



# MULTIFAMILY NATIONAL OUTLOOK

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SPRING 2024

# PRESENTERS

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Director of Research,  
Yardi Matrix



# AGENDA

- U.S. Economy, Inflation, Interest Rates
- Labor Markets & Demographics
- Affordability
- Multifamily Fundamentals
- Forecasts: Rent, Occupancy & Supply
- Potential Supply-Driven Distress Markets
- Not covered today, see previous work:  
Single-Family Rentals in Build-to-Rent Communities

## P R E S E N T E R S

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# OPENING REMARKS

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# Yardi Matrix House View – May 2024

## MACROECONOMIC UPDATE

- U.S. economic growth is strong, with 4.9% GDP growth in 3Q23, 3.4% in 4Q23 and 1.6% for 1Q24;
- The Fed has paused its interest rate hike campaign, having kept rates steady at the December - April meetings
  - Interest rate cuts are anticipated now not until EOY '24
- Inflationary pressures have cooled, and will continue to, but risk of re-acceleration is non-trivial; March inflation exceeded expectations, but April jobs report at 175,000+ indicates deceleration
  - De-globalization continues, putting mild upward pressure back on inflation
- The labor market is tight due to an aging population, with weaker demand at the top end, and more supply at the bottom
- 2023 population increase provides a temporary boost to population growth & labor supply; therefore, lessening wage pressures, but unlikely to change trajectory of slowing population growth in the long term; absent a fundamental change to the public policy consensus
- No consensus on immigration policy as 5-8 MM illegal immigrants enter the labor market
- U.S. economy is strong but slowing; the yield curve (10YR - 3MTH) is inverted with expected slower growth and a mild recession likely sometime in early-mid 2025

# Yardi Matrix House View – May 2024

## MULTIFAMILY UPDATE

- The concepts of affordable housing are bleeding into conventional housing, as public policy attempts to deal with rising housing costs
- The multifamily market continues to perform relatively well, despite decelerating rent growth
- We continue to see a market rotation occurring:
  - Sun Belt metros are decelerating at the upper end, driven by heavy supply additions
  - Midwest, Northeast, Small Southern and some Mountain metros are outperforming
- The market rotation is occurring due to **affordability** in the wake of rapid rent increases and **slower domestic migration**
- Construction financing is in short supply, and deliveries will likely be reduced in 2026 through 2029
- The supply shortage of U.S. housing is likely to last 5-10 years, supporting continued healthy rent growth and capital appreciation
- The bid/ask spread for acquisitions remains very wide, with initial pre-distress and distress emerging
- Transactions have, and will, continue to slow until inflation is deemed under control and interest rates come down, which we think happens over the course of 2025

# U.S. ECONOMY, INFLATION & INTEREST RATES

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# Forecasts for Real GDP Project a Mild Recession in Early 2025

## Evercore ISI / Yardi Matrix Economic Forecasts

	2021	2022	2023 Q/Q	2024 Forecast Q/Q A.R.
<b>Real GDP</b>	5.5%	2.9%	Q1: 2.2% Q2: 2.1% Q3: 4.9% Q4: 3.2%	Q1: 1.6%A Q2: 2.0% Q3: 1.5% Q4: 1.0%
<b>Nominal GDP</b>	10.7%	9.2%	Q1: 6.3% Q2: 3.8% Q3: 8.5% Q4: 5.1%	Q1: 4.2%A Q2: 4.5% Q3: 4.0% Q4: 3.0%
<b>Inflation (GDP Deflator)</b>	5.9%	6.3%	Q1: 3.9% Q2: 1.7% Q3: 3.6% Q4: 1.9%	Q1: 2.6%A Q2: 2.5% Q3: 2.5% Q4: 2.0%

## Evercore ISI / Yardi Matrix Economic Forecasts

	2021	2022	2023 Q/Q	2024 Forecast Q/Q A.R.
<b>Unemployment Rate</b>	3.9%	3.5%	Q1: 3.5% Q2: 3.6% Q3: 3.8% Q4: 3.8%	Q1: 3.8% Q2: 3.9% Q3: 4.0% Q4: 4.0%
<b>Bond Yield*</b>	1.5%	3.6%	Q1: 3.9% Q2: 3.7% Q3: 4.6% Q4: 3.9%	Q1: 4.0% Q2: 4.5% Q3: 4.0% Q4: 4.0%
<b>Fed Funds*</b>	0.1%	4.1%	Q1: 5.0% Q2: 5.3% Q3: 5.5% Q4: 5.5%	Q1: 5.5% Q2: 5.5% Q3: 5.5% Q4: 5.0%

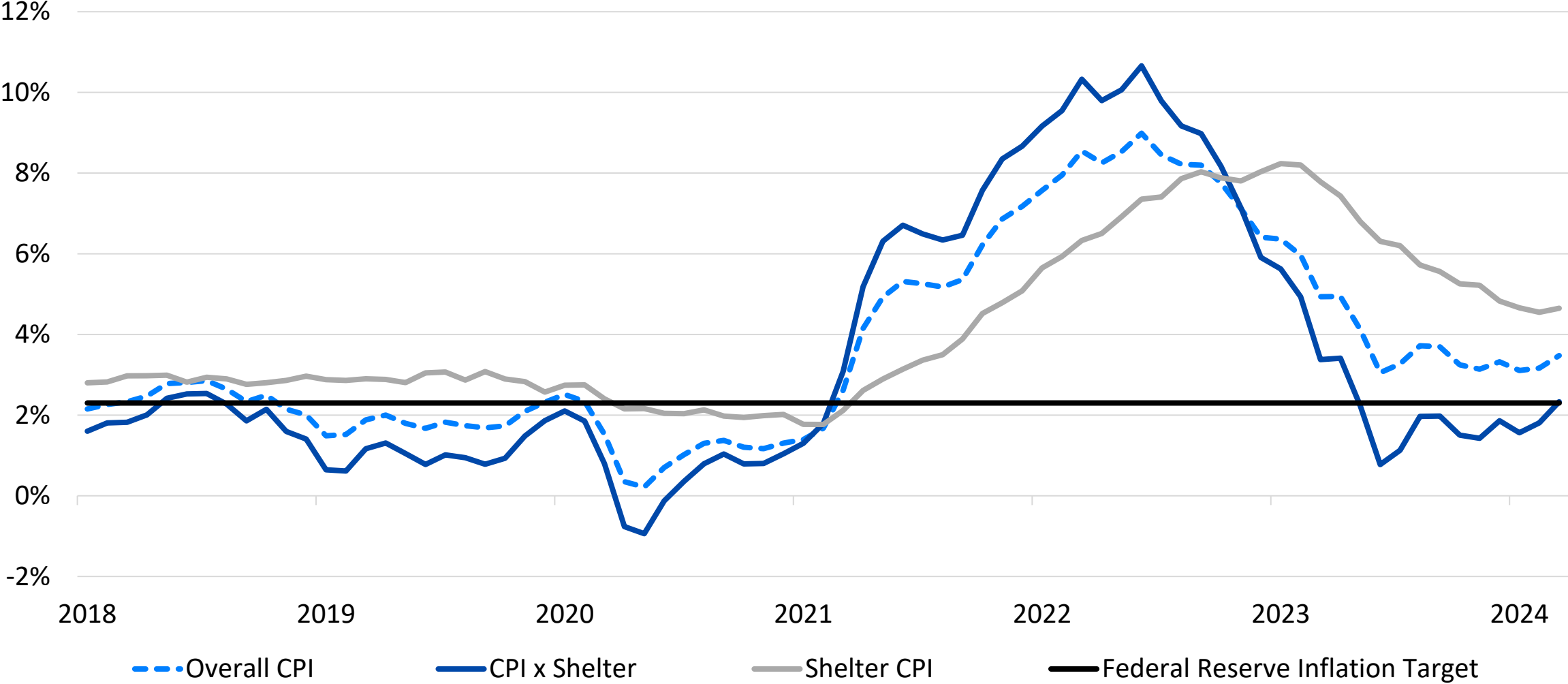
\*End of quarter. Historical Bond Yield data shown as long-term government bond yields: 10-year: main (including benchmark) for United States, not seasonally adjusted

Source: Yardi Matrix; Evercore ISI, Morning Economic Report; Federal Reserve Bank of St. Louis

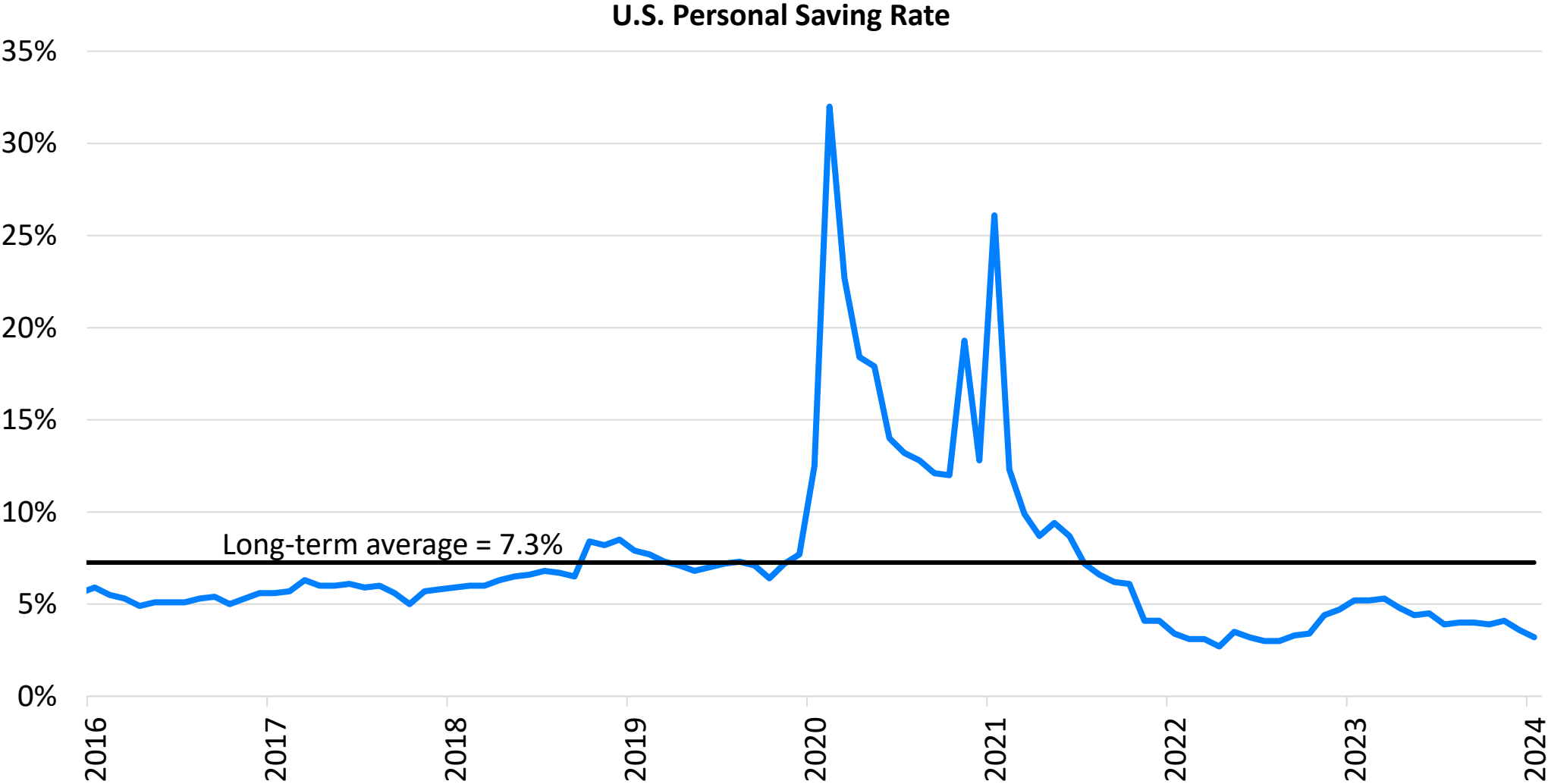


# Inflation Is Coming Closer To Meeting The Federal Reserve's Target

## U.S. Consumer Price Inflation, YOY % Change

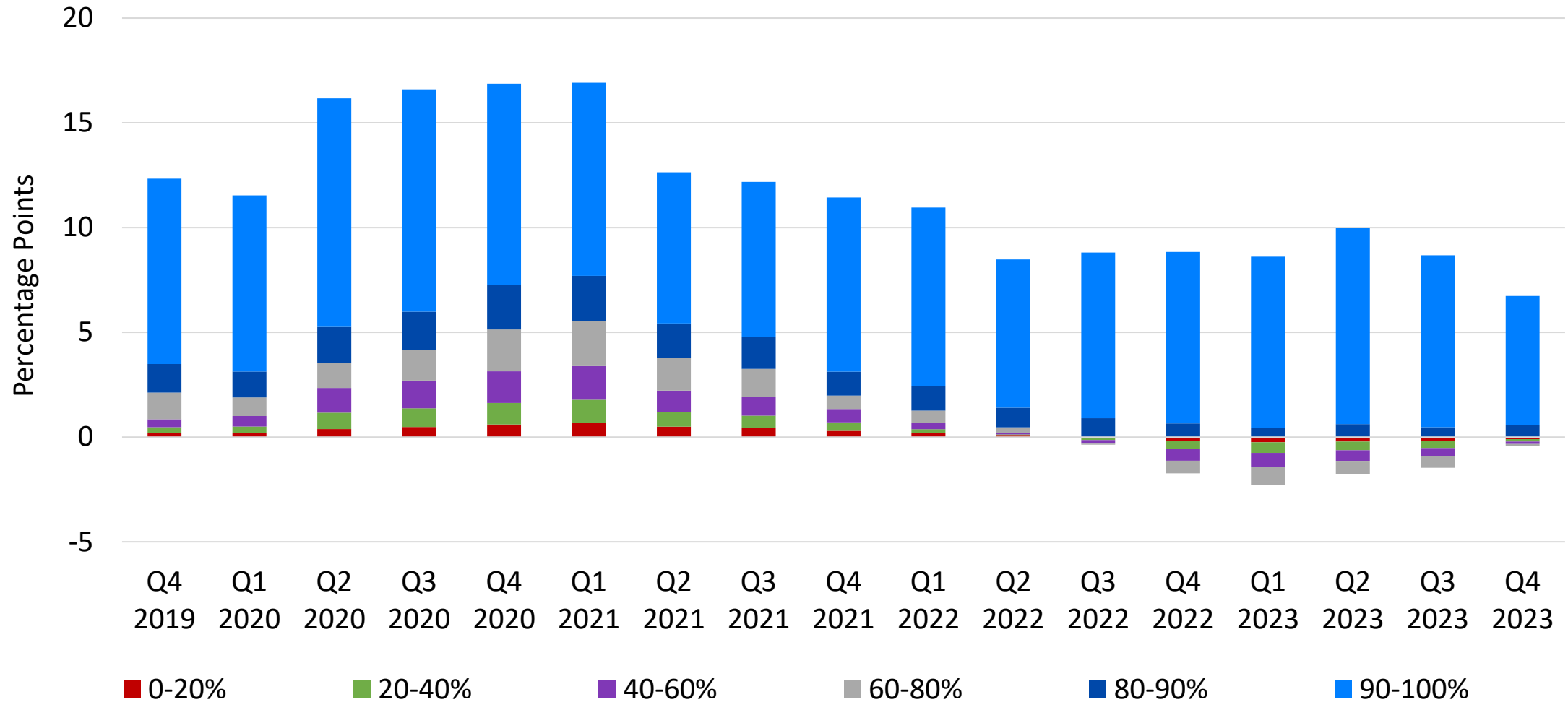


# Excess Savings Are Being Used to Cover Inflationary Pressures Which Will Further Decline With Student Debt Repayment



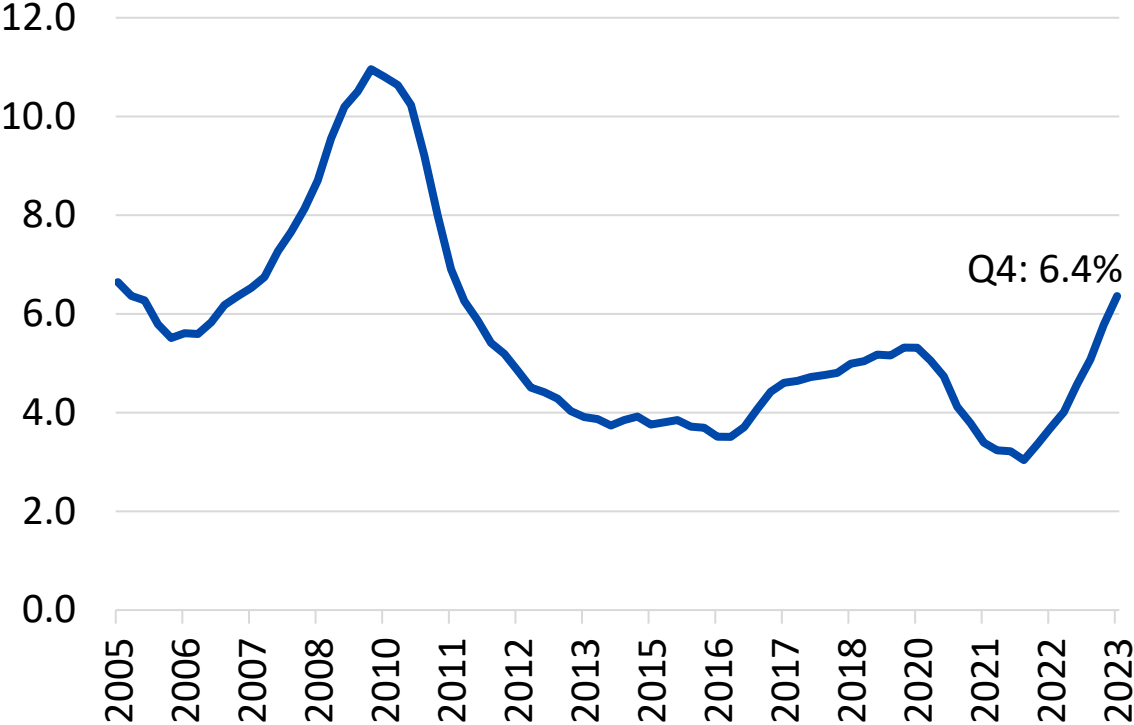
# Those Under The 80% Income Cohort Have Drained the "Excess" Savings From the COVID Boost

## Contributions to Savings Rate by Income Cohort

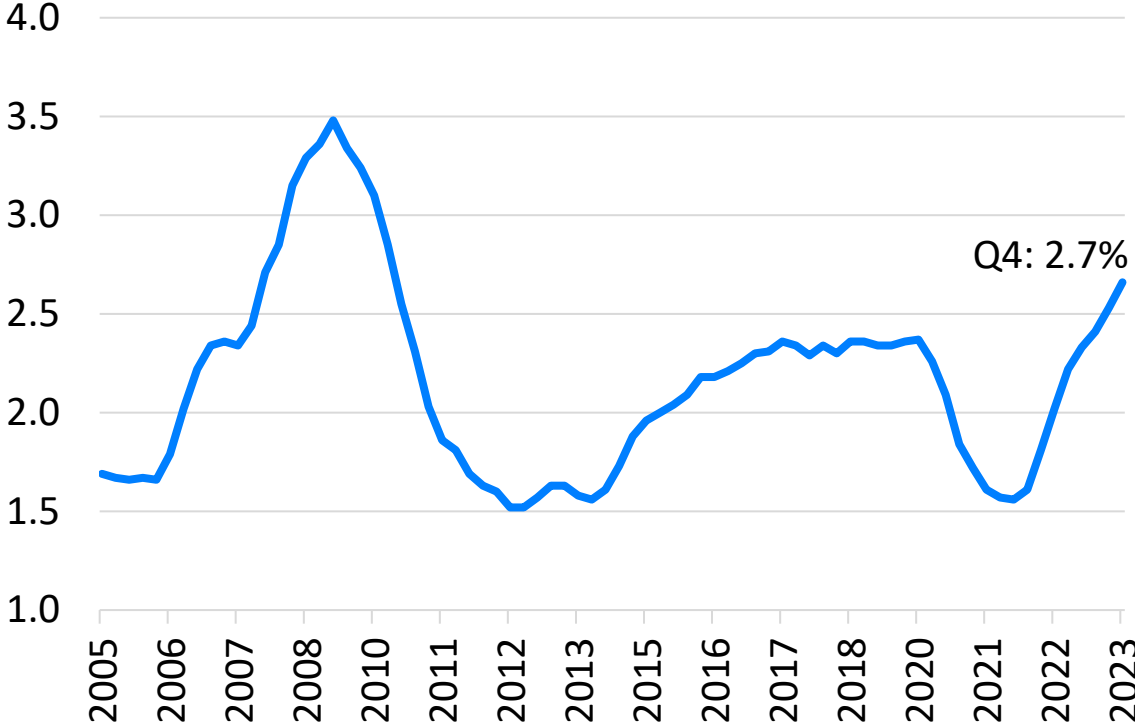


# Credit Card and Auto Loan Delinquencies Continue To Move Higher

### NY Fed/Equifax Serious Delinquency (90+) Transition for Credit Card



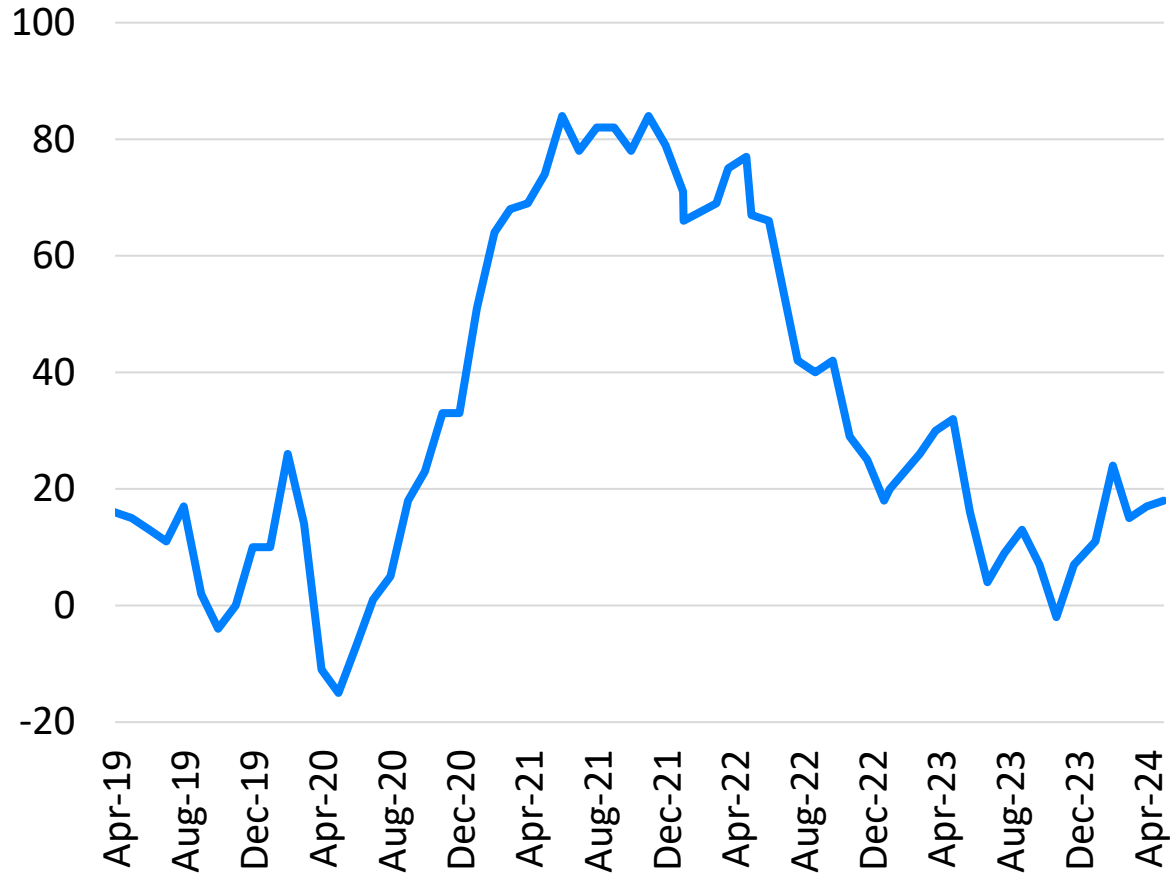
### NY Fed/Equifax Serious Delinquency (90+) Transition for Auto Loans



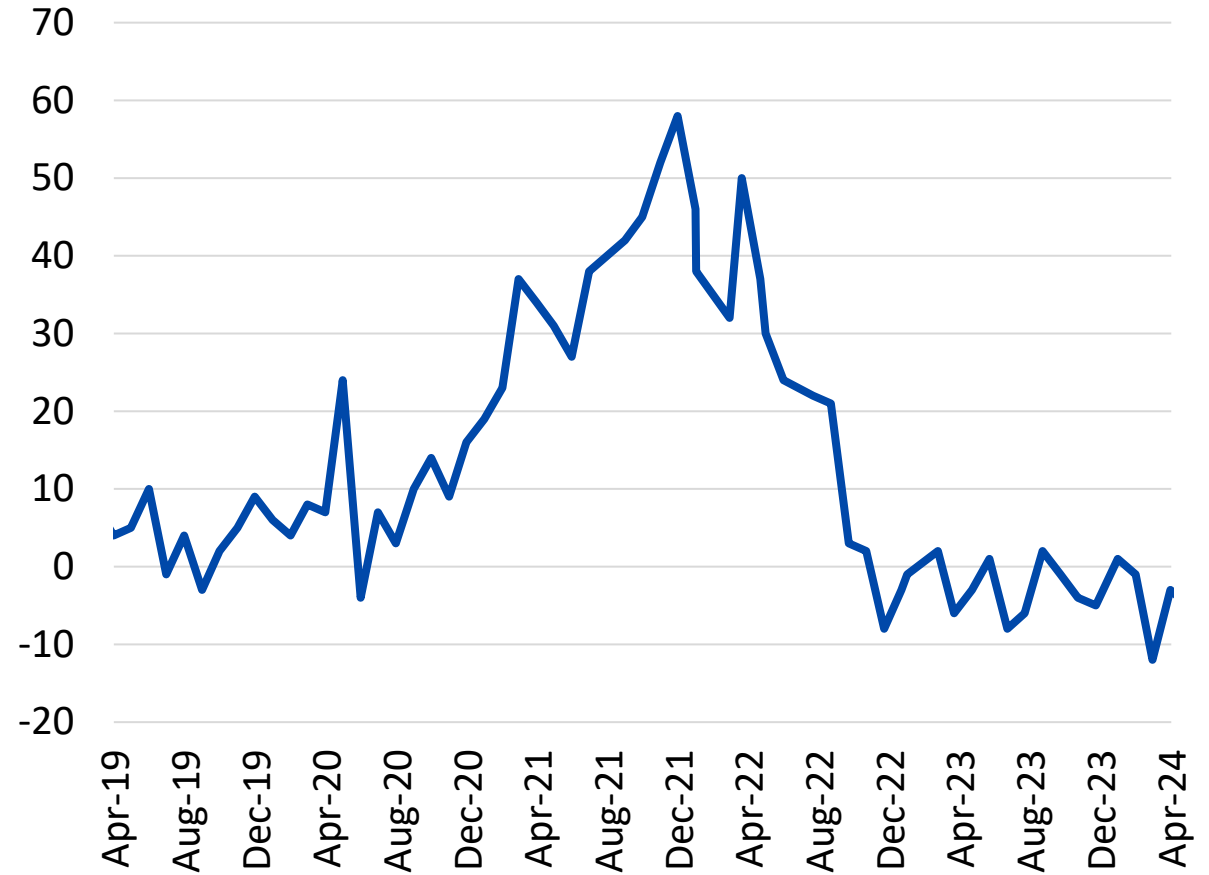
Source: Yardi Matrix; Federal Reserve Bank of New York

# Supply Chain Disruption Easing, As Are Raw Materials Prices

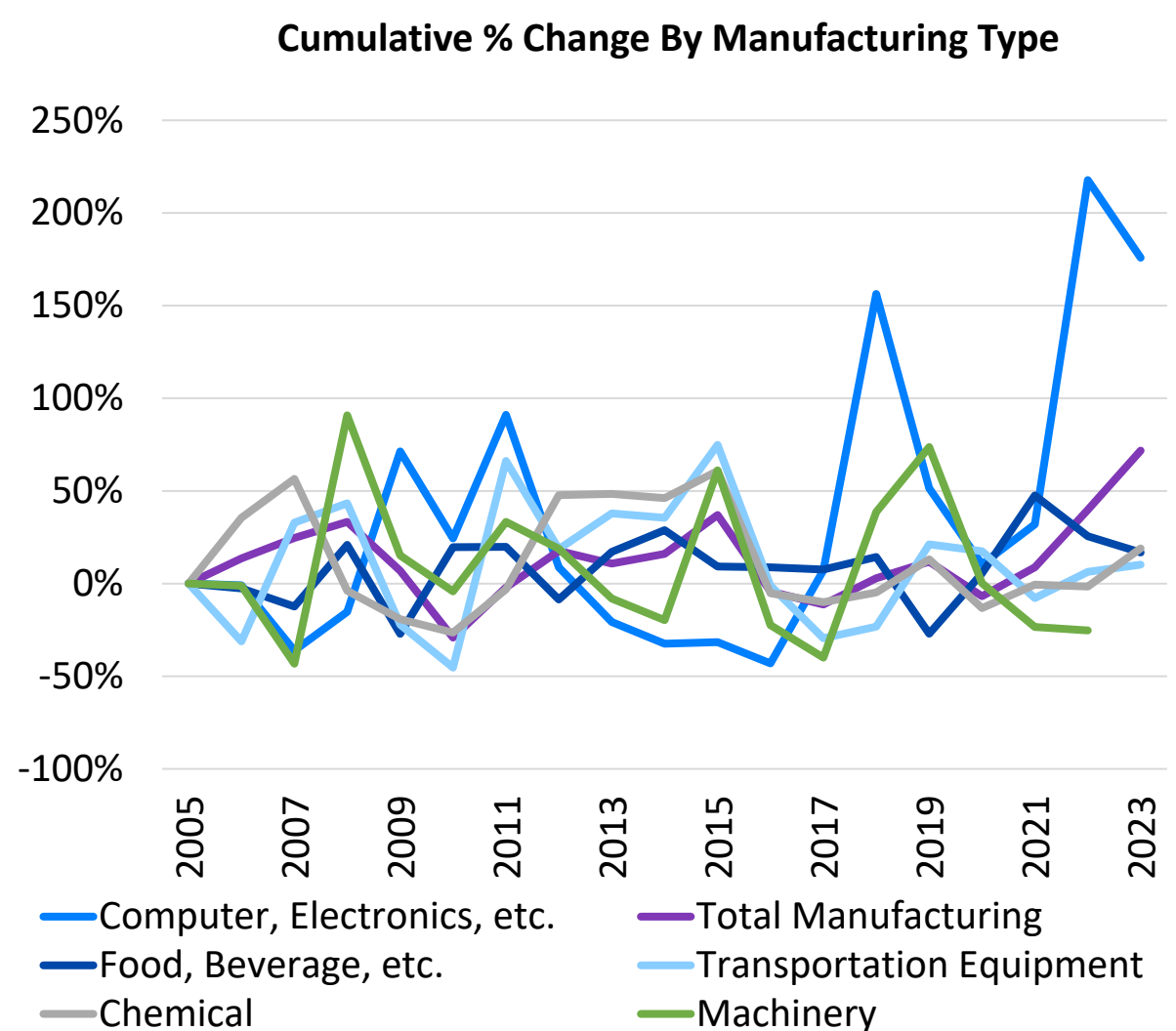
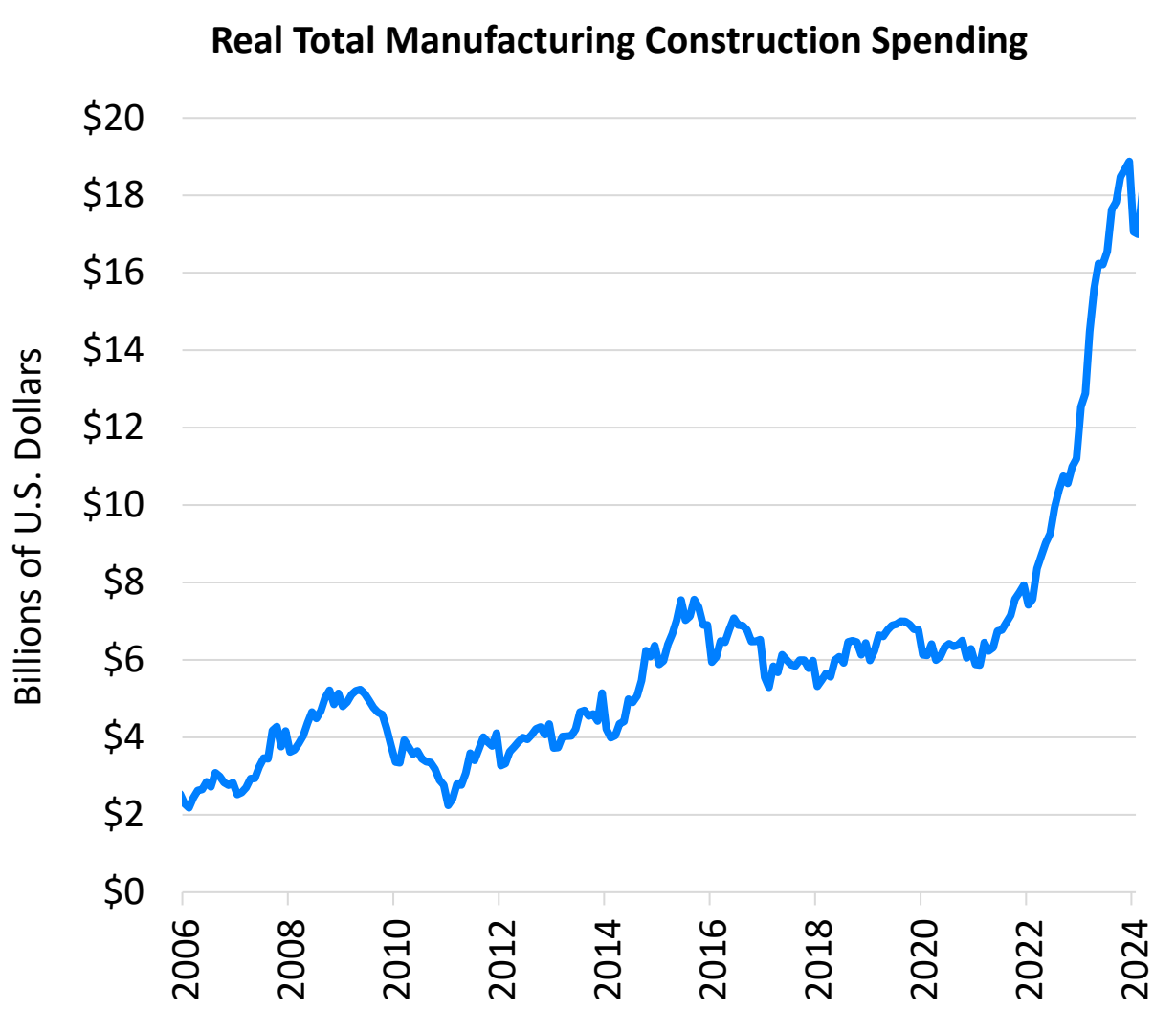
## Prices Paid for Raw Materials Versus a Month Ago



## Supplier Delivery Time Versus a Month Ago



# The U.S. Has Significantly Increased Its Domestic Manufacturing Spending, Especially Within the Computer and Electronics Segment

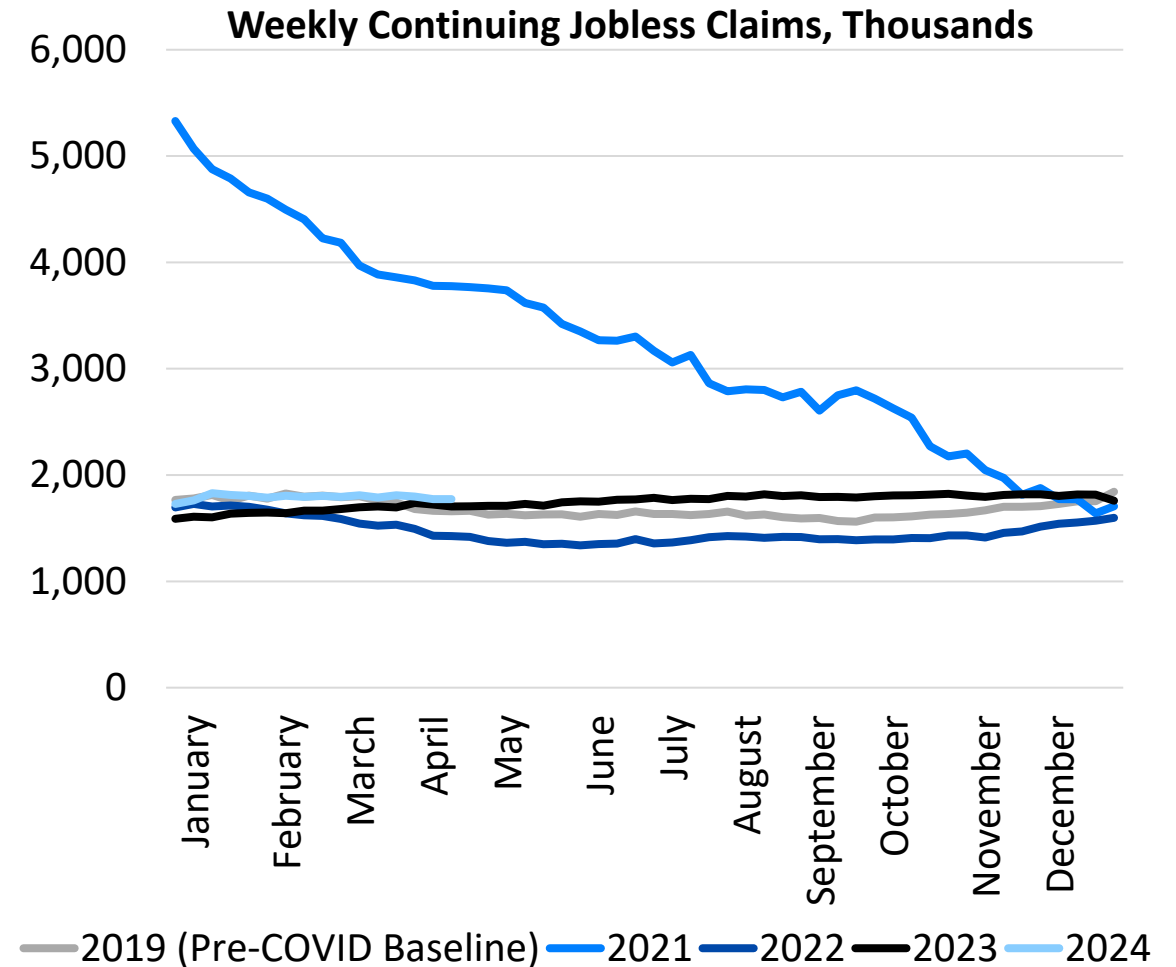
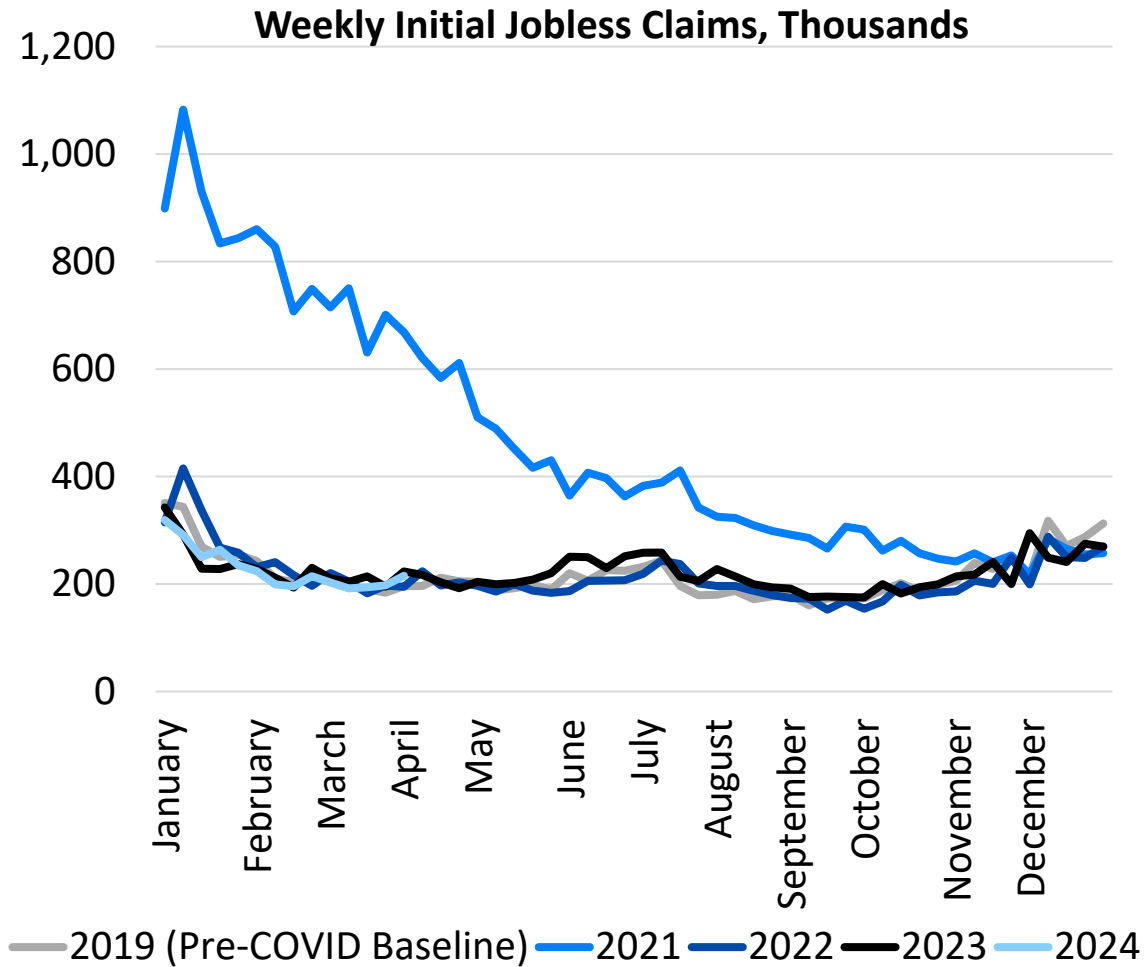


Left chart: Data through March | Source: Yardi Matrix; Moody's Analytics; U.S. Census Bureau

# LABOR MARKETS & DEMOGRAPHICS

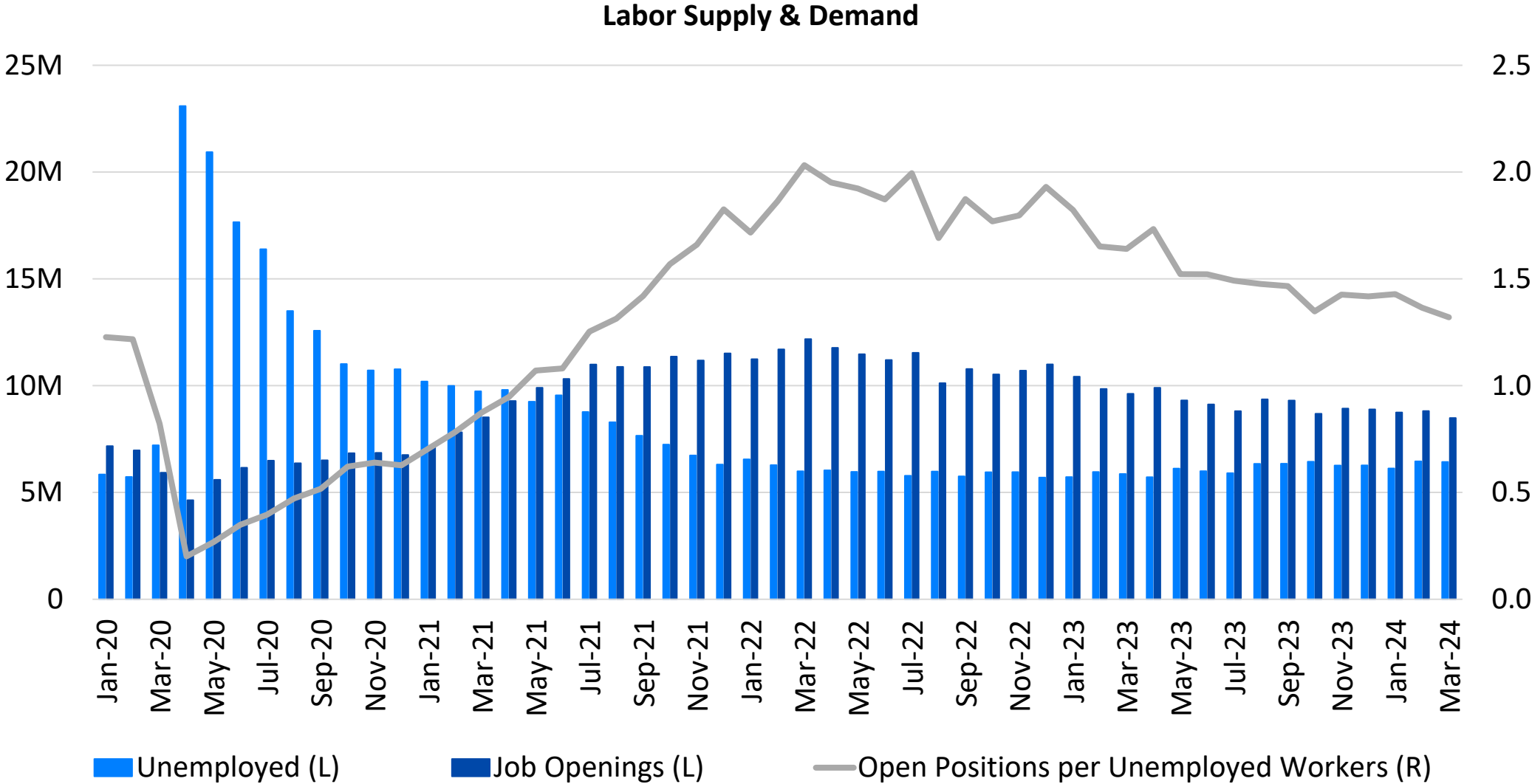
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# Jobless Claims Are Nearly In Line With Last Year's Levels



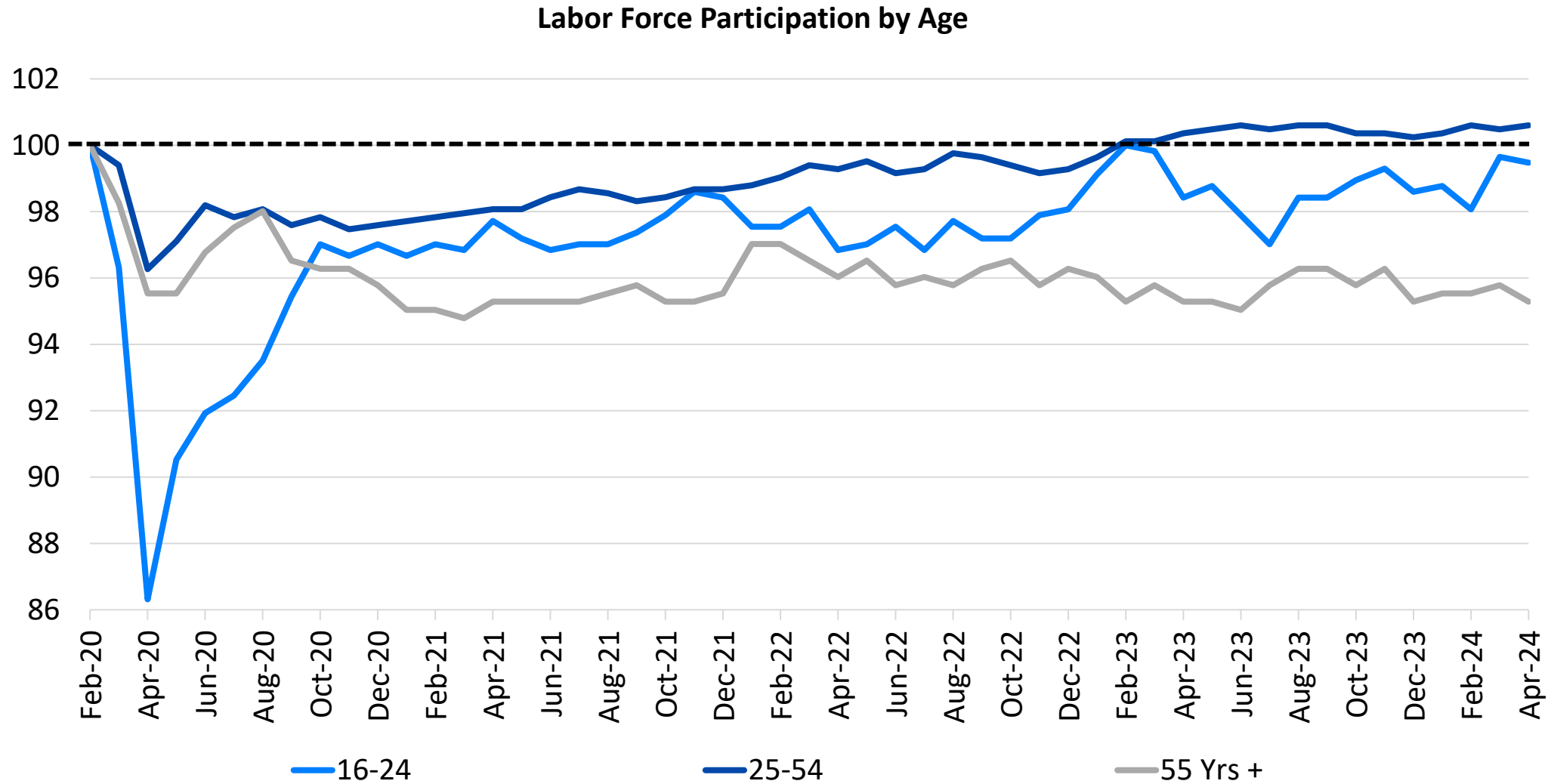


# Tight Labor Market Slowly Loosening



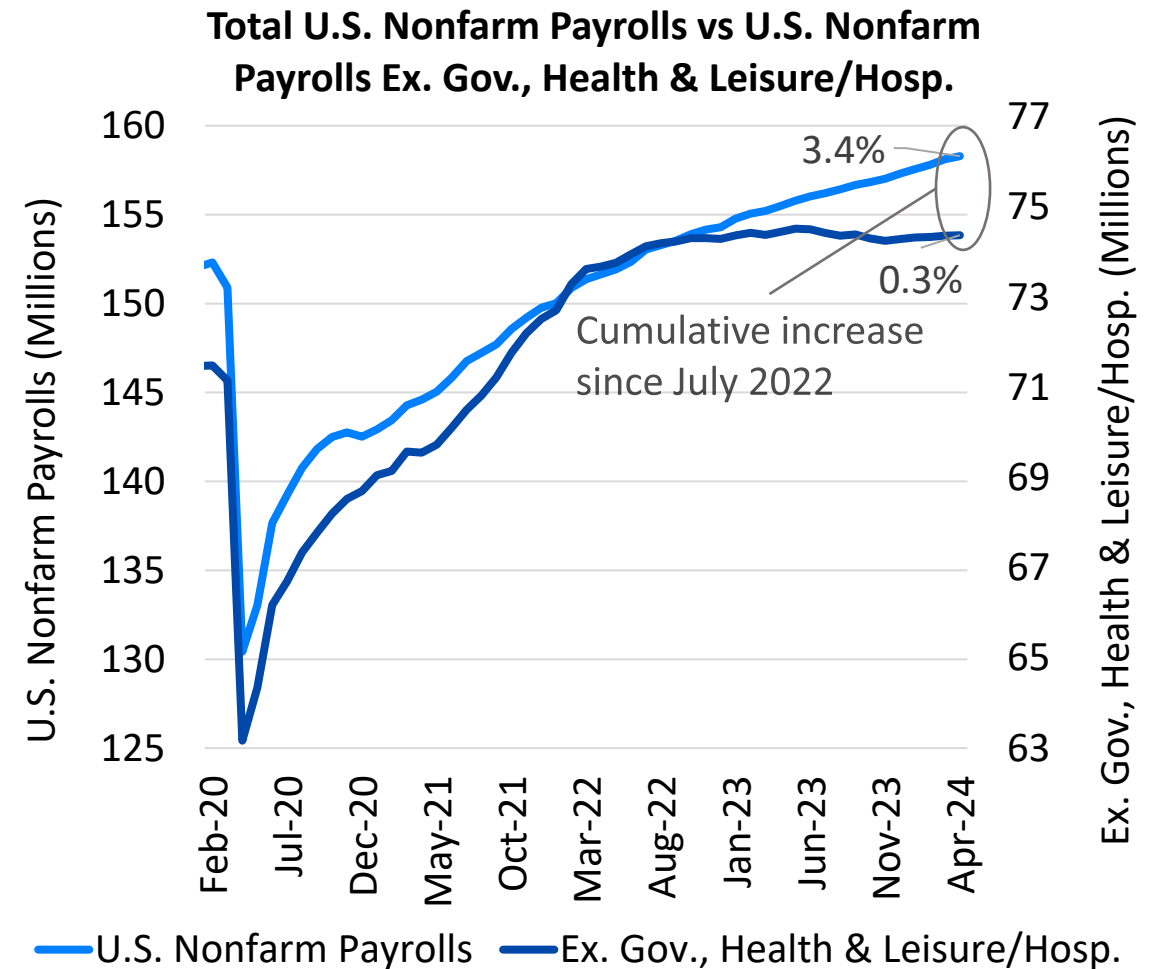
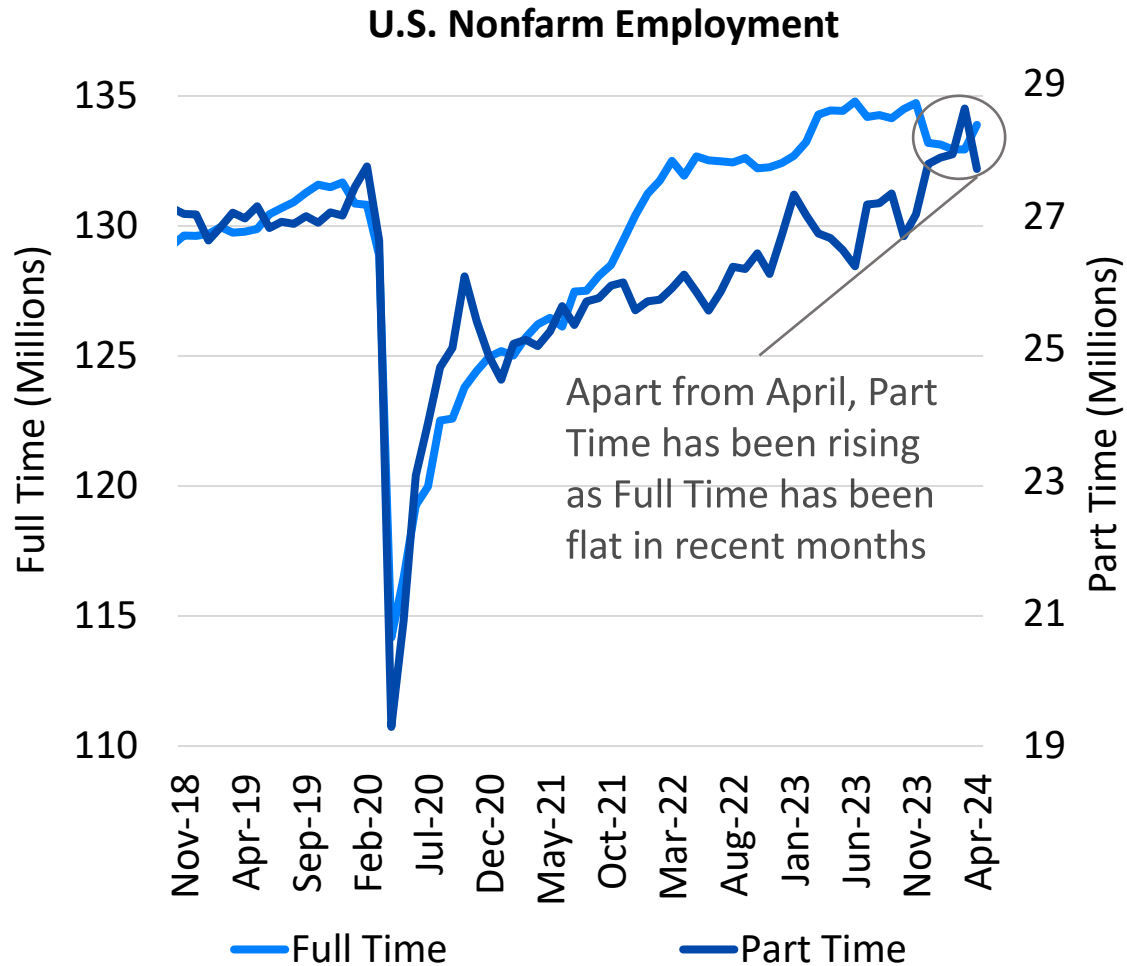
Source: Yardi Matrix; Moody's Analytics; U.S. Bureau of Labor Statistics

# The Labor Force Has Fully Recovered for Prime Age Adults (But Not for Older Americans), Thus Mitigating Wage Growth and Tempering Inflation



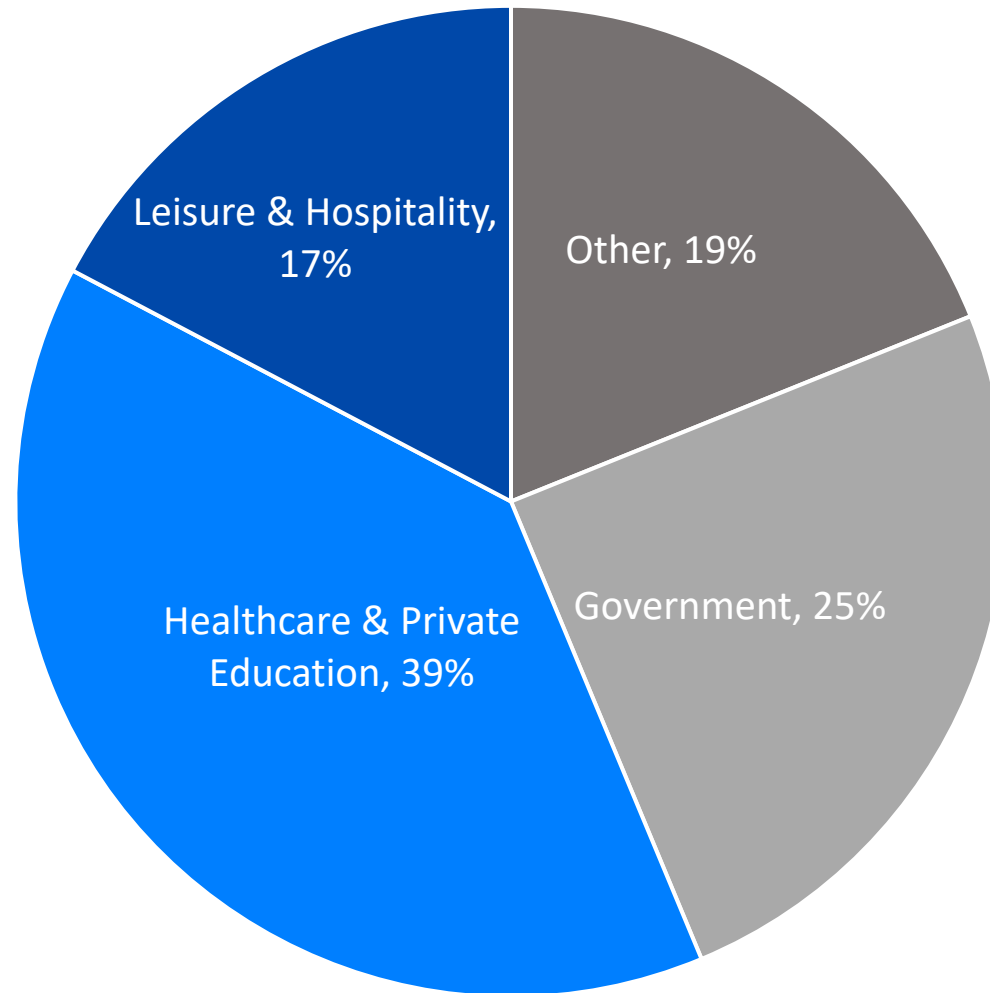
Source: Yardi Matrix; U.S. Bureau of Labor Statistics

# The Employment Picture is Not as Strong as It Seems



# Government, Healthcare & Private Education, Leisure & Hospitality Accounted for Over 80% of New Jobs in 2023

**2023 Establishment Survey Job Formation Composition**



# The Establishment Survey Has Consistently Reported Higher Total Employment Than The Household Survey Since the Pandemic

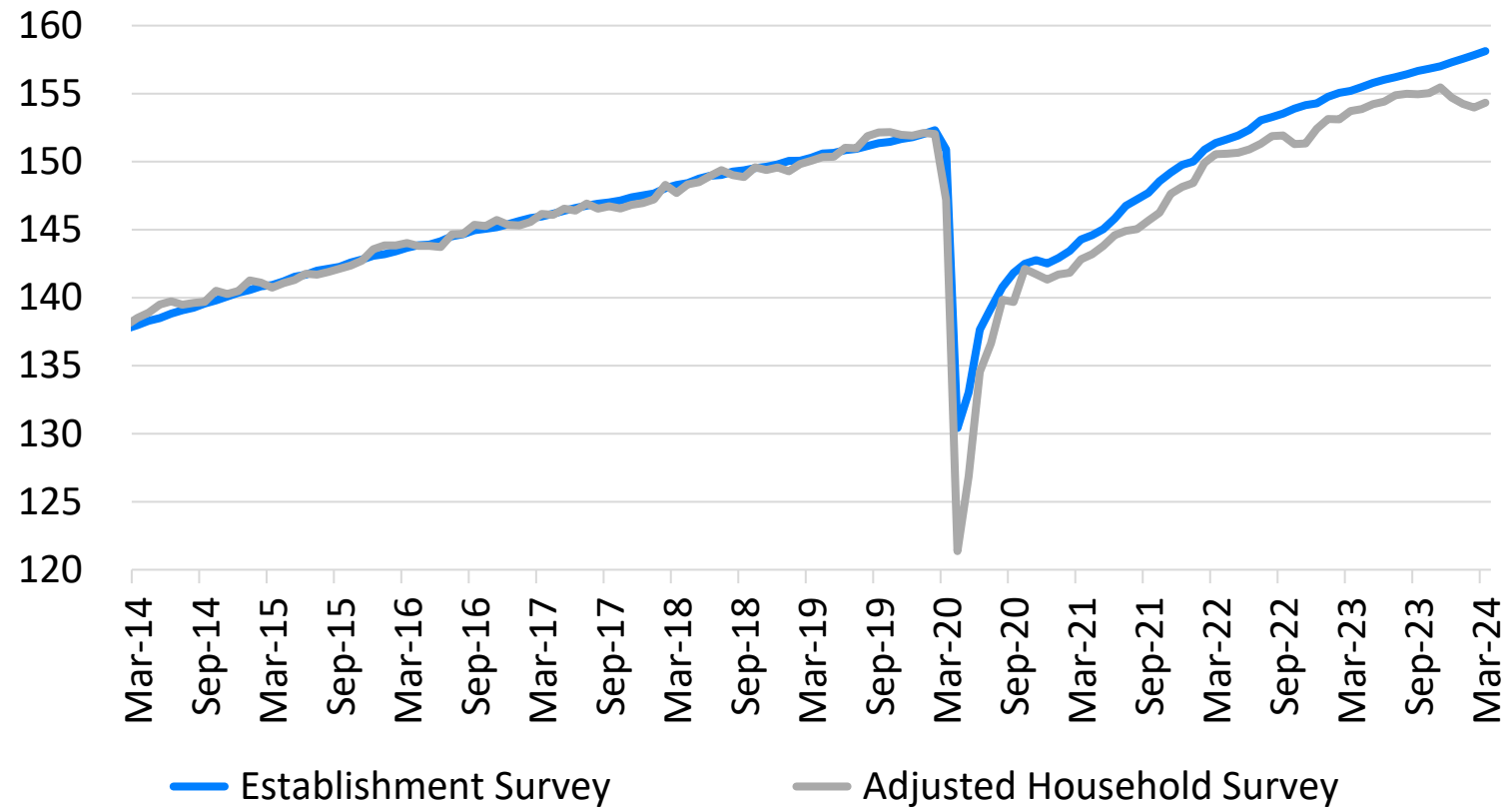
## Discrepancy in Reporting :

- **Adjusted Household Survey (CPS)** estimates jobs via a sample of around 60,000 homes
- For comparison, the CPS is adjusted to exclude agricultural workers, unpaid family workers, private home workers and the unincorporated self-employed

The string of weak readings in the household survey continued in April as the unemployment rate edged higher to 3.9% and employment rose by just 25,000.

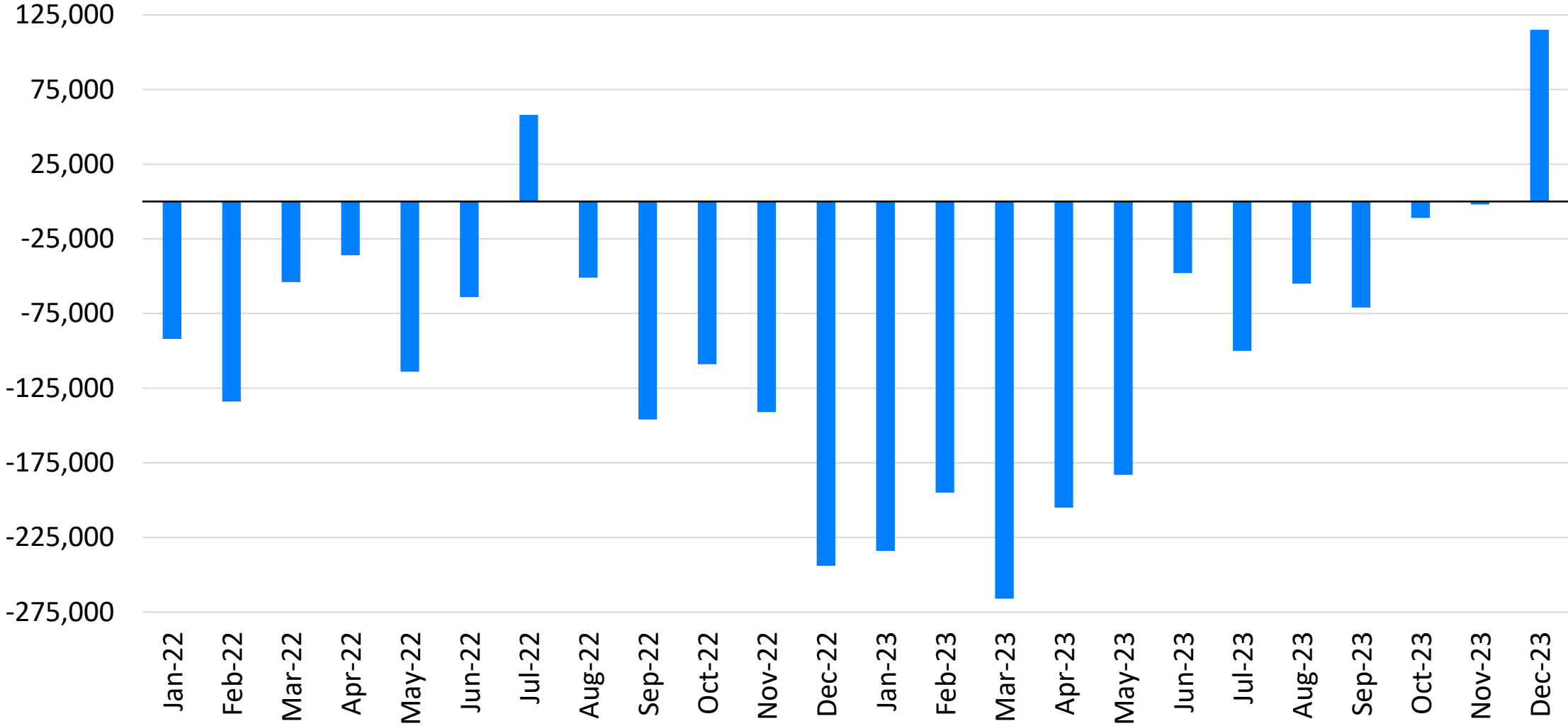
- **Establishment Survey (CES)** counts all nonfarm workers who receive a wage or salary
- This can lead to double counting if a worker has multiple part time jobs
- Possibly overstates job formation
- This is most widely publicized employment statistic

### Establishment Survey and Adjusted Household Survey Total Employment (Millions)



# Except for 2 Months, the Establishment Survey Overstated Employment for 2022 and 2023

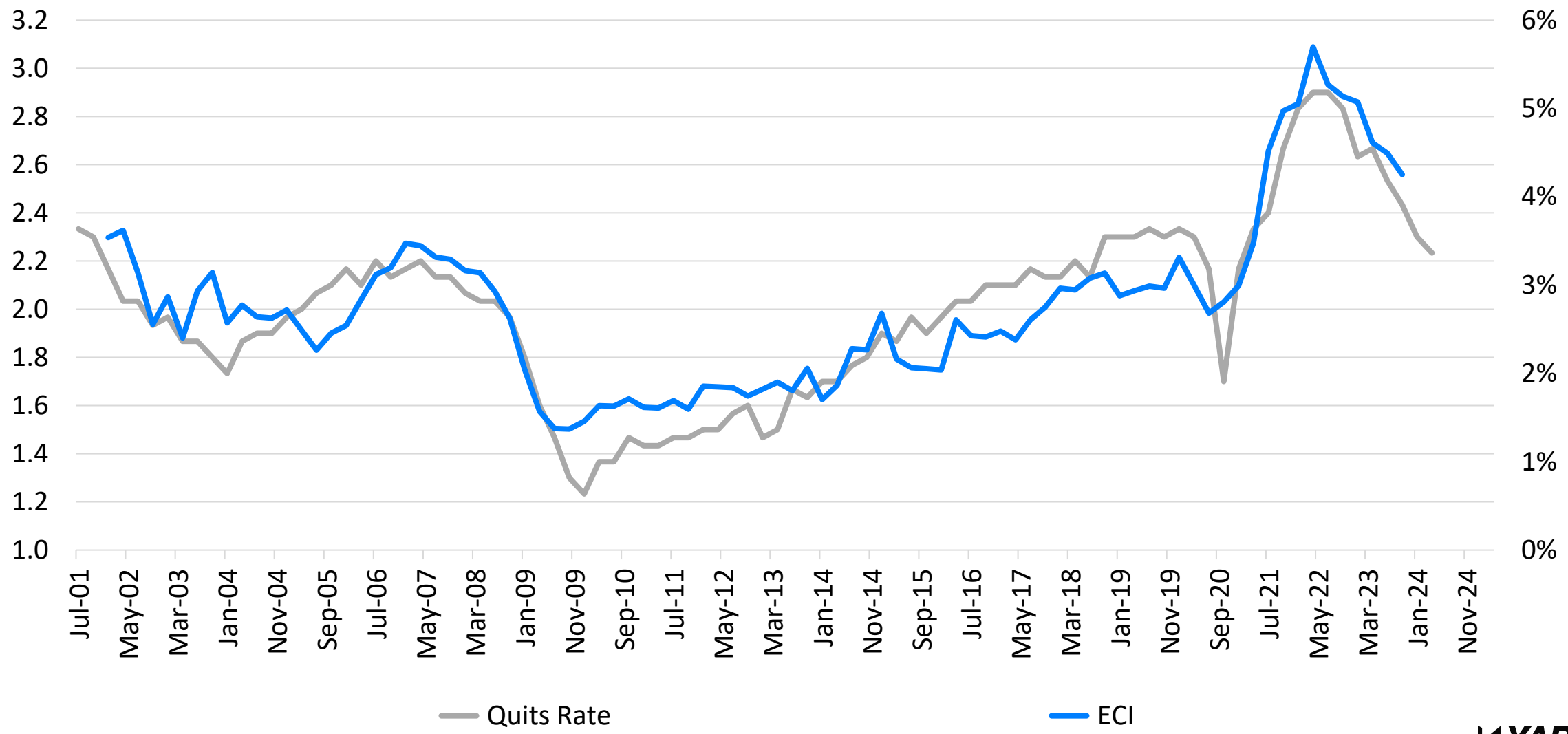
## Revisions to CES Total Nonfarm Employment Levels, Seasonally Adjusted



Revisions calculated as the difference between December 2023 total employment and January 2024 first preliminary release. Based on annual benchmark revisions that align survey employment estimates with data from administrative files of employees covered by Unemployment Insurance (UI) | Source: Yardi Matrix; U.S. Bureau of Labor Statistics

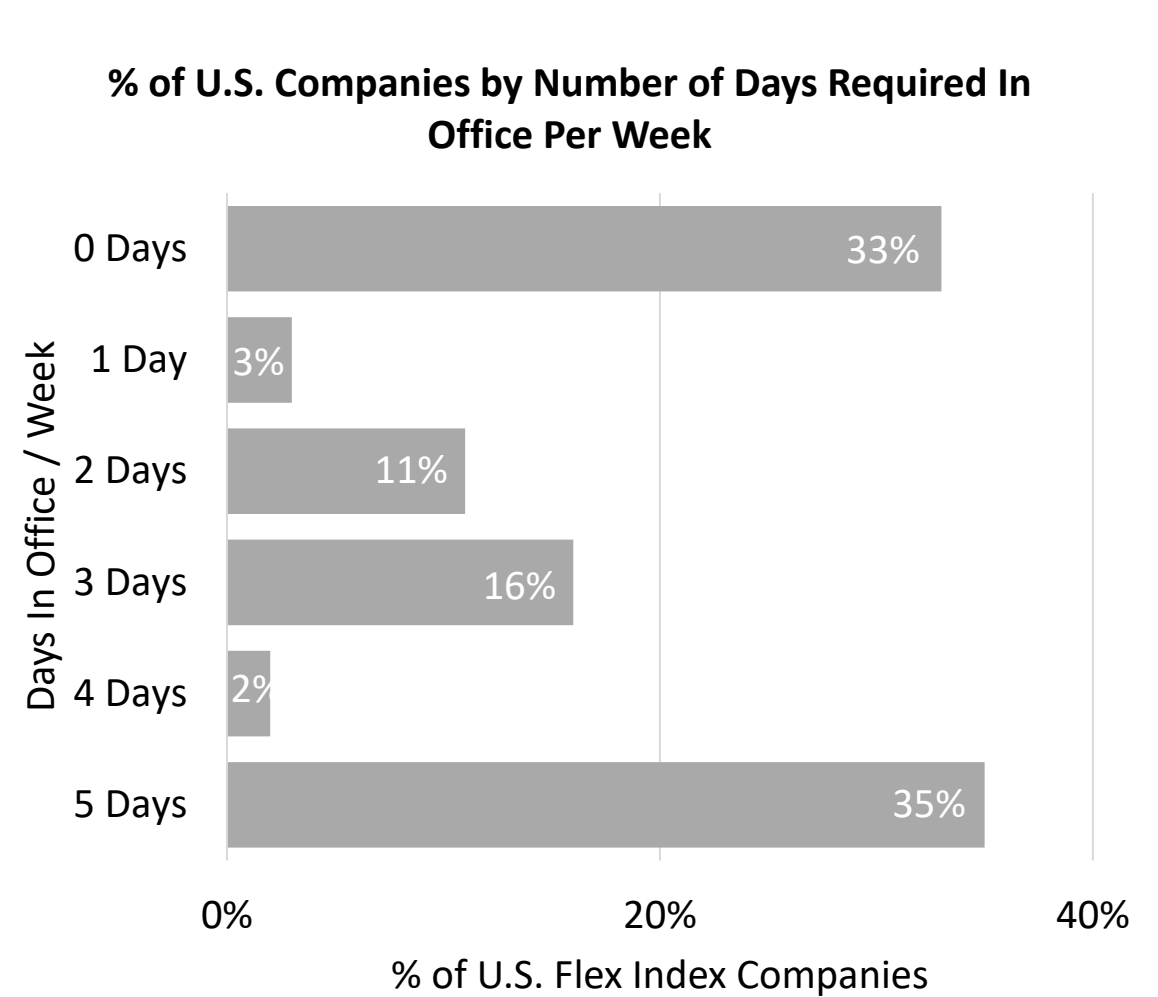
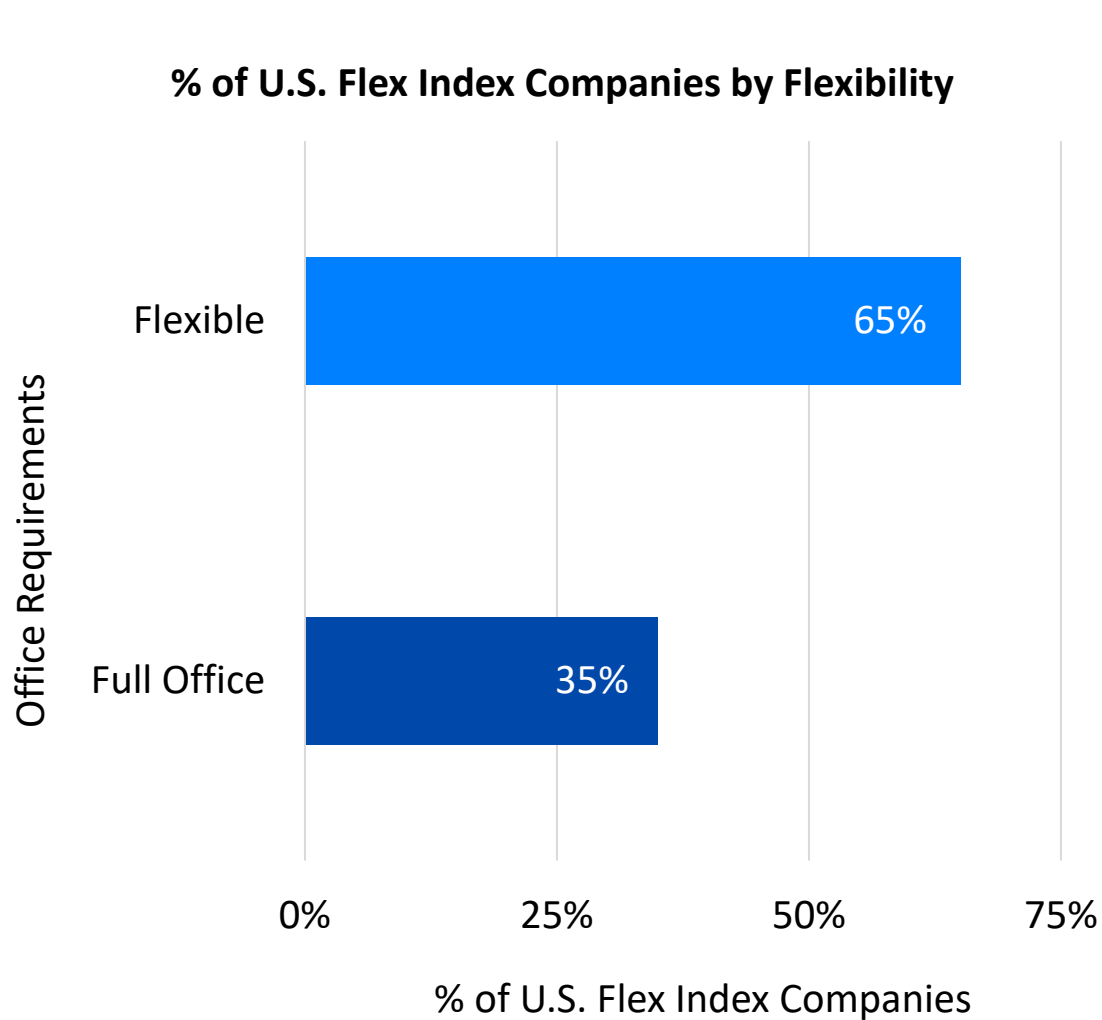
# Plunging Quits Suggest a Sharp Slowdown in Wage Growth, A Positive in Controlling Inflation and Supporting Future Short-Term Interest Rate Reductions

Quits Rate, Advanced Two Quarters (Left) and ECI Private Sector Wages & Salaries, YoY% (Right)



Source: Yardi Matrix; U.S. Bureau of Labor Statistics

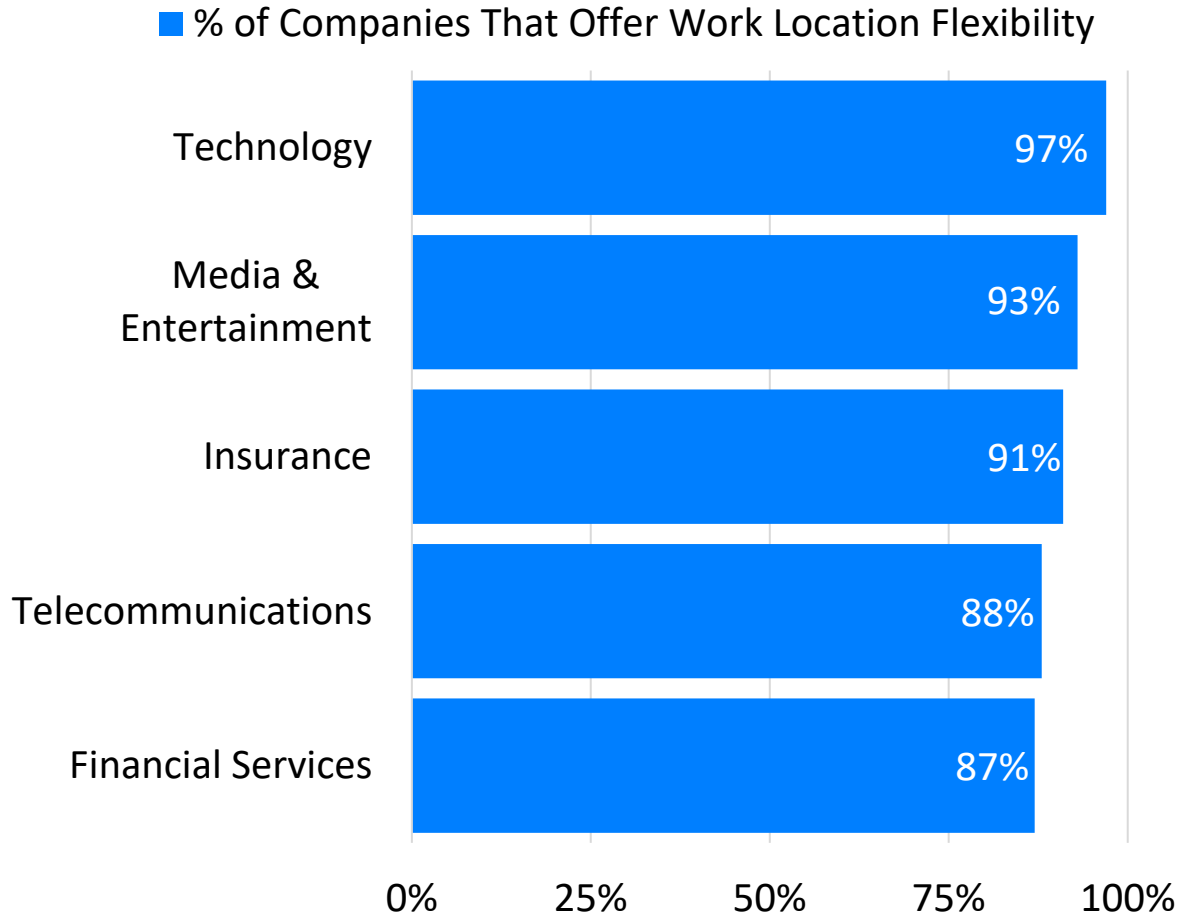
# More Companies Are Allowing Greater Work Location Flexibility As Opposed To Full Time In-Office Requirements



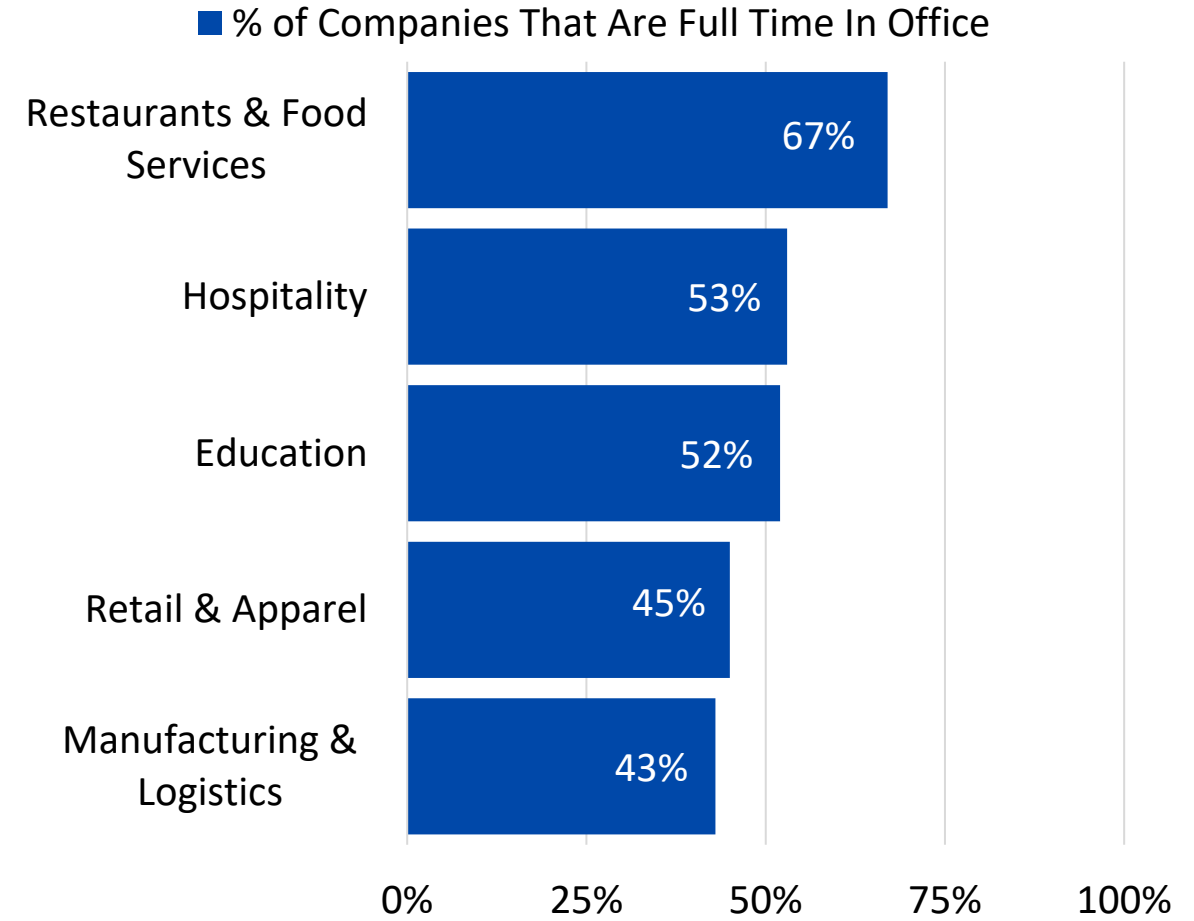


# Flexibility Varies By Industry, With Tech Predictably Being The Most Flexible

## Top 5 Most Flexible Industries



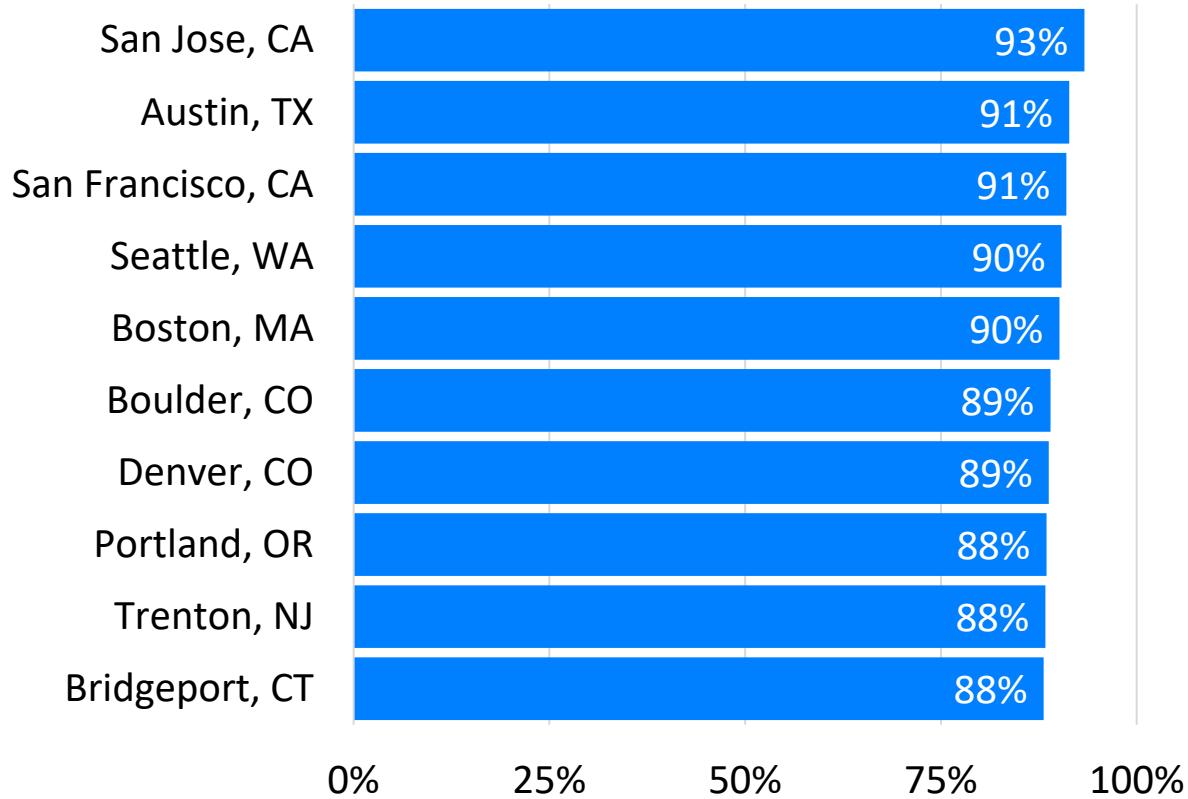
## Top 5 Least Flexible Industries



# Flexibility Varies By Metro, With The Bay Area Allowing For The Most Flexibility And Smaller Sun Belt Metros Allowing The Least

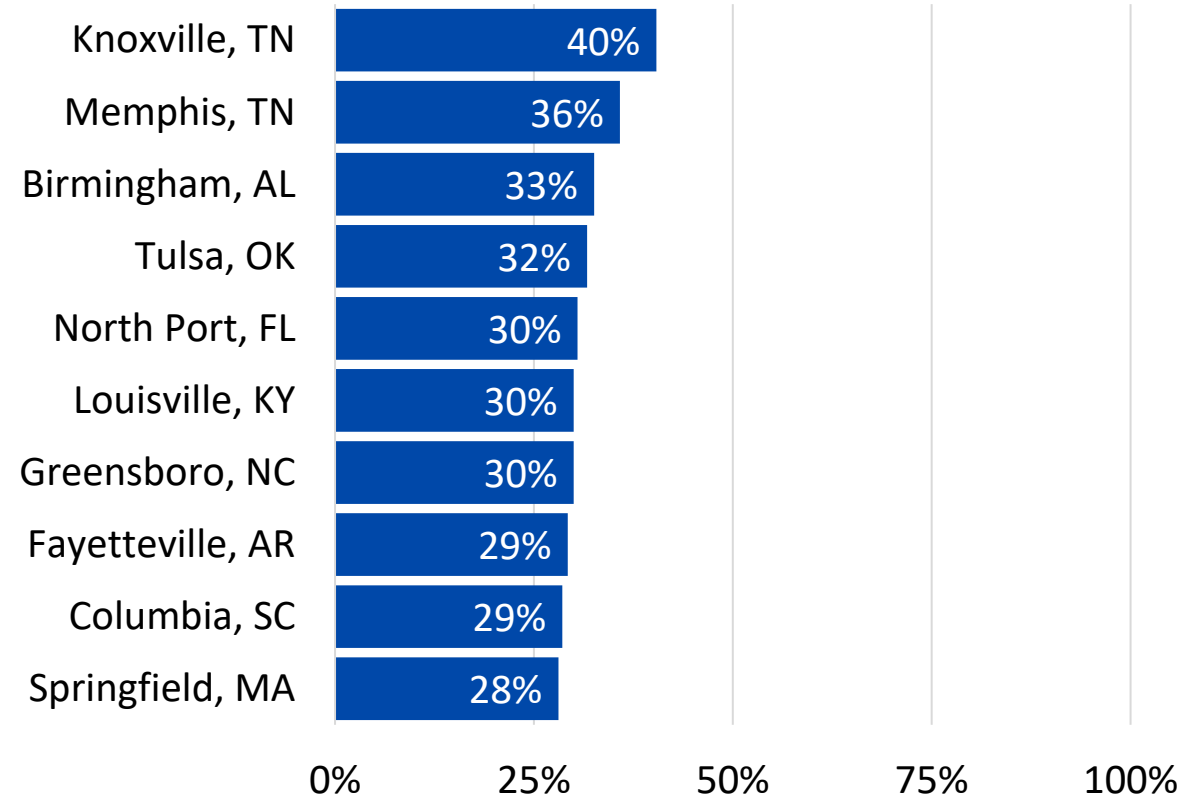
### Top 10 Most Flexible Metros

■ % of Companies Offering Location Flex



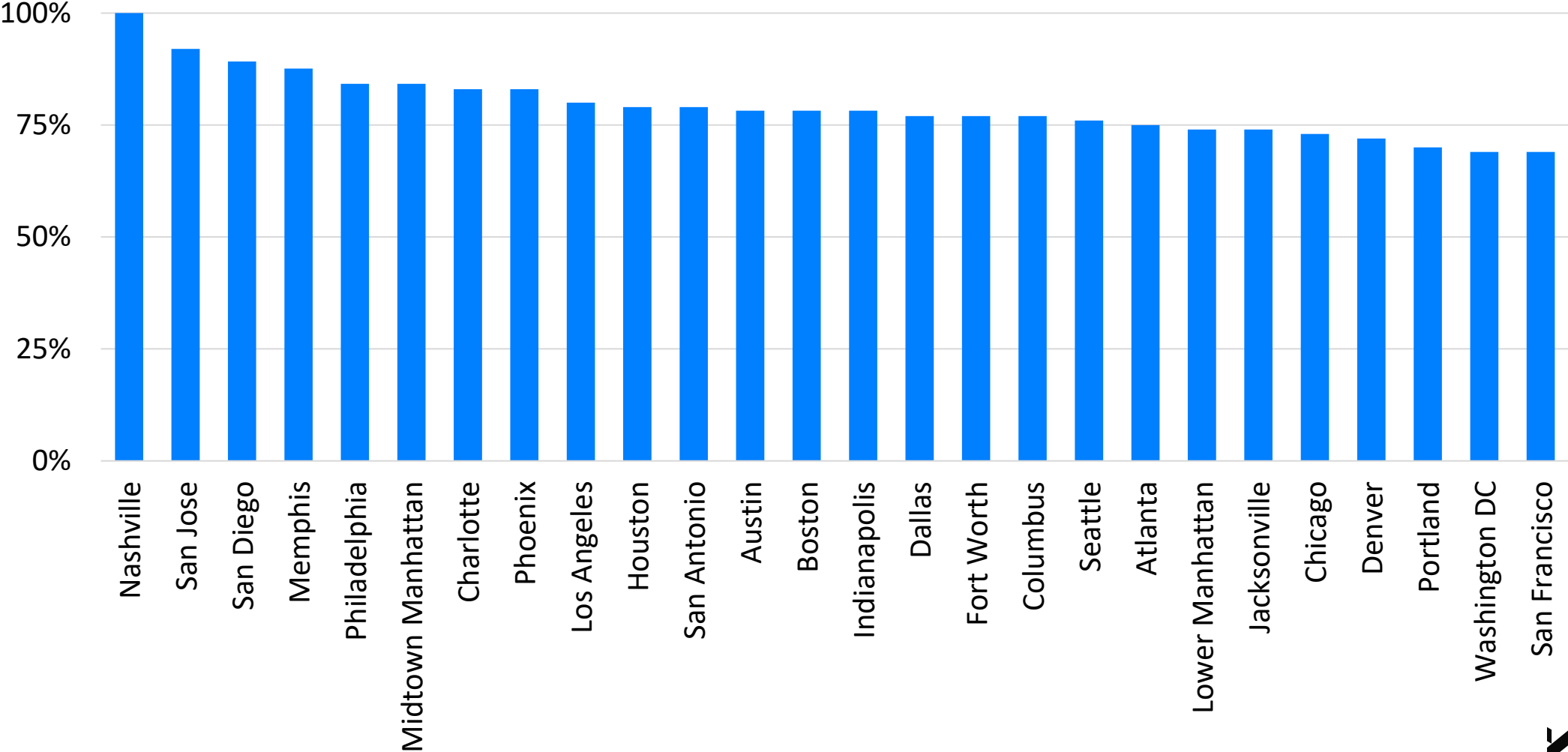
### Top 10 Least Flexible Metros

■ % of Companies That Are Full Time In Office



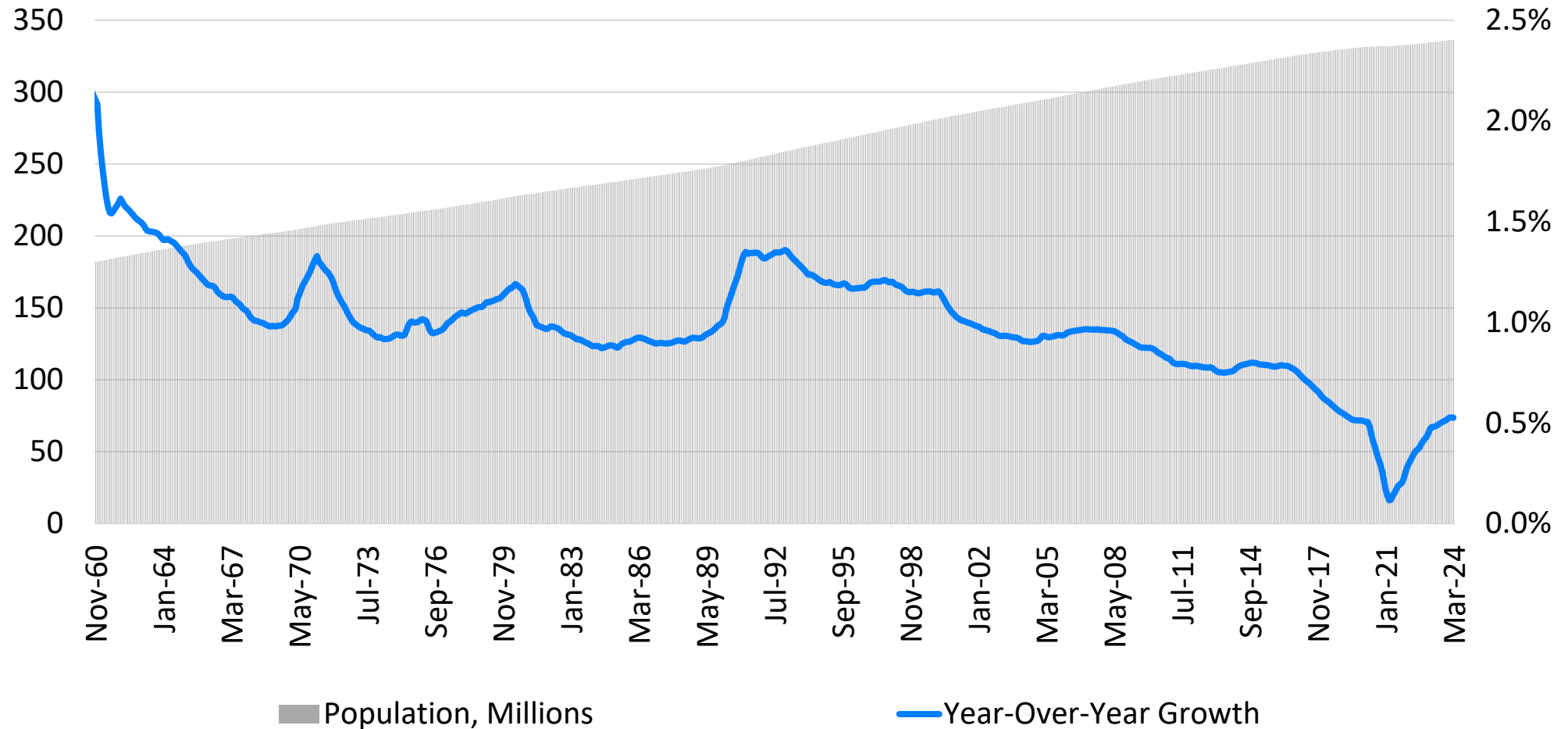
# Cities That Have Robust Leisure & Hospitality Industries Recovered Faster Than Those With More Remote Work Opportunities

Recovery Rate of Residents, Workers, & Visitors in Downtown Metros (Q2 2019 to Q2 2023)



Source: Yardi Matrix; Center City District

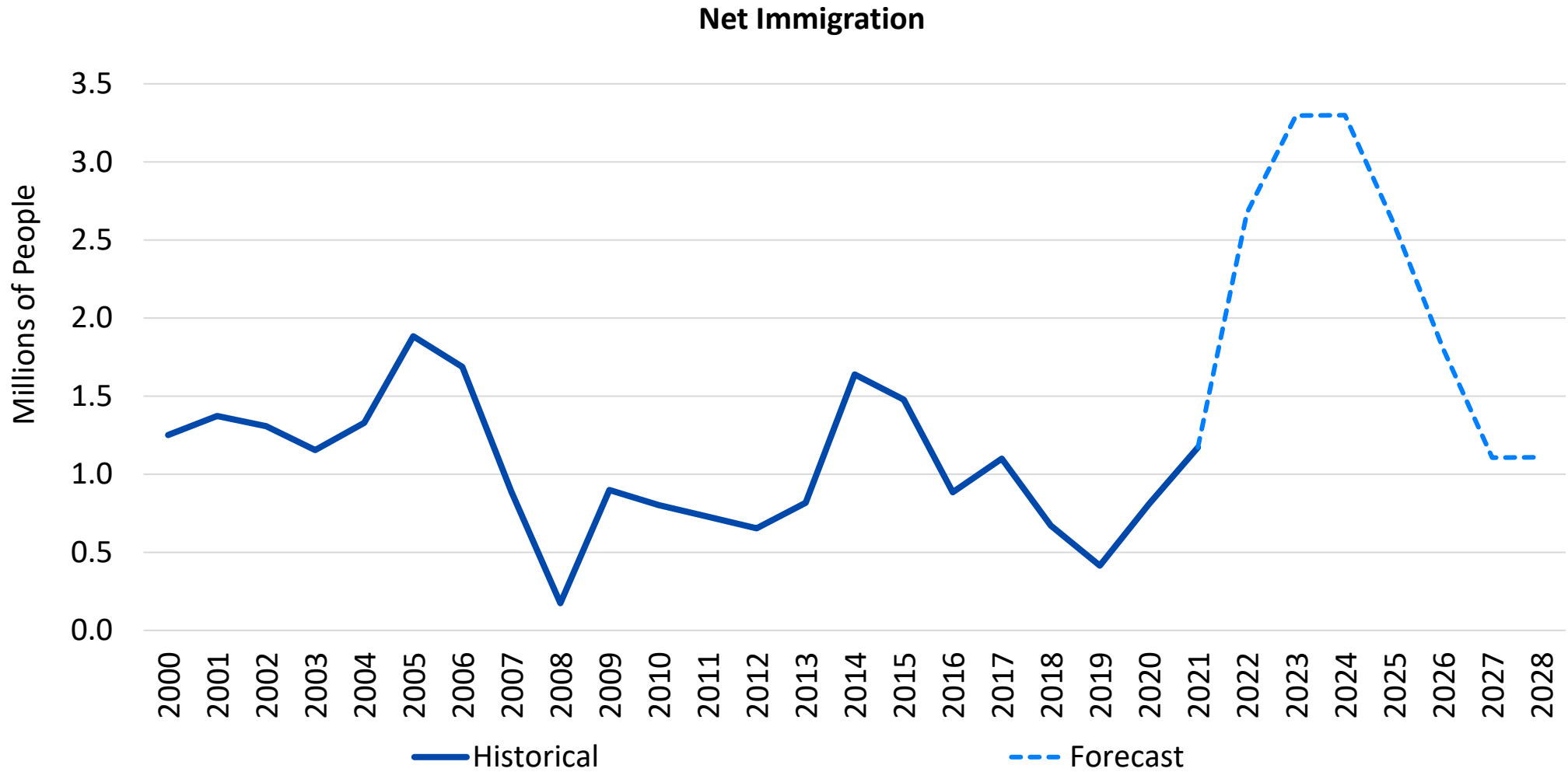
# U.S. Population Growth Has Seen An Uptick In Recent Years, But Noncitizens Are Often Undercounted In Federal Collection Data



■ Population, Millions

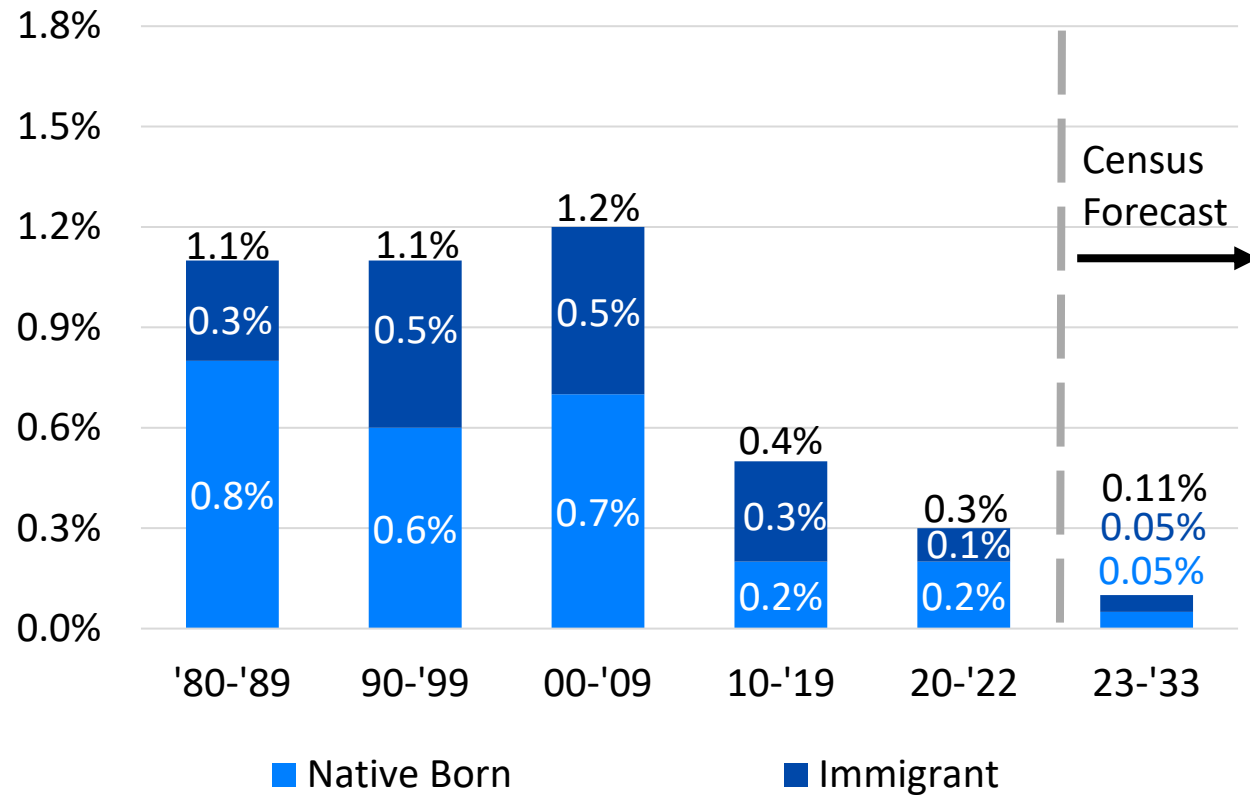
— Year-Over-Year Growth

# Net Immigration Saw a Sharp Uptick in 2022-2023, But Its Future is Dependent on Political Events

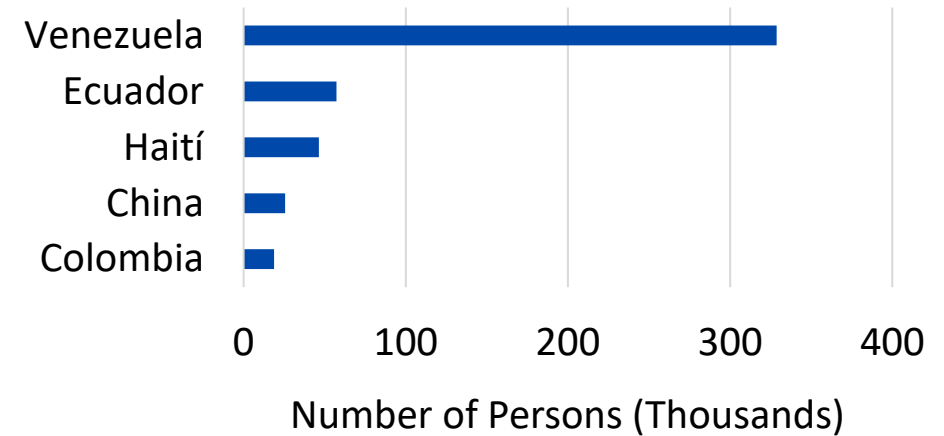


# Despite a Record of U.S.-Bound Migrants, the U.S. Working Age Population is not Forecasted for Significant Growth

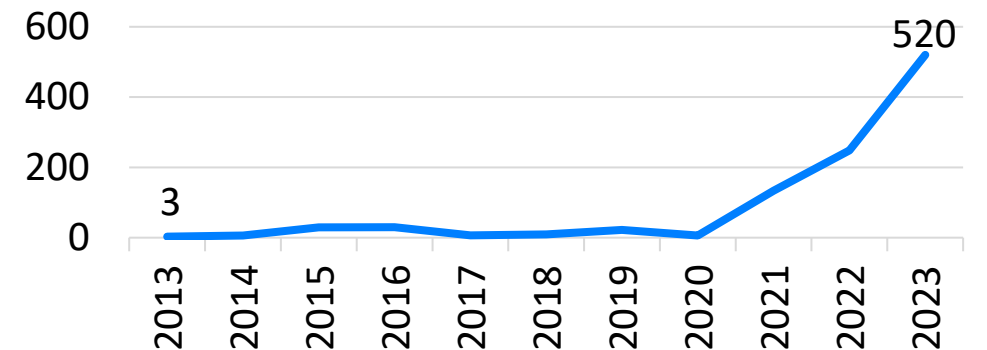
**Growth in Working Age Population: % Increase in Civilian Non-Institutional Population Ages 16-64**



**Migrants in Transit through the Darién Gap by Country of Origin: 2023**

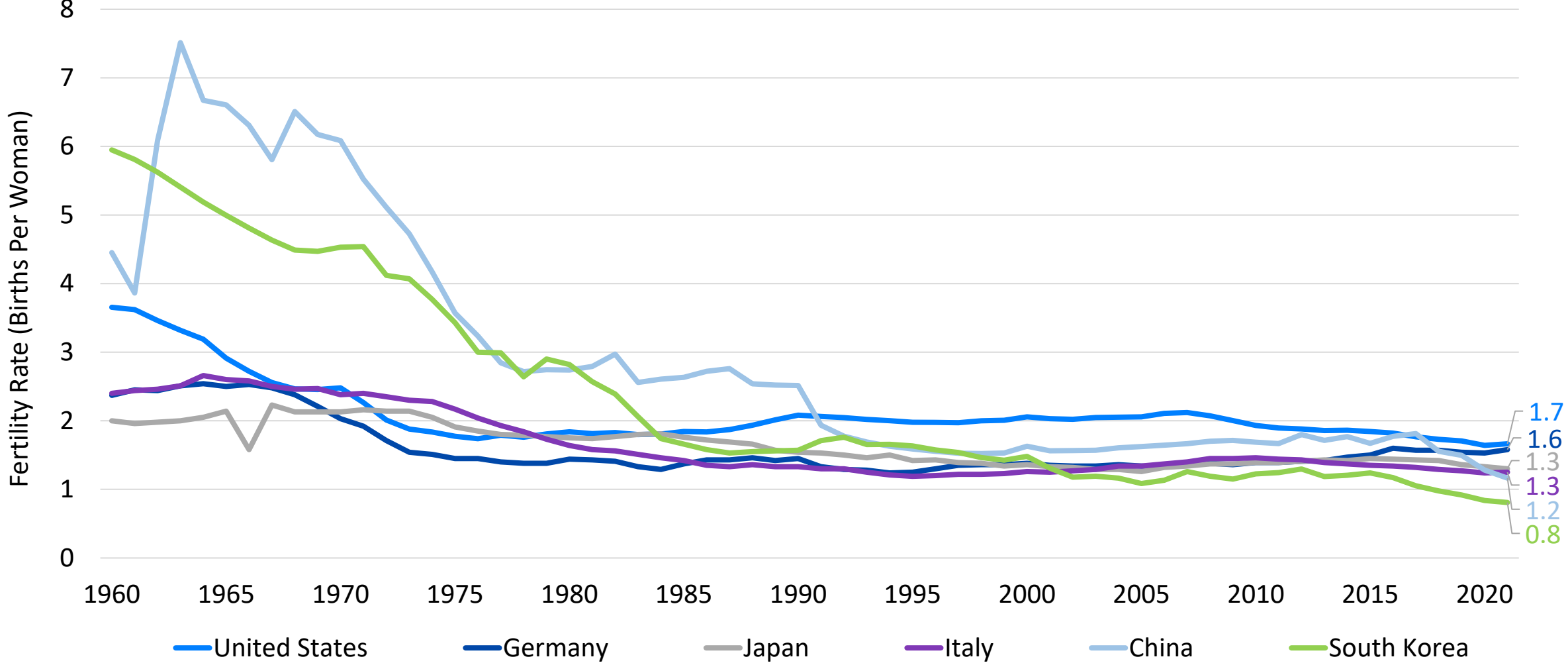


**Darién Gap Crossings, Thousands**



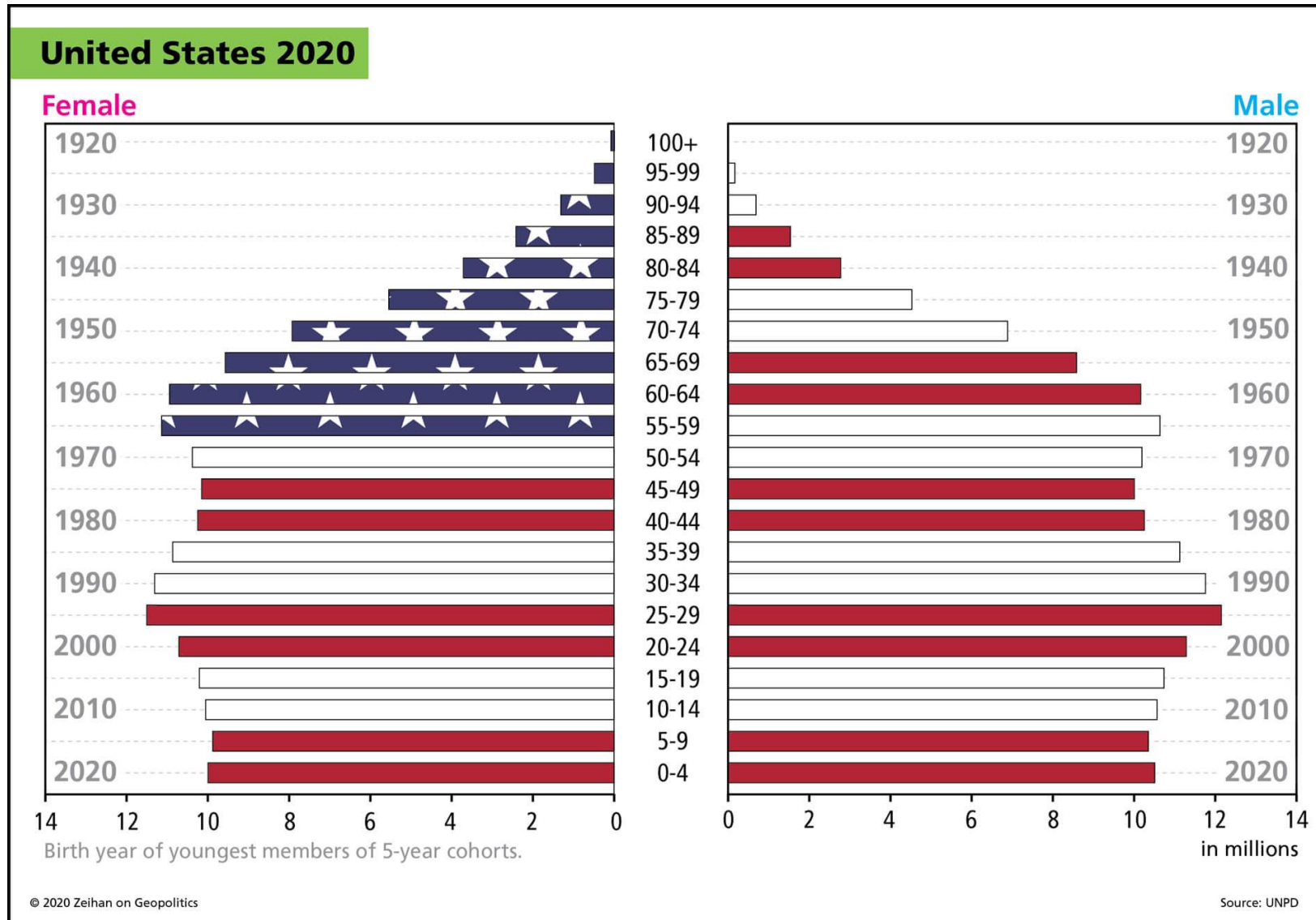
# The U.S. Birth Rate is Declining, But is Faring Better Than Other Developed Nations

### Fertility Rate By Country



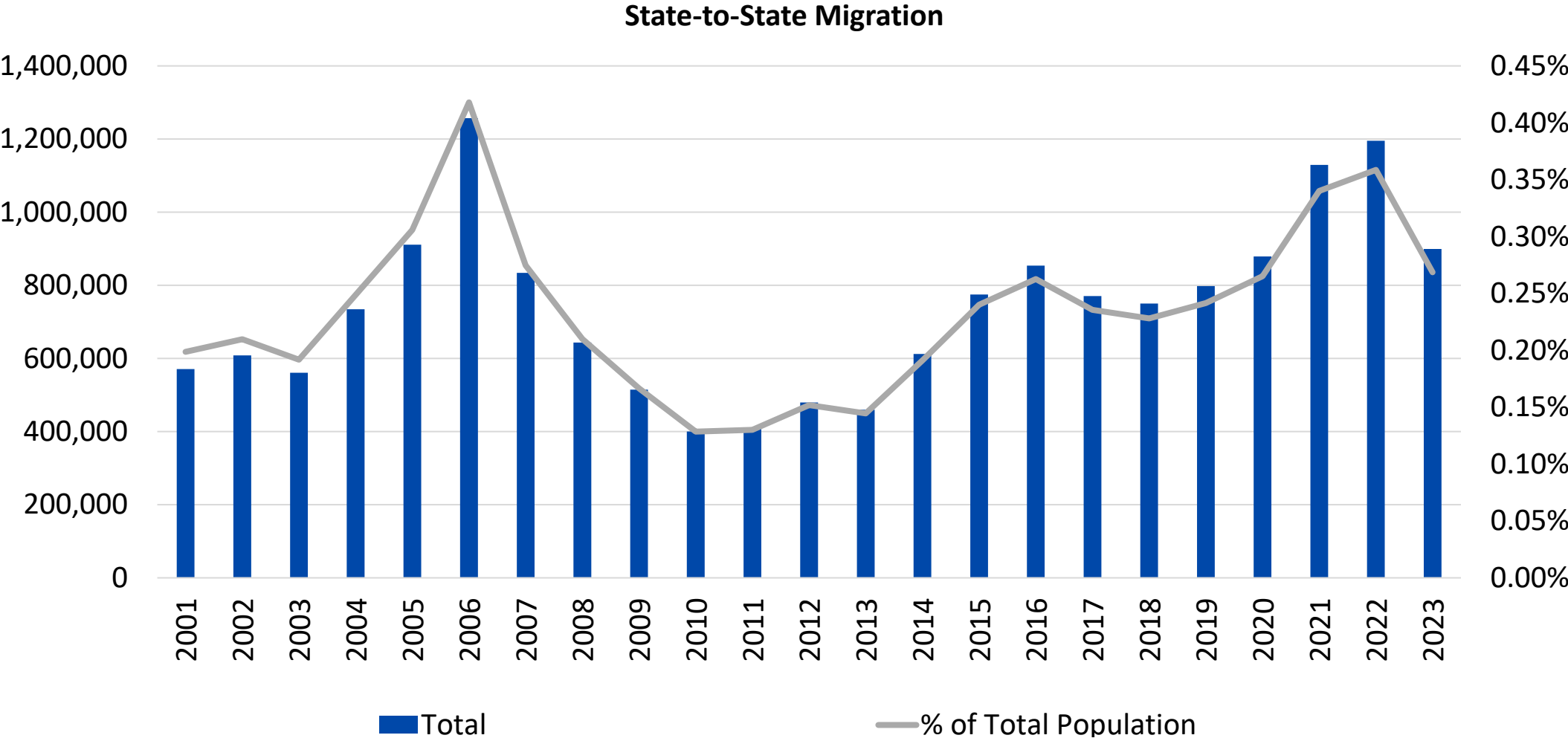
Source: Yardi Matrix; The World Bank

# The U.S. Will Suffer a Demographic “Hiccup” as Boomers Retire, But Will Fare Better Than Other Parts of the World





# State-to-State Migration Decreased in 2023, Nearing A Return To Pre-Pandemic Norms



Migration data is for July – July of each year | Source: Yardi Matrix; U.S. Census Bureau

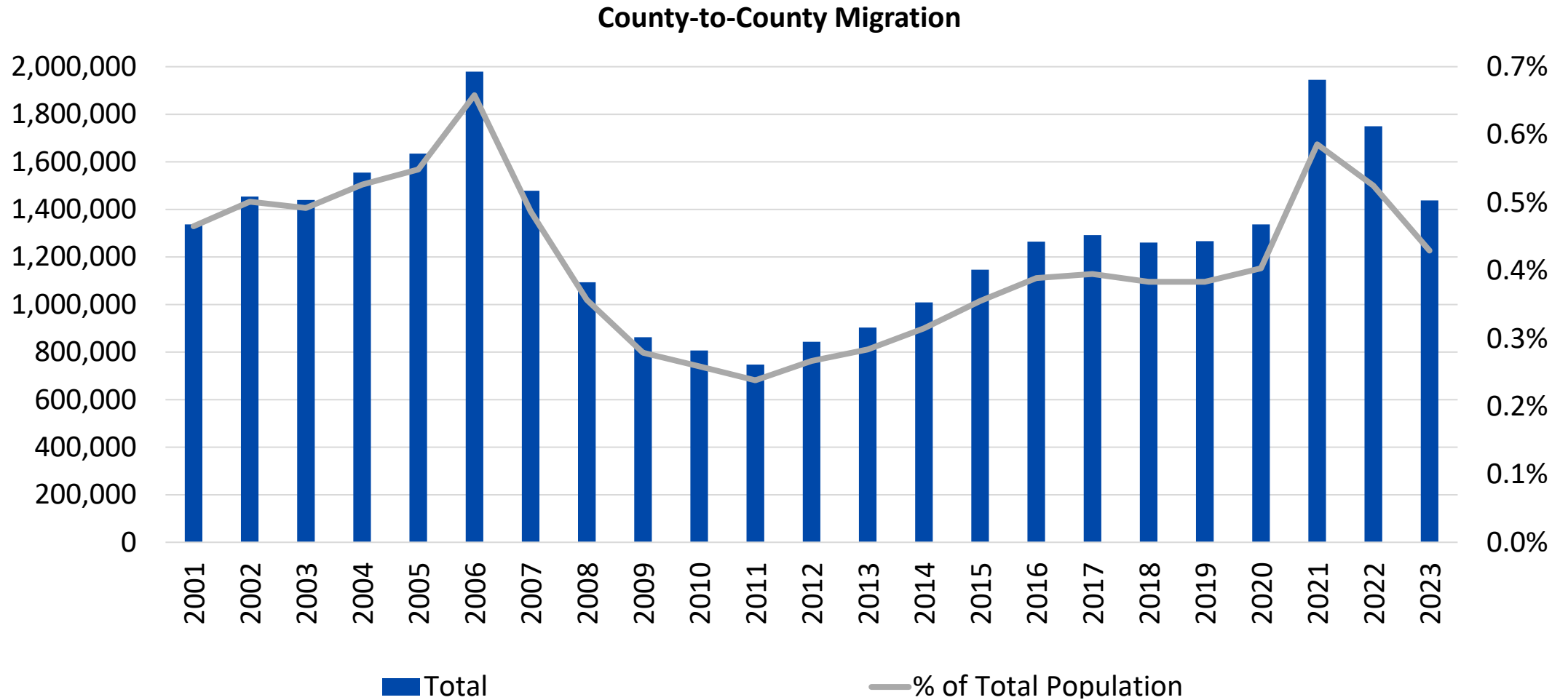
# The Migration to Southeastern States Continues, But At A Much Slower Rate Than During Peak COVID

## U-Haul Top & Bottom Growth States 2023

Rank	Top Inbound	Rank	Top Outbound
1	Texas	50	California
2	Florida	49	Massachusetts
3	North Carolina	48	Illinois
4	South Carolina	47	New Jersey
5	Tennessee	46	Michigan
6	Idaho	45	Louisiana
7	Washington	44	Maryland
8	Arizona	43	New York
9	Colorado	42	Connecticut
10	Virginia	41	Oklahoma

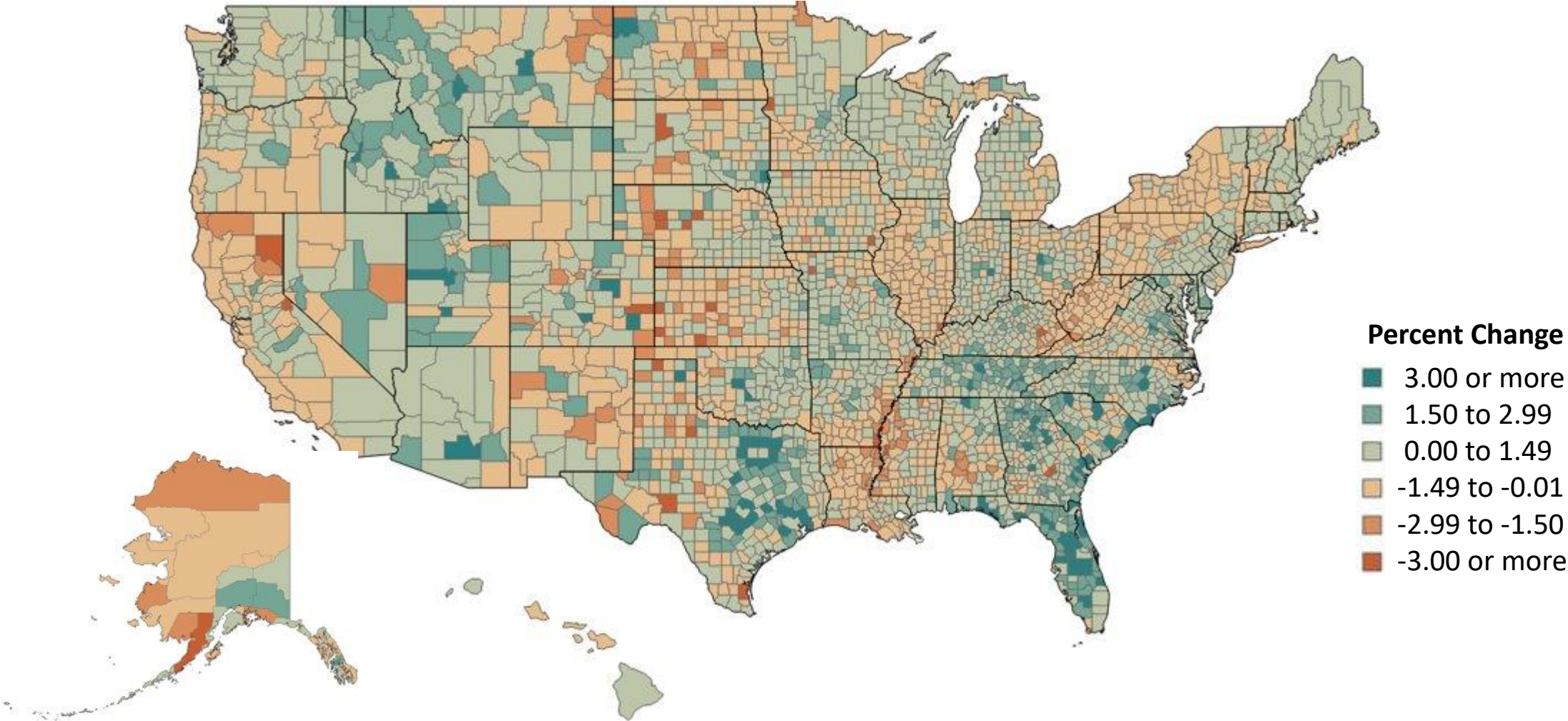
- Texas was the #1 growth state for the 3rd year in a row
  - Texas has been the #1 growth state for six of the last eight years
- Florida was the #2 growth state and it netted almost as many inbound U-Haul customers as Texas in 2023
  - Florida has been a top-four growth state for nine years in a row
- Biggest climbers in the rankings include:
  - Arkansas (+26 spots), Wyoming (+19), and Vermont (+18)
- California recorded the greatest loss of one-way movers for the 4<sup>th</sup> year in a row
- Overall, one-way transactions in 2023 were below the record-breaking levels seen during the pandemic
  - While the numbers are smaller, the geographical trends are the same

# County-to-County Migration is Decelerating, but 2023 Was Still Well Above Average



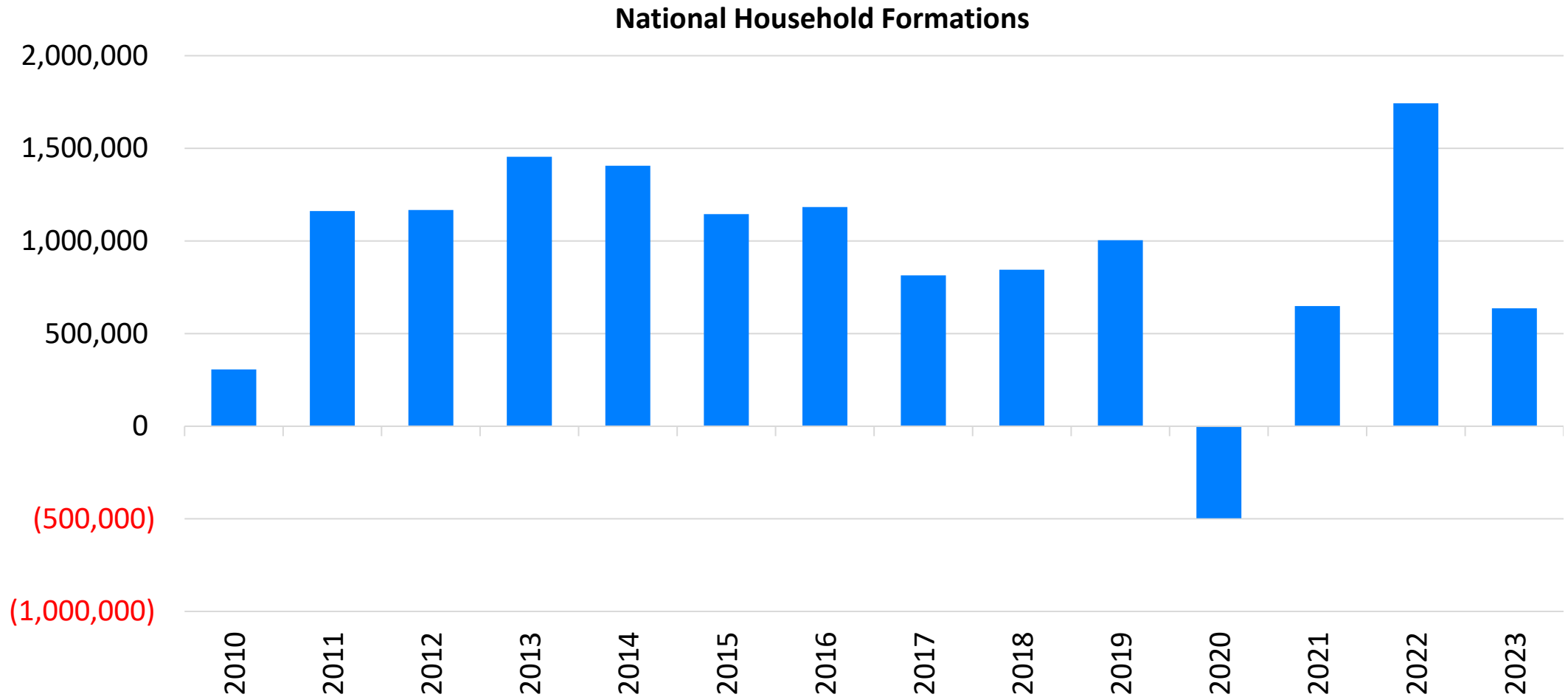
# Western and Southern States Have Experienced Significant Population Growth

Percent Change in County Population: July 2022 to July 2023



Source: Yardi Matrix; U.S. Census Bureau, Vintage 2023 Population Estimates

# There Was a Surge in Household Formations Coming Out of the Pandemic, But The Rate Has Since Returned To Norm

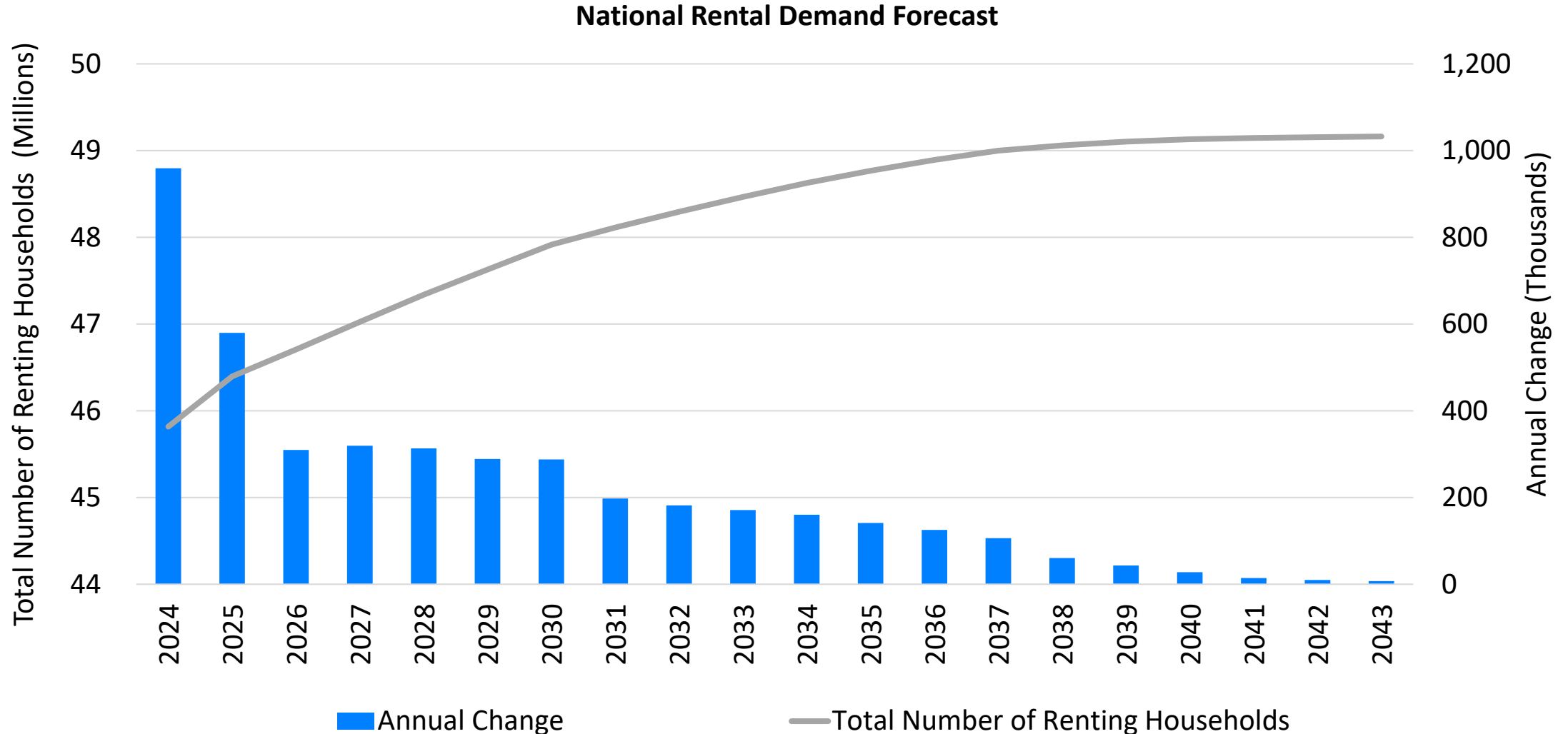


The U.S. Census Bureau collects data from all foreign born who participate in its censuses and surveys, regardless of legal status. However, evidence suggests that the Census undercounts noncitizens | Source: Yardi Matrix; Moody's Analytics; U.S. Census Bureau; "Noncitizen Coverage and Its Effects On U.S. Population Statistics," J. David Brown, Misty L. Heggeness and Marta Murray-Close (2023)

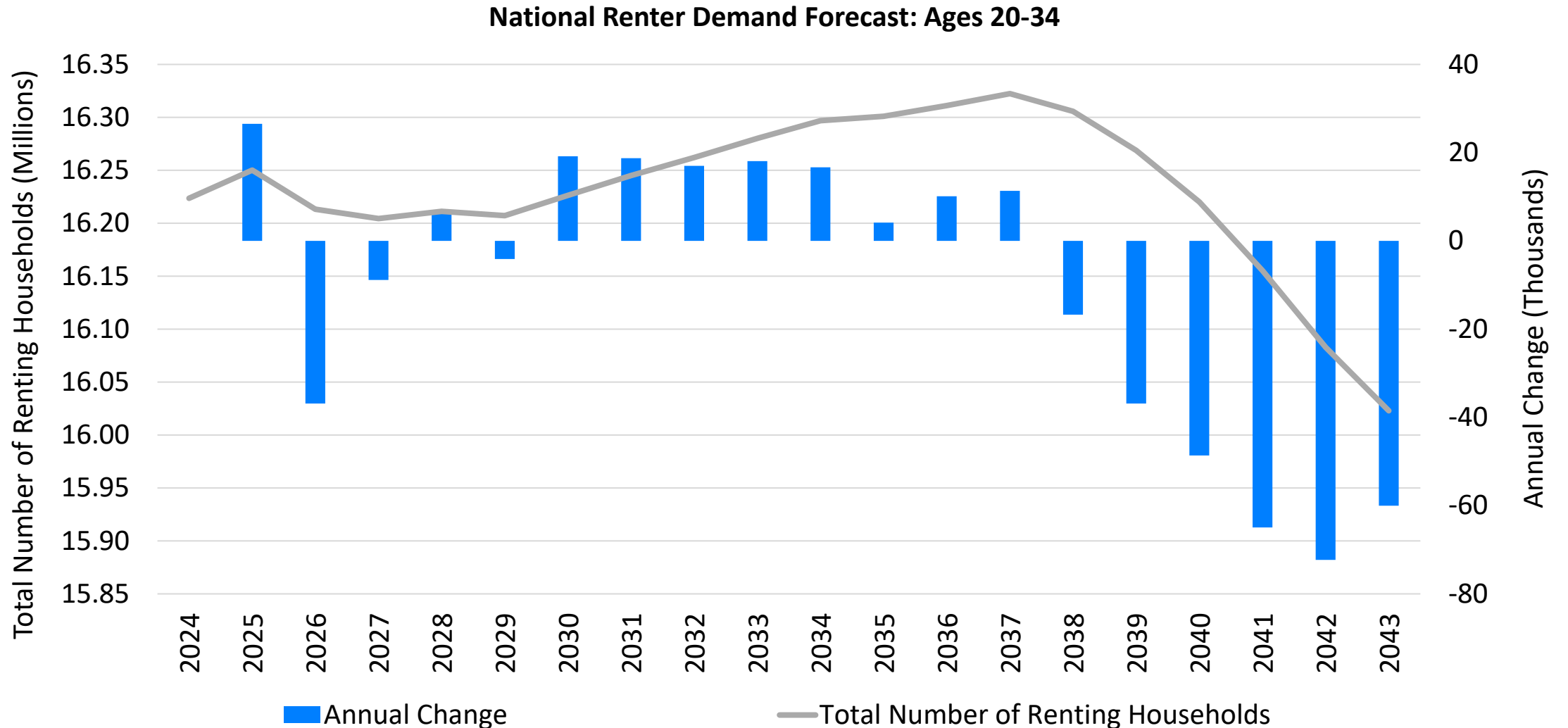
# Demographics: How They Could Impact A 20-Year National Renter Demand Forecast

Factor	Direction	Impact
Population Growth	Slowing	<b>Negative Impact:</b> Low population growth in the next 20 years will reduce the number of new HH formations
Birth Rate	Down	<b>Impact is Baked in:</b> Impacts population growth and thereby HH growth in the long-term, but factors less in a 20-year outlook as today's primary and youngest renter cohort (Gen Z, whose population size is known) will be the most consequential players
Immigration	Slowing (But subject to political changes)	<b>Negative Impact:</b> Limits population growth and thereby new household formations, off of 2021 to 2023 highs
Domestic Migration	Slowing	<b>Impact is Local:</b> While important to a market-level analysis, irrelevant to a national forecast
Household Formations	Slowing	<b>Negative Impact:</b> The pandemic boom was temporary and affordability concerns are expected to mitigate against demographics
Home Prices	Up	<b>Positive Impact:</b> Reduced home affordability pushes more would-be homebuyers into the rental market
Homeownership	Down	<b>Positive Impact:</b> Lower homeownership rates will create more renters
Household Size	Down	<b>Positive Impact:</b> There has been a rise in single-person households, which will increase HH formations

# The Total Number of Renting Households is Expected to Increase for the Next 10 Years, Then Flatline Heading into the 2040s



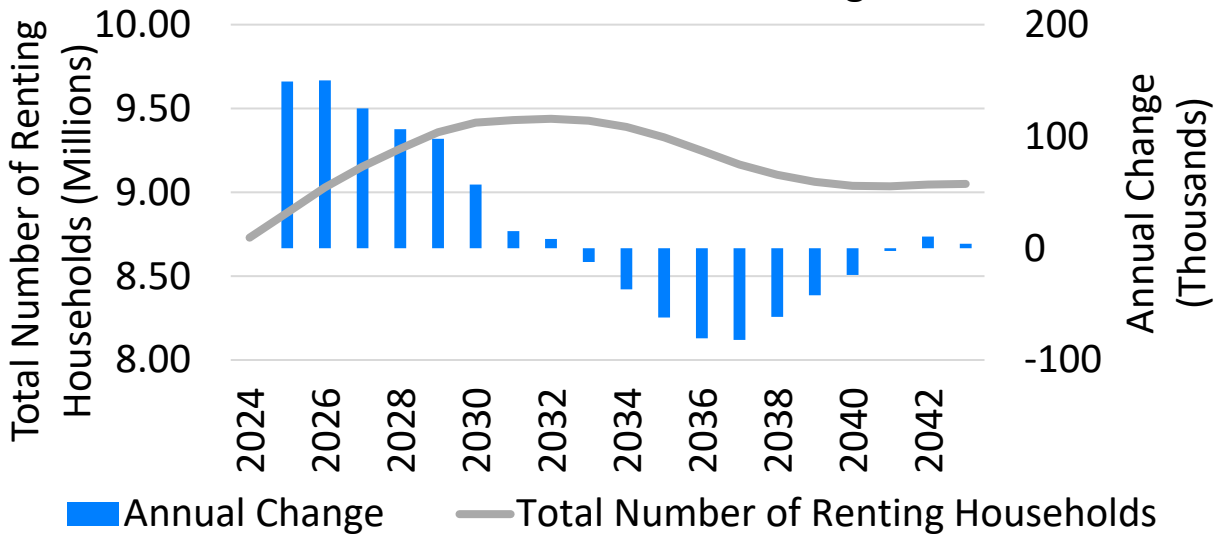
# The Youngest and Primary Renter Cohort is Forecasted to Peak in Terms of Total Number of Renting Households in 2037 Before Falling



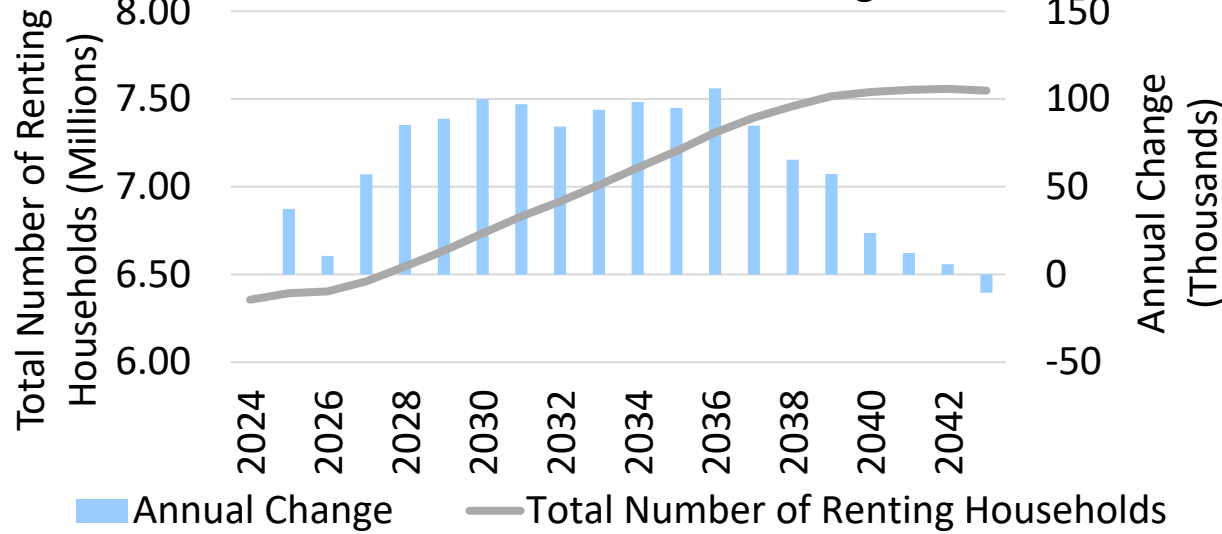


# Most Other Cohorts Will Flatline in Renting Households in the 2040s as well

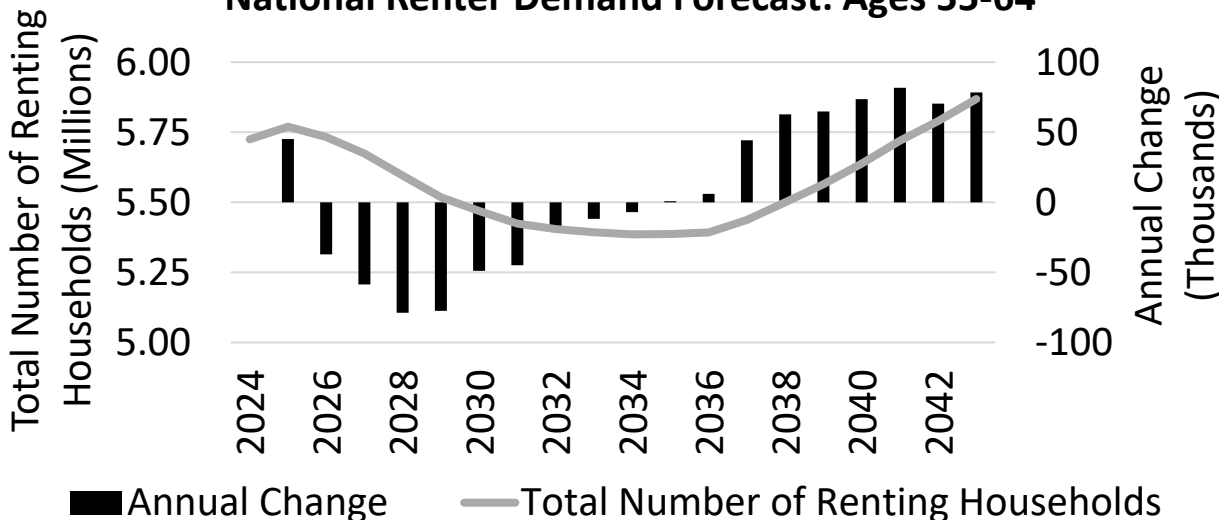
## National Renter Demand Forecast: Ages 35-44



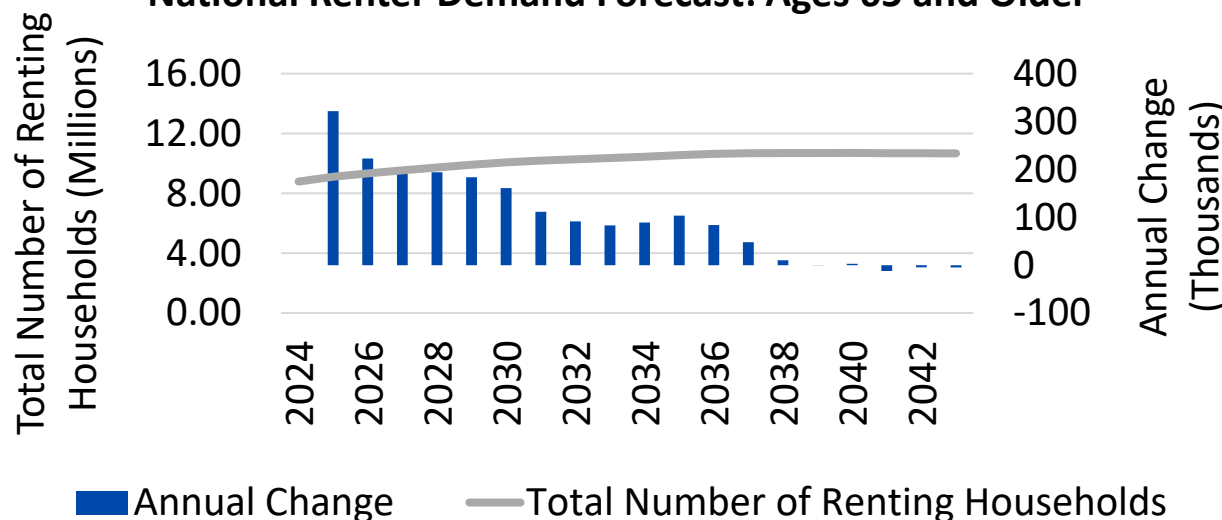
## National Renter Demand Forecast: Ages 45-54



## National Renter Demand Forecast: Ages 55-64



## National Renter Demand Forecast: Ages 65 and Older

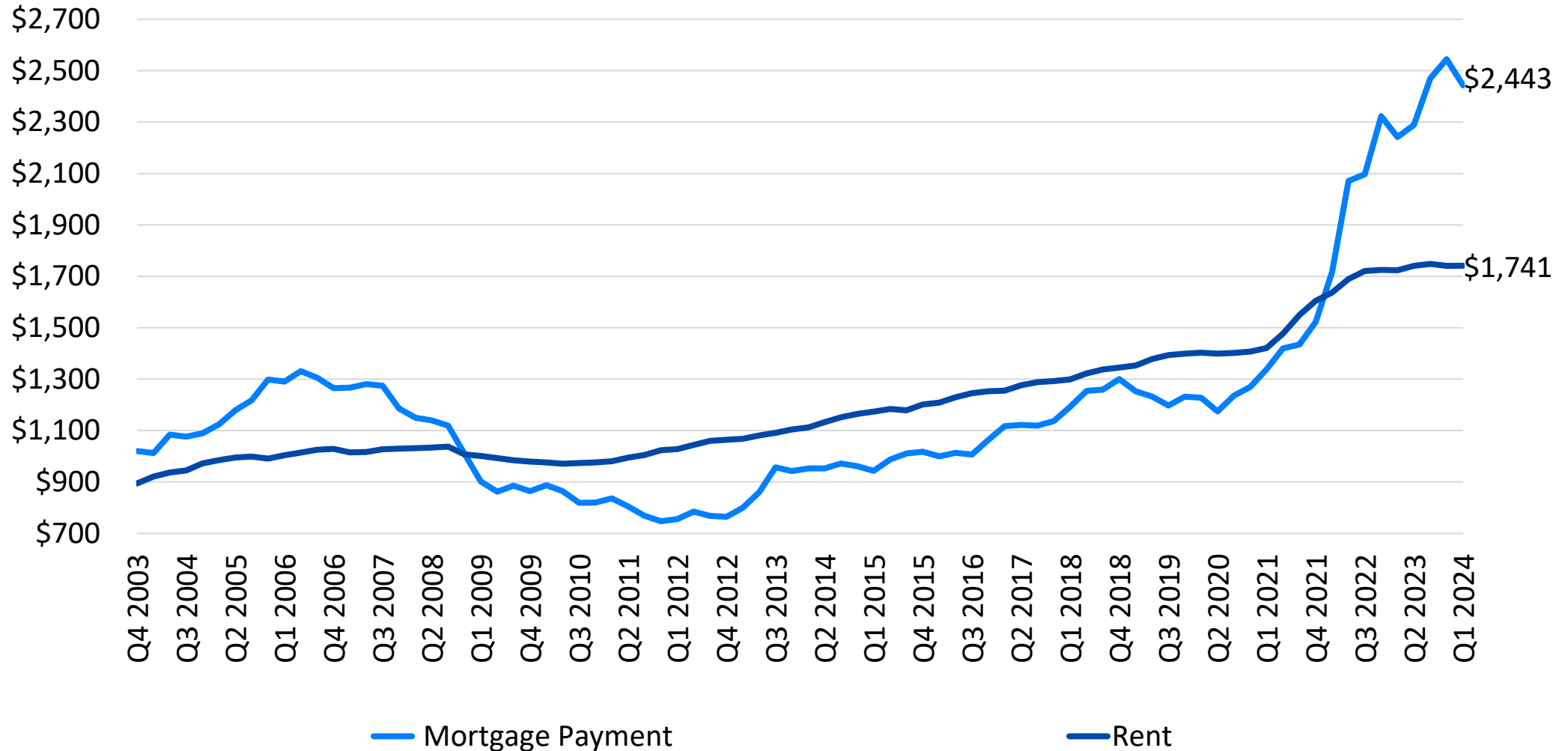


# AFFORDABILITY

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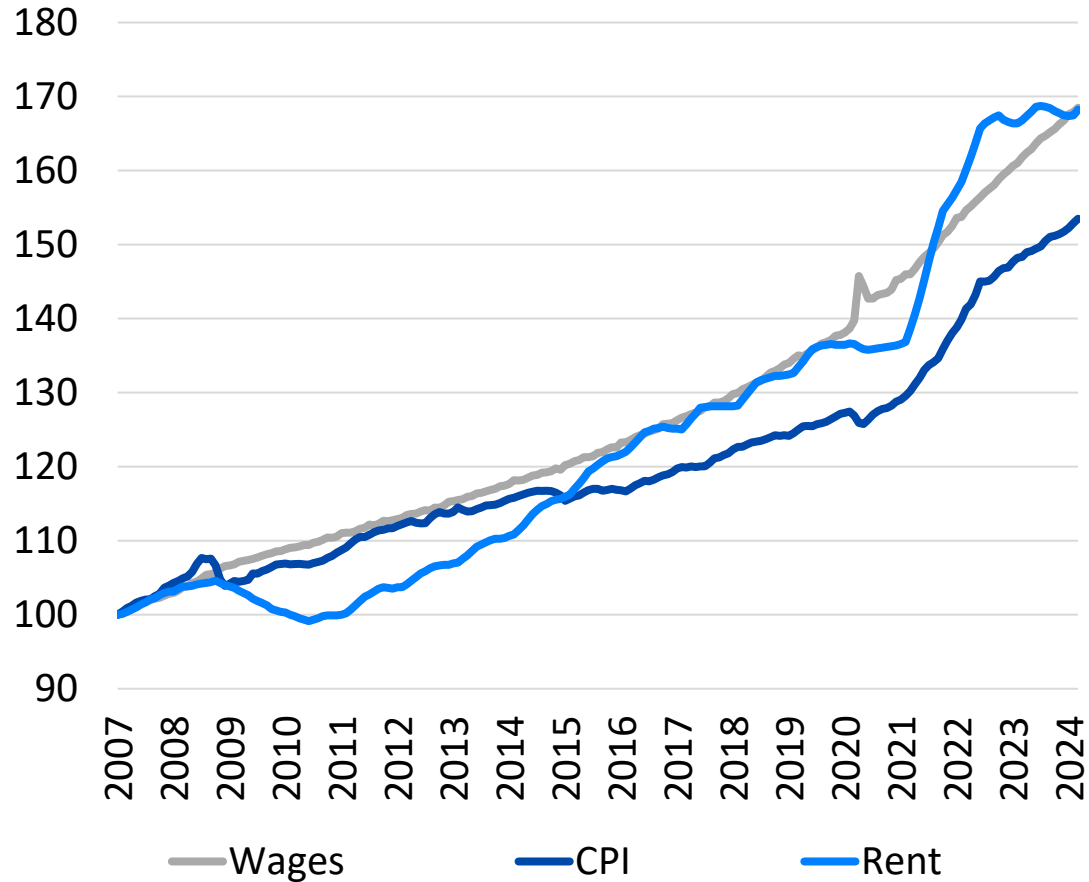
# Renting is Still a Better Deal Compared to the Cost of Owning

## Home Mortgage Payment vs. Rent

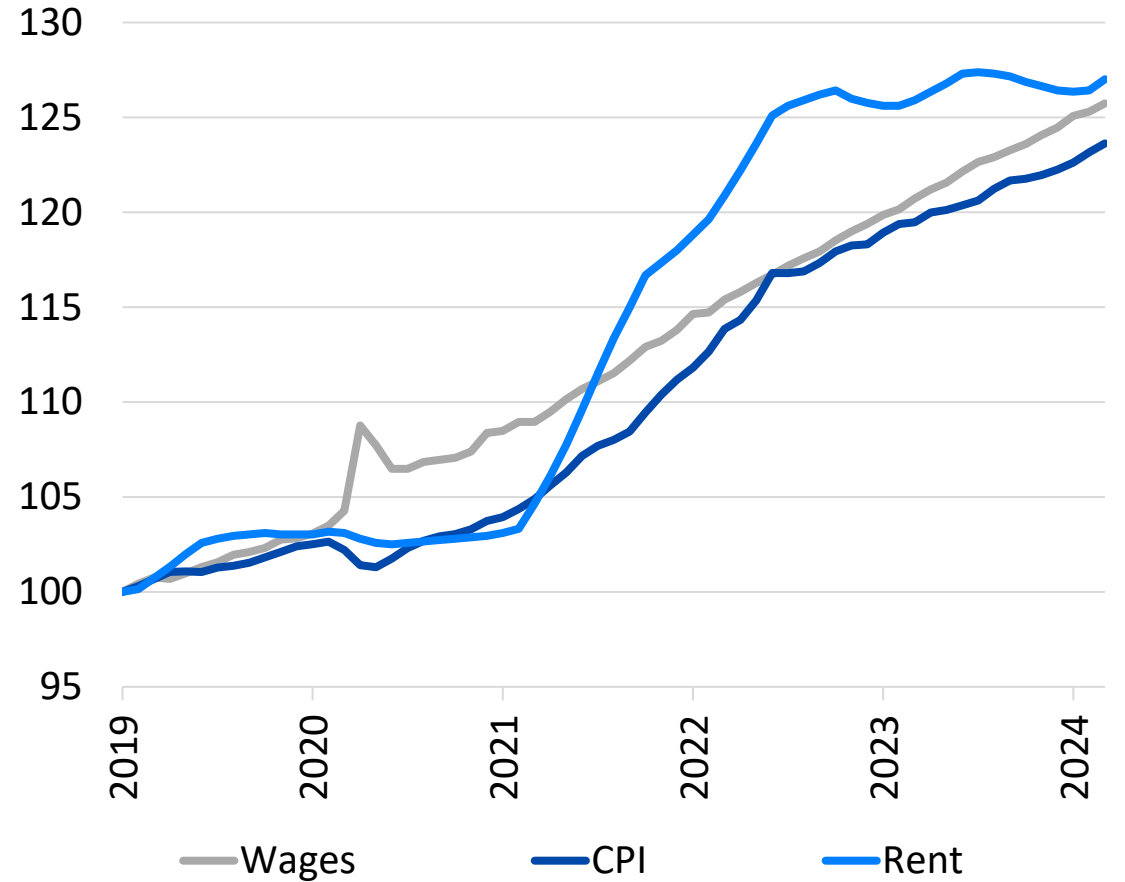


# Wage Growth is Catching up to Rent Growth, as Both Outpace Inflation

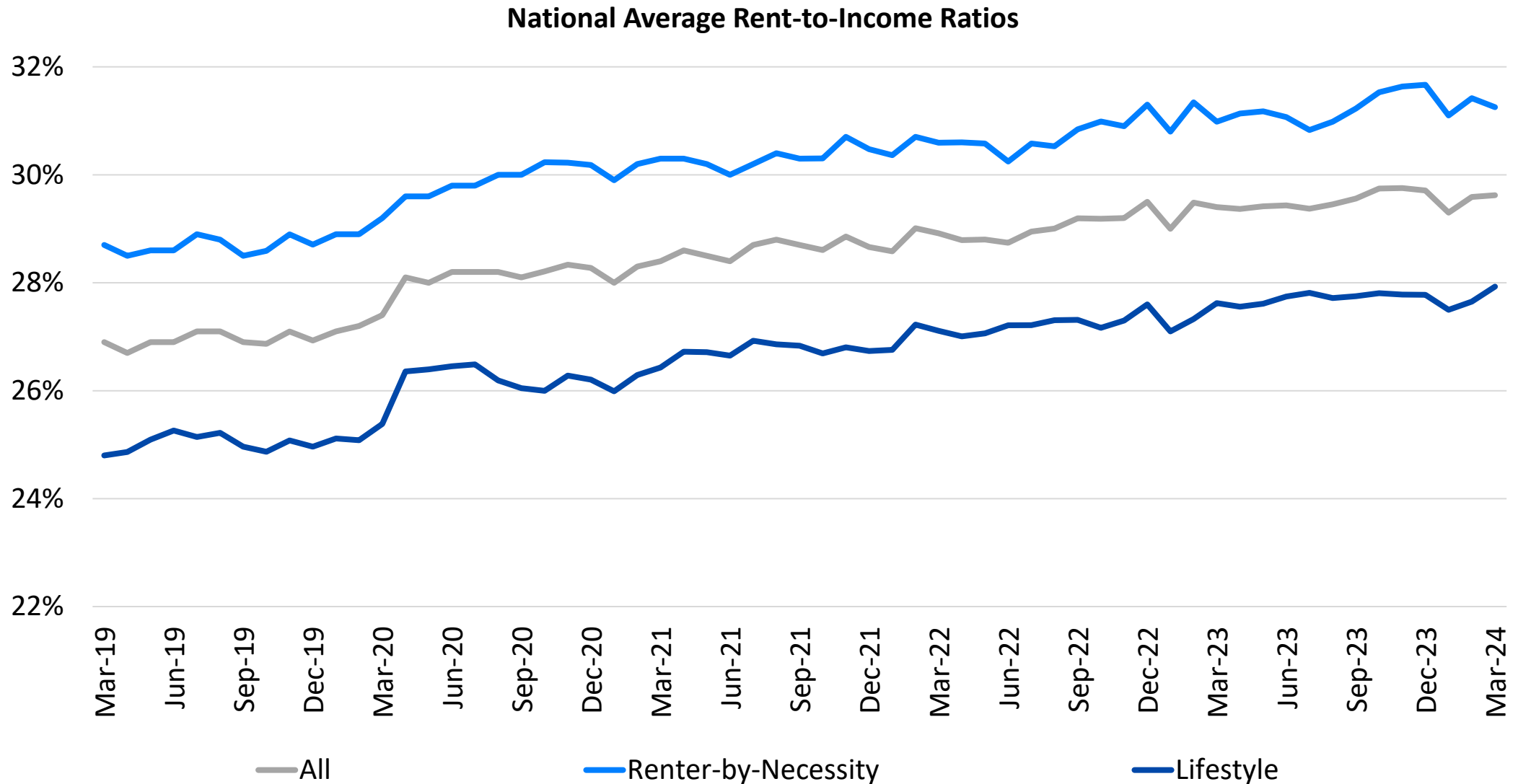
Average Asking Rent vs. CPI vs. Wages  
2007 to Present



Average Asking Rent vs. CPI vs. Wages  
2019 to Present



# Rent-to-Income Ratios Highest in Renter-by-Necessity Class

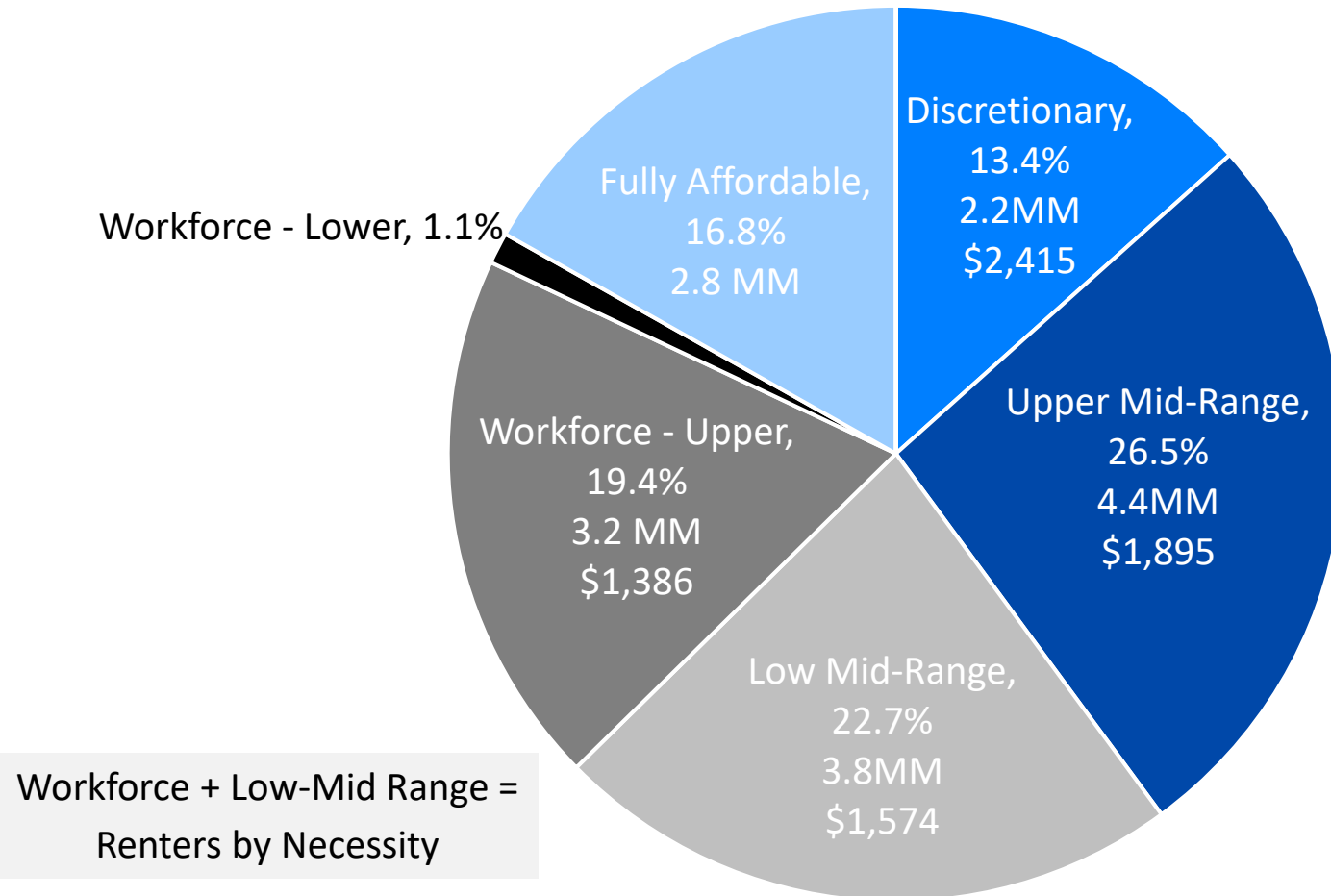


# High Rent-to-Income Ratios at the Lower-End Put Pressure on Those Already Cost Burdened

Market	Lifestyle Units			Renter-by-Necessity Units		
	March 2023	March 2024	Change	March 2023	March 2024	Change
Long Island	28.7%	25.8%	-2.9%	45.0%	49.8%	4.8%
Chattanooga	32.3%	23.8%	-8.4%	39.2%	43.4%	4.2%
Memphis	27.4%	29.7%	2.4%	36.9%	40.5%	3.6%
McAllen	0.0%	38.1%	38.1%	25.2%	39.2%	14.0%
San Francisco	26.3%	26.5%	0.2%	35.2%	38.7%	3.4%
Corpus Christi	30.9%	24.9%	-6.0%	38.4%	38.4%	0.1%
Worcester - Springfield	26.1%	30.6%	4.5%	34.2%	38.2%	3.9%
Bridgeport - New Haven	26.9%	28.6%	1.7%	37.6%	38.0%	0.4%
Knoxville	26.4%	31.4%	5.0%	27.3%	37.2%	9.9%
Pensacola	26.8%	27.1%	0.3%	38.4%	36.9%	-1.5%
San Diego	30.0%	31.7%	1.7%	35.6%	36.8%	1.2%
Sacramento	39.0%	31.7%	-7.2%	43.9%	36.5%	-7.4%
Washington DC	29.9%	32.0%	2.1%	35.6%	36.3%	0.7%
Boston	25.7%	28.3%	2.6%	34.3%	36.3%	1.9%
Madison	29.0%	29.5%	0.5%	31.8%	35.4%	3.6%

# Workforce Housing Currently Comprises Approximately One-Fifth of Completed Rental Units; Half of Renter HH's are Outside the Private Market

**Completed Inventory 16.7 MM: Composition By Rental Category**  
**%, #, and Asking Rent \$/month**



Income Levels Required To Be "Affordable"	Income of Renter HH
Discretionary = \$96,600/year	>\$75K: 30%
Upper Mid-Range = \$76,104/year	
Low Mid-Range = \$63,212	\$50-\$75K: 18%
Workforce Upper = \$55,662	\$35-\$50K: 13%
	\$20-\$35K: 16%
	<20K: 23%



# Responses to Affordability

## MARKET RESPONSES TO AFFORDABILITY

- 1) Co-living
- 2) Short-term Rentals
- 3) Airbnb Sublet Deal with Apartment Landlords
- 4) Conversions
  - Office to Apartments
  - Hotels to Apartments
- 5) BUILD!

## PUBLIC POLICY RESPONSES TO AFFORDABILITY

- 1) Curtail Demand
- 2) Encourage Supply
  - Reduce Zoning Impediments
  - Provide Incentives
- 3) Explicitly Cross-Subsidize Certain Populations
  - \$32B already spent on Vouchers (Section 8)
  - \$16B already spent on Project Based Section 8
  - \$25B already spent on Federal Low Income Housing Tax Credits
- 4) Regulate/Suppress Market Forces: Rent Control, etc.



# Texas' Incentives to Build Partially Affordable Projects

## Texas' Public Facility Corporations (PFCs):

- **Property Tax Abatement**

- Public Facility Corporations (PFCs) are nonprofit entities that operate on a local level
  - Created by a municipality, county, school district, housing authority, or sponsor
- Texas law recognizes qualified affordable housing as public use
- PFCs can qualify for a 100% property tax exemption for owning eligible affordable housing properties
- Recent changes now require PFCs to remain in their own jurisdictions & provide notice when leasing to an operator

- **Household Income Requirements**

- *Baseline Income Requirements*
  - Applies if property is occupied with existing rent restrictions or unoccupied at time of acquisition by the PFC
  - 10% of the units must be rented to households who earn 60% or less of AMI
    - Annual rent may not exceed 30% of 60% of AMI for the applicable household size
  - 40% of the units must be rented to households who earn 80% or less of AMI
    - Annual rent may not exceed 30% of 80% of AMI for the applicable household size
- *Renovation Requirement*
  - If occupied at time of acquisition, PFCs have a choice to renovate the property
  - If declined, 25% of the units must be reserved for 60% or less of AMI and 40% for those below 80% AMI
- If renovated, 15% of the total gross cost must be spent and only the Baseline Income Requirements must be met

# Florida's Incentives to Build Partially Affordable Projects

## Florida's State Apartment Incentive Loan (SAIL) Program:

- **SAIL Overview**

- Administered by the Florida Housing Finance Corporation (FHFC) to provide low-interest loans for the construction or substantial rehabilitation of affordable housing
- Part of gap financing and usually paired with additional funding sources
- Funding is accessed through the Request for Applications (RFA) process
  - RFAs are a multifamily allocation process where FHFC issues funds on a competitive basis

- **Qualifications**

- At least 20% of units reserved for those at 50% or less of AMI
- If used in conjunction with housing credits, 40% of units reserved for those at 60% of AMI
- SAIL funding will cover a maximum of 25% of the development cost with some exceptions
  - Exceptions include: Nonprofit/public sponsors with at least 10% funding from other sources, developments with at least 80% set aside for defined demographics, or by committing units for Extremely Low-Income (ELI) households (10% if using Competitive Housing Credits or 5% if not)
- Required annual reporting and a compliance period of 50 years unless otherwise stated in the RFA
  - ELI units may convert to 60% AMI units after 15 years if not using income averaging
  - Eligible units financed via the National Housing Trust Fund (NHTF) may convert to 60% AMI after 30 years
    - NHTF is a federal program that provides funding for low-income housing

# Florida's Incentives to Build Partially Affordable Projects

## Florida's Live Local Act:

- **Amendment to Zoning Laws**

- Previously, counties were allowed to bypass local zoning regulations on residential, commercial, or industrial land
  - Required 10% of units to be affordable housing and the developer to not receive/apply for any SAIL funding
  - Amendment allows for SAIL funding, but removes the zoning bypass for residentially-zoned affordable developments
- Now, counties **must authorize** proposed mixed-use/multifamily projects in **any** commercial, industrial, or mixed-use zones without any comprehensive plan amendments, rezoning or other special approvals needed
  - Mixed-use projects need to reserve at least 65% of total square footage for residential units
  - To qualify, properties must have at least 40% of residential units as affordable housing
  - Affordability defined as total monthly rents not to exceed 30% AMI for tenants who are extremely-low-income (30% AMI), very-low-income (50% AMI), low-income (80% AMI), and moderate-income (120% AMI)

- **Affordable Housing Property Tax Exemption**

- Exemptions available if a 50+ unit property has 20% of units reserved for tenants at 60% AMI
  - If fully affordable, 100% exemption on assessed value per affordable unit
  - If less than 100% of units are affordable, up to 75% exemption on assessed value per affordable unit

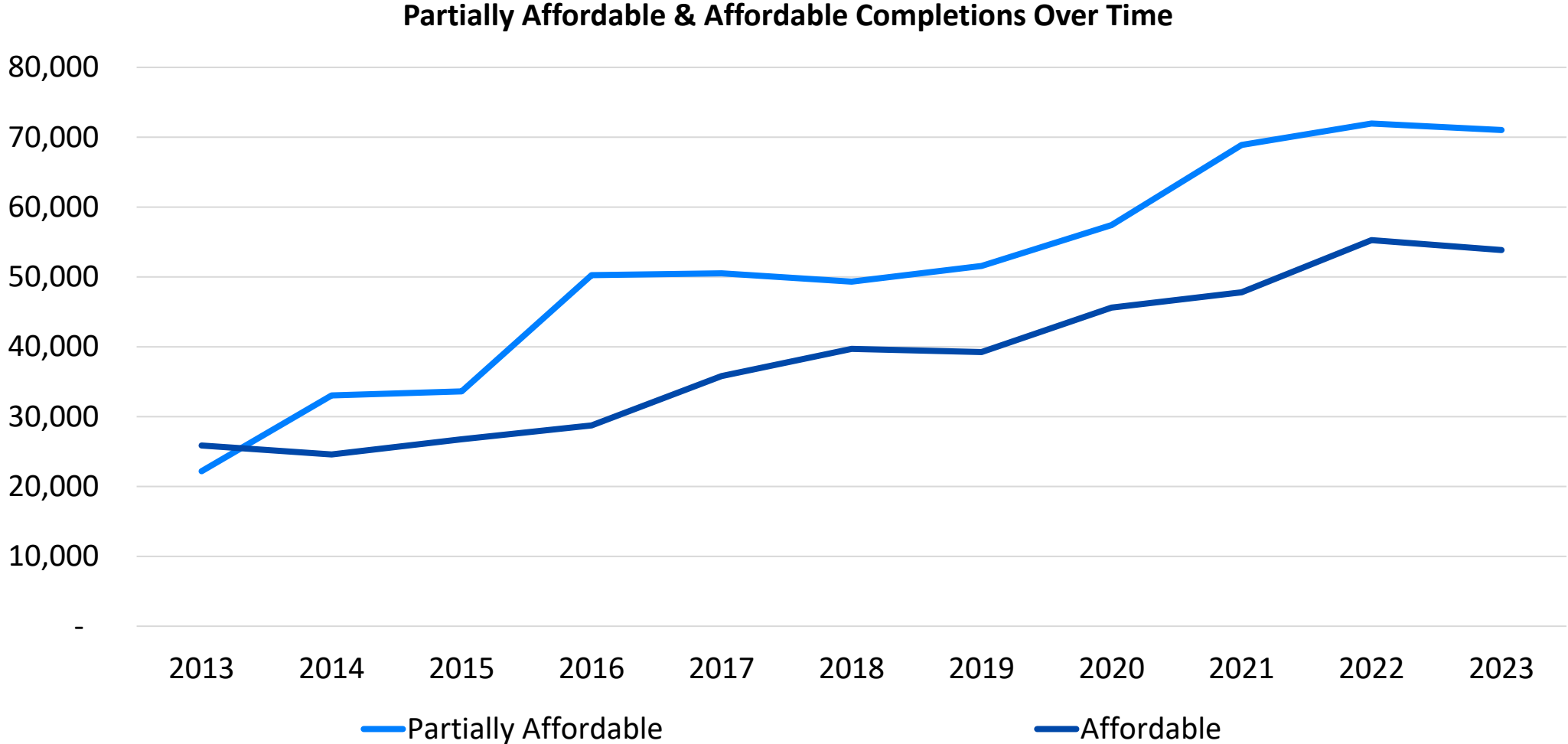
- **Building Materials Sales Tax Refund:** Developers can refund up to \$5,000/eligible unit for sales taxes paid for building materials

- **Live Local Credit (Corporation Tax Donation Credit):** Corporations may get 100% credit for qualified contributions used by SAIL

- **Additional SAIL Funding:** An additional \$150 M in new, recurring funds for the SAIL program

- **Prohibition of Rent Control:** Removes language from current law that allows under certain circumstances a county, municipality or local government to pass an ordinance to impose rent controls

# Partially Affordable & Affordable Housing Completions Have Trended Upward Over Time



# GSE Loan Programs Incentivize "Affordability" in Conventional Multifamily

## Workforce Housing Preservation

(Freddie Mac)

- Private borrowers may voluntarily agree to restrict rents on units for residents at 80% Area Median Income (AMI)
- At least 20% of units must be set aside to meet these affordability standards
- Rents must be preserved for the lesser of the term of the loan or 10 years
- Freddie Mac Loan Agreement regulates rent restrictions with annual rent monitoring to ensure affordability
- 1.25x/80% max credit parameters & competitive loan pricing

## Sponsor-Initiated Affordability

(Fannie Mae)

- Incentivizes voluntary preservation and creation of affordable units via competitive loan pricing
- Conventional properties may qualify if at least 20% of units are affordable (30% of income) at 80% AMI
- 5-30 year loans at competitive rates and flexible terms
- 1.25x/80% maximum credit parameters
- Possible 1.20 DSCR if in eligible market, borrower is an affiliate/sponsor, at least 50% of units are restricted at 80% AMI, and actual rents are at least 10%

## Tenant Advancement Commitment

(Freddie Mac)

- Borrowers restrict rents on conventional properties
- Enter into a Master Financing Commitment with Freddie Mac
- Min 7-year fixed & floating rate loans with favorable terms
- Loans receive full mission pricing benefits
- Preservation of Affordable Rent Covenant (PARC) helps determine the percentage of restricted rent units
- Annual rents may be no more than 30% of income @ 60-80% AMI

## Targeted Affordable Housing Bridge Loan

(Freddie Mac)

- Short-term financing to help acquire/refinance non-LIHTC and LIHTC properties near end of compliance period
- Helps borrowers bridge the gap to later recapitalize using 4% LIHTC or long-term Freddie Mac financing & public subsidies
- 24-month, interest-only floating rate loan with 6-month extension at 1.15x/85% LTV for LIHTC eligible and 1.20-1.25x/80% LTV for non-LIHTC eligible
- Non-LIHTC eligible: 10-20% of units rent restricted at 80-120% AMI depending on market. Other units at market rent



# New Proposed Programs Modeled After LIHTC Aim to Expand Affordable Housing to a Broader Group

## Workforce Housing Tax Credit (WHTC) & Middle-Income Housing Tax Credit (MIHTC)

- **Qualifications**
  - At least 60% of residential units would be occupied to tenants at 100% or less AMI
  - Rents must be restricted to 30% of the designated income
  - New projects are eligible for 50% of the buildings cost
  - Rehabilitation projects are eligible for 20% of the cost
  - 15-year compliance time frame
- **State-based decision making**
  - Local authorities are given discretion to select projects and utilize public-private partnerships
  - Allows finance agencies to transfer the middle-income allocation to LIHTC to combine both tax credits
- **Allocation**
  - \$1 per capita with a minimum of \$1,500,000 for small states
  - 30-year affordability period with a 15-year initial compliance time frame

# The Mixing of Affordable With Conventional Multifamily Provides Opportunities for Expansion and Investment

- **Affordability issues in the US have created a need for federal and state-based programs**
  - Proposed Federal LIHTC legislation could substantially increase affordable housing over the next decade
  - Local and state-based programs are proliferating, adding and expanding incentives to boost development of affordable rentals
- **Investment opportunities are not limited to new development**
  - Opportunity to acquire rehabilitation projects and receive tax credits over 10 years
  - Construction is expensive and financing is tight in the current market - the LIHTC program offers an option to multifamily developers
  - Possibilities to invest in conventional multifamily properties that are eligible for affordable programs
- **Market growth**
  - Despite an overall increase in affordable housing completions since 2013, demand greatly outpaces supply
    - *The National Low Income Housing Coalition estimates that extremely low-income households represent 25% of the 44.1M U.S. renters, meaning a shortage of 7.3M affordable and available rental homes*
  - Expect to see the supply of partially affordable & affordable housing continue to rise

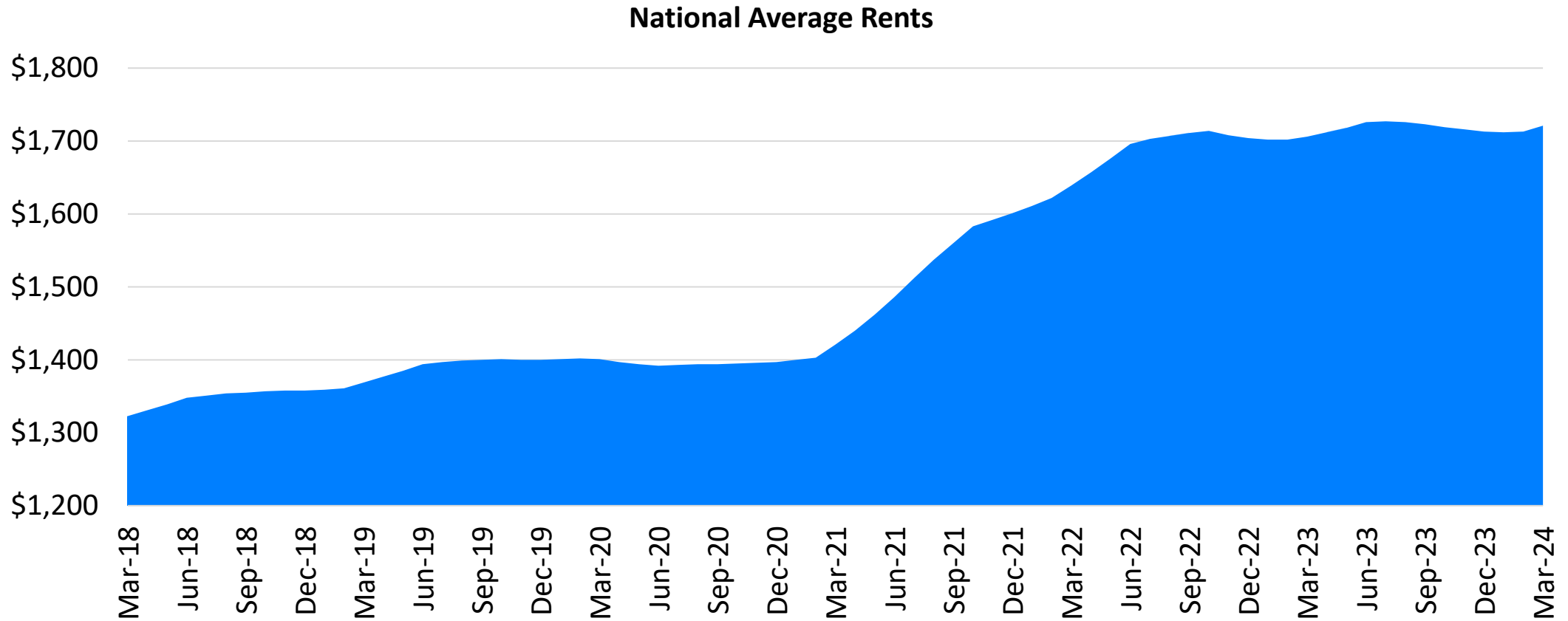
***Expected to be an important, growing factor in multifamily — as a result, we are expanding the capabilities within the Yardi Matrix service to address the sector!***

# MULTIFAMILY FUNDAMENTALS

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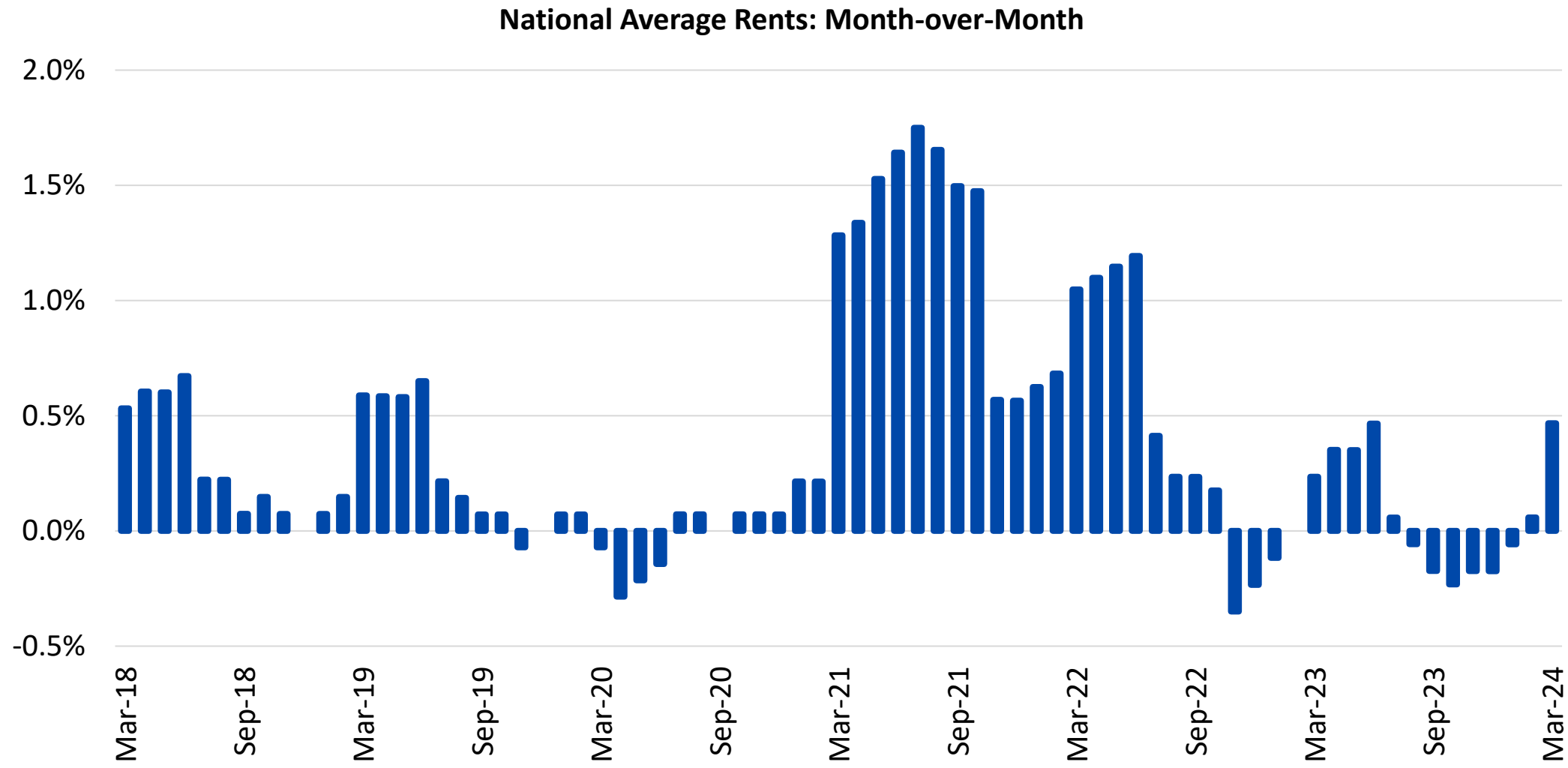


# National Multifamily Rent Growth is Strong But Decelerating

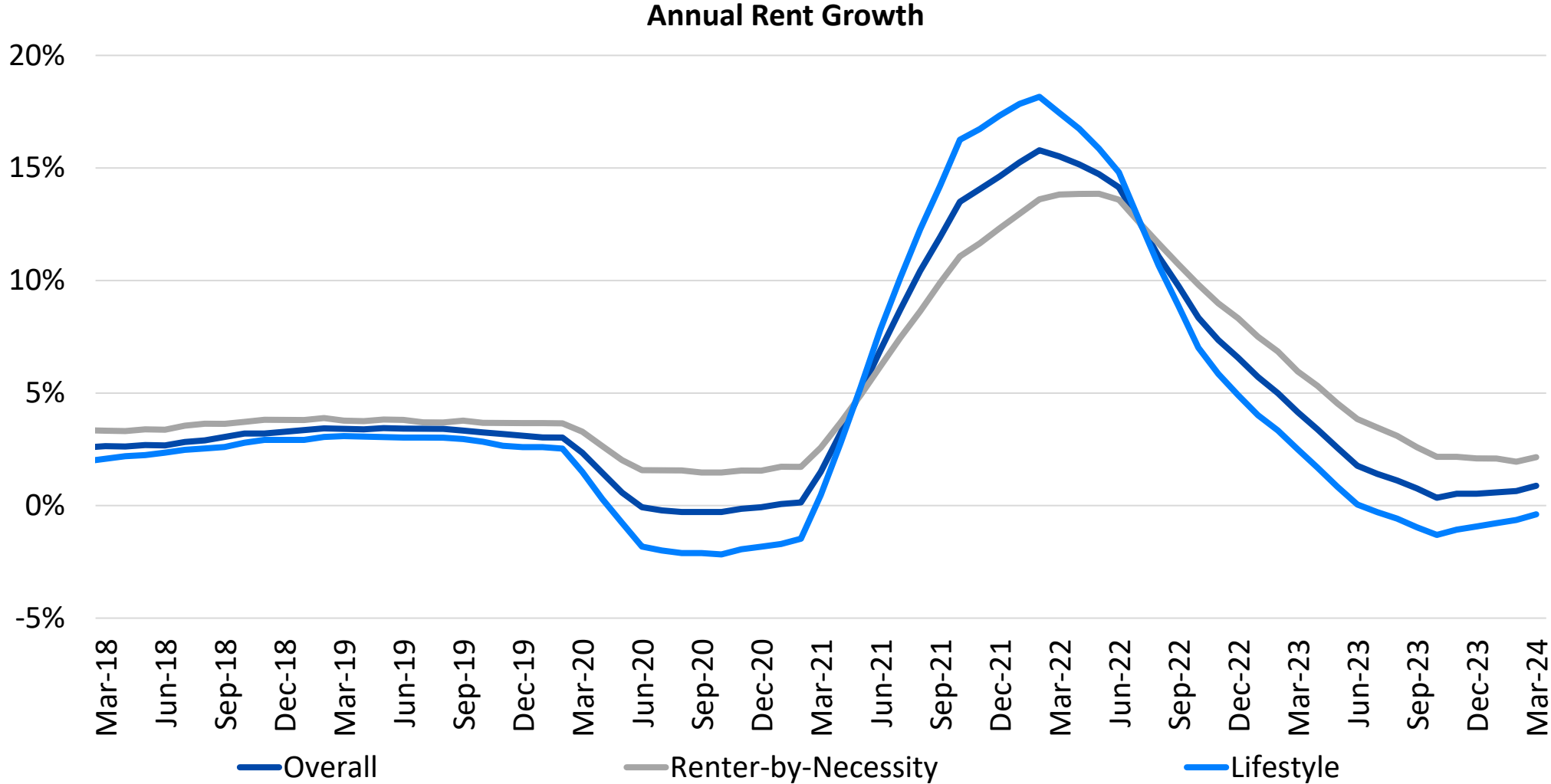


	% Change	\$ Change
Year-over-Year: March '23 – March '24	0.9%	\$15
Month-over-Month: Feb '24 – March '24	0.5%	\$8
Pre-pandemic to Current: Feb '20 – March '24	22.8%	\$319

# Rent Growth Has Been Positive After Several Months of Negative Growth

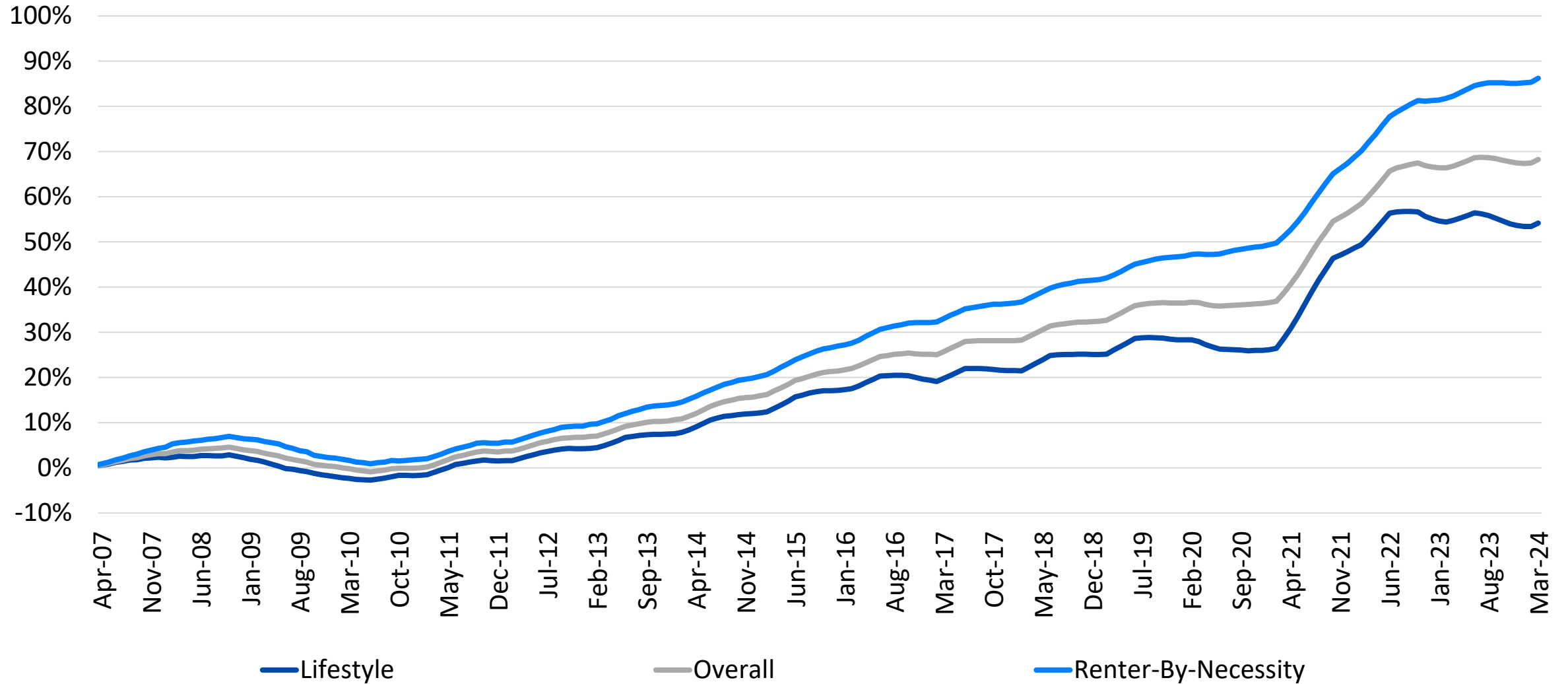


# Lifestyle Rent Growth Surged at the End of 2020, But Has Since Fallen Behind Renter-by-Necessity Rent Growth



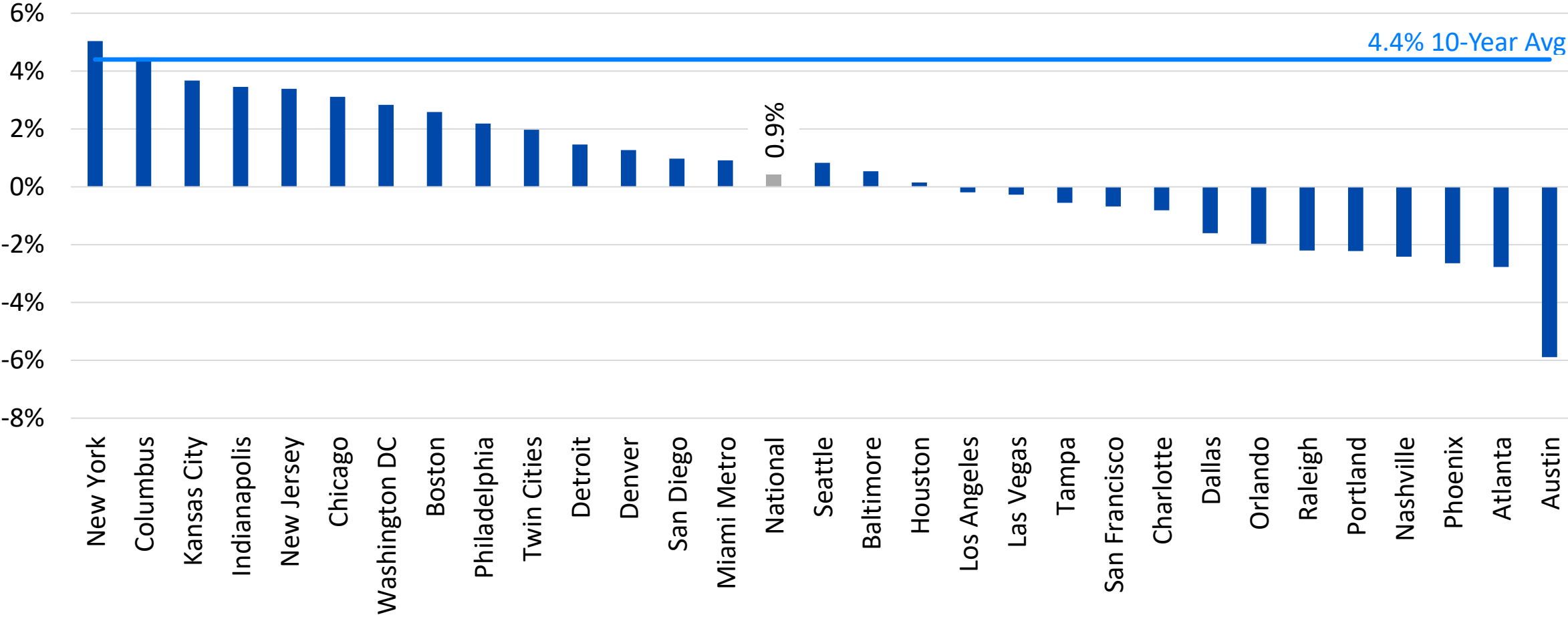
# Renter-By-Necessity Properties Saw the Largest Cumulative Increases in Rents Post-Pandemic

## Cumulative Rent Growth Since 2007



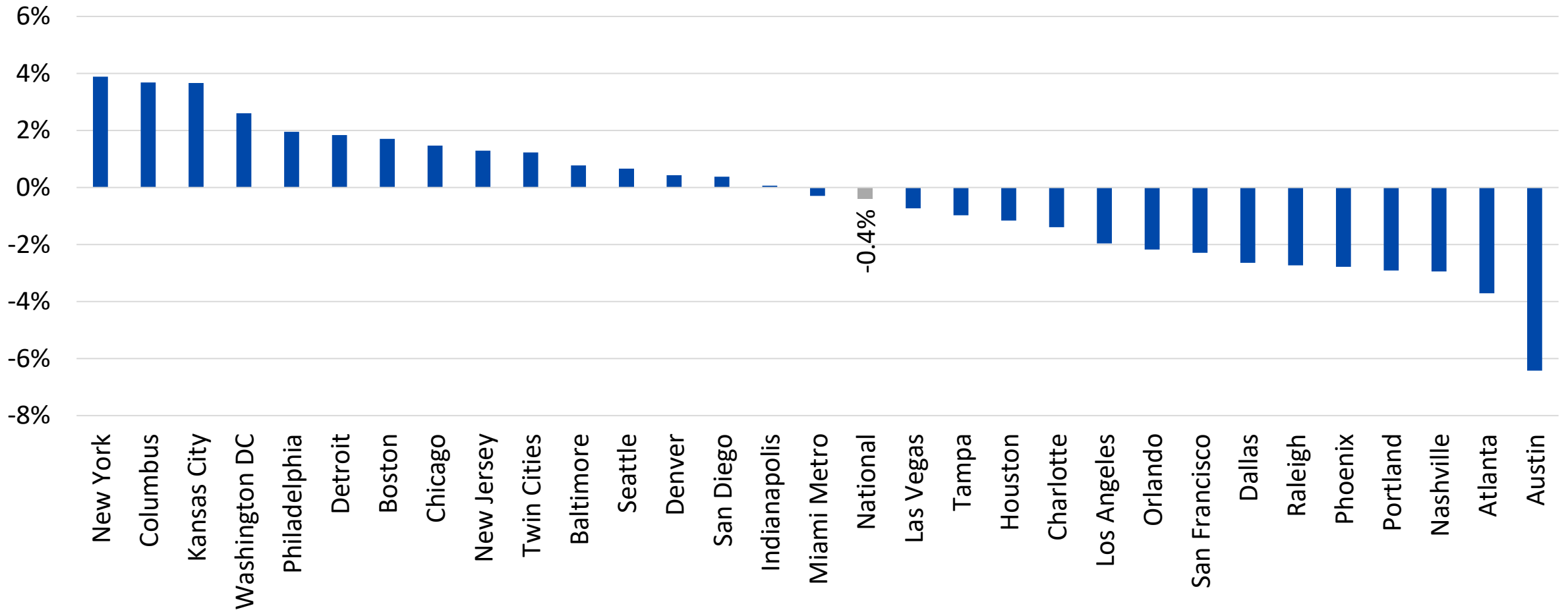
# Rent Growth Has Been Softening in Many Matrix Top Markets

Year-Over-Year Rent Growth - All Asset Classes



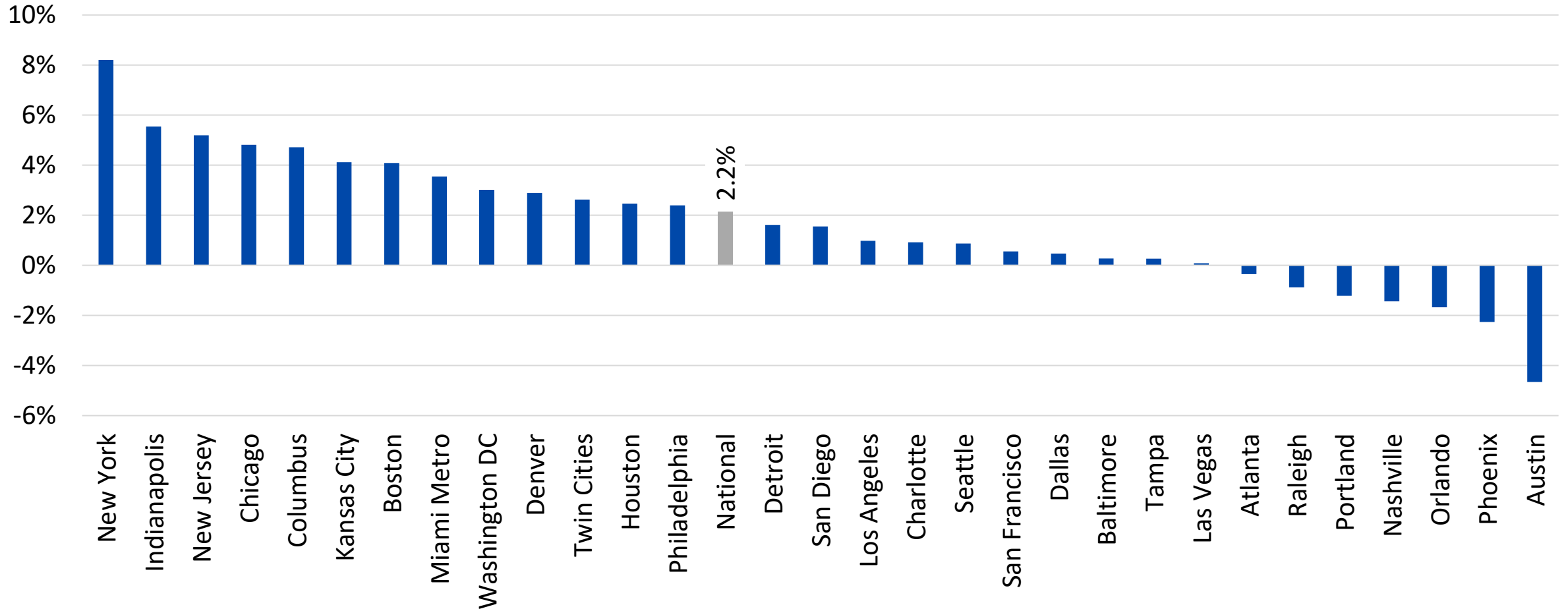
# In March 2024, Sunbelt and Western Metros Experienced Rent Growth Declines in the Lifestyle Asset Class

## Year-Over-Year Rent Growth - Lifestyle Asset Class



# The Majority of Top Matrix Markets Experienced an Increase in Renter-by-Necessity Rent Growth in March

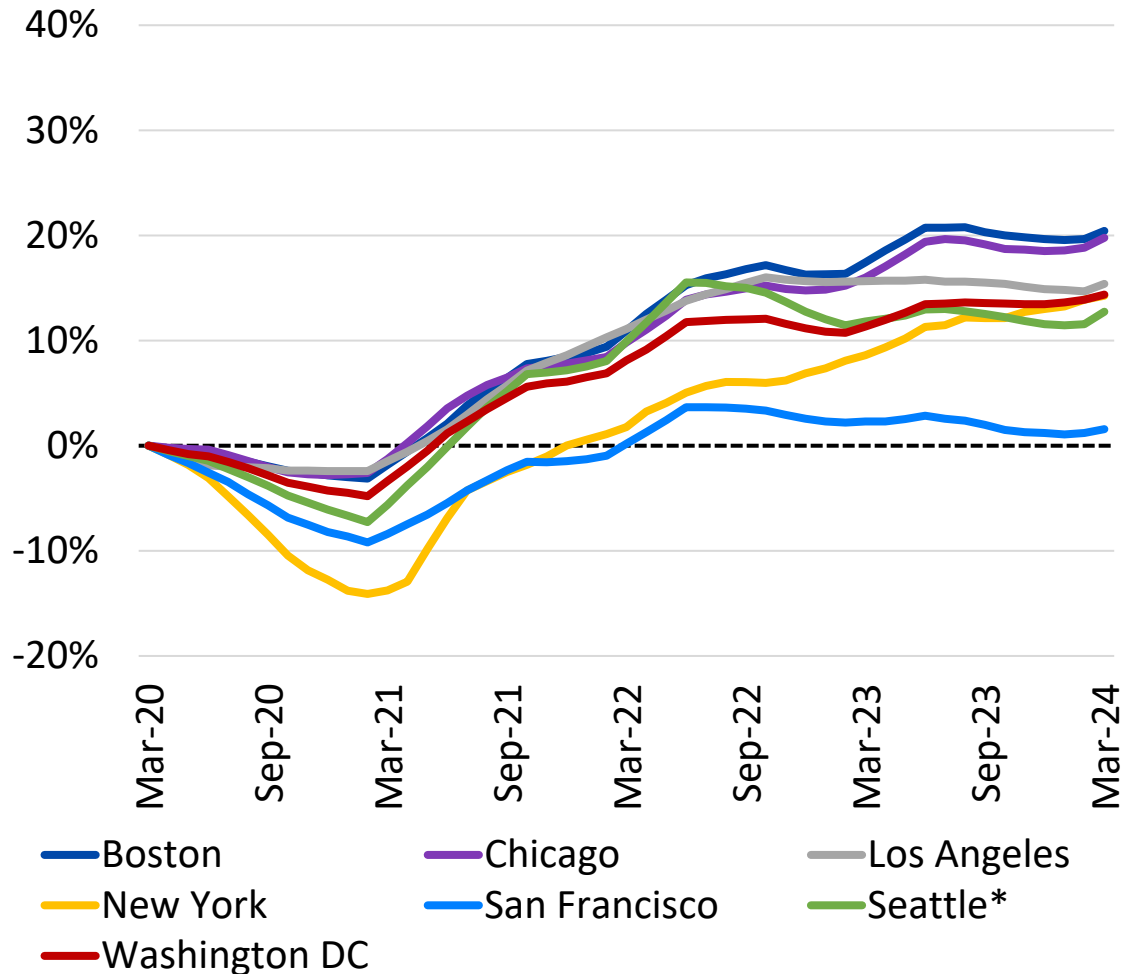
Year-Over-Year Rent Growth - Renter-by-Necessity Asset Class



# Multifamily Rent Growth Recovered Quicker in Tech Hubs than Gateway Markets

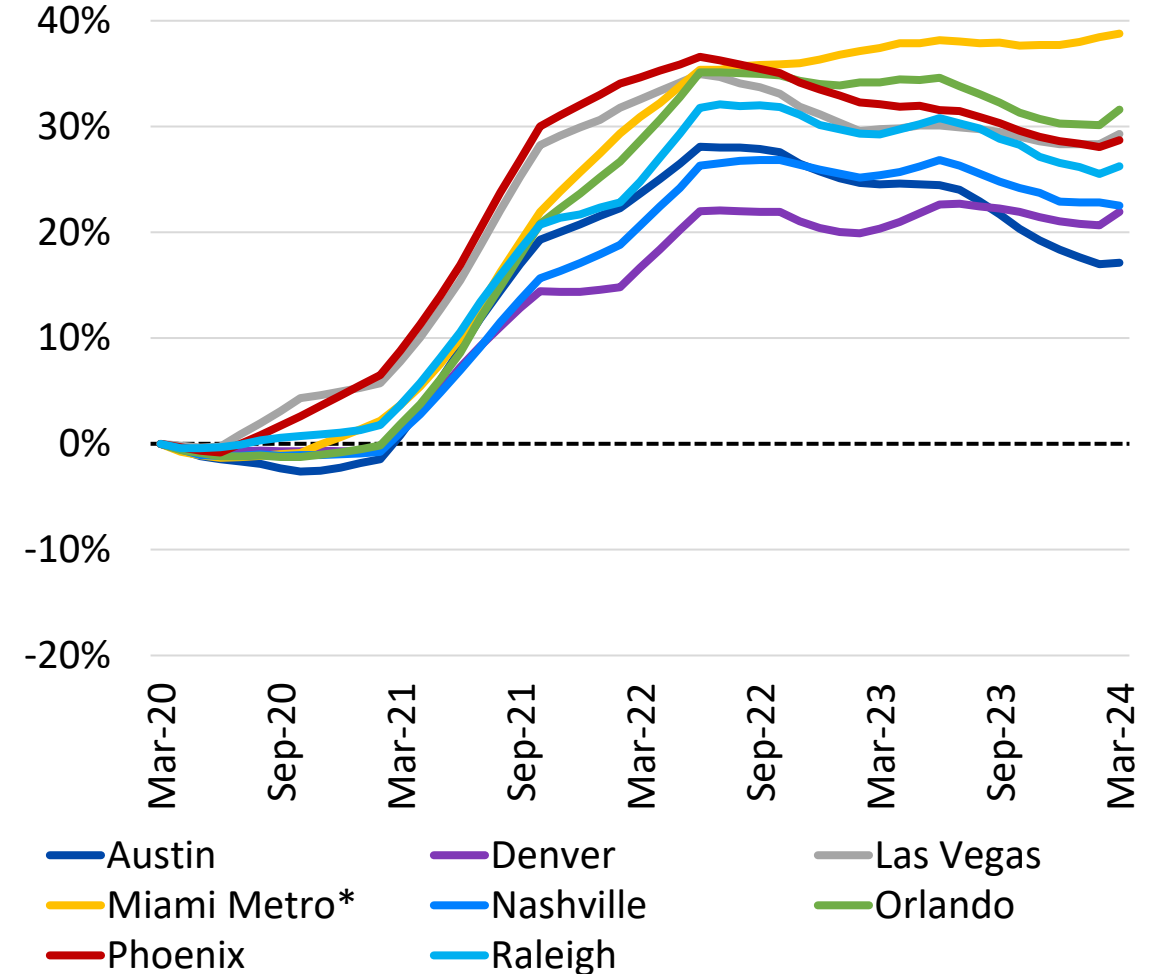
## GATEWAY MARKETS

Change in Rents Since March 2020



## TECH HUB MARKETS

Change in Rents Since March 2020

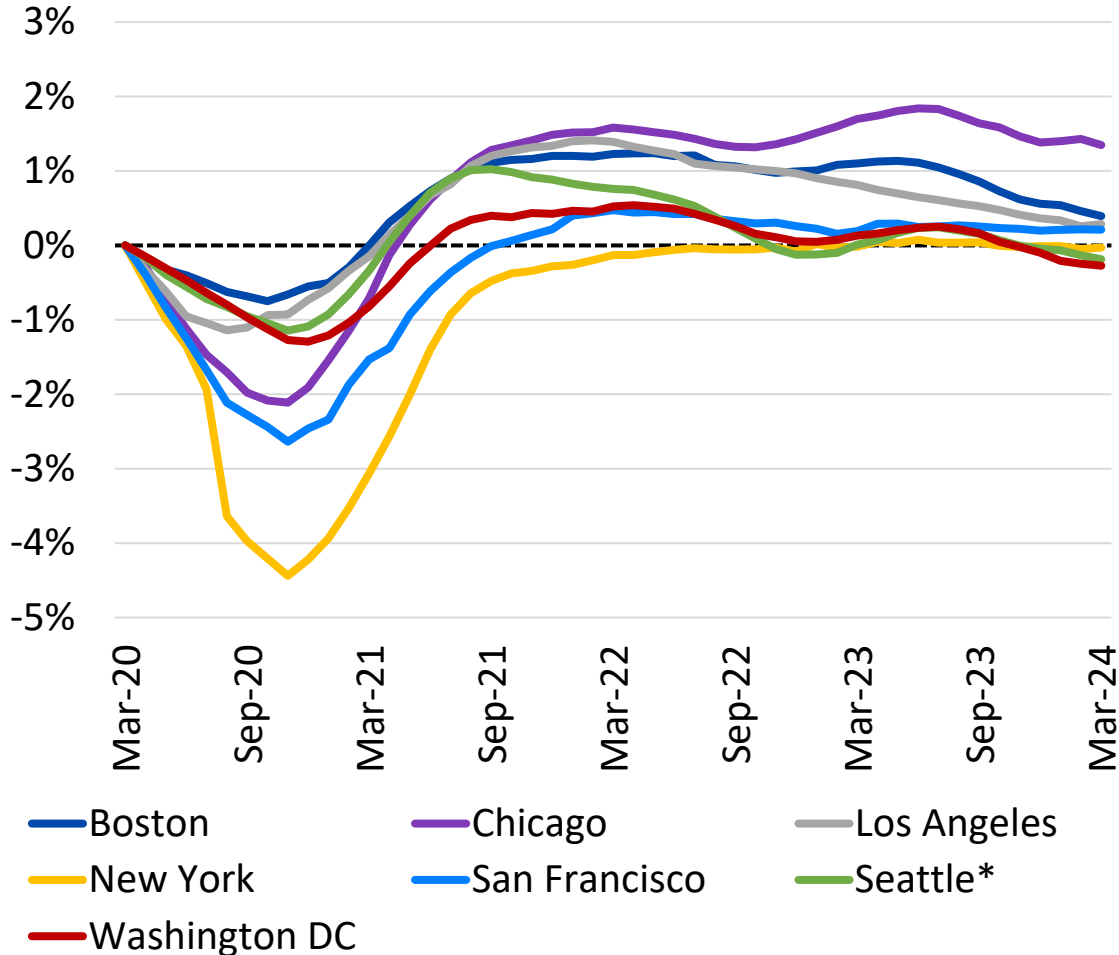


\*Miami performs more like a tech hub market & Seattle performs more like a gateway market | Source: Yardi Matrix

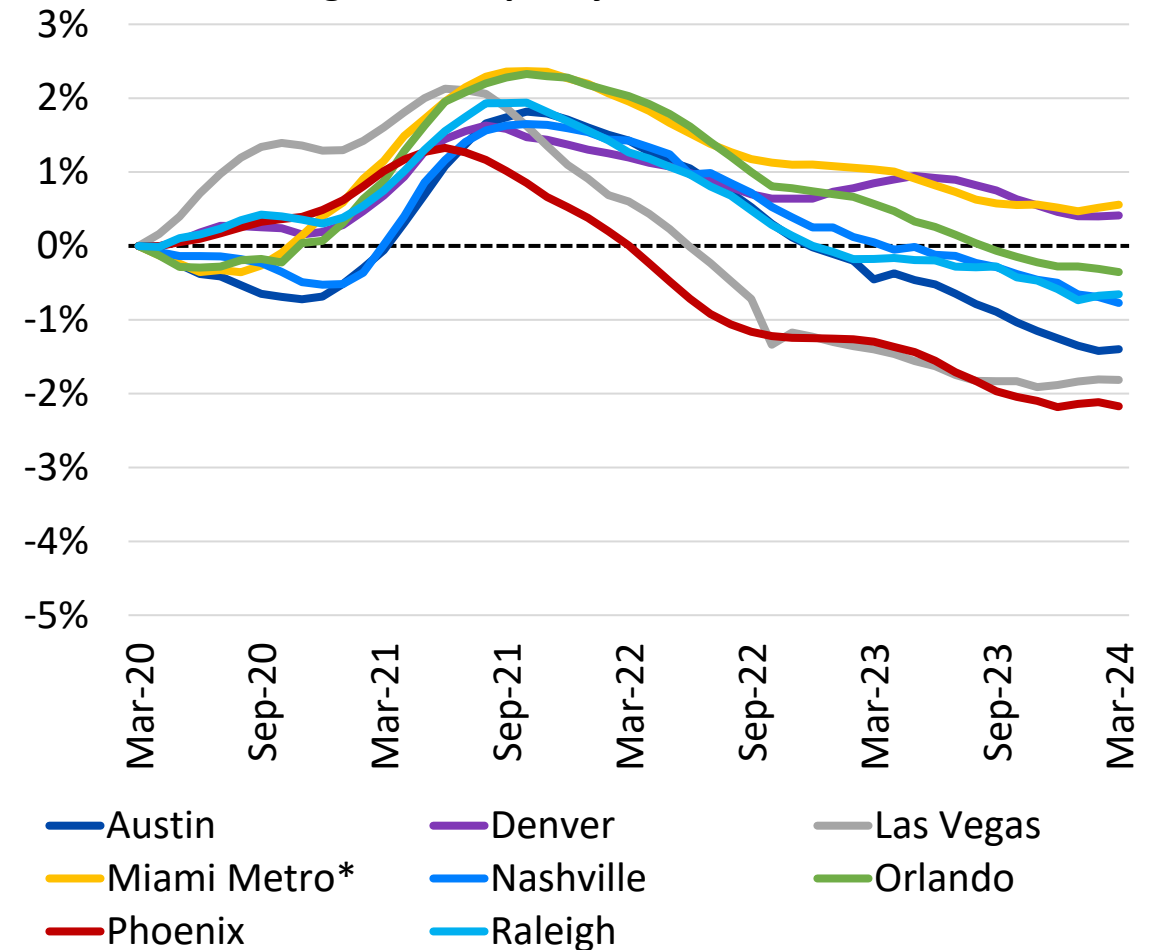


# Multifamily Occupancy is Moderating in Both Gateway and Tech Hub Markets

**GATEWAY MARKETS**  
Change in Occupancy Since March 2020



**TECH HUB MARKETS**  
Change in Occupancy Since March 2020



\*Miami performs more like a tech hub market & Seattle performs more like a gateway market | Source: Yardi Matrix

# Many Tertiary Markets Are Still Performing Well

Market	Mar 2023 Rent	Mar 2024 Rent	YOY Rent Growth
Madison	\$1,468	\$1,553	5.8%
Louisville	\$1,149	\$1,207	5.0%
Milwaukee	\$1,377	\$1,440	4.6%
Grand Rapids	\$1,236	\$1,291	4.4%
Little Rock	\$950	\$989	4.1%
Dayton	\$1,062	\$1,104	4.0%
Bridgeport - New Haven	\$1,856	\$1,928	3.9%
Cincinnati	\$1,279	\$1,328	3.8%
Tulsa	\$952	\$988	3.8%
Central East Texas	\$1,086	\$1,125	3.6%
New Orleans	\$1,206	\$1,247	3.4%
Eugene	\$1,515	\$1,559	2.9%
El Paso	\$1,037	\$1,067	2.9%
Richmond - Tidewater	\$1,473	\$1,514	2.8%
Lansing - Ann Arbor	\$1,183	\$1,215	2.7%
Cleveland - Akron	\$1,127	\$1,150	2.0%

Market	Mar 2023 Rent	Mar 2024 Rent	YOY Rent Growth
Tacoma	\$1,716	\$1,751	2.0%
Central Valley	\$1,531	\$1,562	2.0%
Spokane	\$1,369	\$1,390	1.5%
Birmingham	\$1,213	\$1,228	1.2%
Greenville	\$1,289	\$1,304	1.2%
Reno	\$1,527	\$1,544	1.1%
Savannah - Hilton Head	\$1,618	\$1,631	0.8%
Tucson	\$1,202	\$1,211	0.7%
Memphis	\$1,160	\$1,167	0.6%
Baton Rouge	\$1,145	\$1,149	0.3%
Huntsville	\$1,167	\$1,163	-0.3%
Colorado Springs	\$1,515	\$1,501	-0.9%
Pensacola	\$1,566	\$1,546	-1.3%
Jacksonville	\$1,547	\$1,492	-3.6%
Southwest Florida Coast	\$2,101	\$1,977	-5.9%

# Midwest Performing Well via Re-industrialization and Modest New Supply

Market	2024 Completions (F)	% of Starting Inventory	March Rent	2023 YOY Rent Growth	Q1 2024 Rent Growth	2024 Rent Growth (F)
Kansas City	2,928 units	1.7%	\$1,271	5.6%	0.8%	2.7%
Indianapolis	4,831 units	2.7%	\$1,258	6.7%	1.2%	2.4%
Cincinnati	3,768 units	3.2%	\$1,328	7.6%	0.9%	3.0%
Columbus	3,759 units	2.0%	\$1,285	5.4%	1.1%	3.2%
Milwaukee	3,328 units	3.5%	\$1,440	4.7%	1.9%	2.9%
Louisville	2,242 units	2.5%	\$1,207	5.3%	1.7%	3.5%
Omaha	2,906 units	3.1%	\$1,206	7.1%	0.7%	2.8%
Dayton	-	-	\$1,104	6.4%	0.3%	3.5%
Lexington	483 units	1.3%	\$1,151	7.1%	0.6%	3.5%

## Factors Driving Growth in the Midwest:

- Affordability
  - The continuance of work-from-home policies has allowed many to move from expensive coastal cities to these more affordable Midwest metros
  - High mortgage rates have kept many potential buyers in the rental market, thus putting greater pressure on demand
- Modest development
  - Completions are keeping better pace with demand than the Sun Belt which has seen an influx of supply
- Job growth
  - The growing electric vehicle industry is expected to create over 25,000 jobs in Ohio by 2030
  - Meta and Google are both slated for data center projects in Indiana in the coming years

# Several Gateway Markets Are Making A Comeback From Pandemic Lows, But Rent Regulations Pose Political Risk

Market	2024 Completions (F)	% of Starting Inventory	March Rent	2023 YOY Rent Growth	Q1 2024 Rent Growth	2024 Rent Growth (F)
New York	13,177 units	2.2%	\$4,462	4.9%	0.9%	3.1%
Chicago	5,668 units	1.4%	\$1,889	5.0%	0.4%	1.3%
Washington DC	8,830 units	1.5%	\$2,141	2.5%	0.6%	1.6%
Boston	6,647 units	2.5%	\$2,776	4.4%	0.1%	1.6%

## New York

- Plethora of convoluted rent control, rent stabilization and mandatory inclusionary zoning policies
- Most regulations apply to older buildings (pre-1974)

## Chicago

- Statewide ban on rent control but there are several bills in the State House to repeal it

## Boston

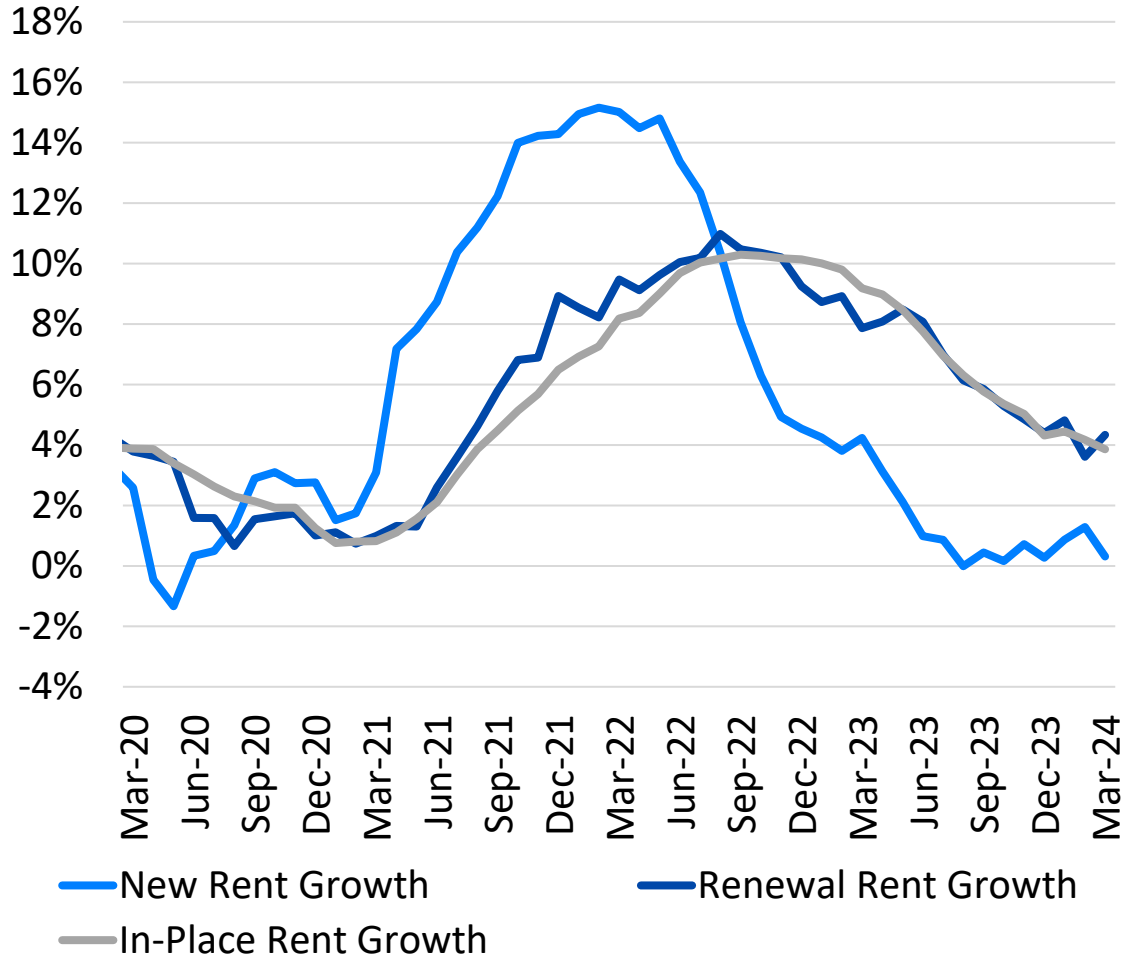
- Rent Control Initiative: Would make the max allowable annual rent increase be either based on the change in CPI + 6% or a max of 10%, whichever is lower; Proposal to build 3,000 public housing units
- The state of MA currently has a ban on rent control, and the initiative has little chance of passing the state legislature

## Washington DC

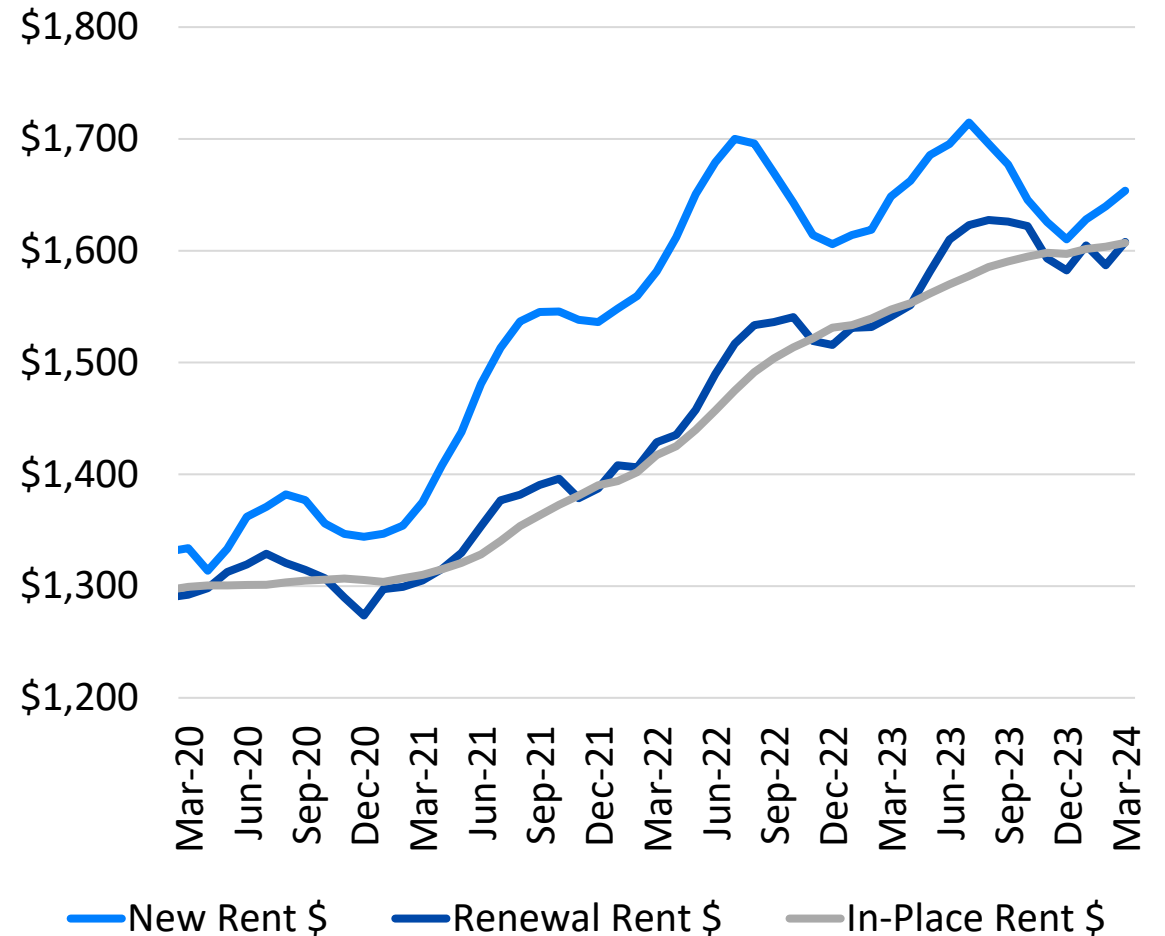
- Rent increase cap at 6% for rent controlled apartments over the next 2 years (4% rent increase cap for units occupied by seniors and those with disabilities); Sales subject to TOPA (current residents first right of refusal)

# Multifamily Rent Growth on New, Renewal and In-Place Transacted Leases Remained Positive in Q1 2024

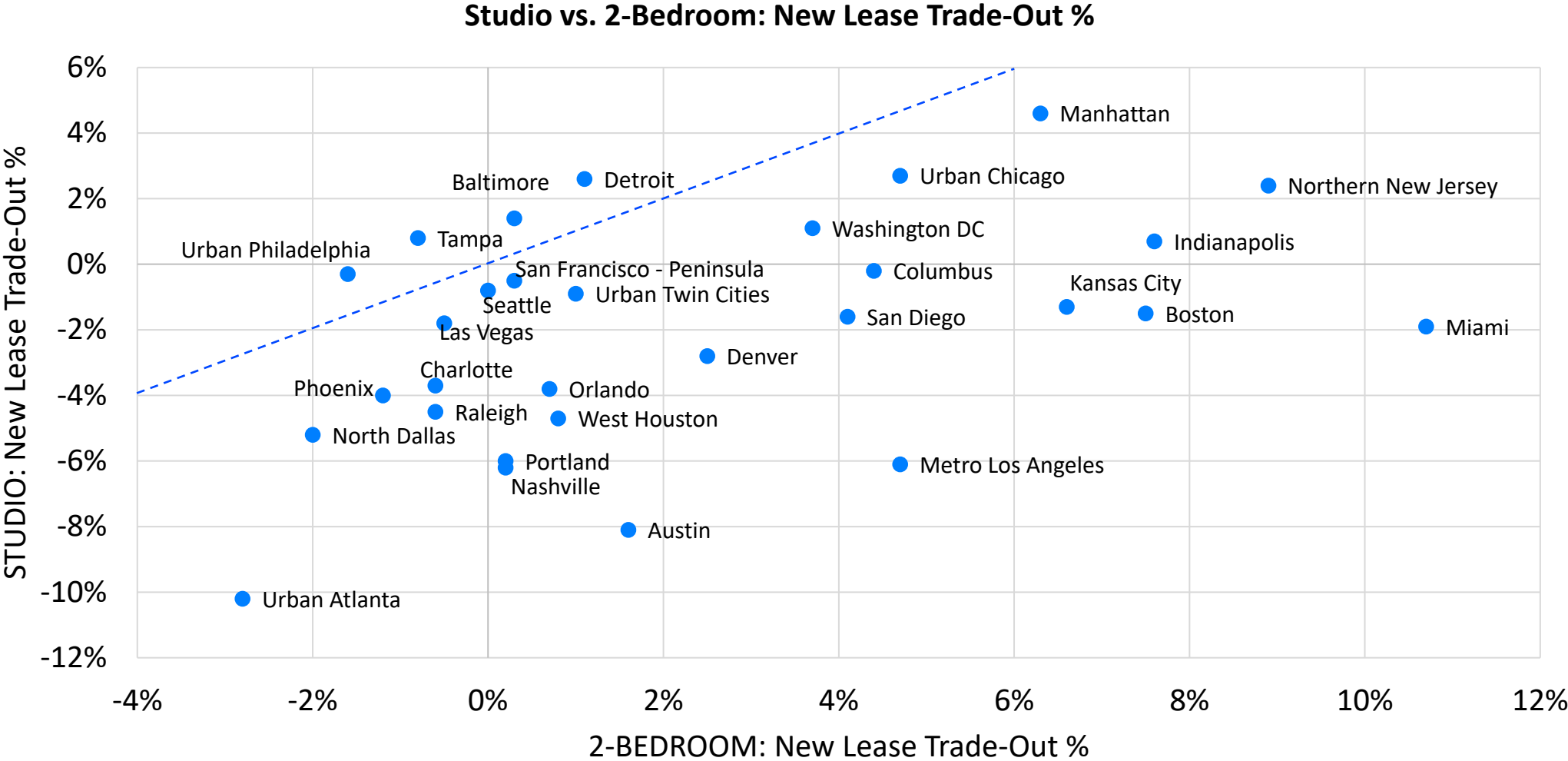
### National Year-over-Year Rent Growth



### National Average Rents



# New Lease Trade-Out is Higher for 2-Bedroom Units than Studio Apartments in Nearly All the Top Metros



Data as of March 2024. Average Change % per Unit for the last 13 months. New Lease trade out is the percentage of monthly rent change between new leases and their corresponding previous leases for the same unit. Renewal Lease trade out is percentage of monthly rent change between renewals and their corresponding previous leases for the same tenant | Source: Yardi Matrix Expert





# Performance Metrics For The High Supply Markets

Market	New Rent Growth %	New Rent \$	Renewal Rent Growth %	Renewal Rent \$	In-Place Rent Growth %	In-Place Rent \$	Occupancy Growth %	Occupancy	New Lease Trade Out %	Renewal Lease Trade Out %
Miami	1.8%	\$2,376	7.1%	\$2,194	8.5%	\$2,157	-1.1%	96.4%	5.0%	5.8%
Denver	1.7%	\$1,787	3.2%	\$1,790	3.5%	\$1,790	-0.1%	94.3%	0.8%	5.0%
Raleigh - Durham	-3.8%	\$1,414	3.3%	\$1,482	3.2%	\$1,474	-1.9%	92.8%	-3.9%	3.8%
Salt Lake City	3.2%	\$1,471	-1.5%	\$1,513	0.8%	\$1,498	1.3%	94.0%	-4.2%	3.7%
Orlando	1.3%	\$1,650	5.4%	\$1,612	4.6%	\$1,626	-0.2%	94.8%	-0.9%	3.7%
Charlotte	-1.3%	\$1,451	0.6%	\$1,464	2.3%	\$1,466	-1.0%	92.6%	-3.3%	3.5%
San Antonio	-3.5%	\$1,184	3.6%	\$1,220	2.3%	\$1,213	-2.5%	91.3%	-3.4%	3.4%
Jacksonville	-3.0%	\$1,410	2.9%	\$1,488	1.0%	\$1,457	-0.2%	93.4%	-3.7%	3.3%
Nashville	-3.4%	\$1,509	5.3%	\$1,572	1.9%	\$1,567	-1.8%	92.5%	-3.4%	3.1%
Phoenix	-3.4%	\$1,483	-0.2%	\$1,529	-0.3%	\$1,515	-0.9%	93.2%	-2.6%	2.6%
Austin	-8.6%	\$1,415	-0.9%	\$1,542	-1.1%	\$1,511	-2.8%	91.4%	-8.3%	2.4%



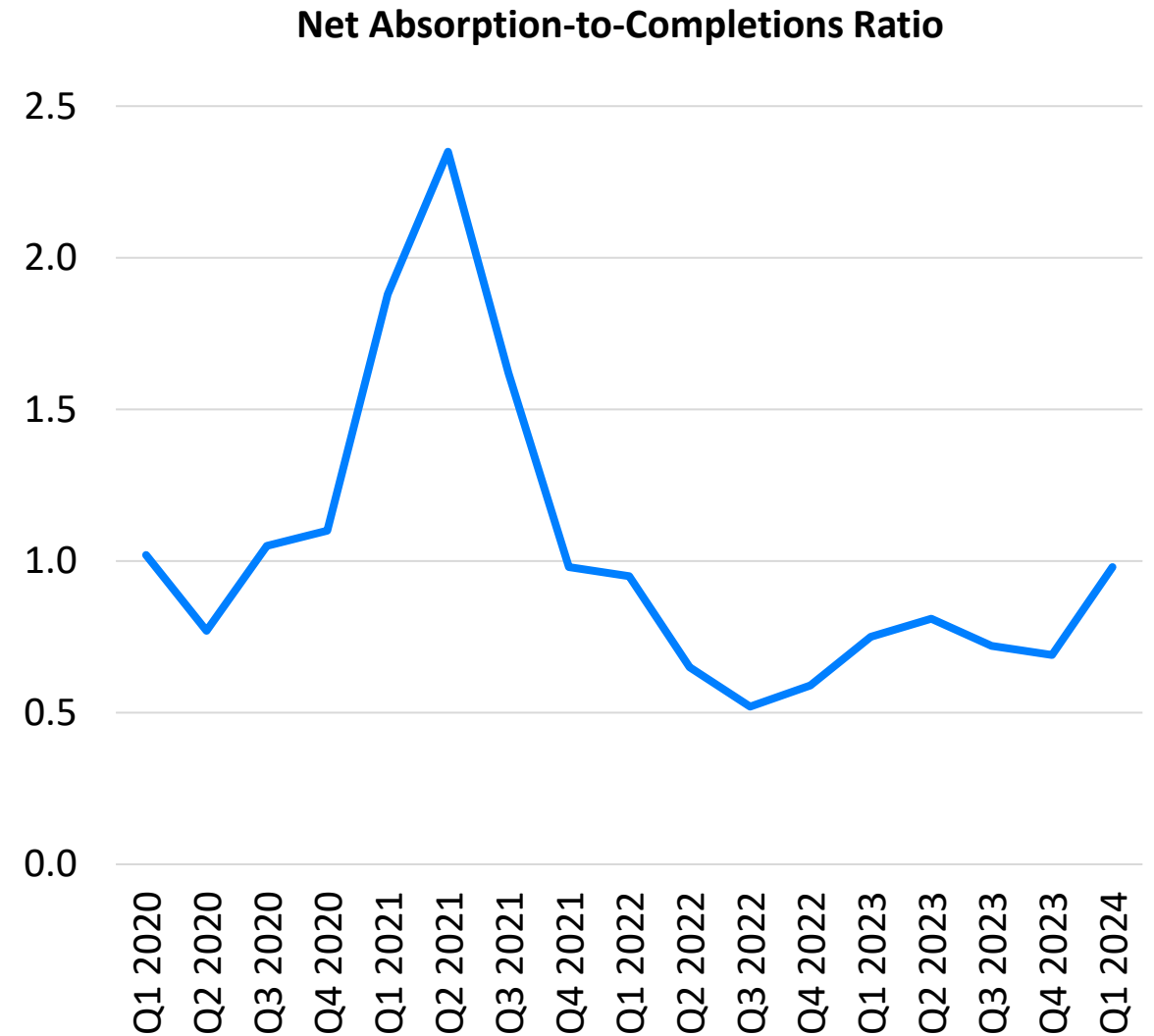
Data as of March 2024. New Lease trade out is the percentage of monthly rent change between new leases and their corresponding previous leases for the same unit.

Renewal Lease trade out is percentage of monthly rent change between renewals and their corresponding previous leases for the same tenant | Source: Yardi Expert; Yardi Matrix



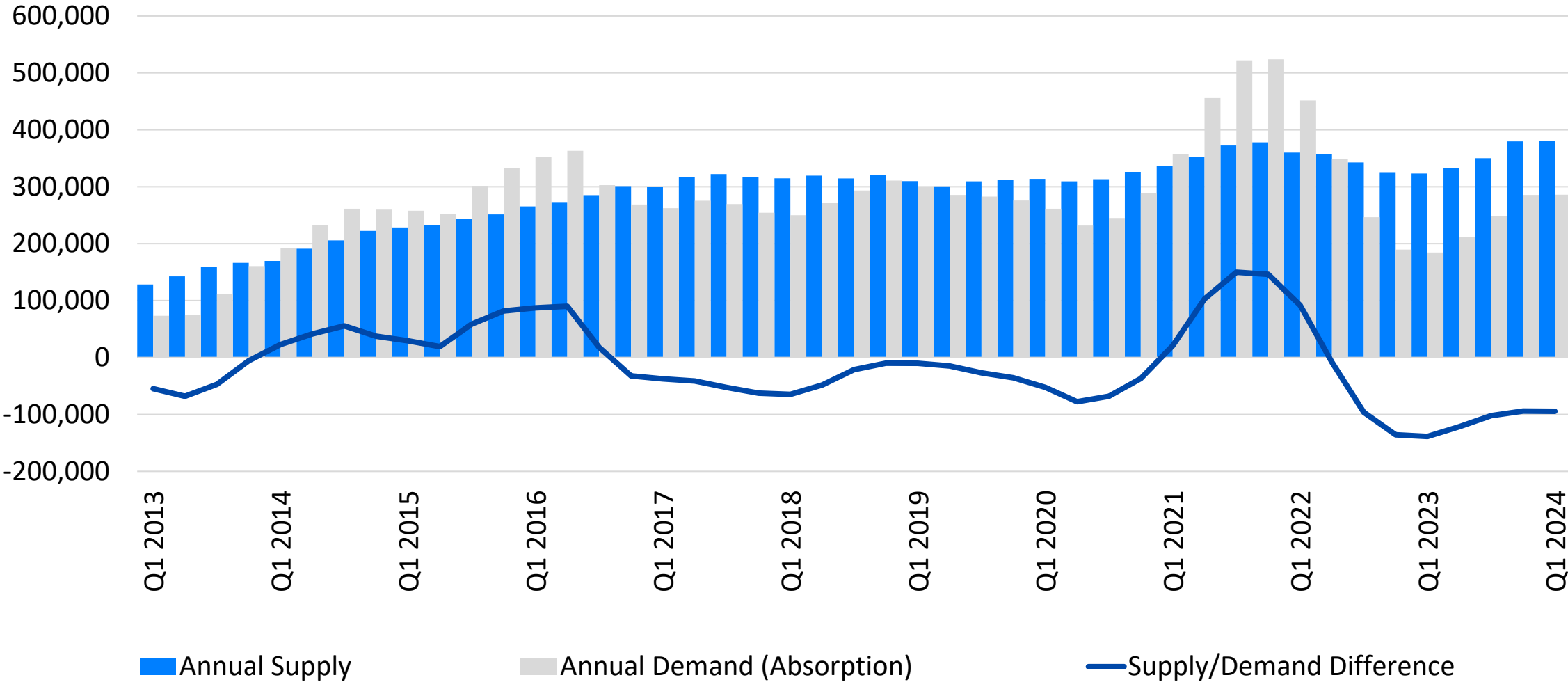
# Net Absorption-to-Completions Saw an Increase in Q1 2024

Quarter	Completed Units	Net Absorbed Units	Net Absorption-to-Completions Ratio
Q1 2020	79,526	81,292	1.02
Q2 2020	68,089	52,206	0.77
Q3 2020	80,777	85,172	1.05
Q4 2020	91,261	100,283	1.1
Q1 2021	91,946	172,527	1.88
Q2 2021	84,532	198,593	2.35
Q3 2021	100,488	163,028	1.62
Q4 2021	94,226	92,597	0.98
Q1 2022	75,311	71,742	0.95
Q2 2022	80,230	52,023	0.65
Q3 2022	86,265	45,213	0.52
Q4 2022	78,032	46,196	0.59
Q1 2023	74,543	56,237	0.75
Q2 2023	96,263	78,371	0.81
Q3 2023	108,033	77,954	0.72
Q4 2023	112,603	77,400	0.69
Q1 2024	74,229	72,832	0.98



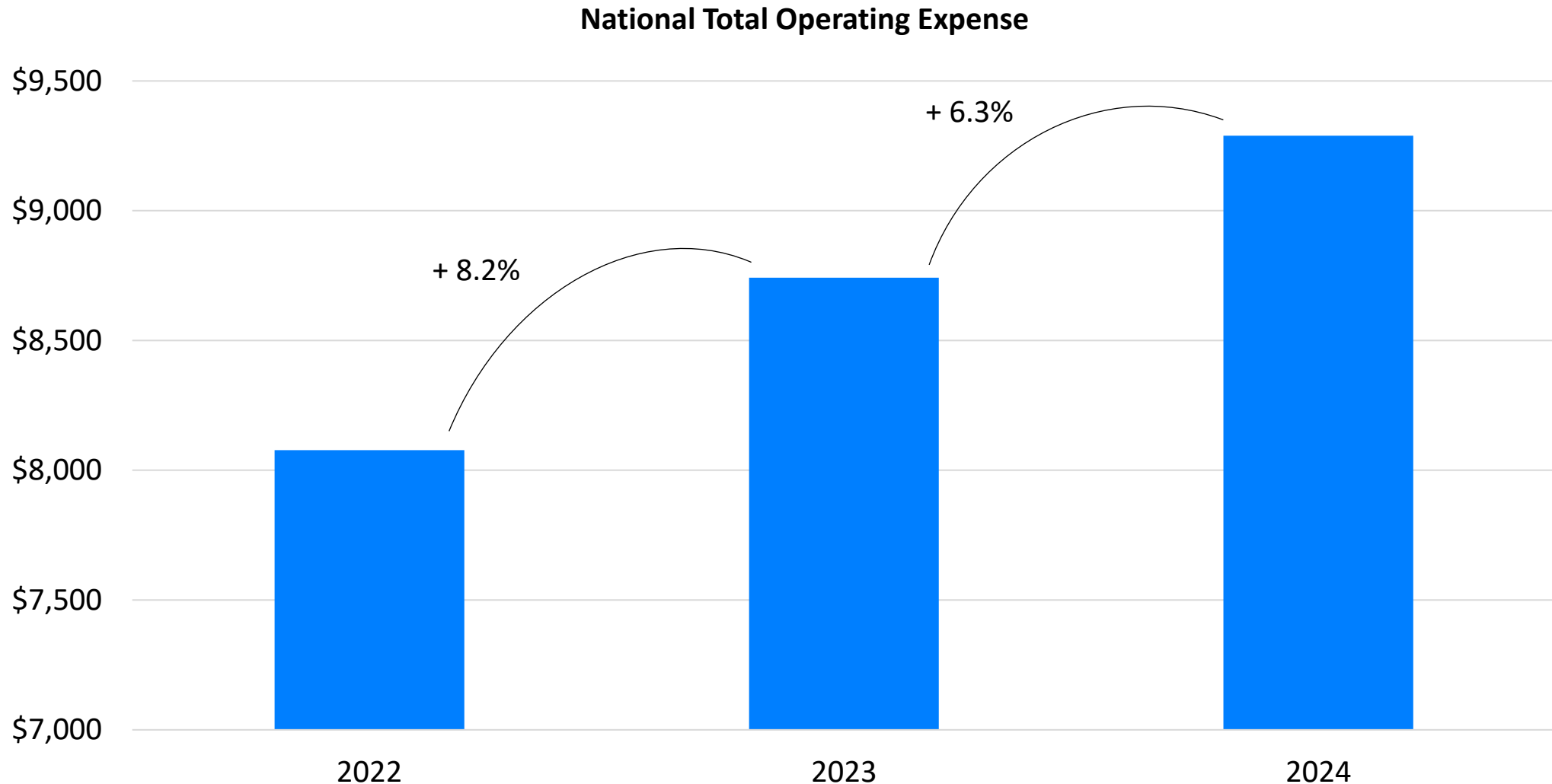
# The Supply/Demand Difference Has Been Negative As A Consequence of the Influx of Deliveries in Recent Years

## U.S. Annual Supply vs. Annual Absorption (Demand)



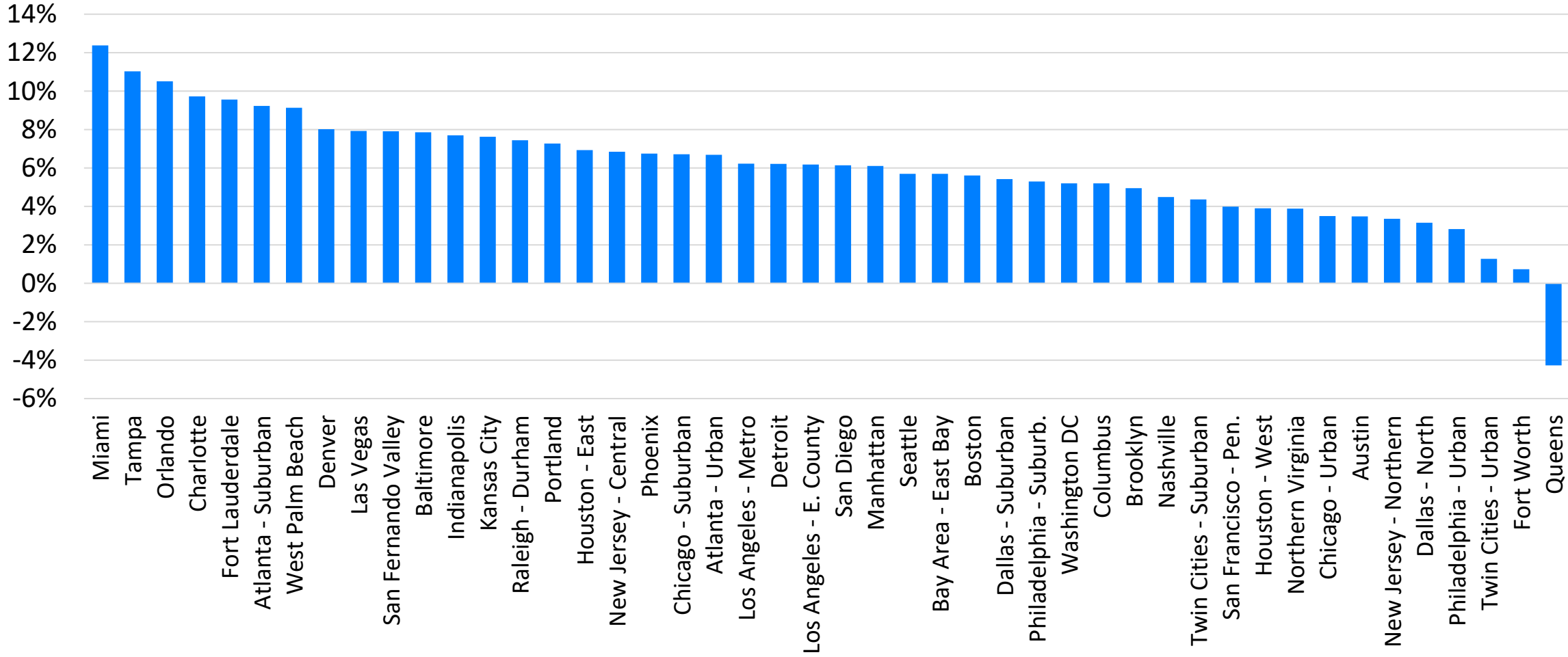
Data includes multifamily market-rate units only | Source: Yardi Matrix

# Total Operating Expenses for Multifamily Properties Are Increasing Nationwide



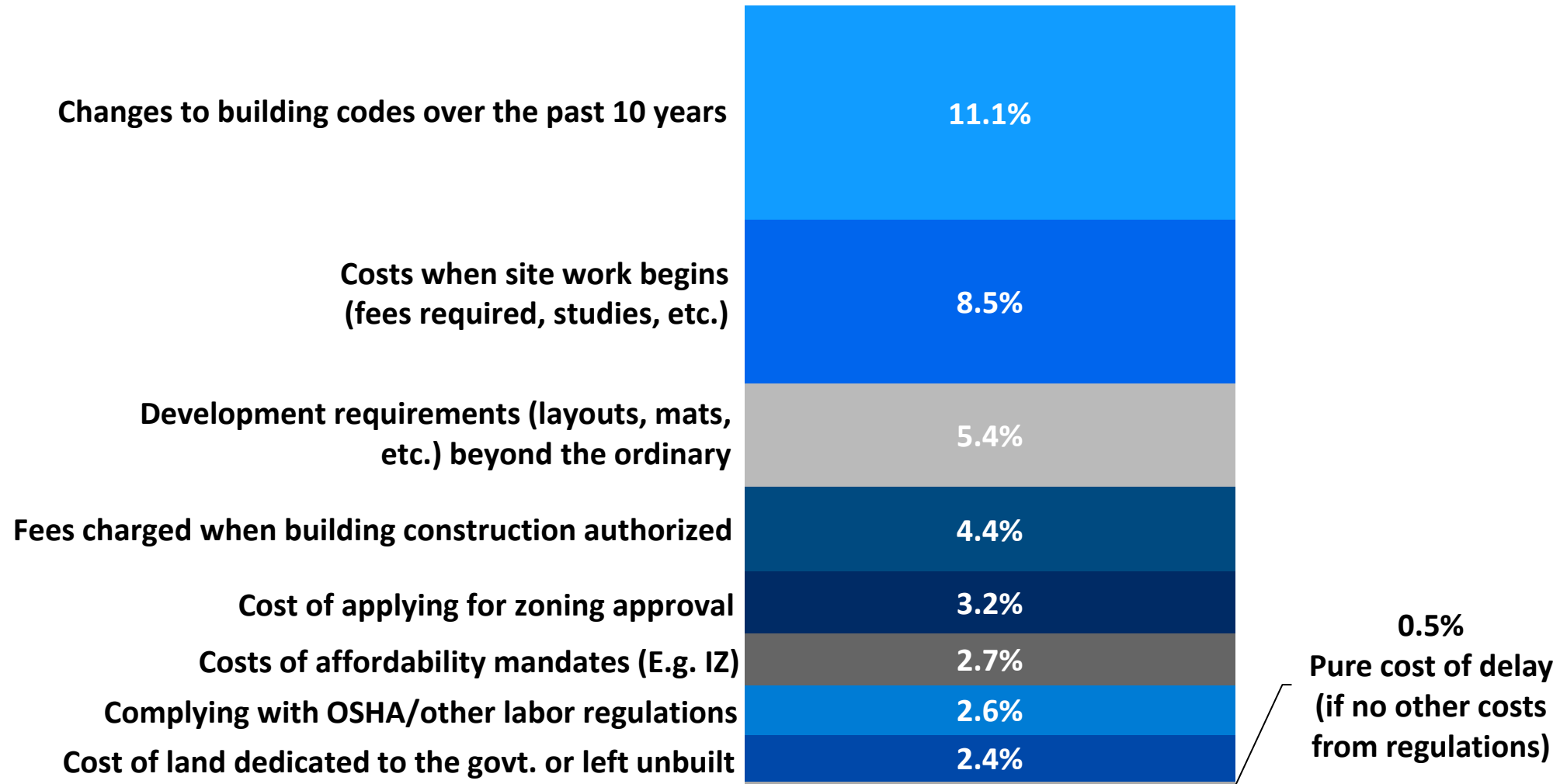
# Most of Multifamily Markets Experience a Significant Increase in Operating Expenses Over the Last Year

Growth in Total Operating Expenses 2023-2024 for Top Multifamily Markets

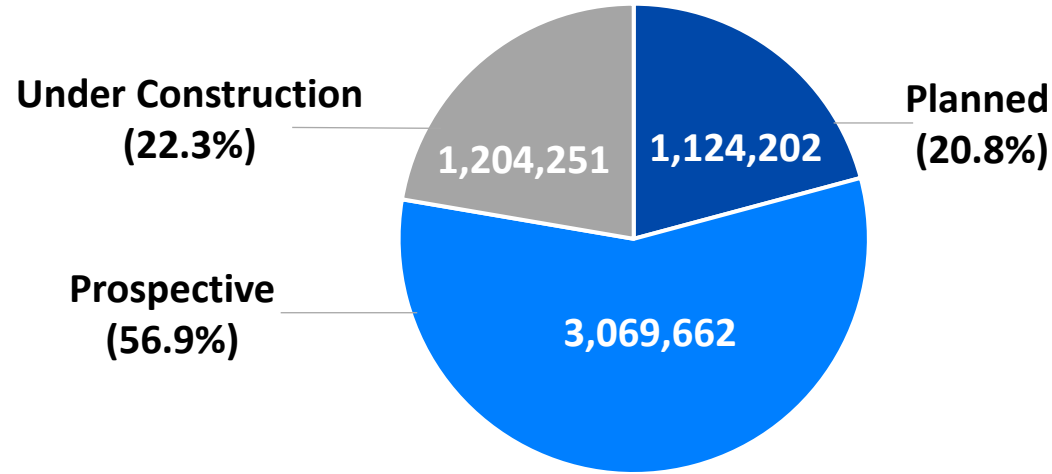


National Total Operating Expenses for the 12-month period ending March 2024. Based on Yardi Matrix Top 30 Metros | Source: Yardi Matrix Expert

# Regulations Account For 40% Of Multifamily Development Costs, Inhibiting Sufficient New Supply Growth



# New Supply Pipeline: Where is New Supply Concentrated?



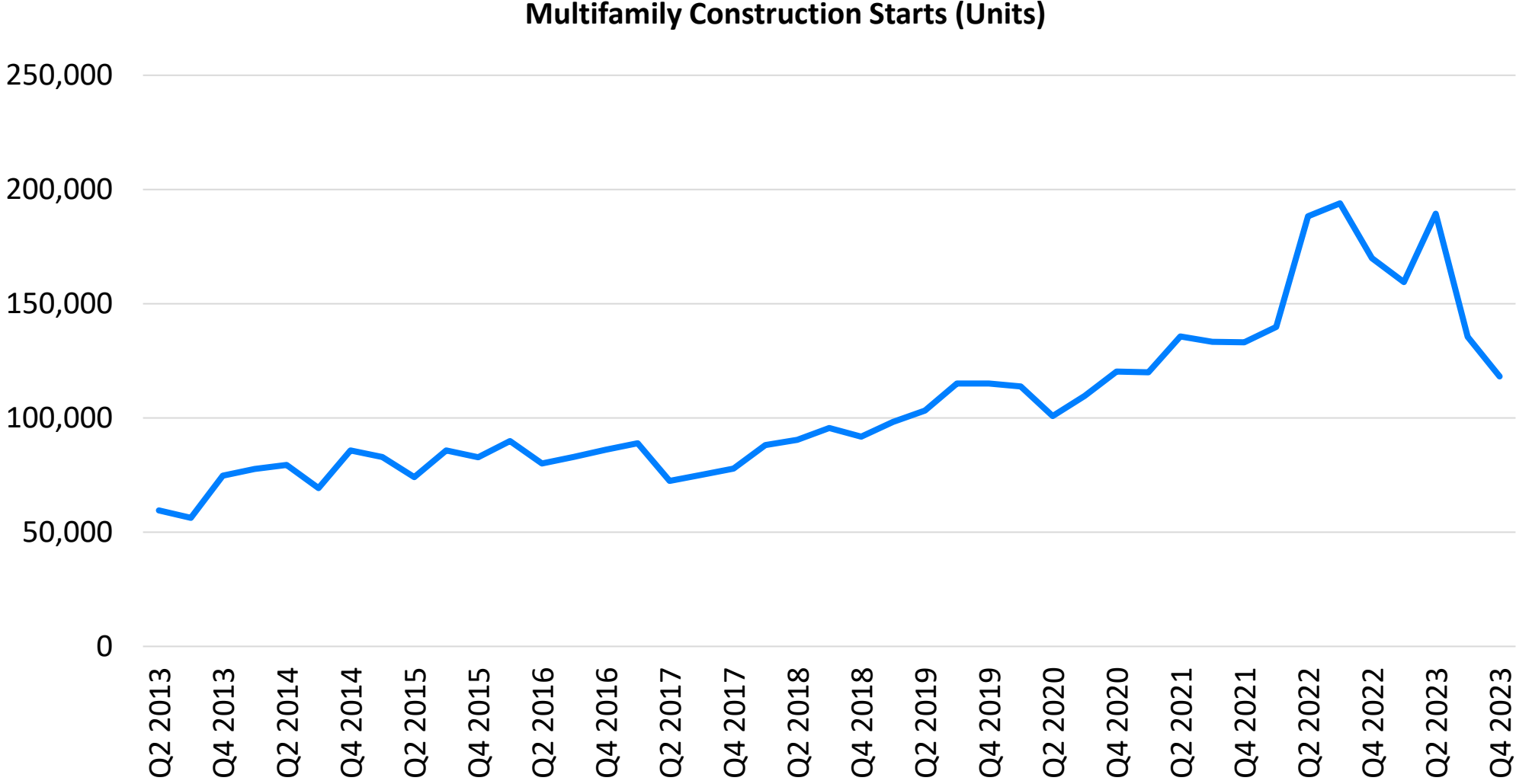
Top 10 Markets	Units	UC as a % of Existing Stock
Montana	5,227	28.5%
Huntsville	11,160	25.2%
Boise	6,144	22.7%
Colorado Springs	9,592	20.9%
South Dakota	5,854	20.1%
Port St. Lucie	3,554	19.5%
Austin	55,394	19.1%
SW Florida Coast	16,900	18.9%
New Bern	2,006	17.9%
Charlotte	36,078	16.7%

Top 10 Markets	Units	Planned as a % of Existing Stock
Miami	49,783	30.3%
Boise	8,103	29.9%
Asheville	6,356	28.9%
Port St. Lucie	4,735	25.9%
Portland ME	2,939	19.1%
Fort Lauderdale	21,713	18.1%
SW Florida Coast	15,151	16.9%
Los Angeles - Met	35,128	16.6%
N. New Jersey	41,437	15.7%
San Francisco	20,835	15.1%

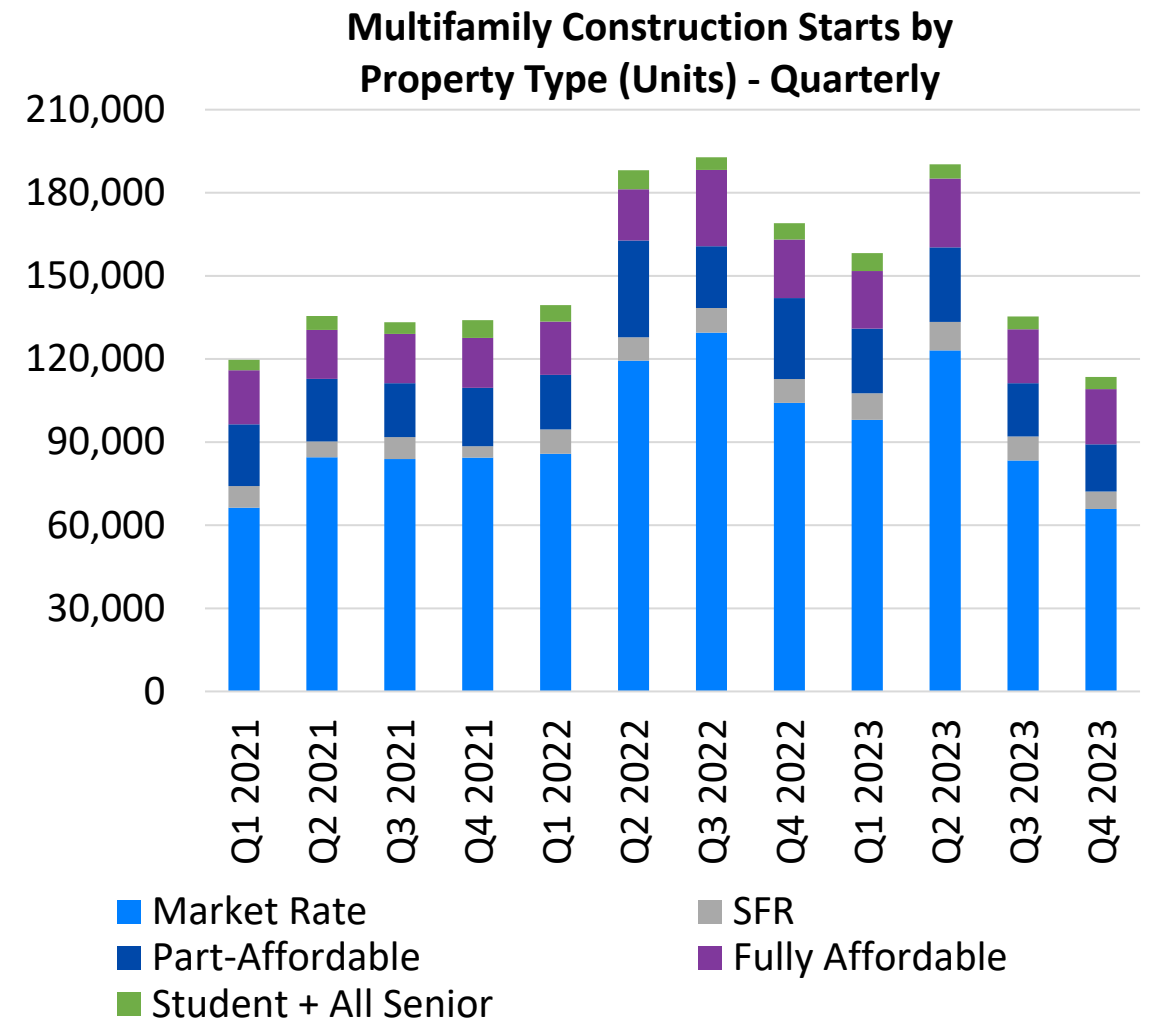
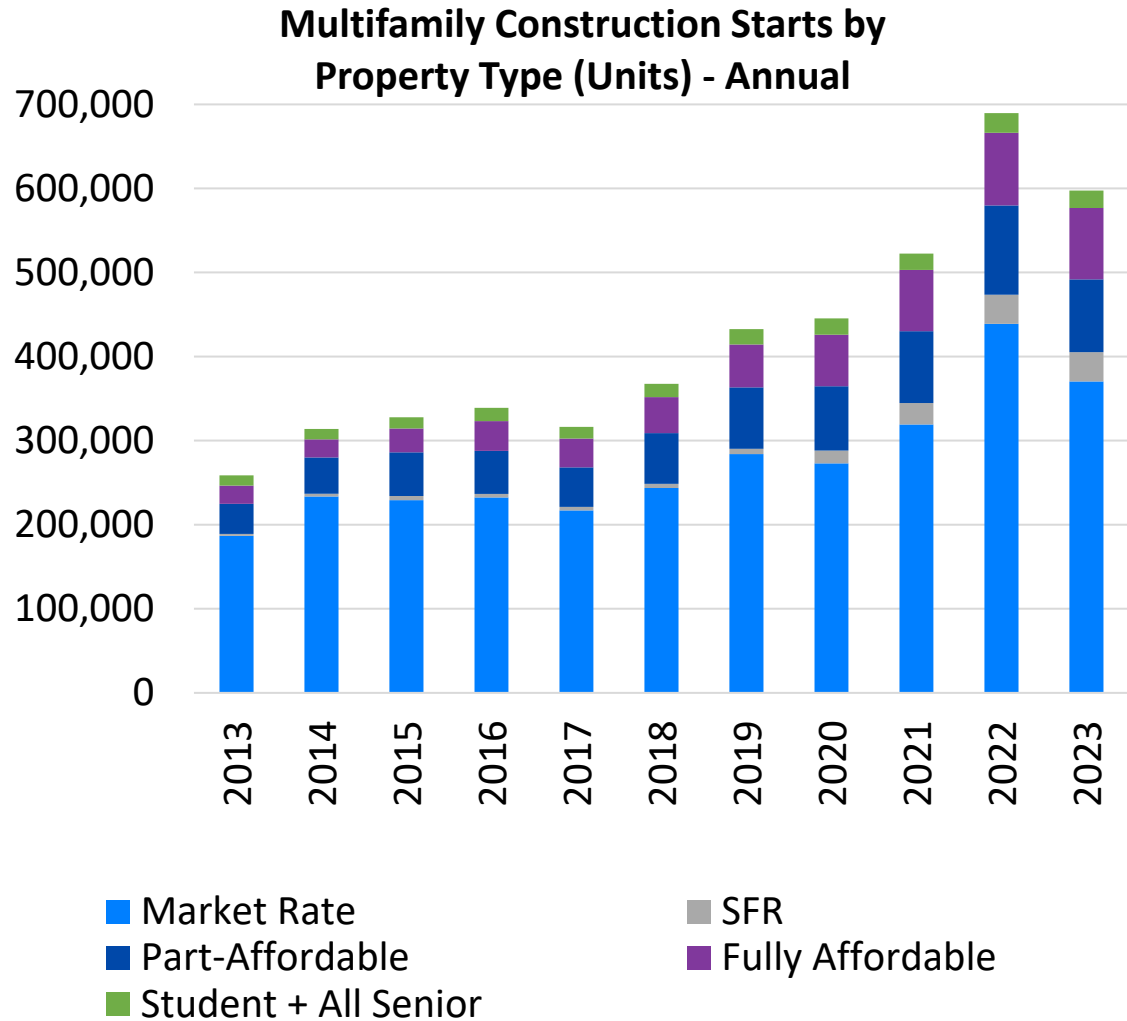
Top 10 Markets	Units	Prospective as a % of Existing Stock
Miami	114,241	69.6%
SW Florida Coast	58,365	65.2%
Boise	16,788	61.9%
Port St. Lucie	10,971	60.1%
Wilmington	12,106	49.4%
Clarksville	6,531	47.1%
Raleigh - Durham	84,690	46.0%
Orlando	112,543	42.6%
N. Central Florida	24,341	41.0%
Montana	7,329	40.0%



# Multifamily Construction Starts Took a Dive Towards the End of 2023 After Peaking in Q2 2023 as well as Q3 2022



# Total Starts Have Slowed Down Since 2022, But Affordable Has Slowed To A Lesser Degree Than Other Property Types



Source: Yardi Matrix



# Starts Have Been Concentrated Heavily in the Sunbelt but These Markets Saw Significant Slowdowns in 2023

## Top 15 Markets for # of Starts

Market	2022	2023	2023 YOY
Austin	29,193	15,147	-48.1%
Denver	21,351	13,163	-38.3%
Charlotte	18,097	13,595	-24.9%
Houston - West	16,064	13,766	-14.3%
Phoenix	14,415	14,157	-1.8%
Orlando	14,363	11,999	-16.5%
Dallas - North	13,851	16,463	18.9%
New Jersey – N.	13,643	12,129	-11.1%
Raleigh - Durham	11,981	12,590	5.1%
Dallas - Suburban	11,900	6,746	-43.3%
Nashville	11,548	10,487	-9.2%
Seattle	11,250	6,656	-40.8%
Atlanta – Suburb.	11,110	8,254	-25.7%
Miami	10,583	10,483	-0.9%
Tampa	9,850	14,247	44.6%

## Bottom 15 Markets for # of Starts

Market	2022	2023	2023 YOY
Rockford	64	0	-100.0%
Greenville NC	66	0	-100.0%
Springfield MO	151	0	-100.0%
Hickory	168	306	82.1%
North Dakota	179	641	258.1%
Central Coast	200	84	-58.0%
Lafayette	240	338	40.8%
Rocky Mount	240	0	-100.0%
Fort Wayne	249	554	122.5%
South Bend	269	175	-34.9%
New Orleans	270	51	-81.1%
El Paso	273	901	230.0%
Lafayette	280	634	126.4%
Columbus GA	294	280	-4.8%
McAllen	309	132	-57.3%

Tables sorted by # of Starts 2022. Starts include multifamily market-rate units only. Markets with 0 starts in 2022 excluded from list

Source: Yardi Matrix

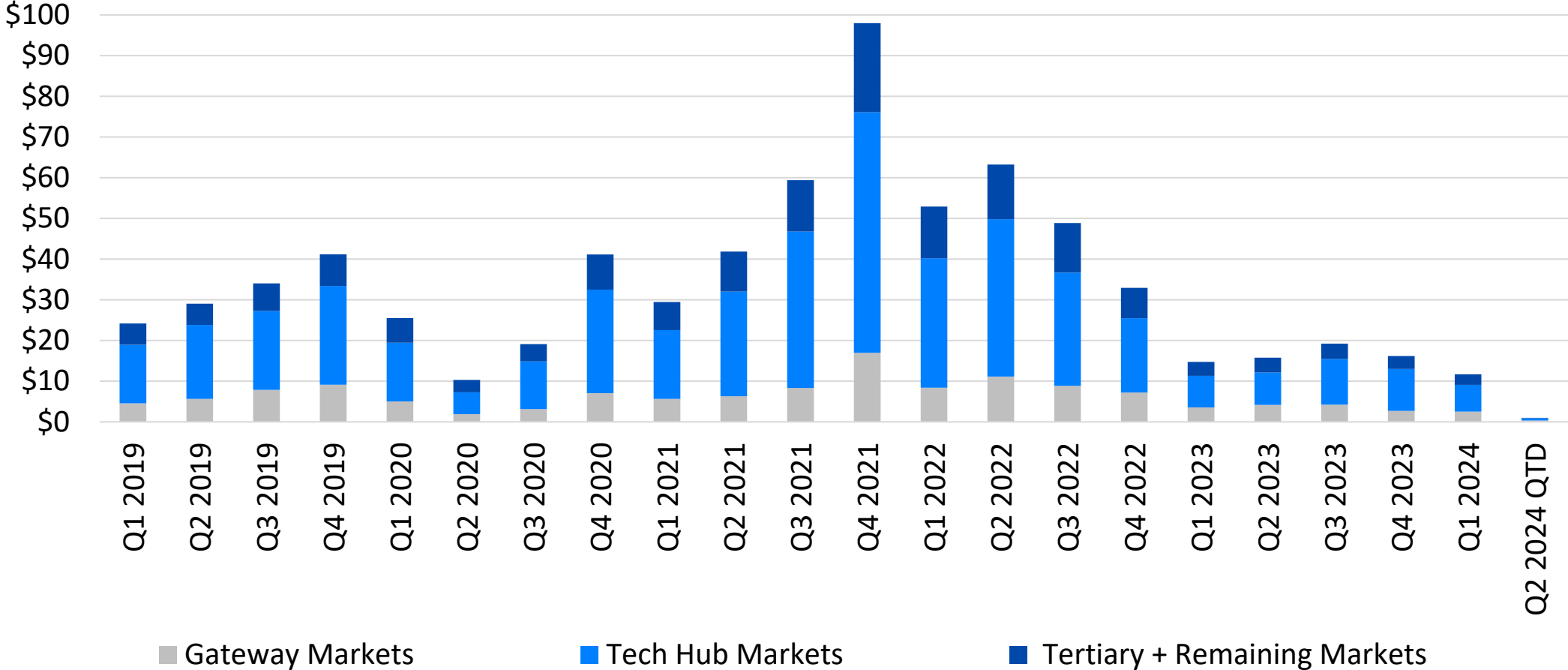


# Multifamily Capital Markets Have Been Disrupted, Impacting Transaction Volume and Construction Financing

- Property sales and new construction are slowing due to high debt costs and weakening rent growth
- The transaction market is frozen given widening bid/ask spreads
  - Mortgage rates now above 7% and total sales volume in Q1 2024 was down over 87% from the peak in Q4 2021
- Construction costs continue to rise
  - U.S. construction costs saw an average increase of 4% in 2023, with costs expected to increase by 3-6% in 2024
  - Cost escalations vary by metro, with Chicago falling at the low end at 3.5% and Phoenix at the high end of 6%
    - A \$10M projected built in Phoenix in 2023 will cost \$10.6M this year; the same project would cost \$10.35M in Chicago
  - While construction material costs rose by less than 1% in 2023, they are expected to increase by 2-3% in 2024
  - 3-4% increase in labor costs is also anticipated for 2024
  - As a result, new construction deliveries may be significantly reduced starting in 2026
- The next 12-18 months will show a continued slowdown of capital markets until inflation slows and interest rates come down
- Still, high rates create a sliver of good news for multifamily
  - With home mortgage rates above 7%, first-time homebuyers are being frozen out of the market and will remain in apartments or single-family rentals longer

# Transaction Activity Will Continue to Slow Over the Next 18 Months Until Inflation Cools and Interest Rates Come Down

Multifamily Sales Volume (Billions)



# FORECASTS: DEMAND, RENT, OCCUPANCY & SUPPLY

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# Yardi Matrix Multifamily Forecast Summary

Year-End	Rent	Rent Growth	Occupancy	Occupancy Growth	Inventory Forecast
2024	\$1,770	3.1%	94.6%	0.0%	553,613
2025	\$1,832	3.5%	94.8%	0.2%	468,958
2026	\$1,898	3.6%	94.8%	0.0%	385,225
2027	\$1,963	3.4%	94.8%	0.0%	396,037
2028	\$2,018	2.8%	94.7%	-0.1%	406,376
2029	\$2,062	2.2%	94.7%	0.0%	426,283
2030	\$2,129	3.2%	94.8%	0.1%	-
2031	\$2,210	3.8%	94.9%	0.1%	-
2032	\$2,262	2.4%	94.8%	-0.2%	-
2033	\$2,311	2.1%	94.8%	0.1%	-
2034	\$2,354	1.9%	94.8%	0.0%	-



# Takeaways from Our May 2024 Multifamily Rent and Occupancy Forecast

- Multifamily asking rents rose for the second straight month, as the U.S. asking rent increased by \$6 to \$1,725 in April; year-over-year rent growth was unchanged at 0.7%
- Secondary markets in the Midwest, Northeast and South are still seeing strong rent growth of over 2% so far this year
  - Honolulu is the only market outside of these regions with over 2% growth (5.7% growth YTD)
- Our national rent forecast for 2024 has increased to 3.1%, but we expect a large influx of supply to dampen rent growth in many of the larger Sun Belt markets
- Many markets will struggle this year due to the influx of supply, but once those new units are absorbed, the markets will return to good shape
  - Rental growth next year will be stronger than this year, and growth in 2026 will likely be a bit stronger still, as it will take some time for the Fed's eventual rate cuts to meaningfully impact consumer demand



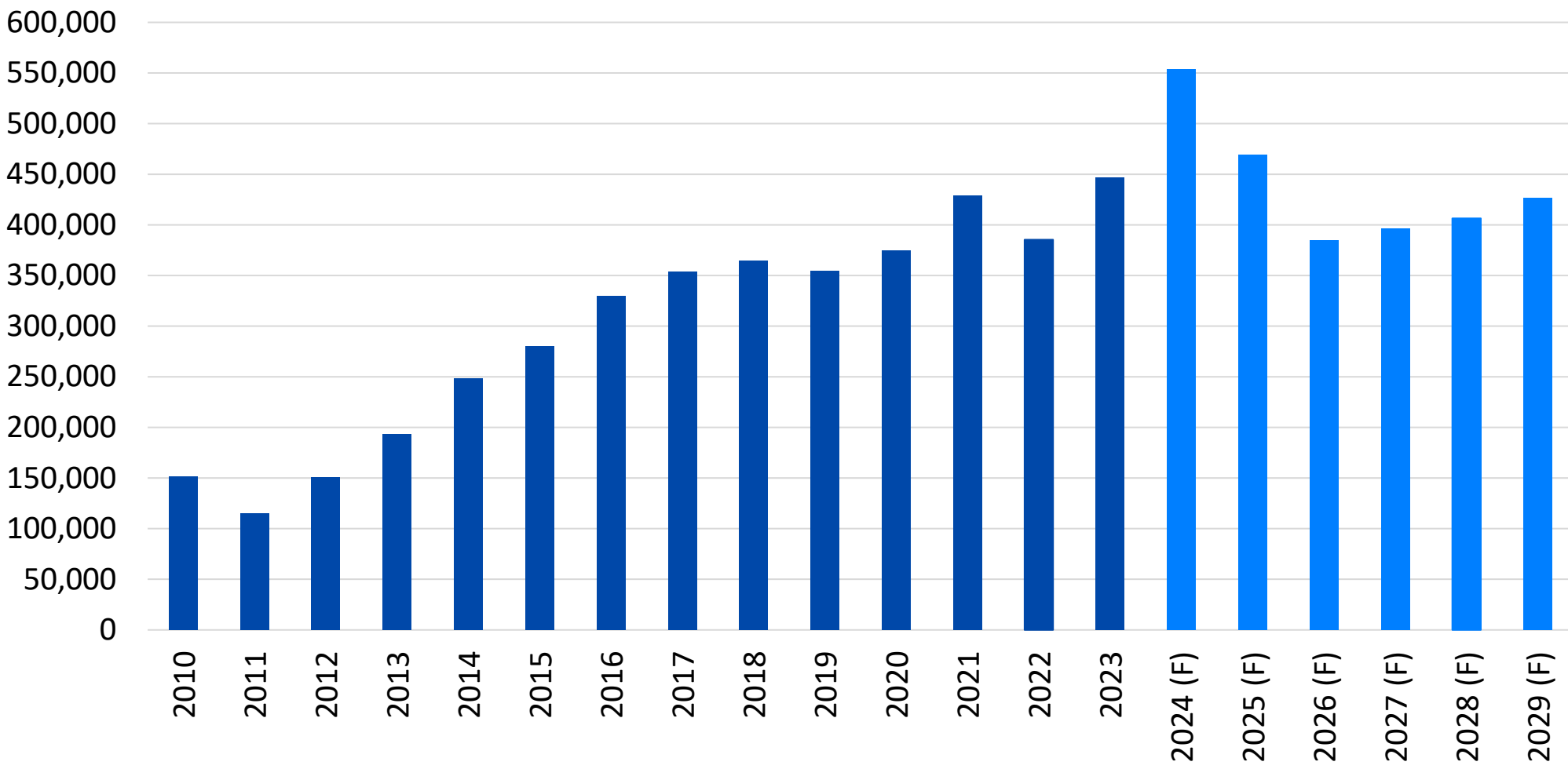
# Tech Hub and Gateway Markets Are Forecasted For A Modest Year of Multifamily Rent Growth

Market	YoY Rent Growth Year-End 2024	Occupancy Year-End 2024	YoY Rent Growth Year-End 2025	Occupancy Year-End 2025	Market	YoY Rent Growth Year-End 2024	Occupancy Year-End 2024	YoY Rent Growth Year-End 2025	Occupancy Year-End 2025
Columbus	3.1%	94.9%	3.6%	95.1%	Houston	0.4%	92.9%	2.7%	93.1%
New Jersey	2.7%	97.2%	2.6%	97.3%	Las Vegas	0.4%	92.9%	3.0%	93.1%
Kansas City	2.5%	94.5%	3.8%	94.8%	San Diego	0.1%	96.5%	2.3%	96.6%
Indianapolis	2.4%	94.0%	3.1%	94.2%	<b>San Francisco</b>	<b>-0.1%</b>	<b>95.3%</b>	<b>2.4%</b>	<b>95.3%</b>
<b>Washington DC</b>	<b>2.2%</b>	<b>95.0%</b>	<b>2.7%</b>	<b>95.1%</b>	<b>Los Angeles</b>	<b>-0.6%</b>	<b>96.0%</b>	<b>1.8%</b>	<b>96.1%</b>
<b>Chicago</b>	<b>2.2%</b>	<b>95.5%</b>	<b>3.0%</b>	<b>95.7%</b>	Portland	-0.8%	94.4%	3.4%	94.6%
Philadelphia	2.1%	95.6%	3.4%	95.8%	Charlotte	-0.9%	93.8%	3.2%	94.0%
<b>Boston</b>	<b>2.0%</b>	<b>96.3%</b>	<b>2.7%</b>	<b>96.4%</b>	Tampa	-0.9%	94.2%	2.5%	94.4%
Detroit	1.8%	94.4%	3.9%	94.6%	Dallas	-1.0%	93.2%	3.1%	93.4%
Twin Cities	1.6%	94.8%	2.9%	94.9%	Nashville	-1.1%	94.2%	3.3%	94.4%
<b>Miami</b>	<b>1.5%</b>	<b>95.4%</b>	<b>1.6%</b>	<b>95.6%</b>	Orlando	-1.2%	94.3%	3.0%	94.5%
<b>New York</b>	<b>1.5%</b>	<b>98.2%</b>	<b>2.5%</b>	<b>98.4%</b>	Phoenix	-1.3%	93.3%	3.2%	93.5%
Seattle	1.2%	95.1%	2.8%	95.2%	Raleigh - Durham	-1.7%	93.6%	3.2%	93.8%
Denver	0.8%	94.8%	2.8%	94.9%	Atlanta	-2.2%	92.6%	2.7%	92.8%
Baltimore	0.7%	94.5%	2.6%	94.6%	Austin	-4.1%	93.0%	3.6%	93.3%



# New Multifamily Supply is Expected to Decline After 2024's Peak

### Multifamily Supply Pipeline

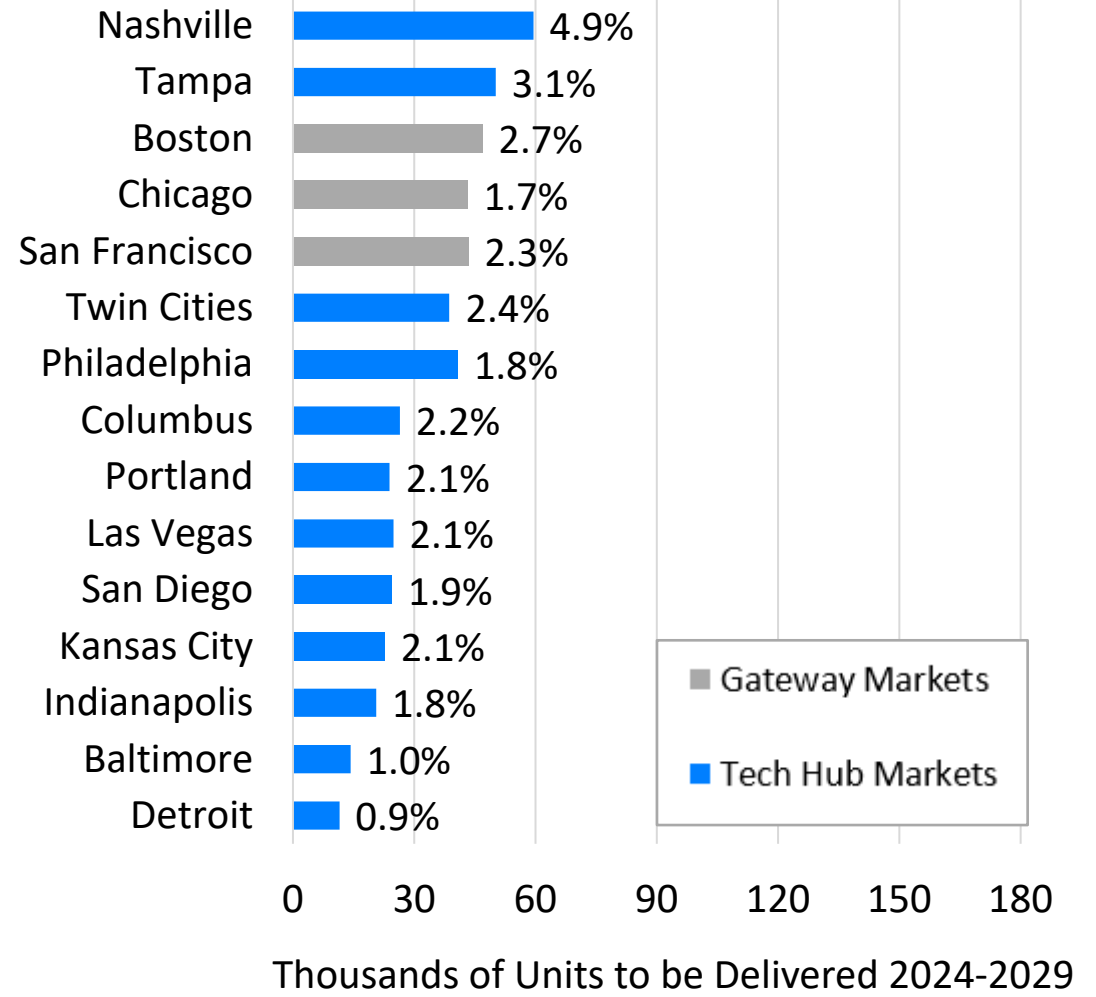
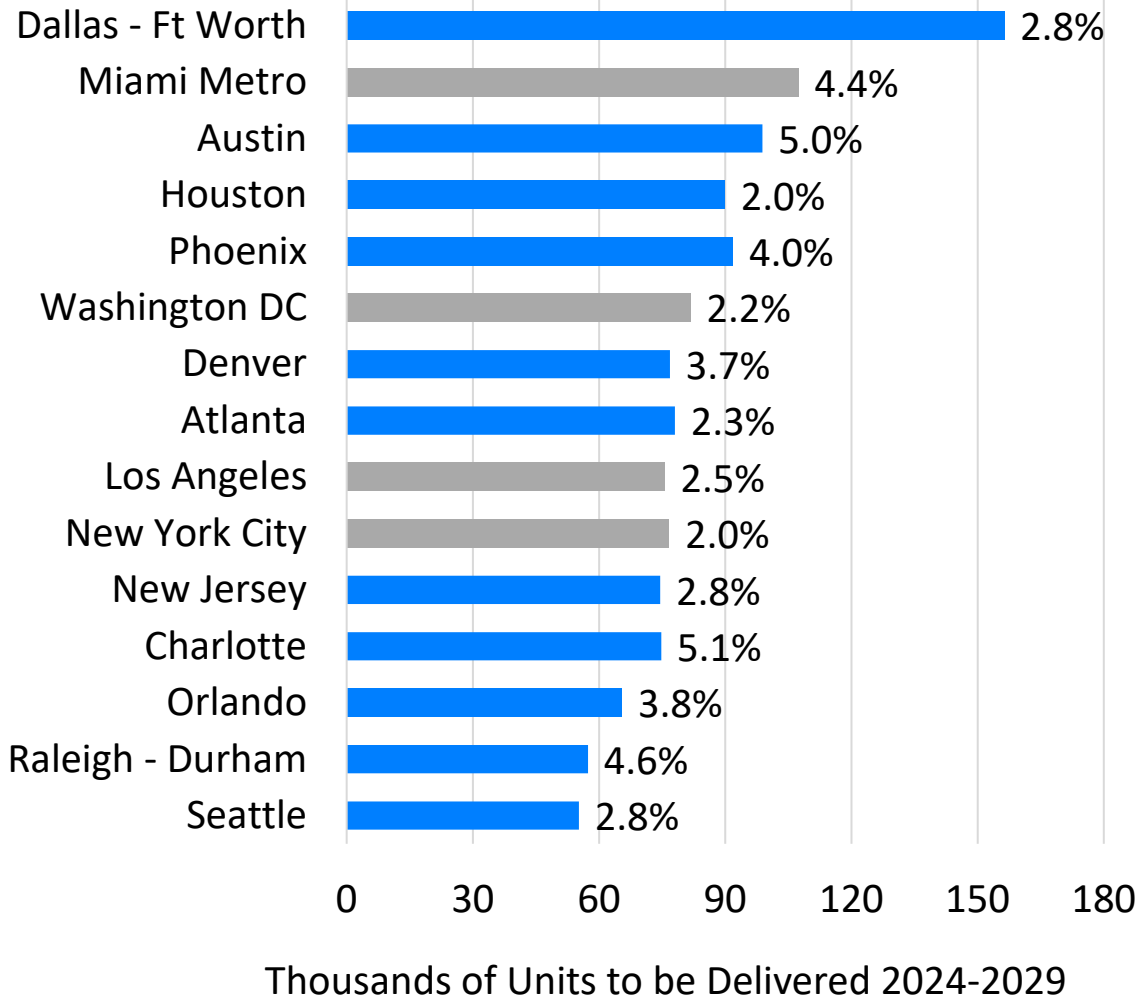


Inventory forecast is for multifamily units only (excluding single-family rentals and student housing) | Source: Yardi Matrix



# A Handful of Markets Still Have a Lot of Supply Coming Despite Decelerating Rents and Occupancies

Forecasted New Unit Deliveries 2024-2029 - Percentages Denote Compound Annual Growth Rates



# GENERAL (DI)STRESS CONDITIONS

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# Finding Opportunities in the Current Environment

**The current investment environment requires increased creativity to find potential investable opportunities, which Yardi Matrix has been designed to do:**

Acquisitions since 2020 with 2-3 year durations =	<b>3,200± properties</b>
Floating/Variable Rate Loans initiated after 2021 =	<b>1,700± properties</b>
Construction loans initiated 2021 – 2023 =	<b>3,500± properties</b>
Loans of GSE Watch Lists =	<b>200± properties</b>
Low estimated DSCRs (<1.05) =	<b>2,000± properties</b>

# There Will Be an Increase in Multifamily Distress, But it Will Be Limited to Certain Situations

## AREAS FOR POTENTIAL DISTRESS:

- Projects in development where sponsor can't "feed" the development process
- Newly delivered projects in high supply markets with exhausted interest reserves
- Loans that were originated too late to benefit from the jump in rents
- Short-term loans that were originated in 2020-21 at very low rates that are now being refinanced at much higher rates
  - Loans on properties in the minority of submarkets like downtown San Francisco that have worsening demand/fundamentals
  - Variable and floating rate debt
- Localized distress due to government regulations/rent control causing expenses to rise faster than income - NYC Rent Stabilized

## MARKETS MOST AT RISK:

- Metros with at least \$3 billion of multifamily loans coming due by EOY 2025 include Atlanta (\$11.9 billion), Dallas (\$8.0 billion), Denver (\$7.2 billion), Houston (\$5.7 billion) and Chicago (\$5.5 billion)
- While performance of individual properties and the immediate submarket are more important than metro-level data when determining potential distress, general inferences can be made utilizing performance metrics such as:
  - Rent growth, vacancy rates and percentage of stock under construction against the percentage of loans maturing in each metro
- Markets with a high percentage of loans maturing over the short term and recent negative rent growth include **Atlanta, Houston, Raleigh-Durham, Orlando and Austin**

# Case In Point, Optimist Lofts in Atlanta Foreclosed This Last February

## PROPERTY DETAILS

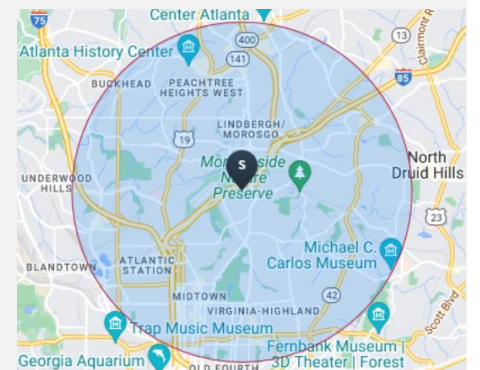
- Units: 212
- Improvements Rating: A-
- Location Rating: B+
- Completion Year: 2007
- Occupancy: 86.3% (as of February 2024)
- Owner: Loancore Capital – REO

## SALES AND LOANS

- Unpaid Principal Balance: \$46.8M
- Lc Optimist, an affiliate of Liquid Capital, purchased the property from RPM Living in April 2022 for \$57M during the post-COVID period
- To make the purchase, Liquid obtained a \$48M bridge loan from LoanCore Capital
- In a foreclosure notice issued in January, the loan was declared “due and immediately payable” due to the firm’s inability to make a payment on the debt

## MARKET AND SUBMARKET PERFORMANCE

- Market: Atlanta – Urban
  - YOY Rent Growth and Absolute Rent
    - 2021: +12.4%; \$1,585
    - 2022: +11.7%; \$1,770
    - 2023: -0.3%; \$1,764
  - YOY Occupancy and Absolute Occupancy
    - 2021: +1.2%; 94.9%
    - 2022: -0.6%; 94.3%
    - 2023: -1.5%; 92.9%
- Submarket: Lindbergh
  - YOY Rent Growth and Absolute Rent
    - 2021: +9.1%; \$1,691
    - 2022: +9.8%; \$1,857
    - 2023: -4.8%; \$1,767
  - YOY Occupancy and Absolute Occupancy
    - 2021: +0.4%; 93.5%
    - 2022: -0.2%; 93.3%
    - 2023: -1.8%; 91.6%





# A FEW LARGE MARKETS HAVE LIKELY POTENTIAL FOR SUPPLY DRIVEN DISTRESS IN '24-'25

**AUSTIN**

**ORLANDO**

**CHARLOTTE**

**PHOENIX**

**DENVER**

**RALEIGH**

**JACKSONVILLE**

**SALT LAKE CITY**

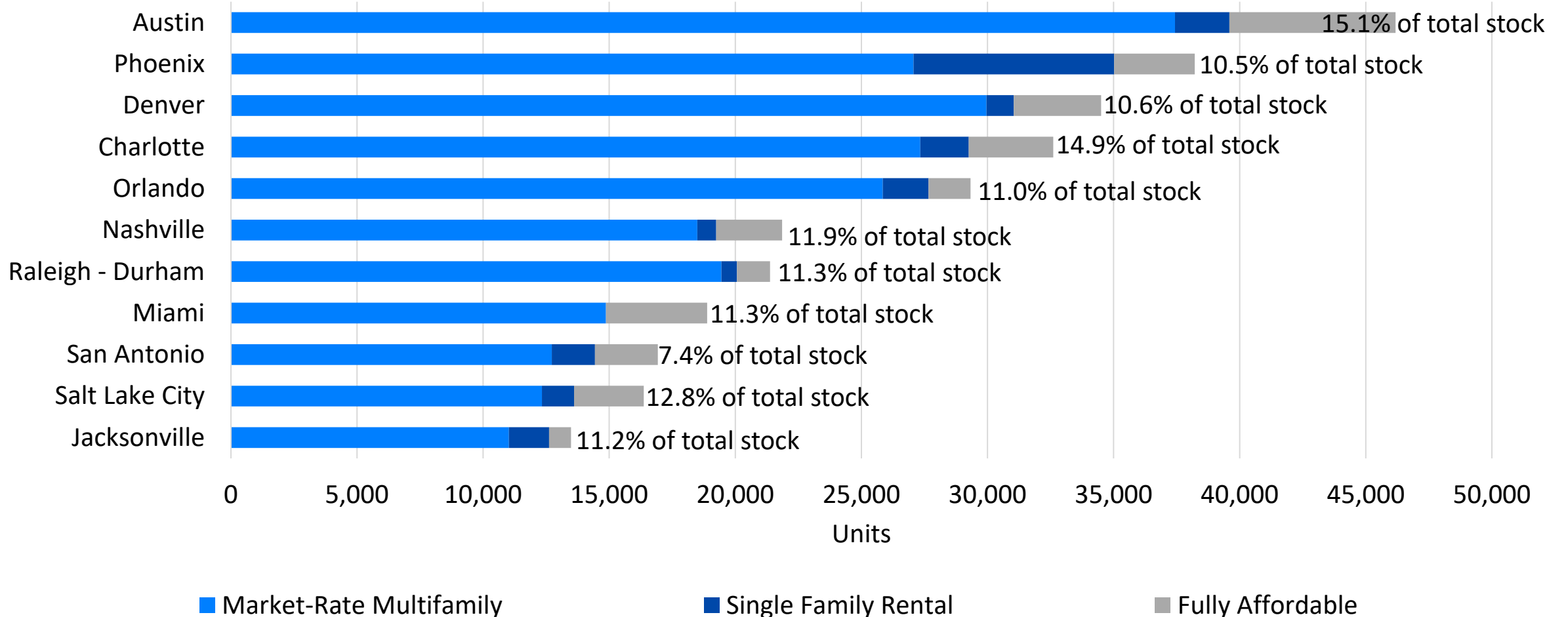
**MIAMI**

**SAN ANTONIO**

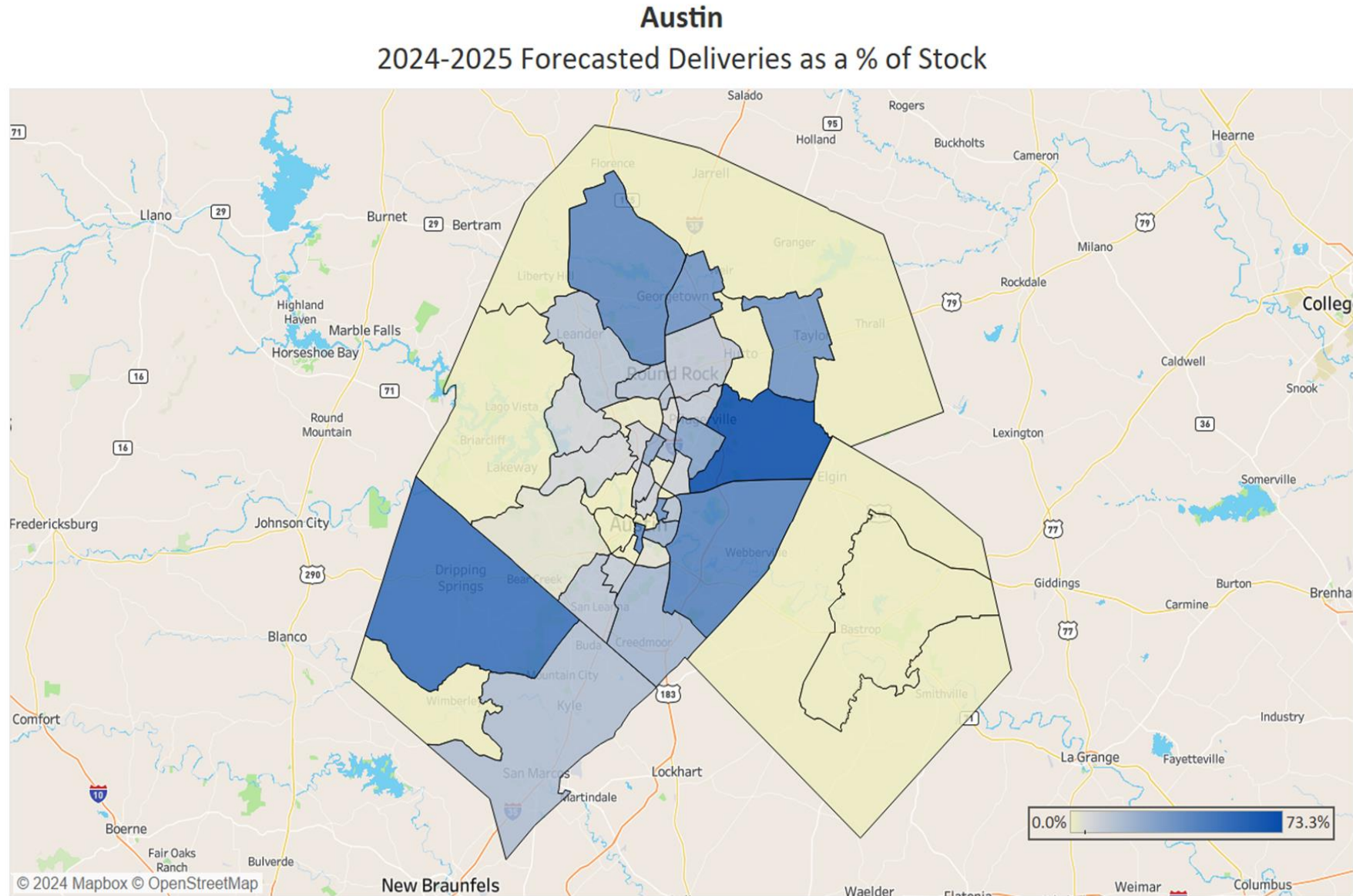
**NASHVILLE**

# Single-Family Rental and Affordable Comprise A Sizeable Portion of New Stock in Many High Supply Markets

Forecasted New Unit Deliveries (2024-2025)



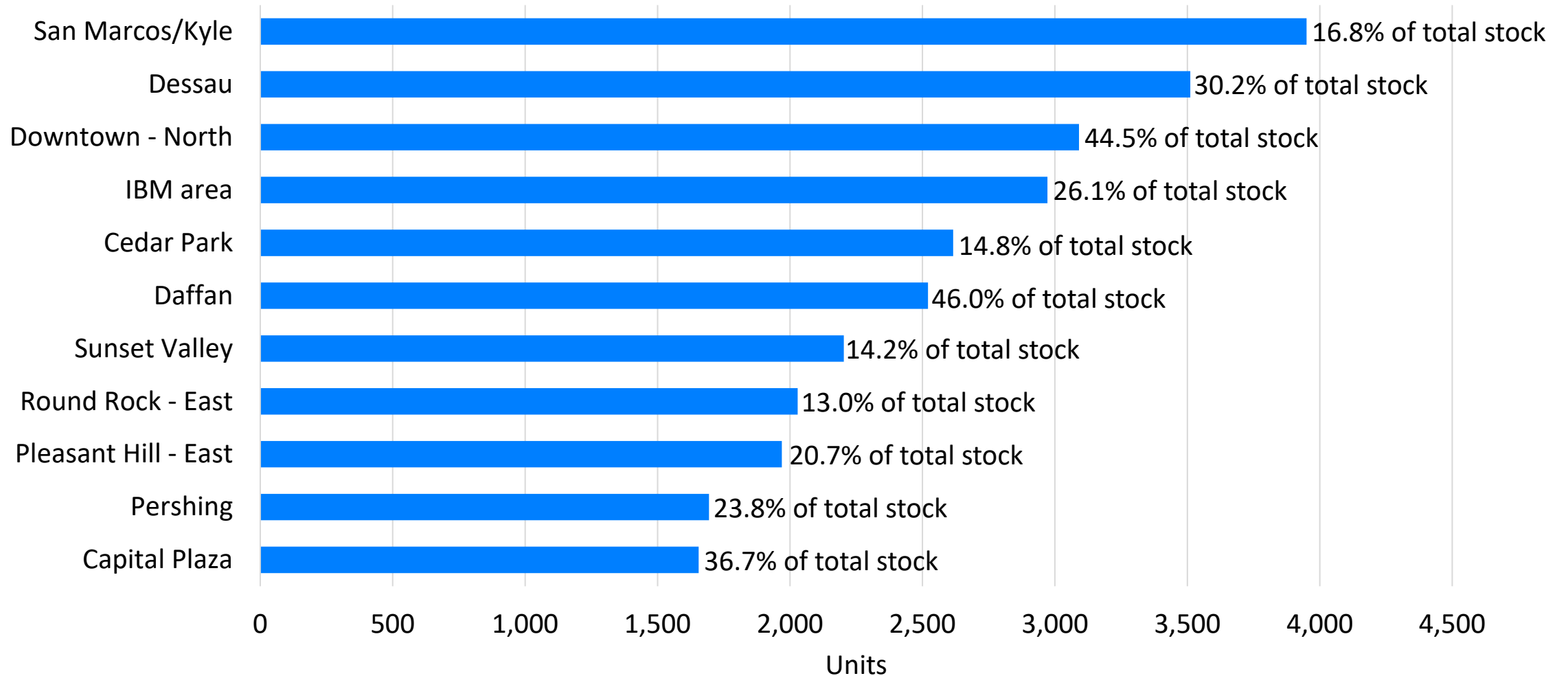
# Several of Austin's Submarkets are Expected to See Heavy Supply by end of 2025





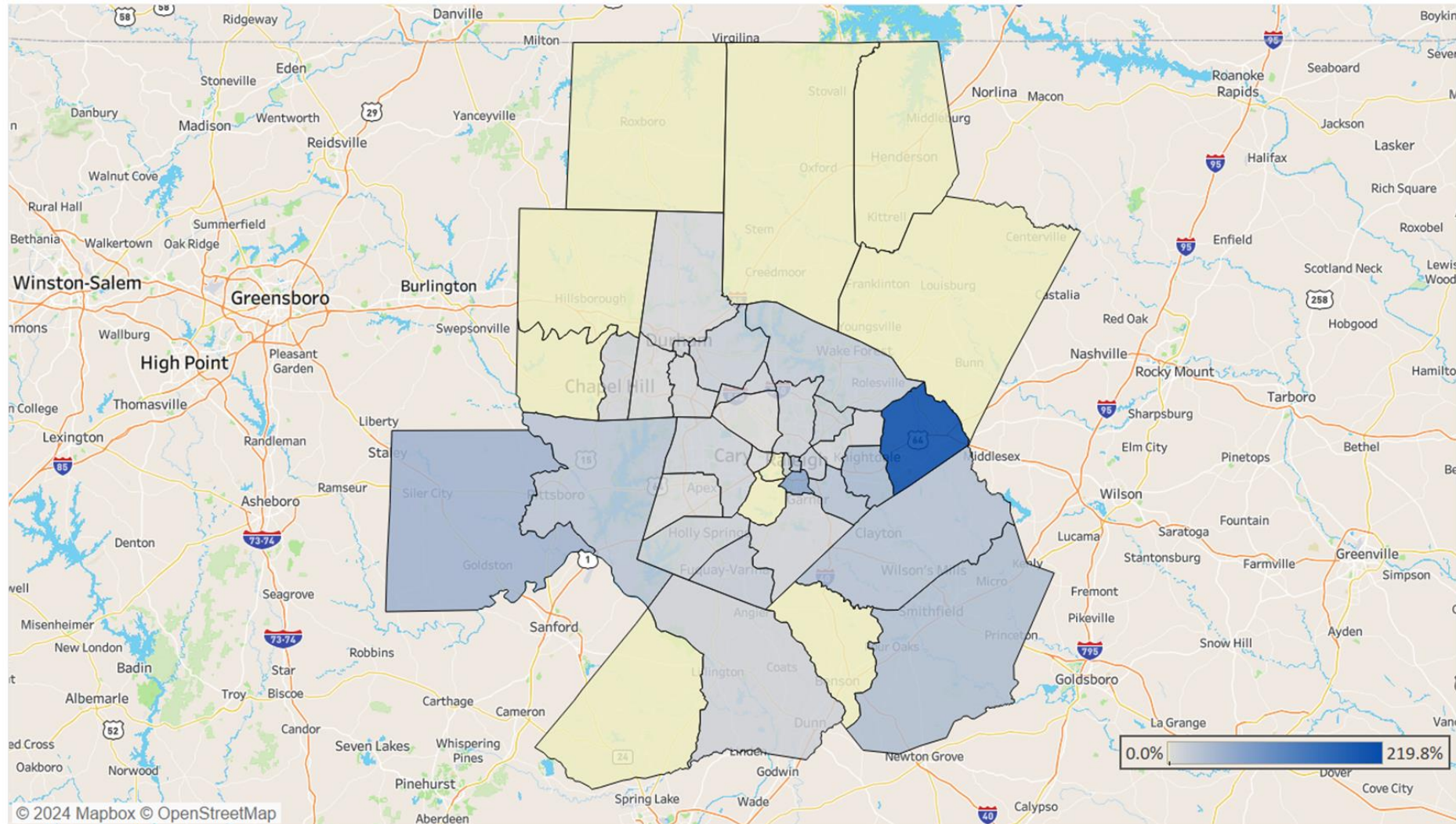
# These Austin Submarkets are Forecasted to Have An Influx of New Supply in the Near-Term

**Austin Forecasted New Unit Deliveries (2024-2025)**



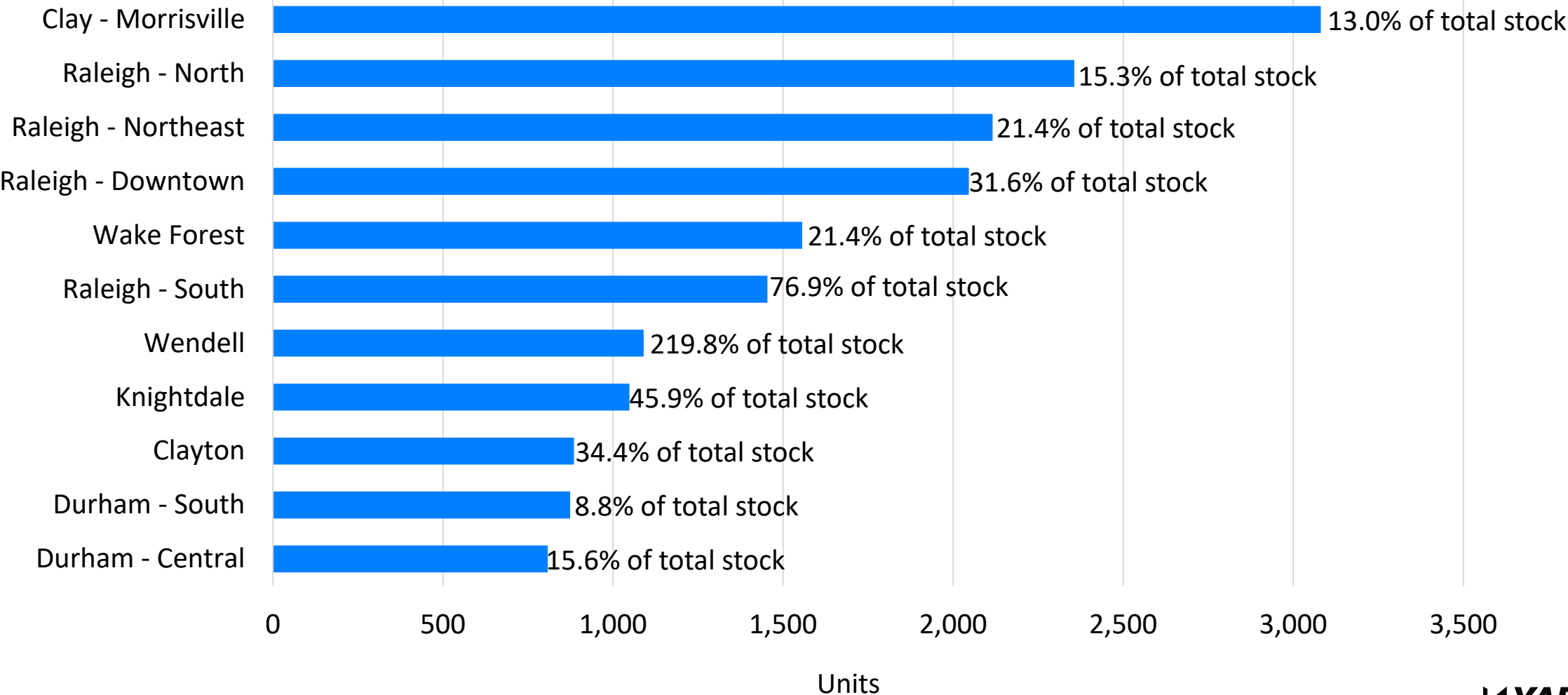
# Raleigh-Durham's Northeast Submarkets Are Expected to See the Most Supply

**Raleigh - Durham**  
2024-2025 Forecasted Deliveries as a % of Stock



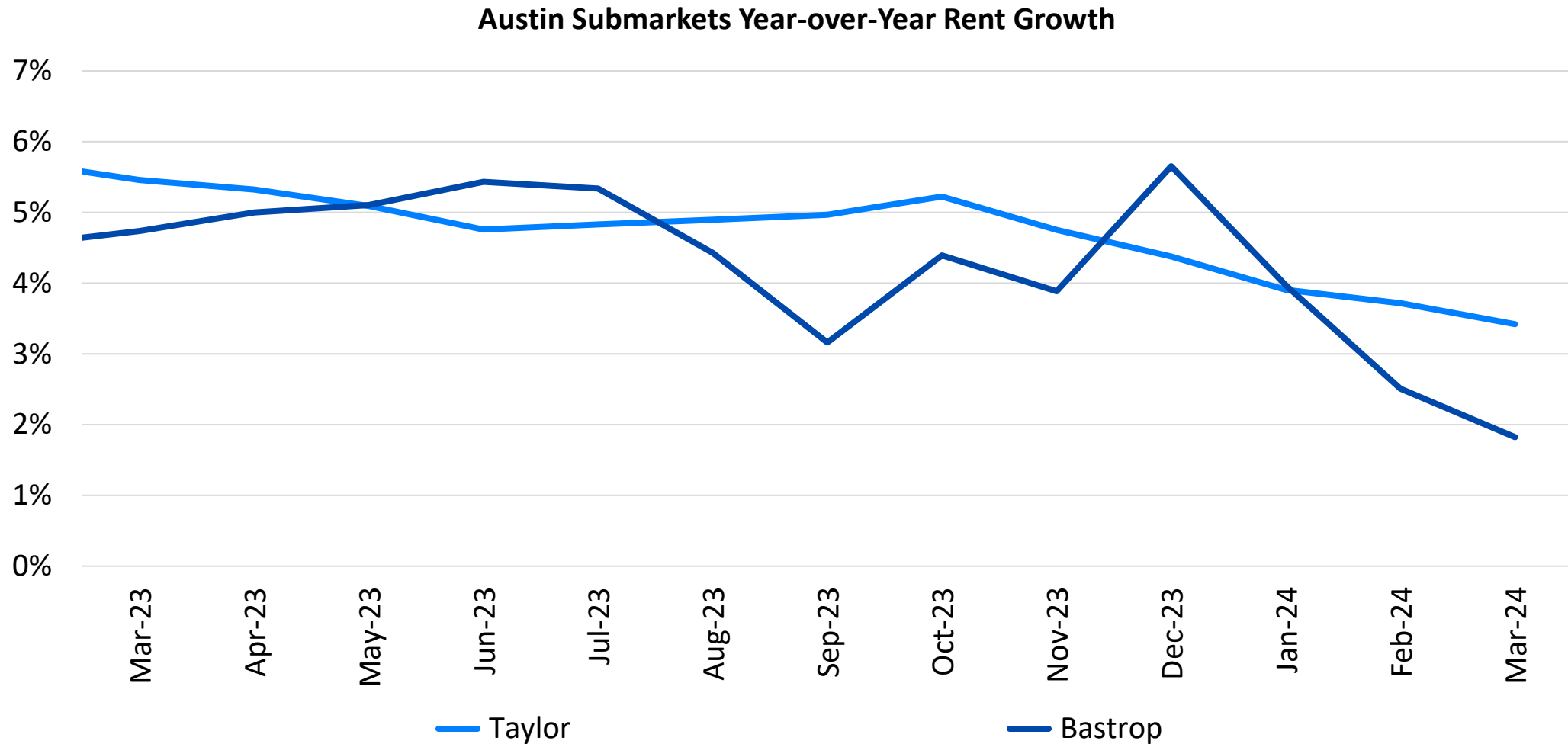
# These Raleigh-Durham Submarkets Are Forecasted To Have an Influx of New Supply in the Near-Term

Raleigh - Durham Forecasted New Unit Deliveries (2024-2025)



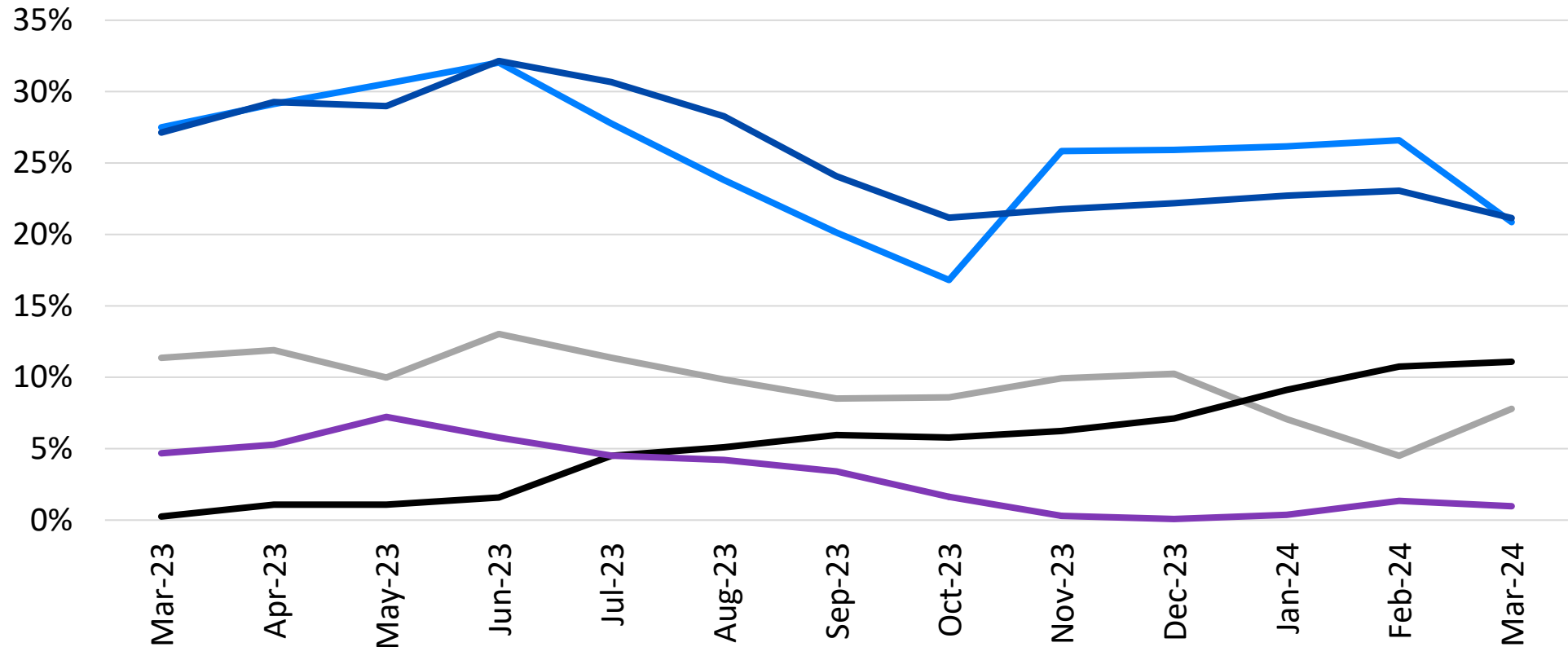
Single-family rental excluded. Data as of March 2024. | Source: Yardi Matrix

# However, There Are Still Pockets of Opportunity: 2 Submarkets in Austin Have Maintained Positive Rent Growth in the Last Year



# However, There are Still Pockets of Opportunity: 5 Submarkets in Raleigh Have Maintained Positive Rent Growth in the Last Year

### Raleigh - Durham Submarkets Year-over-Year Rent Growth



— Chatham County - West — Harnett County - West — Granville County — Raleigh - South — Raleigh - University



# Performance Metrics For The High Supply Markets

Market	New Rent Growth %	New Rent \$	Renewal Rent Growth %	Renewal Rent \$	In-Place Rent Growth %	In-Place Rent \$	Occupancy Growth %	Occupancy	New Lease Trade Out %	Renewal Lease Trade Out %
Miami	1.8%	\$2,376	7.1%	\$2,194	8.5%	\$2,157	-1.1%	96.4%	5.0%	5.8%
Denver	1.7%	\$1,787	3.2%	\$1,790	3.5%	\$1,790	-0.1%	94.3%	0.8%	5.0%
Raleigh - Durham	-3.8%	\$1,414	3.3%	\$1,482	3.2%	\$1,474	-1.9%	92.8%	-3.9%	3.8%
Salt Lake City	3.2%	\$1,471	-1.5%	\$1,513	0.8%	\$1,498	1.3%	94.0%	-4.2%	3.7%
Orlando	1.3%	\$1,650	5.4%	\$1,612	4.6%	\$1,626	-0.2%	94.8%	-0.9%	3.7%
Charlotte	-1.3%	\$1,451	0.6%	\$1,464	2.3%	\$1,466	-1.0%	92.6%	-3.3%	3.5%
San Antonio	-3.5%	\$1,184	3.6%	\$1,220	2.3%	\$1,213	-2.5%	91.3%	-3.4%	3.4%
Jacksonville	-3.0%	\$1,410	2.9%	\$1,488	1.0%	\$1,457	-0.2%	93.4%	-3.7%	3.3%
Nashville	-3.4%	\$1,509	5.3%	\$1,572	1.9%	\$1,567	-1.8%	92.5%	-3.4%	3.1%
Phoenix	-3.4%	\$1,483	-0.2%	\$1,529	-0.3%	\$1,515	-0.9%	93.2%	-2.6%	2.6%
Austin	-8.6%	\$1,415	-0.9%	\$1,542	-1.1%	\$1,511	-2.8%	91.4%	-8.3%	2.4%



Data as of March 2024. New Lease trade out is the percentage of monthly rent change between new leases and their corresponding previous leases for the same unit.

Renewal Lease trade out is percentage of monthly rent change between renewals and their corresponding previous leases for the same tenant | Source: Yardi Expert; Yardi Matrix

# Loans Maturing by Year for High Supply Markets

Market	# of Loans Maturing in 2024	# of Loans Maturing in 2025	# of Loans Maturing in 2026
Austin	70	81	79
Charlotte	40	45	49
Denver	89	109	98
Jacksonville	30	32	25
Miami	25	33	24
Nashville	35	56	50
Orlando	38	60	51
Phoenix	43	70	80
Raleigh	34	41	35
Salt Lake City	17	19	18
San Antonio	37	42	34

# Distress Can be Found by Monitoring Construction Loans Coming Due in the Near-Term, as Well as Floating Rate Loans Originated in '20-'21 and '22-'23

Market	# of Construction Loans Maturing in '24-'25	# of Floating Rate Loans Originated in '20-'21	# of Floating Rate Loans Originated in '22-'23	Construction Loans Initiated in '21-'22
Austin	35	122	78	162
Charlotte	22	118	90	145
Denver	69	161	110	173
Jacksonville	9	62	41	60
Miami	16	62	33	82
Nashville	24	87	80	85
Orlando	19	99	76	105
Phoenix	18	172	114	145
Raleigh	19	81	58	93
Salt Lake City	7	101	68	81
San Antonio	10	125	112	69



# Yardi Matrix House View – May 2024

## MACROECONOMIC UPDATE

- U.S. economic growth is strong, with 4.9% GDP growth in 3Q23, 3.4% in 4Q23 and 1.6% for 1Q24;
- The Fed has paused its interest rate hike campaign, having kept rates steady at the December - April meetings
  - Interest rate cuts are anticipated now not until EOY '24
- Inflationary pressures have cooled, and will continue to, but risk of re-acceleration is non-trivial; March inflation exceeded expectations, but April jobs report at 175,000+ indicates deceleration
  - De-globalization continues, putting mild upward pressure back on inflation
- The labor market is tight due to an aging population, with weaker demand at the top end, and more supply at the bottom
- 2023 population increase provides a temporary boost to population growth & labor supply; therefore, lessening wage pressures, but unlikely to change trajectory of slowing population growth in the long term; absent a fundamental change to the public policy consensus
- No consensus on immigration policy as 5-8 MM illegal immigrants enter the labor market
- U.S. economy is strong but slowing; the yield curve (10YR - 3MTH) is inverted with expected slower growth and a mild recession likely sometime in early-mid 2025

# Yardi Matrix House View – May 2024

## MULTIFAMILY UPDATE

- The concepts of affordable housing are bleeding into conventional housing, as public policy attempts to deal with rising housing costs
- The multifamily market continues to perform relatively well, despite decelerating rent growth
- We continue to see a market rotation occurring:
  - Sun Belt metros are decelerating at the upper end, driven by heavy supply additions
  - Midwest, Northeast, Small Southern and some Mountain metros are outperforming
- The market rotation is occurring due to **affordability** in the wake of rapid rent increases and **slower domestic migration**
- Construction financing is in short supply, and deliveries will likely be reduced in 2026 through 2029
- The supply shortage of U.S. housing is likely to last 5-10 years, supporting continued healthy rent growth and capital appreciation
- The bid/ask spread for acquisitions remains very wide, with initial pre-distress and distress emerging
- Transactions have, and will, continue to slow until inflation is deemed under control and interest rates come down, which we think happens over the course of 2025



THANK YOU

Feel free to contact us with any questions

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