spread is 1.4% and it is -1.2% today. Cap rates can be misleading in an environment where persistent negative leverage is keeping buyer pools thin and primarily focused on a limited supply of properties. Further increases witnessed in REIT-implied cap rates during third quarter signal more adjustment in the private markets to come.

Top Quartile Transaction Cap Rate*

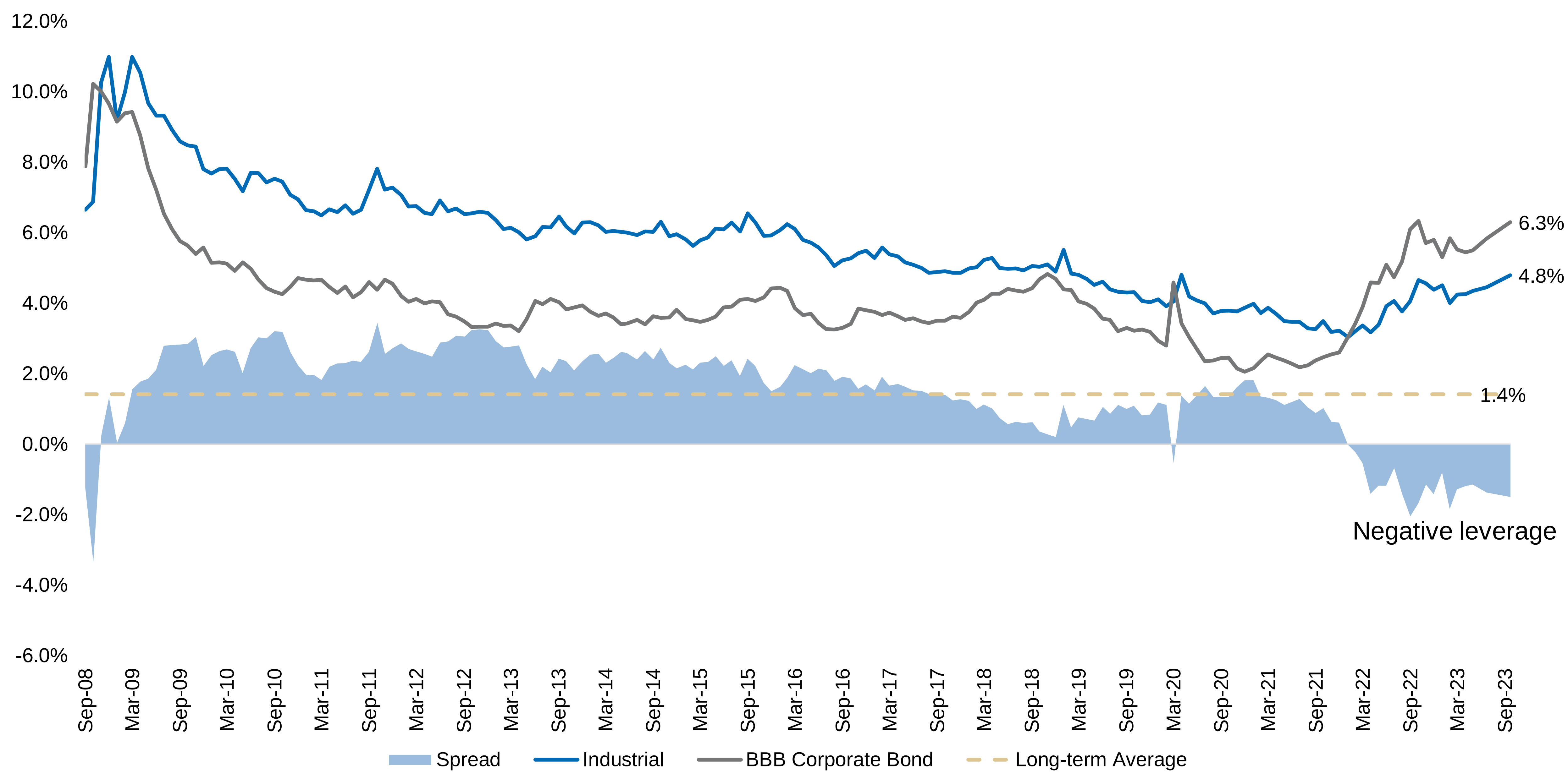


Source: Real Capital Analytics, Federal Reserve Bank of St. Louis, Moody's as of 11/7/2023
*Quarterly

Adjustment Process Continues in the Public Markets

Public and private markets alike have been in a state of negative leverage for over a year, with public markets quicker to react and range-bound longer. Buyers are tending to underwrite achieving positive leverage within two to three years, anticipating (hoping for) falling debt costs in the future. Uncertainty around the future cost of debt persists.

REIT-Implied Nominal Cap Rate

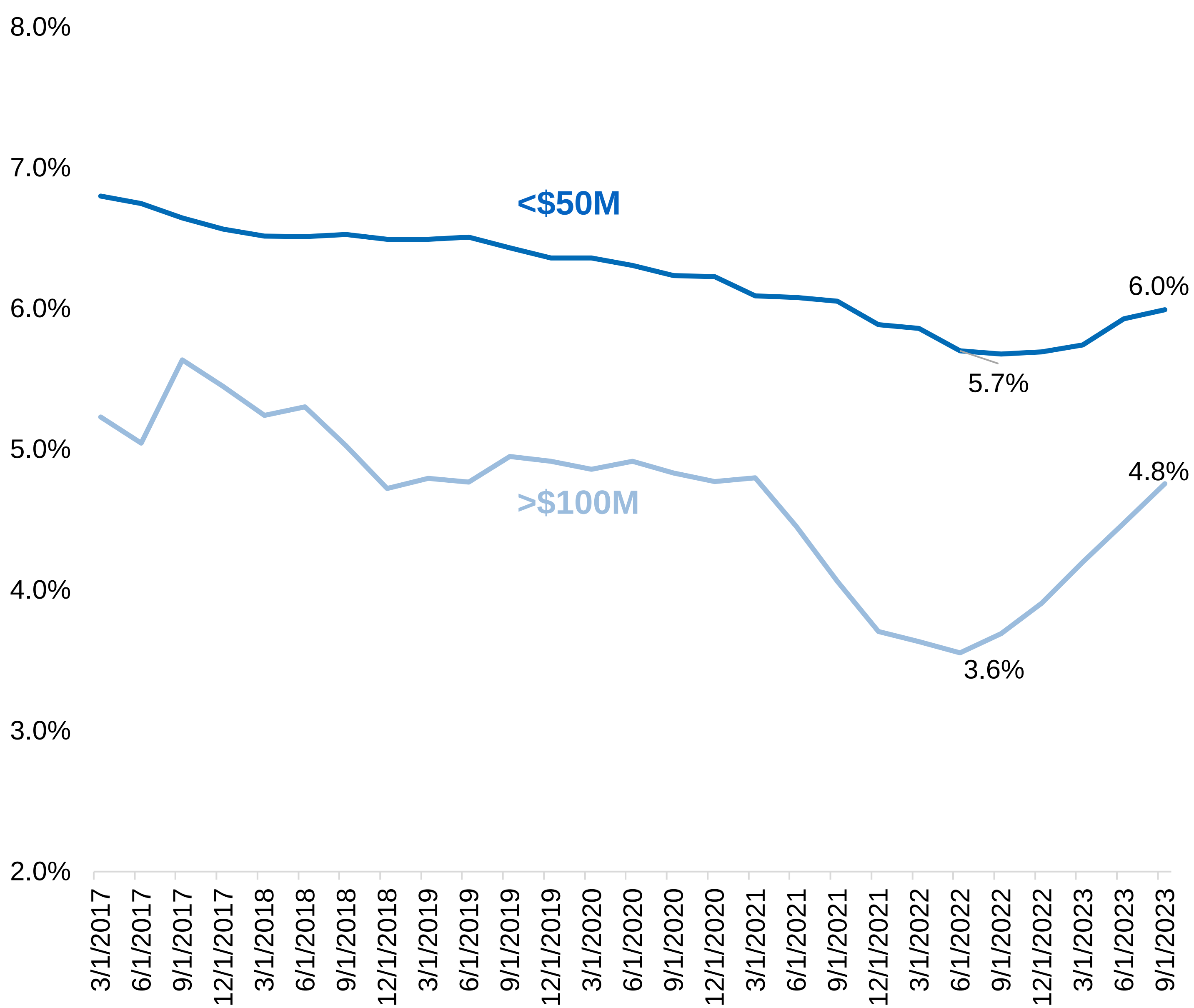


Source: Green Street, FRED, Nareit, Newmark Research as of 11/7/2023

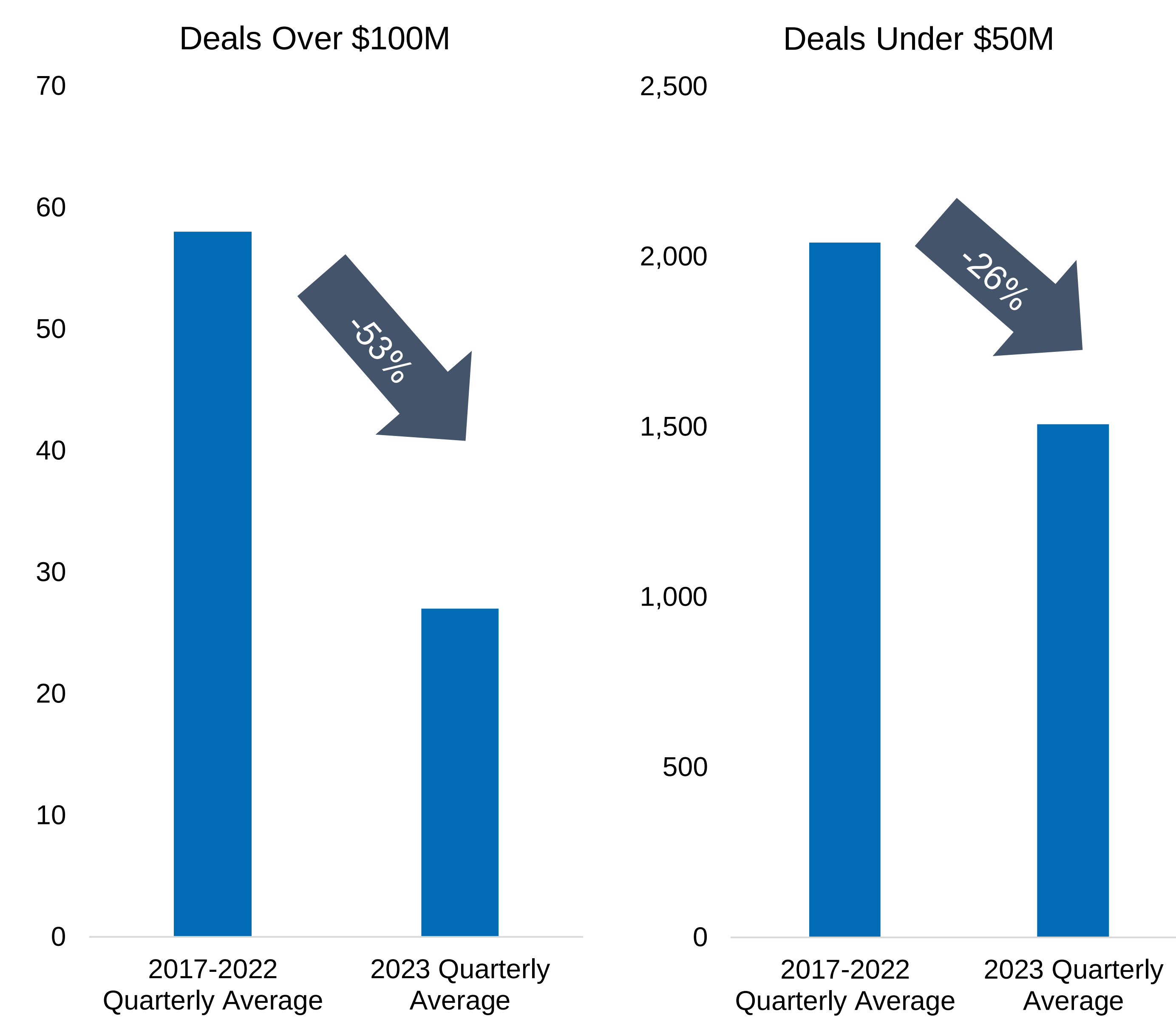
Bigger Isn't Necessarily Better – Larger Deals See Larger Drop-Off

Practically all industrial investment profiles are seeing less transactional activity now than in 2022 amid the prevailing high-interest-rate environment but deals amenable to all-cash transactions or easier financing conditions remain attractive. Transactions under $50M make up the largest portion of total capital markets activity and have seen markedly less of a decline in activity than deals over $100M. Larger deals have also seen the most significant reset in cap rates albeit with limited data points.

Quarterly Average Cap Rates by Deal Size



Number of Deals by Size, Historical and Current Quarterly Average

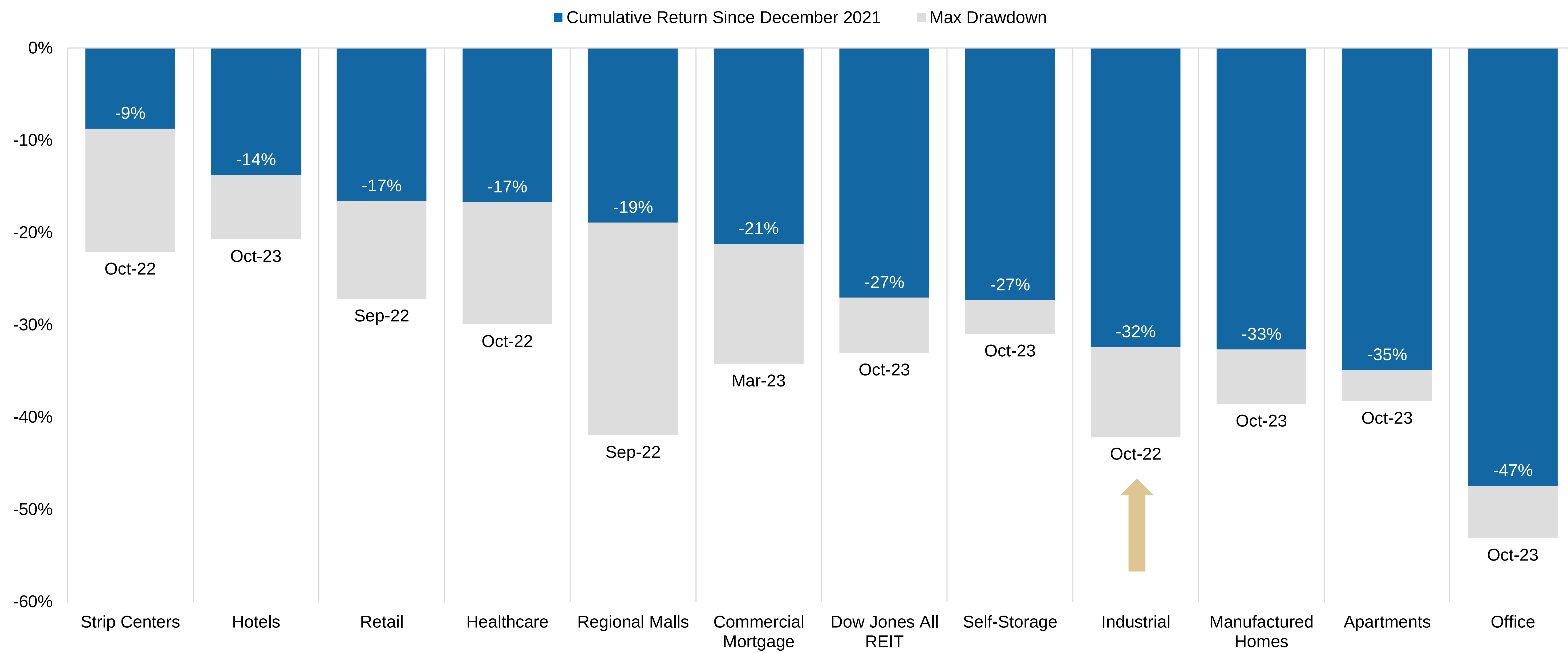


Source: Newmark Research, Real Capital Analytics. Excluding entity sales.

REITs Have Fallen across Sectors since the Start of the Hiking Cycle

REITs rebounded in the first half of 2023 but stumbled again the third quarter as most sectors set or retest post-2021 lows. On net, REITs have returned -2.7% in the year to date led by healthcare (+6.6%), commercial mortgage REITs (+4.7%) and hotels (+1.9%). Office and apartment REITs are both the worst performing sectors cumulatively but also set new record lows in October. Industrial REITs are flat year-to-date supported by continued cash flow growth. This, however, is set against unsustainable implied cap rates and AFFO yields.

Dow Jones REIT Index Total Returns

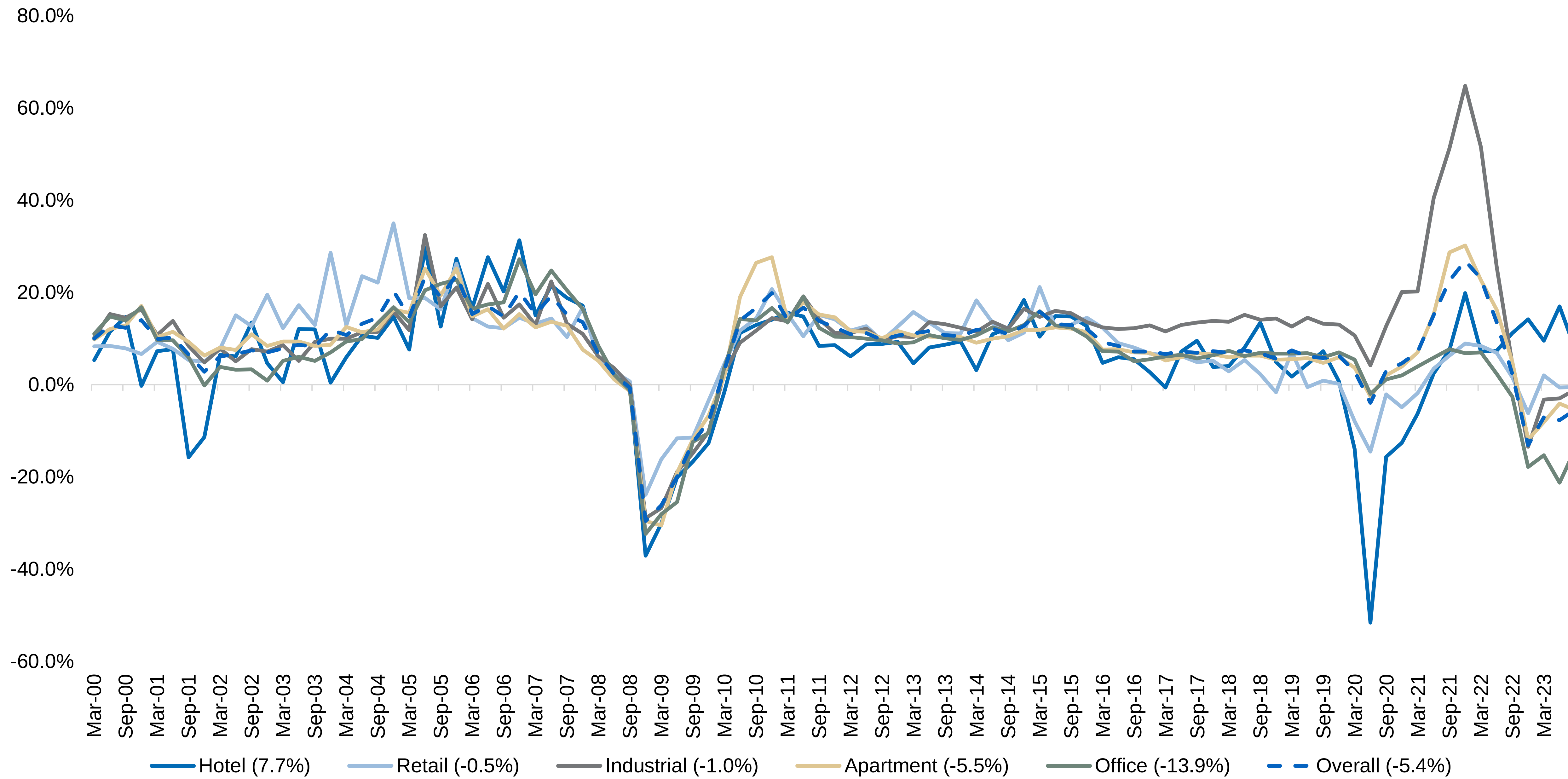


Source: Dow Jones, Moody's, Newmark Research as of 11/8/2023

Private Market Core Properties Returned -5.4% Annualized in 3Q23

All major property types (with the notable exception of hotels) generated negative returns in the third quarter. Office continues to be a clear outlier to the downside as returns continued to decelerate and seem to be on a path to match the depths of the GFC. Apartment and industrial returns were negative though far more modestly. Retail decelerated into negative territory but continues to outperform. Keep in mind that appraisal-based returns are especially unreliable in illiquid periods like the current one.

NCREIF National Property Index Quarterly Annualized Total Return

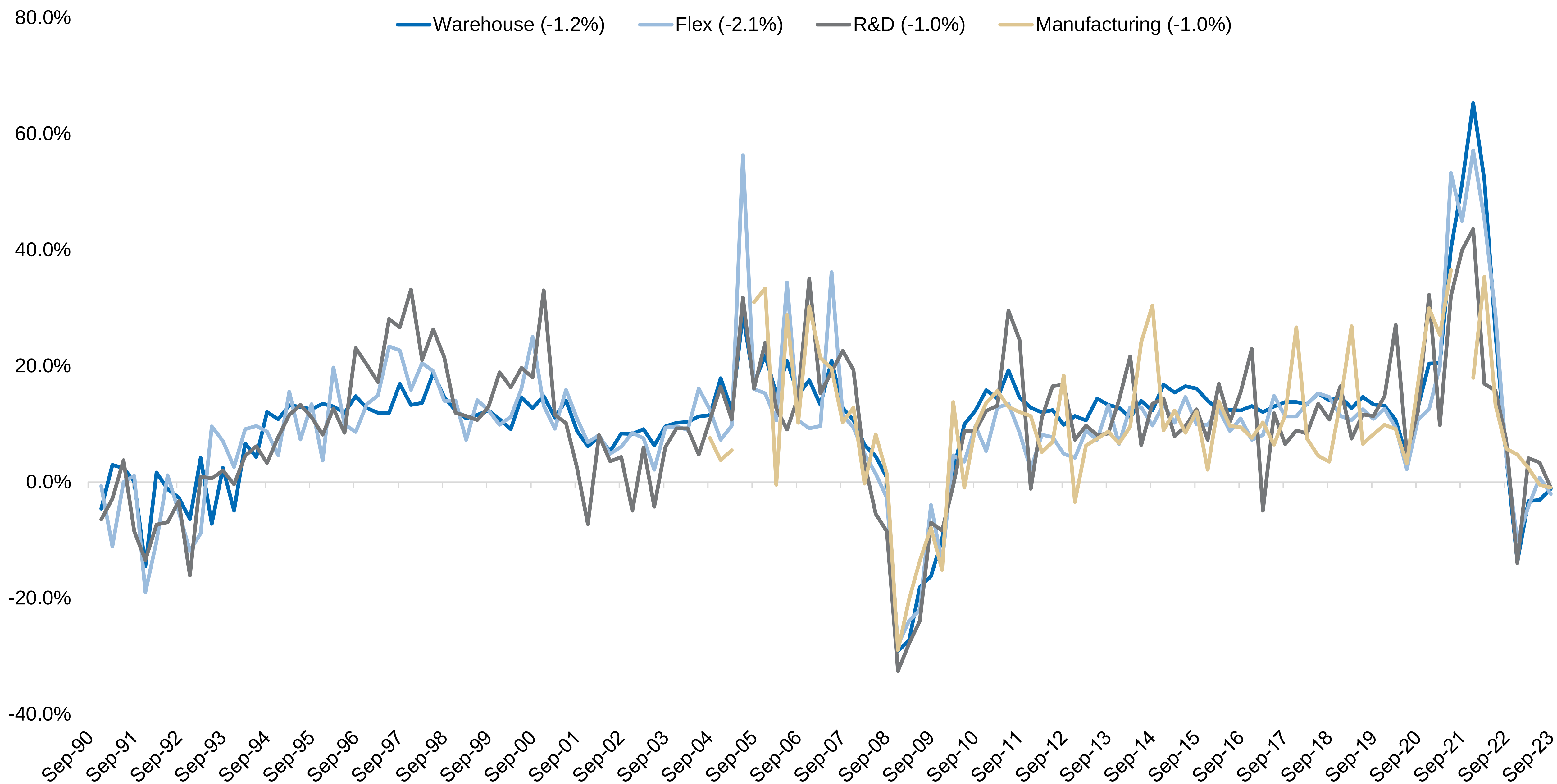


Source: NCREIF, Newmark Research as of 11/8/2023

NCREIF Industrial Returns Decelerated in Q3, Led by R&D and Flex

Warehouse – by far the largest segment – returns remained negative, contracting at a 1.2% annualized pace. This represents a modest acceleration from the prior quarter (-3.1%) but significantly better than the sharp contraction in Q4 2022 (-13.7% annualized). Nonetheless, warehouse properties have returned 80% cumulatively since 1Q20 according to NCREIF.

NCREIF Quarterly Annualized Total Return

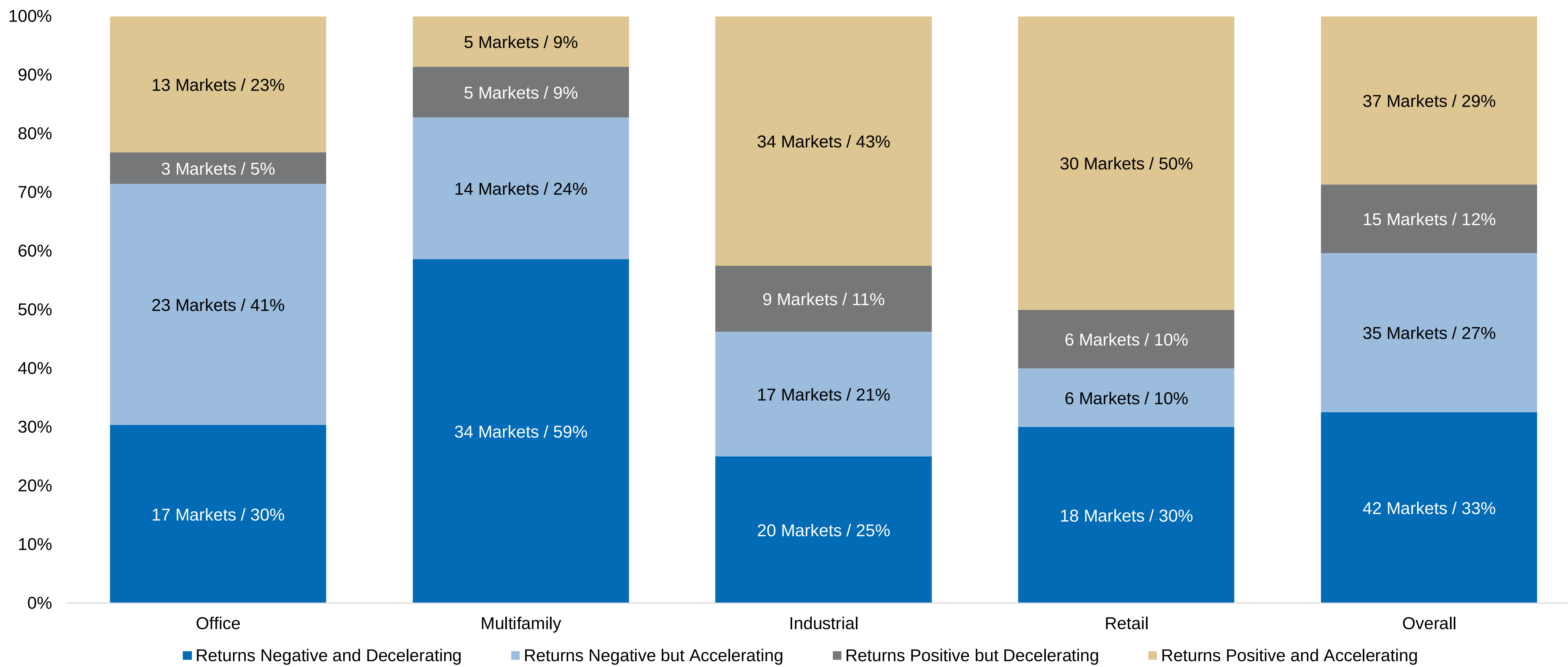


Source: NCREIF, Newmark Research as of 11/8/2023

NCREIF Returns Negative in 60% of Markets, but Variation by Property Type

Returns were negative across large majorities of office and multifamily metro markets, continuing the pattern from last quarter. Last quarter, most negative return office markets were decelerating while the converse was true for negative return multifamily markets. In 3Q23, this is reversed. Industrial and retail property returns were positive in most markets in the third quarter, and among these, mostly accelerating. The share of positive/accelerating increased for both sectors but most pronouncedly for retail, going from 26% in Q2 to 50% in Q3.

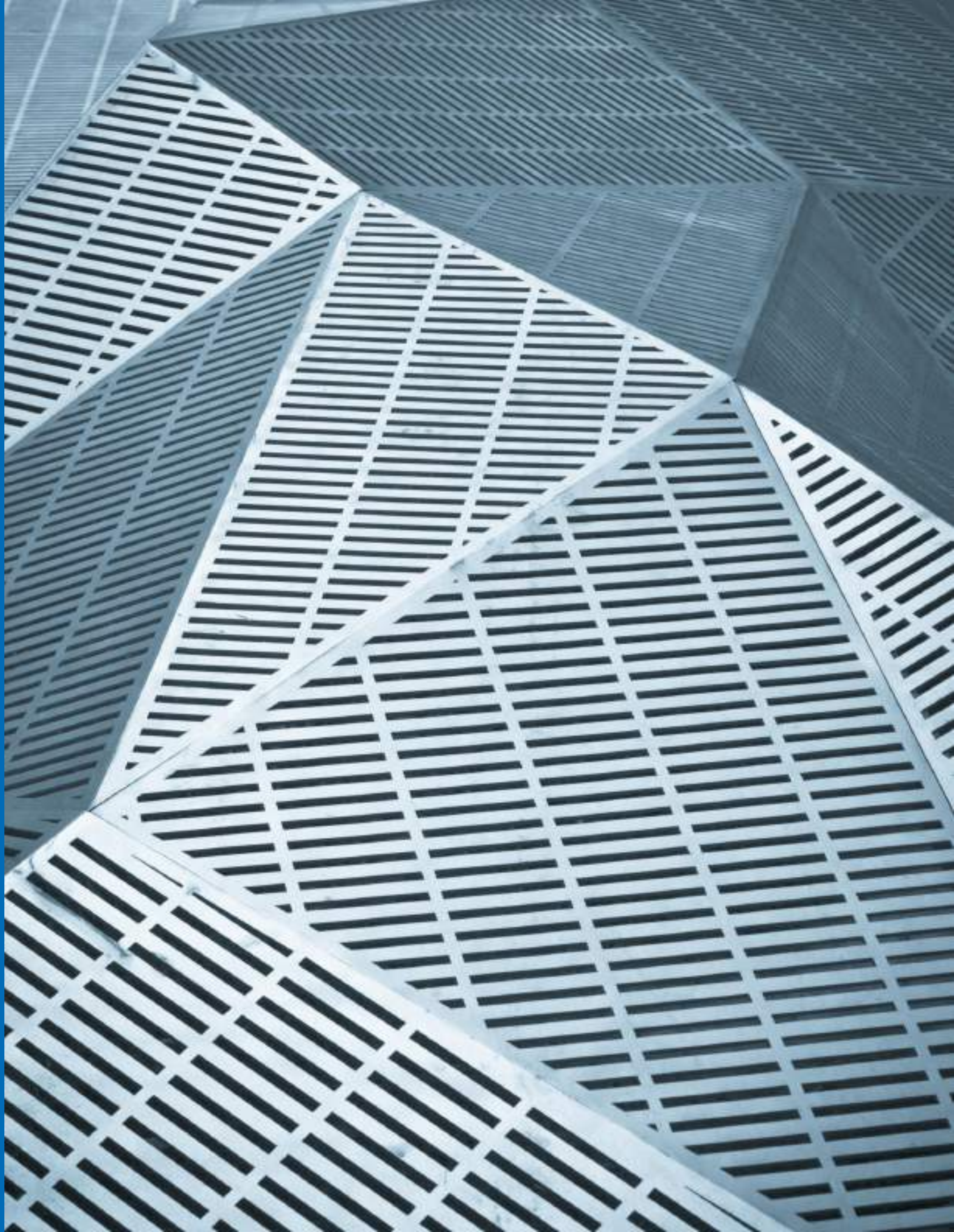
Breakdown of NCREIF CBSA Total Returns: 3Q 2023



Source: NCREIF, Newmark Research as of 11/8/2023

3Q23

Appendix: Market Statistics



National Industrial Market Statistics

Third Quarter 2023

Market Statistics

	Total Inventory (SF)	SF Under Construction	SF Absorbed This Quarter	SF Absorbed Year-to-Date	Vacancy Rate	Average Asking Rent (Price/SF)
National	**16,957,741,197**	**537,040,733**	**46,811,447**	**175,334,422**	**5.1%**	**$11.66**
Atlanta	745,344,424	29,094,326	-746,561	2,625,942	5.7%	$6.64
Austin	126,659,837	17,094,825	858,845	3,213,249	8.2%	$12.78
Baltimore	264,135,824	1,169,119	-131,403	434,829	5.8%	$8.19
Boston	215,969,945	5,624,948	100,495	-1,255,887	5.5%	$15.69
Broward County, FL	116,077,879	1,380,013	220,850	-21,232	4.6%	$13.53
Charleston, SC	96,926,906	10,453,635	596,233	1,868,538	6.2%	$7.81
Charlotte	438,099,143	17,518,163	1,781,966	6,769,910	5.1%	$7.19
Chicago	1,214,035,678	25,666,832	4,409,612	15,859,390	4.3%	$6.27
Cincinnati	309,873,131	6,814,300	-510,125	658,004	5.1%	$6.03
Cleveland	292,477,791	2,920,777	-51,610	282,253	4.6%	$5.65
Columbia, SC	67,670,719	1,269,860	754,810	772,058	3.9%	$5.07
Columbus	281,985,213	6,647,212	2,114,431	5,304,182	5.7%	$5.85
Dallas	1,075,586,323	50,810,306	6,636,261	25,069,614	7.9%	$8.99
Denver	218,308,066	8,852,196	603,997	1,813,278	8.4%	$11.10
Detroit	429,800,913	5,253,206	3,105,880	6,026,660	3.2%	$7.75
Greenville, SC	253,930,510	8,343,016	2,610,931	6,417,301	7.4%	$5.49
Houston	739,383,691	21,997,374	6,358,695	15,603,200	6.5%	$9.19
Indianapolis	416,846,515	11,964,831	245,421	9,014,345	7.6%	$6.81
Inland Empire, CA	699,937,891	39,814,825	576,361	926,249	3.9%	$18.04

Note: Asking rents are quoted on a NNN basis. The average asking rent is the weighted average across warehouse, manufacturing, flex, and general industrial properties. Older, available buildings often cite asking rents, while newer facilities often withhold rent values. Based on this, today's asking rent averages may be materially understated.

National Industrial Market Statistics

Third Quarter 2023

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Jacksonville	147,413,028	4,924,002	1,459,414	1,690,051	4.1%	$9.16
Kansas City	330,434,448	8,577,586	1,515,539	3,861,802	4.9%	$5.77
Las Vegas	151,960,806	17,814,826	983,696	4,353,417	2.8%	$14.49
Long Island	167,940,801	1,525,714	-79,879	-188,460	4.5%	$17.59
Los Angeles	1,059,126,699	8,673,572	-3,171,236	-7,892,618	2.1%	$21.13
Memphis	319,833,723	1,169,286	787,104	1,761,786	7.1%	$4.61
Miami	223,884,987	6,685,884	-305,377	1,997,971	3.4%	$14.81
Milwaukee	282,999,229	3,172,102	516,727	1,449,229	3.4%	$5.01
Minneapolis	422,631,904	8,841,615	394,254	2,217,464	3.8%	$7.39
Nashville	280,980,152	10,319,189	936,716	1,978,255	3.9%	$9.08
New Jersey Northern	691,058,354	11,050,740	1,847,361	4,655,244	3.5%	$15.60
Oakland/East Bay	261,270,622	4,508,588	-1,257,553	-462,759	5.2%	$17.40
Orange County, CA	266,866,144	1,741,459	-261,919	-1,889,722	2.8%	$19.73
Orlando	176,938,169	8,892,739	838,760	3,659,447	4.4%	$9.66
Palm Beach	46,757,611	2,546,267	69,582	381,540	6.2%	$12.80
Penn. I-81/78 Corridor	464,411,419	10,785,062	1,989,207	11,198,900	6.5%	$9.47
Philadelphia	522,828,220	16,408,023	505,795	2,434,489	5.5%	$11.40
Phoenix	375,052,122	44,204,940	2,516,494	14,786,509	6.2%	$12.62
Pittsburgh	153,971,822	928,556	28,998	541,609	6.7%	$5.34

Note: Asking rents are quoted on a NNN basis. The average asking rent is the weighted average across warehouse, manufacturing, flex, and general industrial properties. Older, available buildings often cite asking rents, while newer facilities often withhold rent values. Based on this, today's asking rent averages may be materially understated.

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Portland	206,627,574	6,511,317	19,747	644,038	3.0%	$10.64
Raleigh/Durham	141,421,775	8,627,891	432,823	2,428,204	4.9%	$11.38
Sacramento	170,576,228	3,435,720	179,449	987,830	3.4%	$10.29
Salt Lake City	291,756,386	12,678,835	1,877,932	4,868,708	4.1%	$10.23
San Antonio	157,043,810	6,810,319	527,399	1,652,959	5.9%	$8.55
San Diego	167,634,400	2,404,565	-697,915	-1,613,220	4.5%	$16.71
Savannah, GA	118,045,527	16,430,677	3,021,536	7,606,572	7.9%	$7.13
Seattle	320,164,389	8,317,707	2,086,043	2,352,304	4.4%	$12.68
Silicon Valley	139,565,828	2,345,688	-424,159	-851,961	8.3%	$28.62
St. Louis	291,784,342	2,891,980	-180,226	413,474	4.9%	$6.14
Tampa/St. Petersburg	249,820,501	6,255,558	435,041	4,010,200	5.8%	$7.74
Washington, DC	353,889,778	14,870,562	685,005	4,919,277	6.1%	$13.21

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