



# MULTIFAMILY NATIONAL OUTLOOK

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SPRING 2022

# PRESENTERS

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# AGENDA

- Opening Remarks
- Macroeconomic Outlook
- Migration and Demographic Trends Impacting Housing Demand
- Multifamily Fundamentals and Forecasts
- Single-Family Rentals in Build-to-Rent Communities

# OPENING REMARKS

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# Yardi Matrix House View – May 2022

## **MACROECONOMIC UPDATE**

- The pandemic recovery has been rapid (V-shaped)
- Labor, goods and money supply have been disrupted
- The Fed has been too slow to react to soaring inflation, now they are playing catch-up
- The economy is at an inflection point as a result

## **MULTIFAMILY INDUSTRY**

- Inflation, geopolitics, and the changing nature of work (COVID initiated) have impacted housing demand
- Two enduring themes: growth in e-commerce and work-from-anywhere
- Multifamily fundamentals are great, but...
- The capital markets are adjusting, since they are quicker to respond to disruptions
- Amplified changes in demographics will continue to benefit the multifamily industry, but less so

## **OUTLOOK**

- We expect the economy and multifamily industry to continue their stellar growth, at a more moderate pace
- It'll be a bumpy ride for the next couple years until the next recession hits, which we are expecting in 2024-2025
- Amid all the noise, the key to success will still be thoughtful market and investment strategy selection

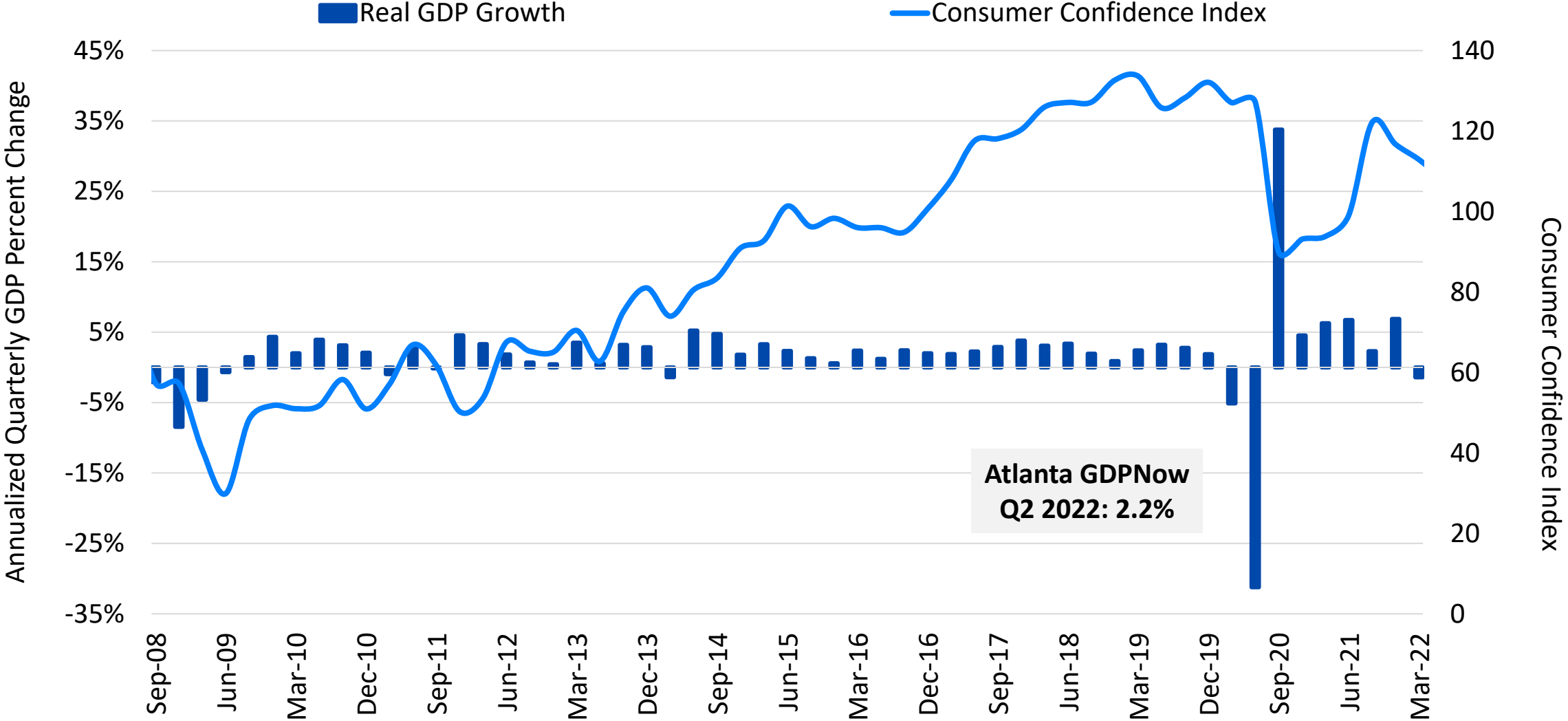
# Recent Multifamily Trends Appear to be Aligning with our Past Theses

| THESIS FROM NOVEMBER WEBINAR   | ACTUAL TREND   |
|--|--|
| <b>Markets will start to see some deceleration in rent growth</b>  | Multifamily rent growth overall is beginning to decelerate— <i>with year-over-year growth falling 50 basis points in April</i> . Tech hubs did see substantial rent growth through the third quarter of 2021; however, they have since seen the rate of rent growth moderate.      |
| <b>The return to office has been stalled</b>   | It appears the return to office has been slower than some anticipated. A slowdown in the return to offices has allowed workers continued flexibility to work from anywhere, which has helped fuel the spreading of the population, as reflected in recent migration numbers        |
| <b>Tech hub markets will continue to perform the strongest, however, most gateway markets will still see positive fundamental performance.</b> | According to recent data, absorption and rent growth have been strongest in tech hub markets, primarily in the Sunbelt region. However, gateway markets, such as New York, have rebounded— <i>seeing robust rent growth and an increase in occupancy on a year-over-year basis</i> |
| <b>Demand for single-family rentals has surged due to more demand for homes, with constraints to purchasing</b>                                | Demand for single-family rentals appears to remain strong as rent growth is solid in all major markets and at the national level   |

# MACROECONOMIC OUTLOOK

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# Q1 GDP Fell, Largely Driven by Inventory Adjustments; Consumer Demand OK

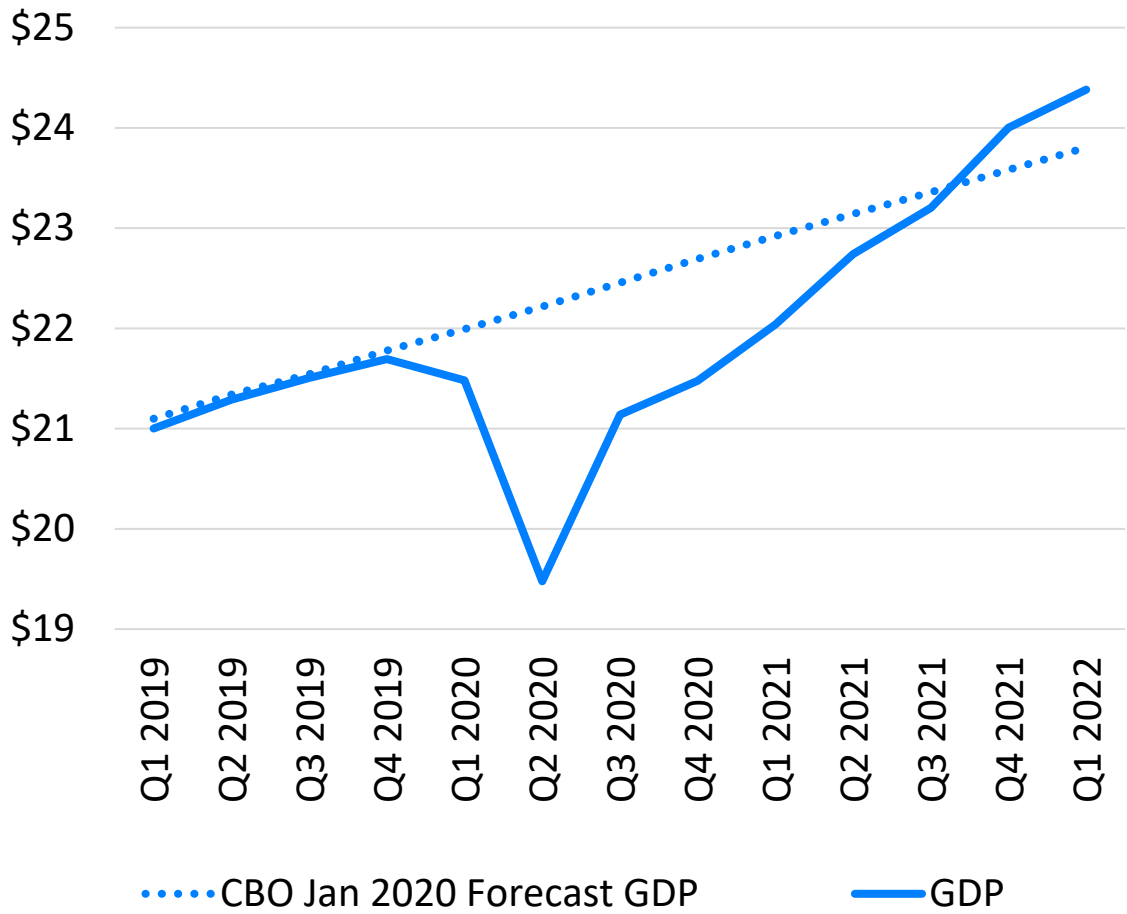


Source: Yardi Matrix; Moody's Analytics; U.S. Bureau of Economic Analysis

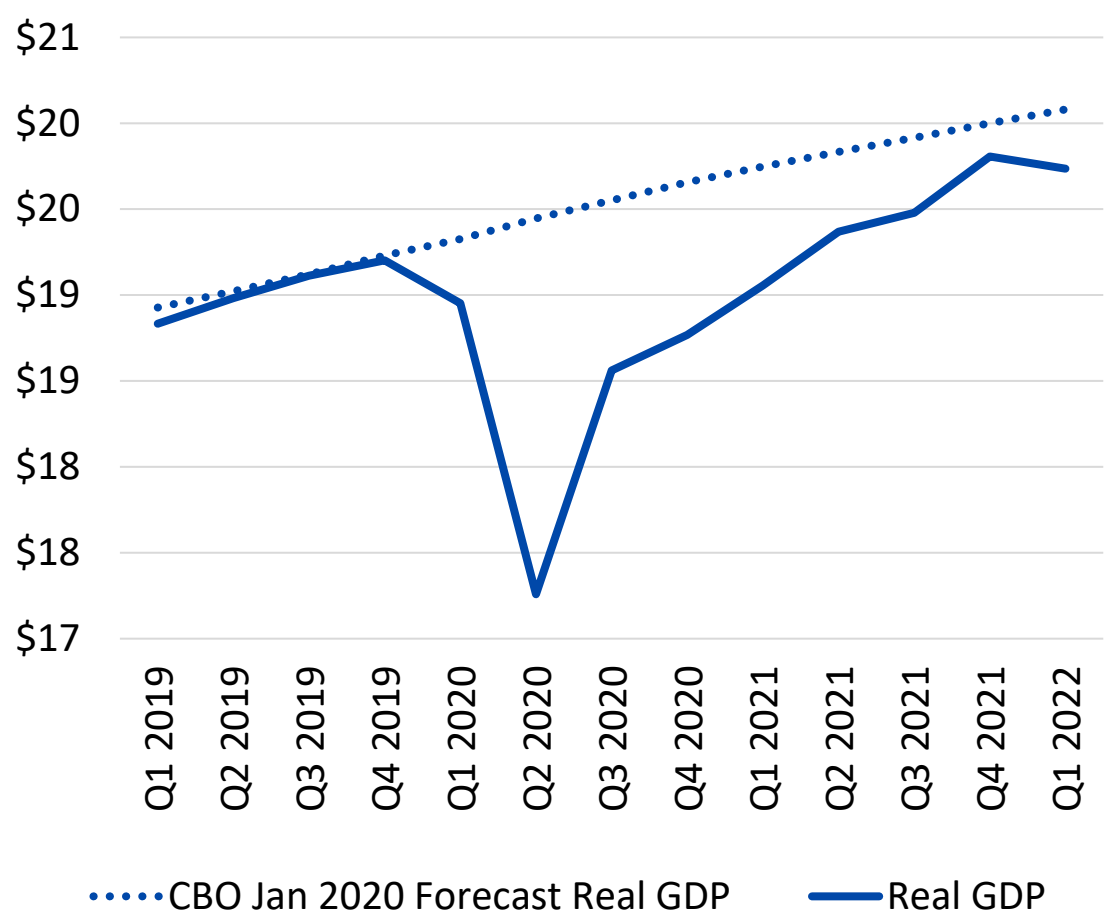


# GDP Has Surpassed Its Pre-Pandemic Trend While Real GDP Has Not

**GDP vs Pre-pandemic Trend, Trillions**



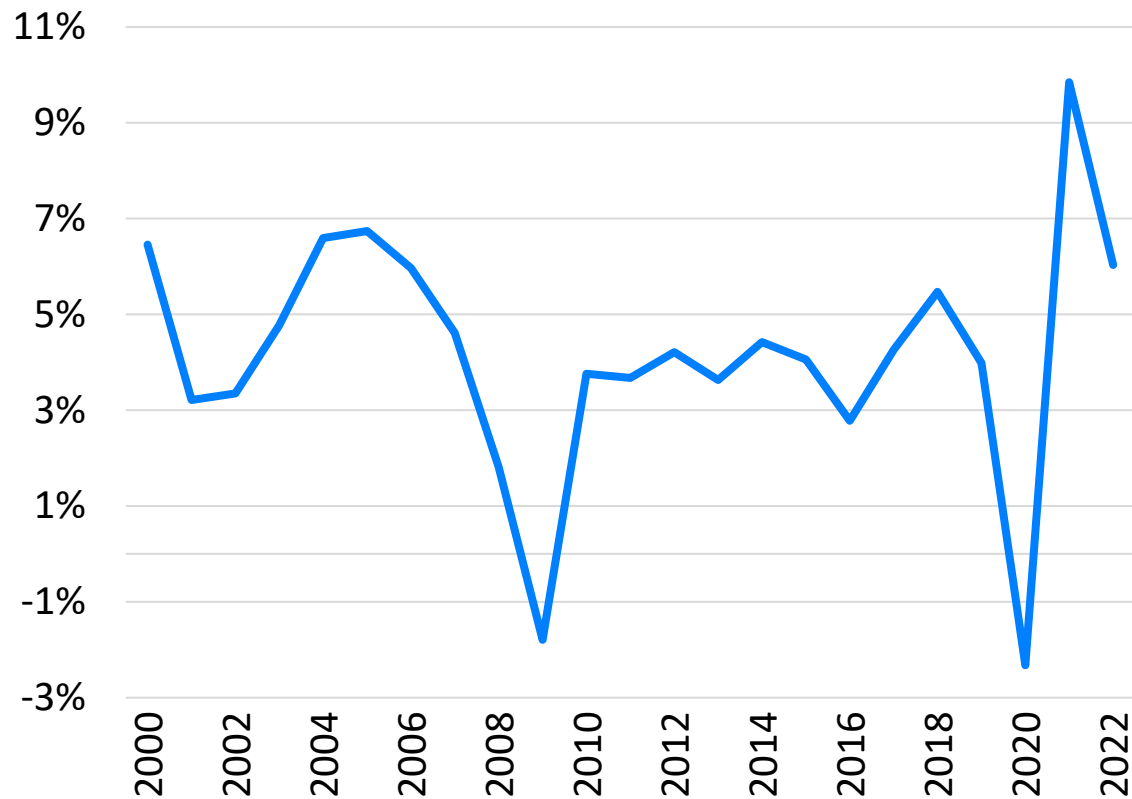
**Real GDP vs Pre-pandemic Trend, Trillions**



Source: Yardi Matrix; Federal Reserve Bank of St. Louis; Congressional Budget Office

# The Recovery Out of COVID Has Been Rapid and V-Shaped

Nominal Annual GDP: YoY % Change



Evercore ISI / Yardi Matrix Economic Forecasts

|  | 2021  | 2022 Forecast | 2023 Forecast |
|--|-------|---------------|---------------|
| <b>Real GDP:</b><br>YoY % Change           | 5.5%  | 1.9%          | 2.5%          |
| <b>Nominal GDP:</b><br>YoY % Change        | 11.8% | 7.6%          | 6.0%          |
| <b>GDP Price Deflator:</b><br>YoY % Change | 5.9%  | 5.7%          | 3.5%          |
| <b>Fed Funds:</b><br>End of Year           | 0.25% | 2.75%         | 3.50%         |
| <b>10 Yr Bond Yields:</b><br>End of Year   | 1.50% | 3.50%         | 4.00%         |



# U.S. and International Financial Markets

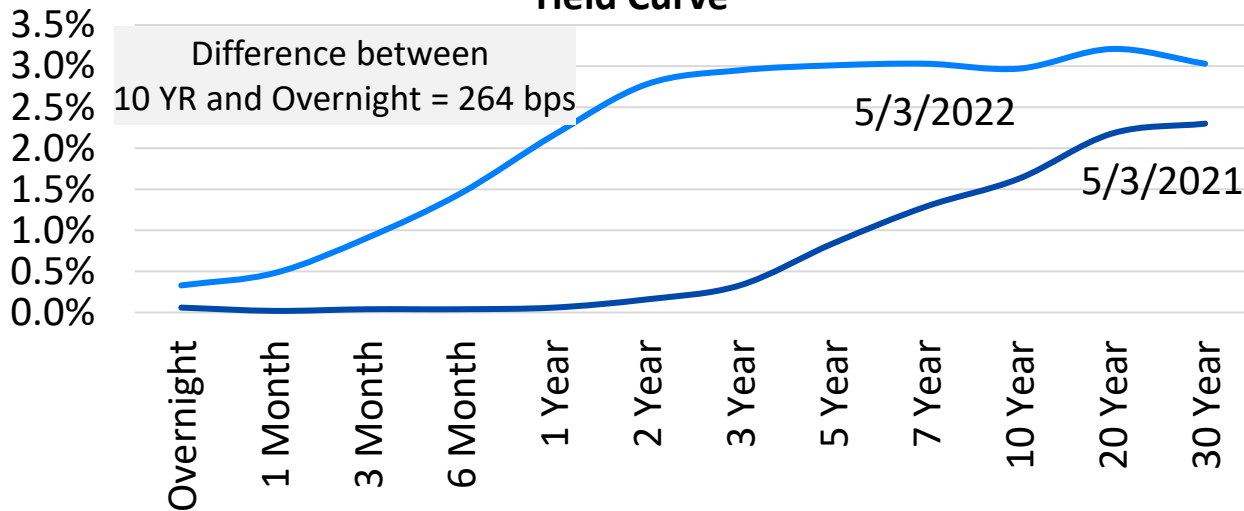
## S&P 500



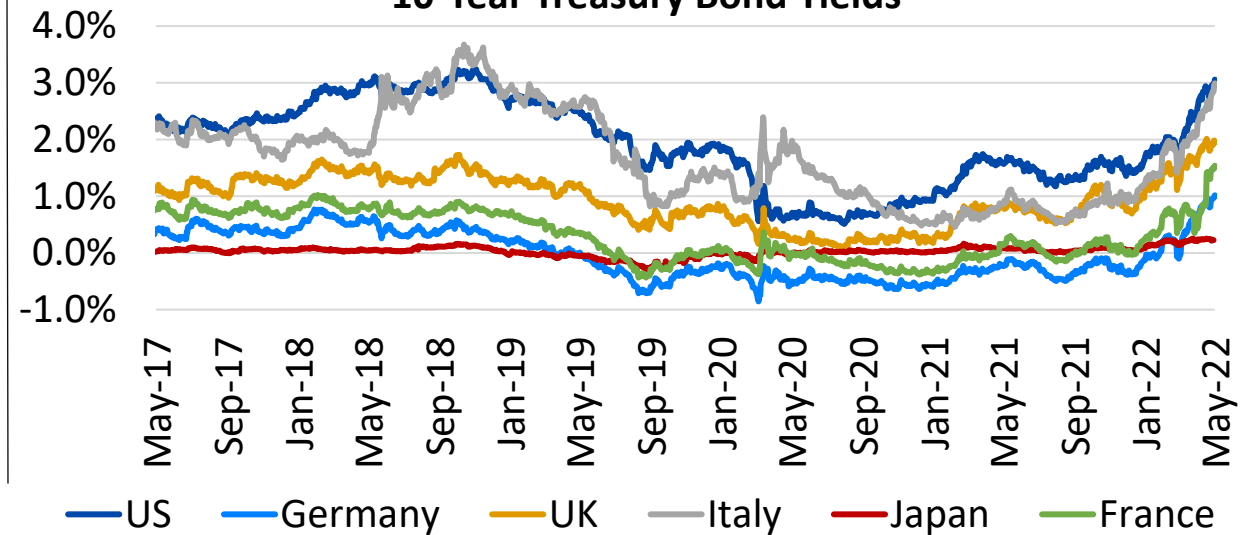
## 10-Year Treasury Note



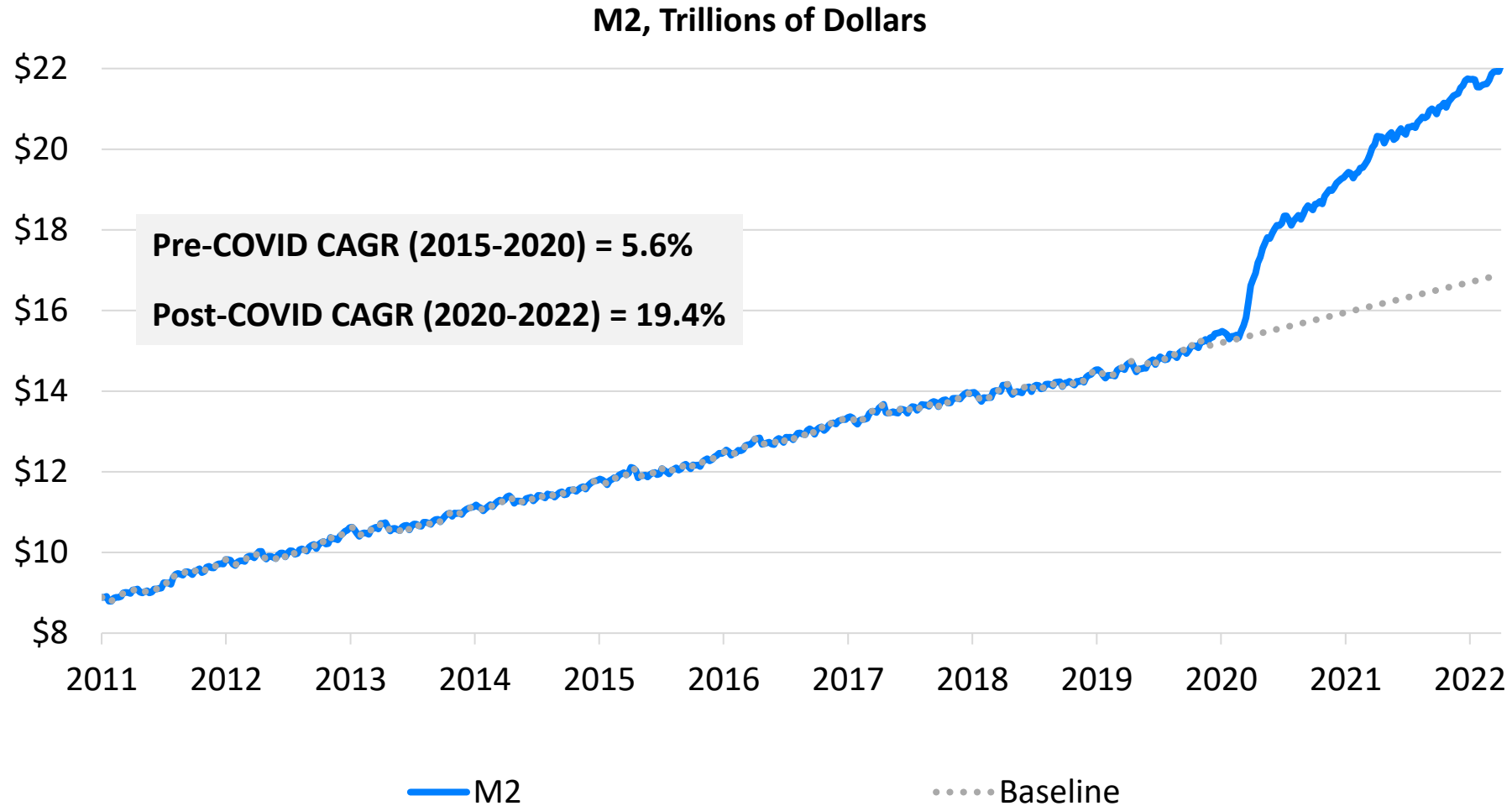
## Yield Curve



## 10-Year Treasury Bond Yields

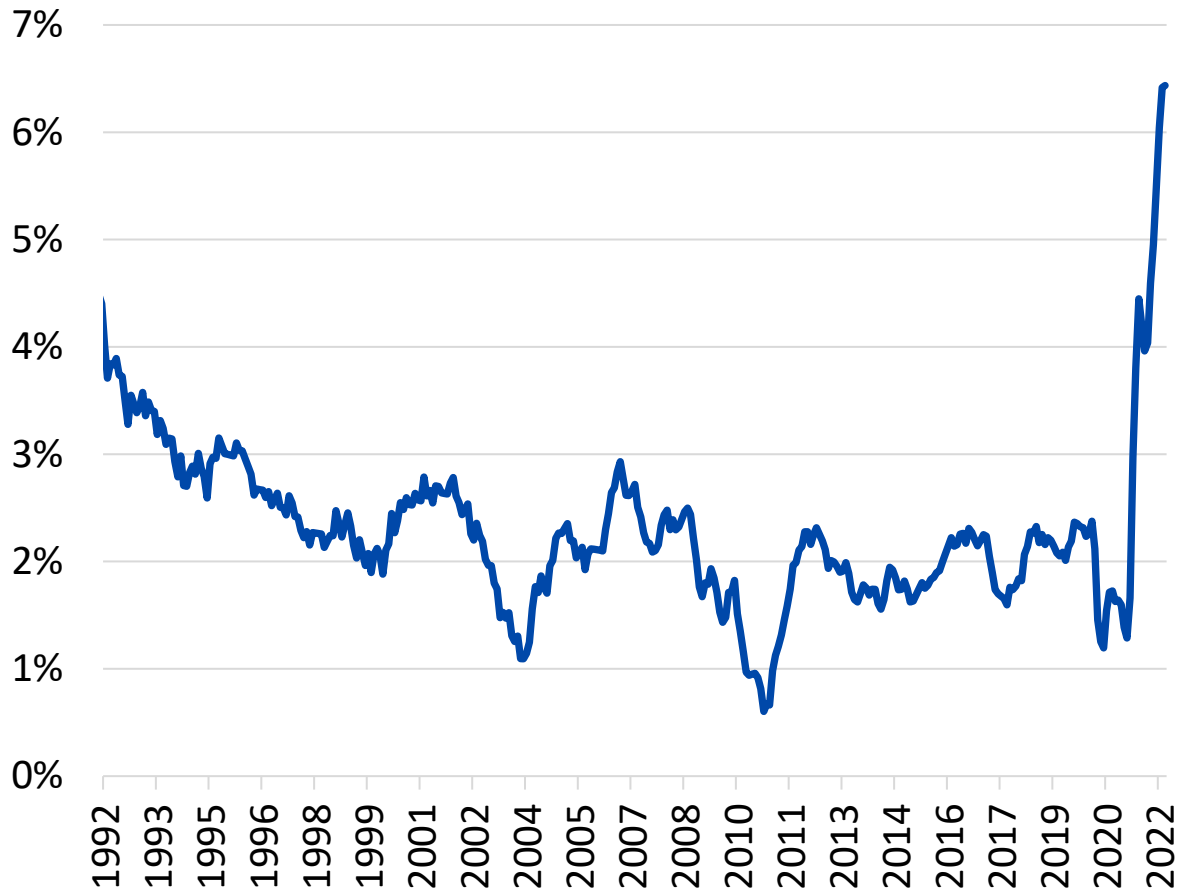


# Significant Expansion of the Money Supply Has Set Off Inflation, but has Started to Rapidly Decelerate

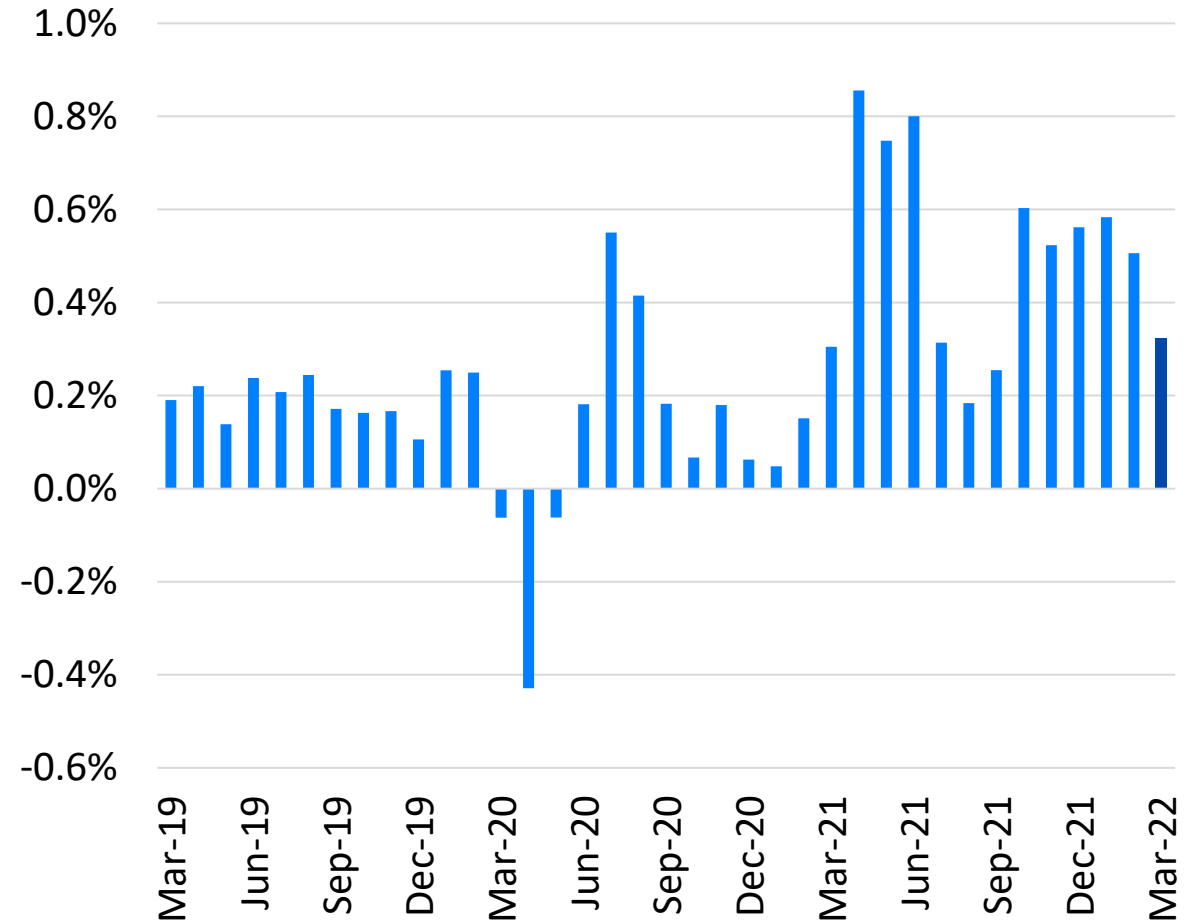


# CPI Gains on a Year-over-Year Basis Have Reached Multi-Decade Highs

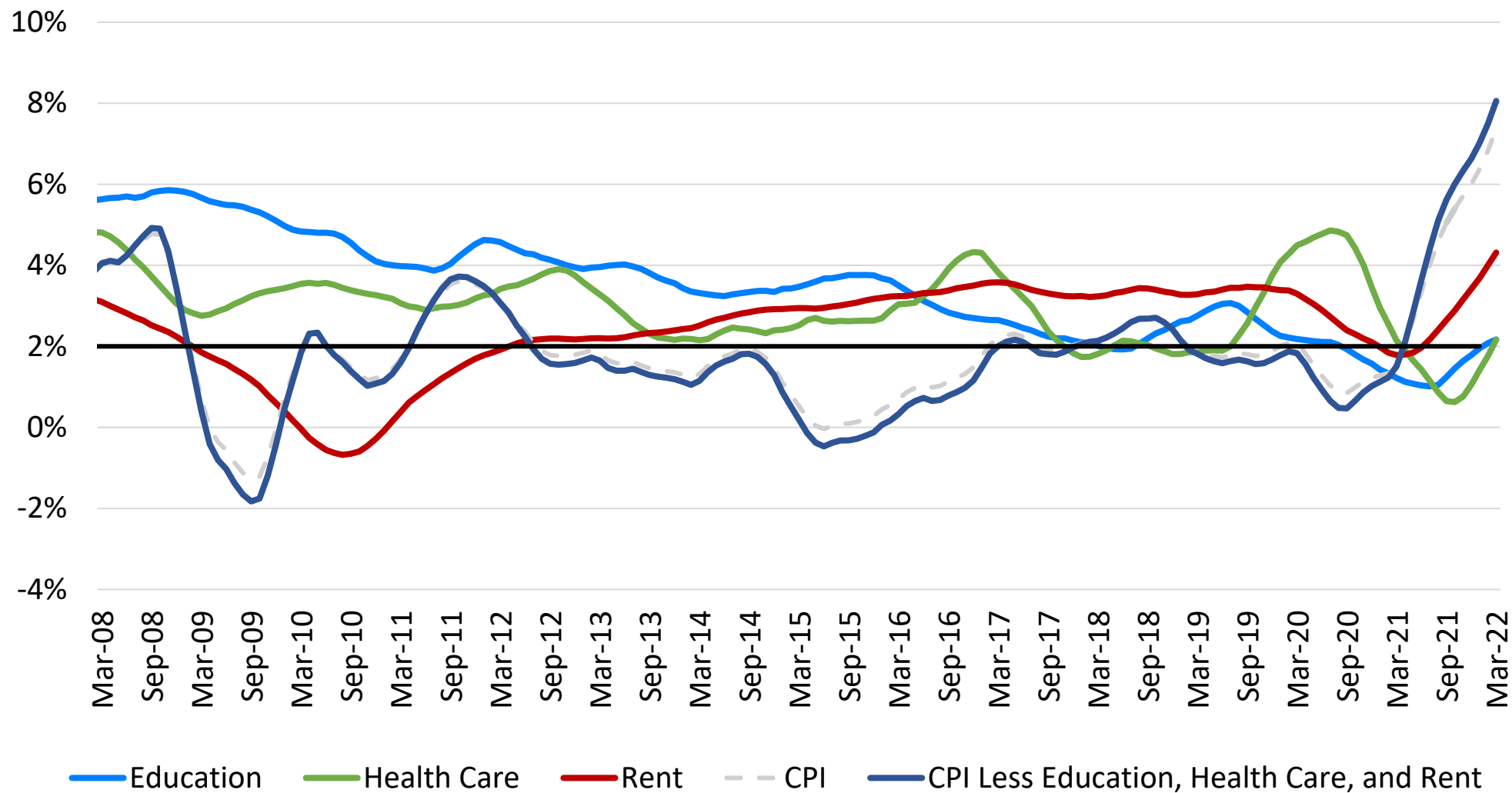
## U.S. Core CPI Year-over-Year Change



## U.S. Core CPI Month-over-Month Change



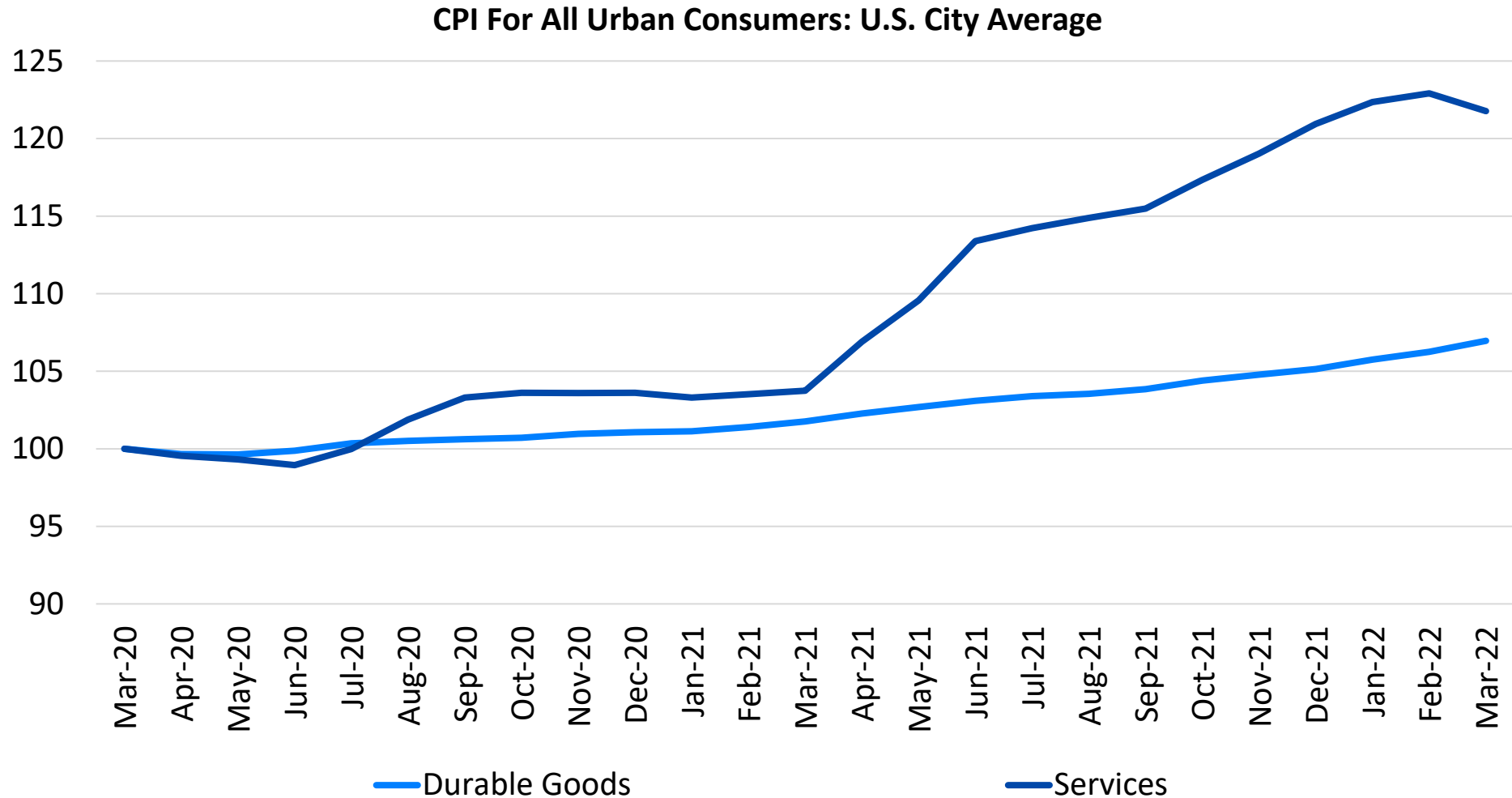
# Goods Inflation Has Taken Off, with Rent Soon to Follow; Even as Goods Inflation Decelerates, Rent will Pushback



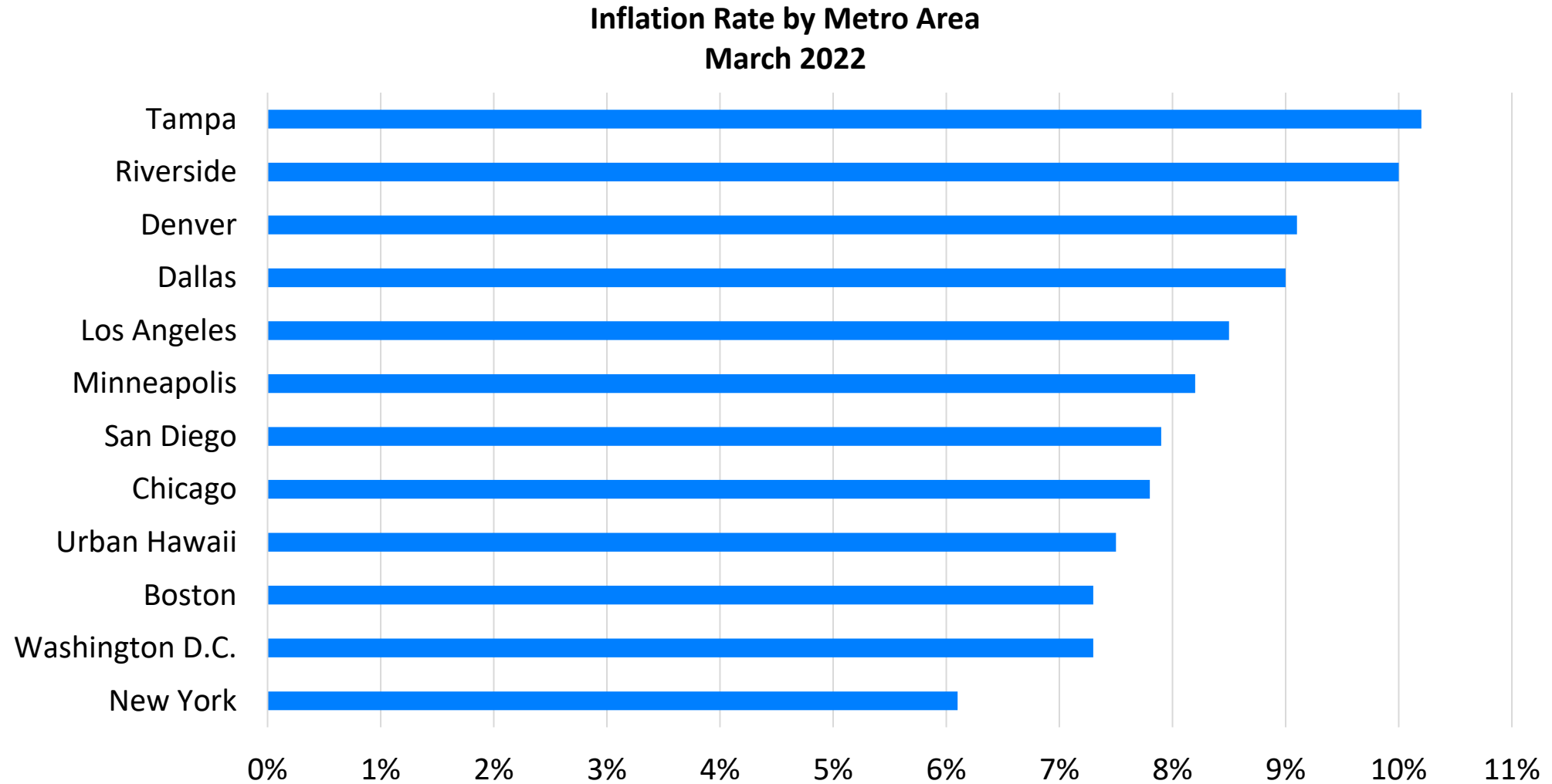
\*YoY 6 month moving averages. CPI Less Health Care, Education and Rent is an estimate using BLS document "Math calculations to better utilize CPI data"

Source: Moody's Analytics; Bureau of Labor Statistics (BLS)

# Pandemic Set Off Surge in Services Inflation; Even as It Decelerates, Its Level will Still be Painful

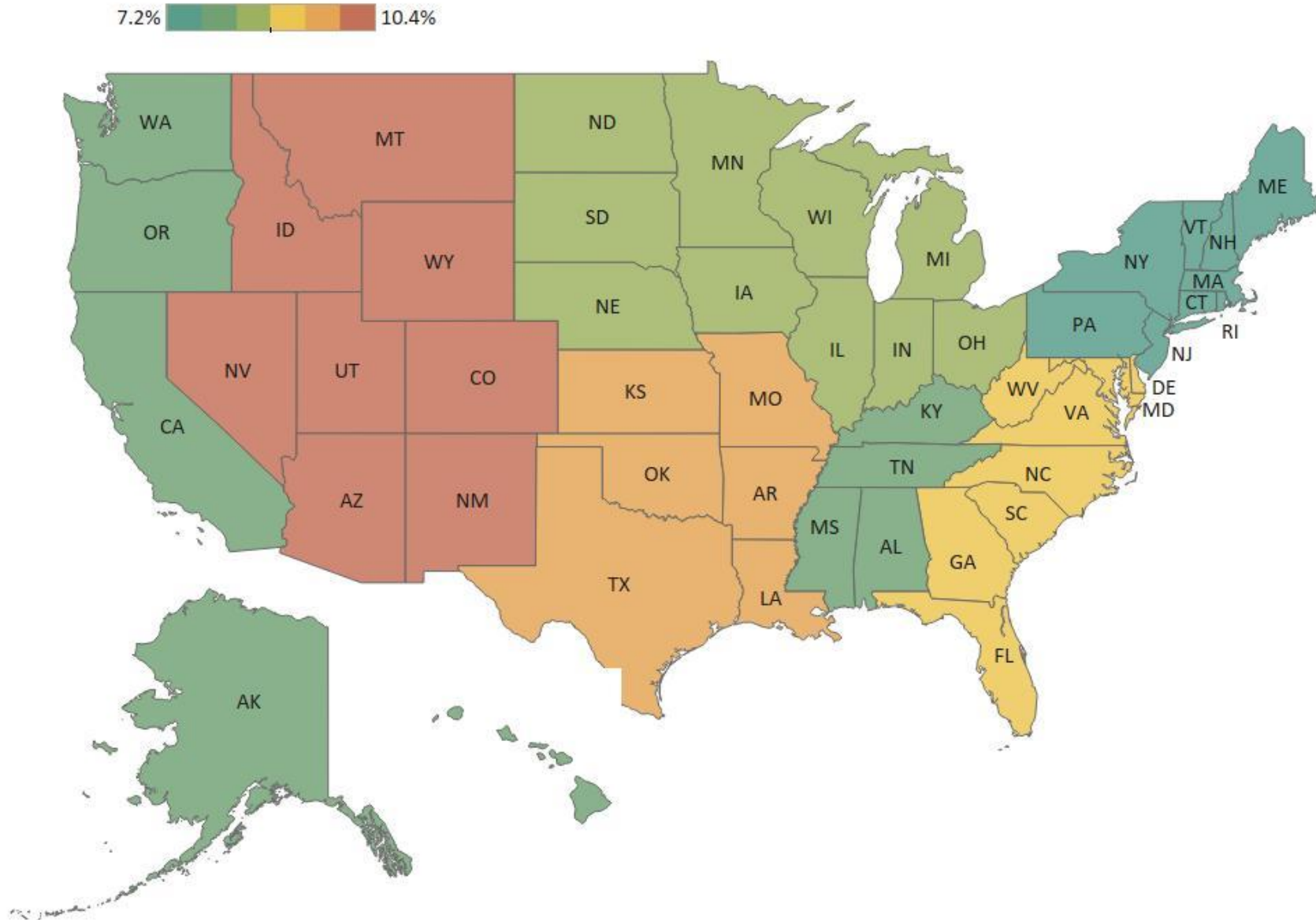


# Prices Are Rising Everywhere, Particularly in Sunbelt and Mountain Markets



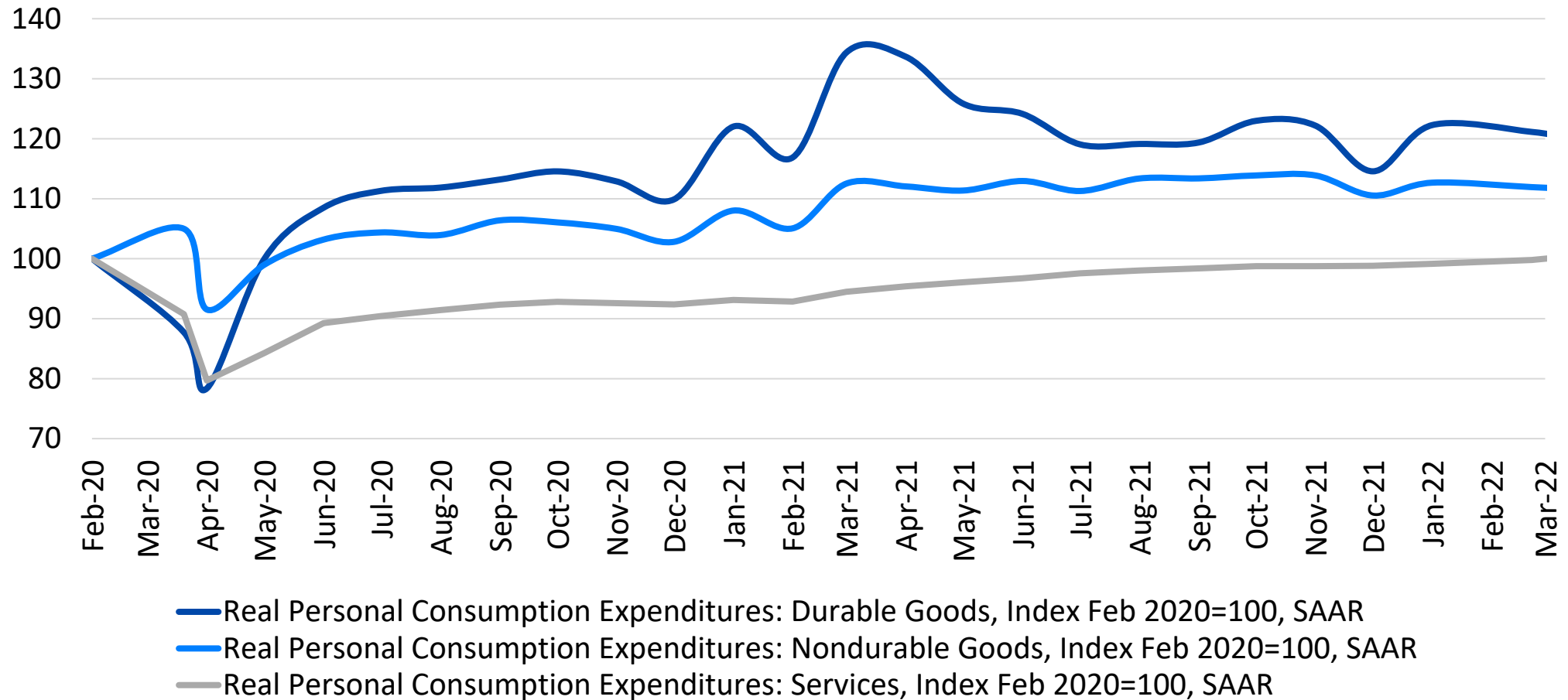


# Inflation Geography: Highest in Domestic Migration Favorites

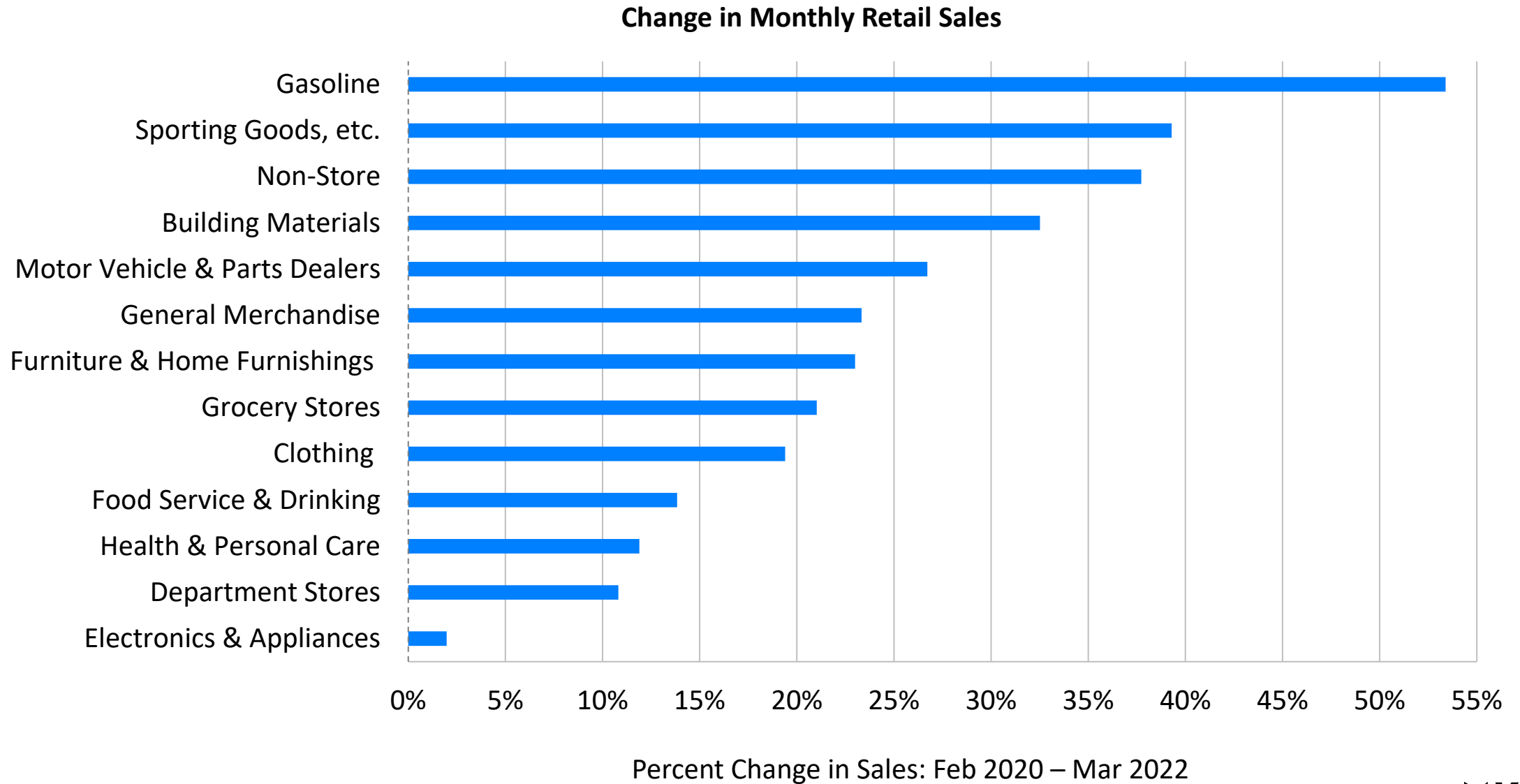


# Consumer Services Spending Back to Pre-Pandemic Levels; Durable Goods +20%

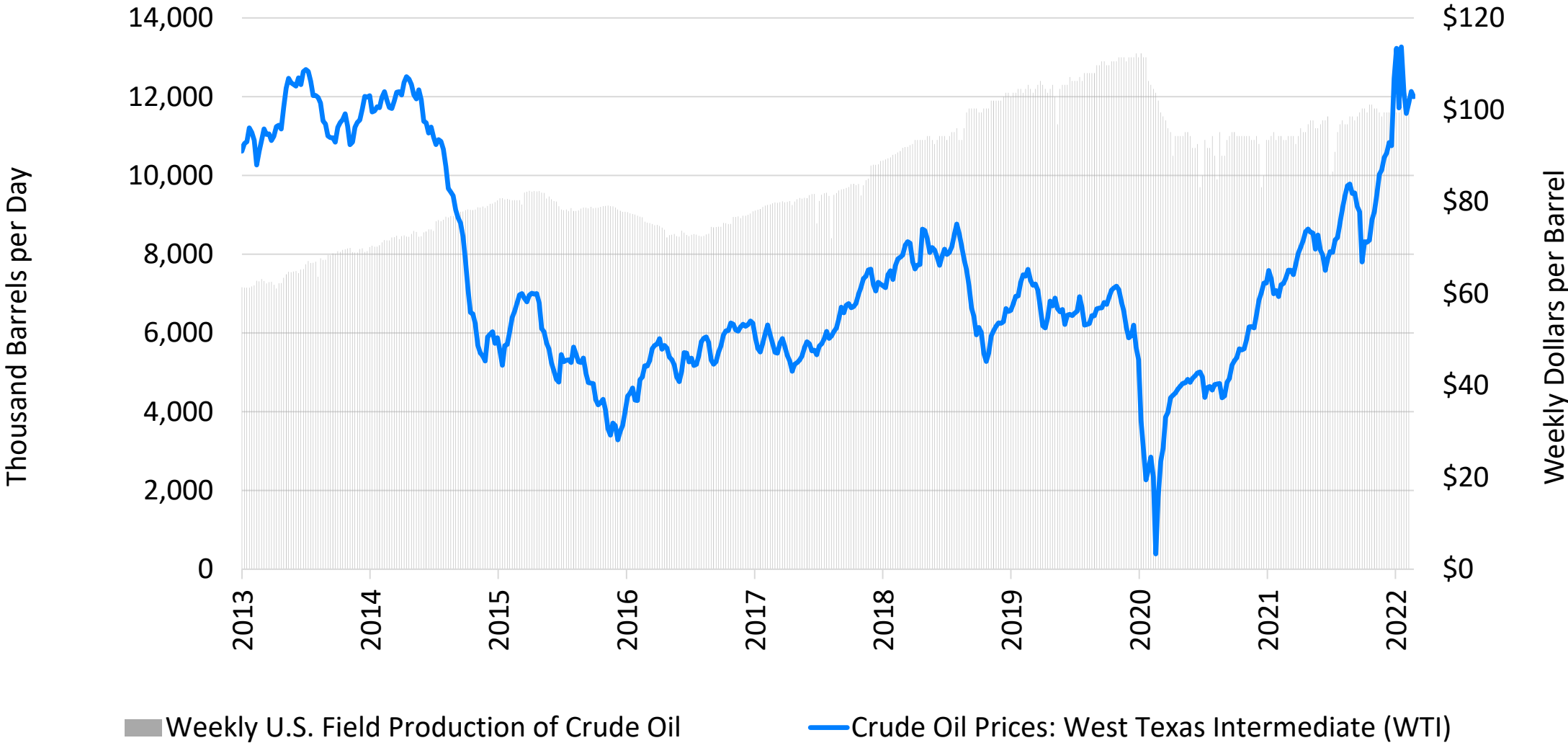
## Consumption of Durable Goods and Services During COVID-19 Recession



# Big Spending Gains on Gasoline, Non-Store Goods and Building Materials



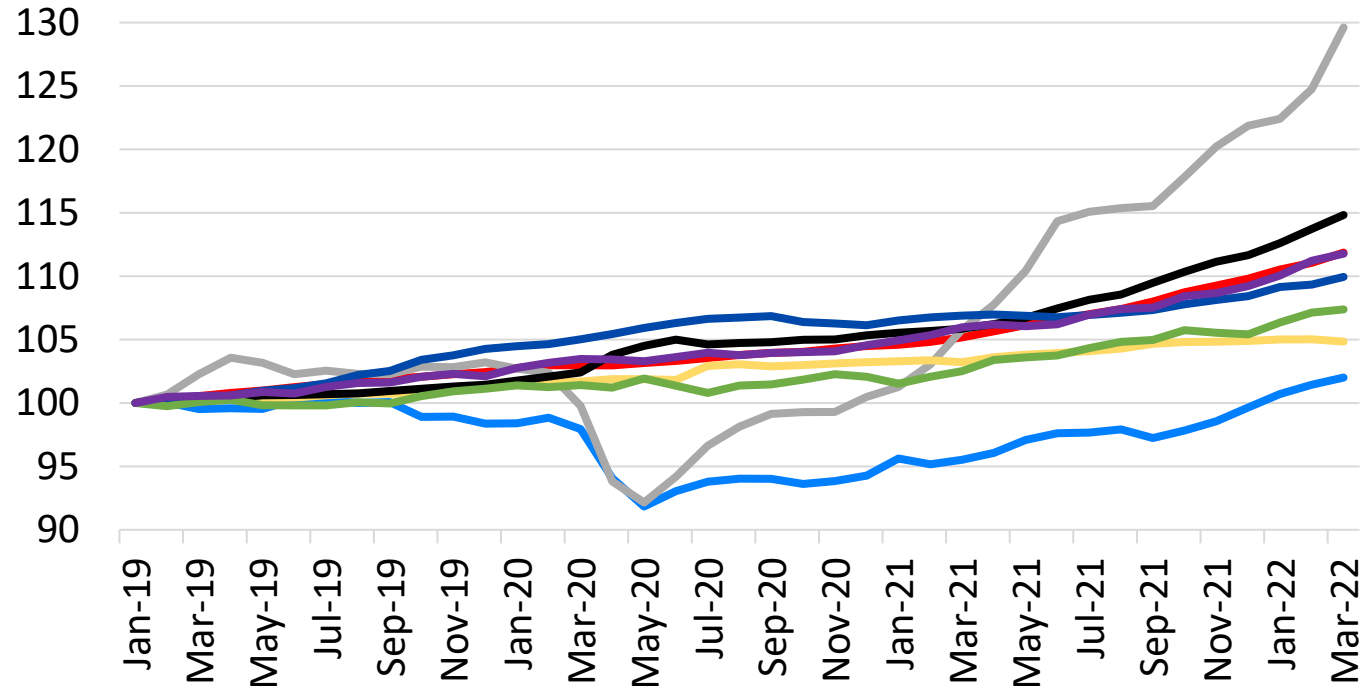
# Oil Prices Are High, Still Around \$100/Barrel



Source: Yardi Matrix; Federal Reserve Bank of St. Louis; U.S. Energy Information Administration

# Oil Prices: Significant Effect on CPI Growth

**CPI Breakdown**  
Indexed Jan 2019 = 100

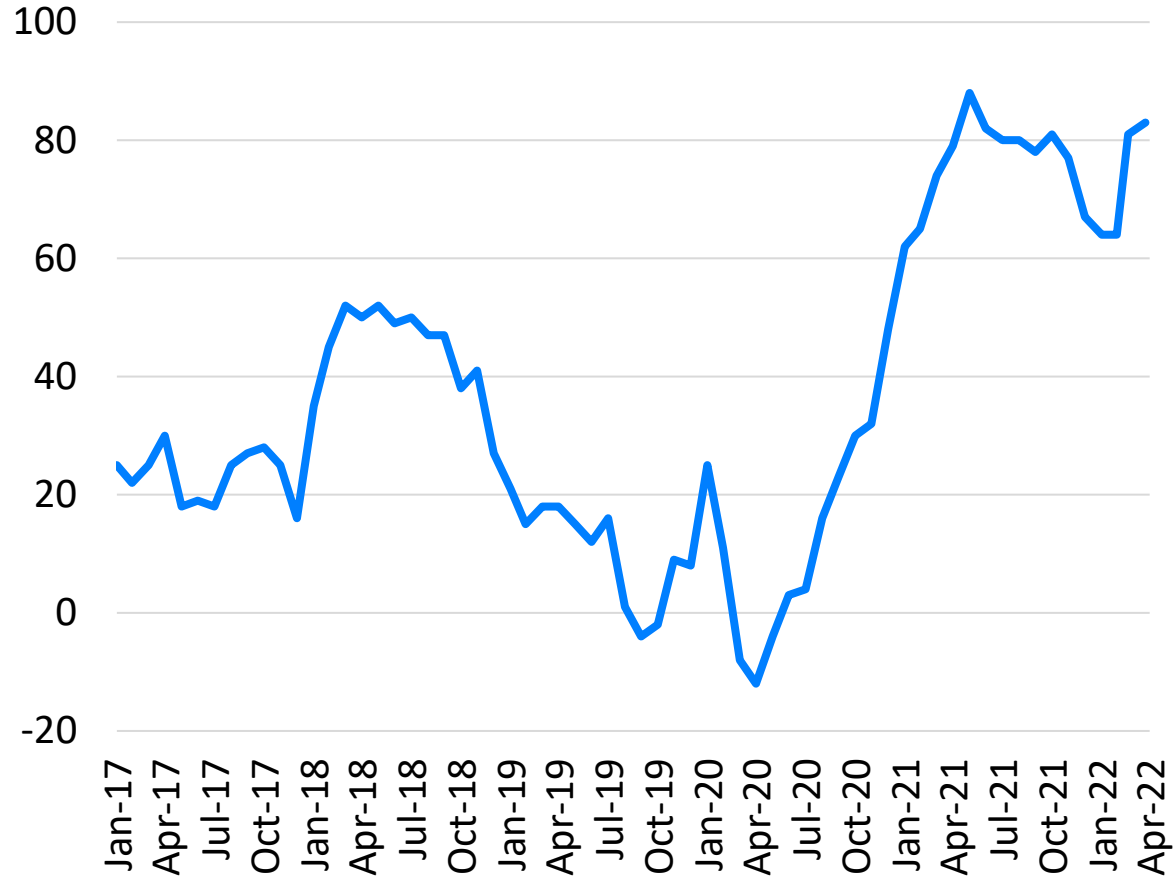


**Change in CPI Since January 2019**

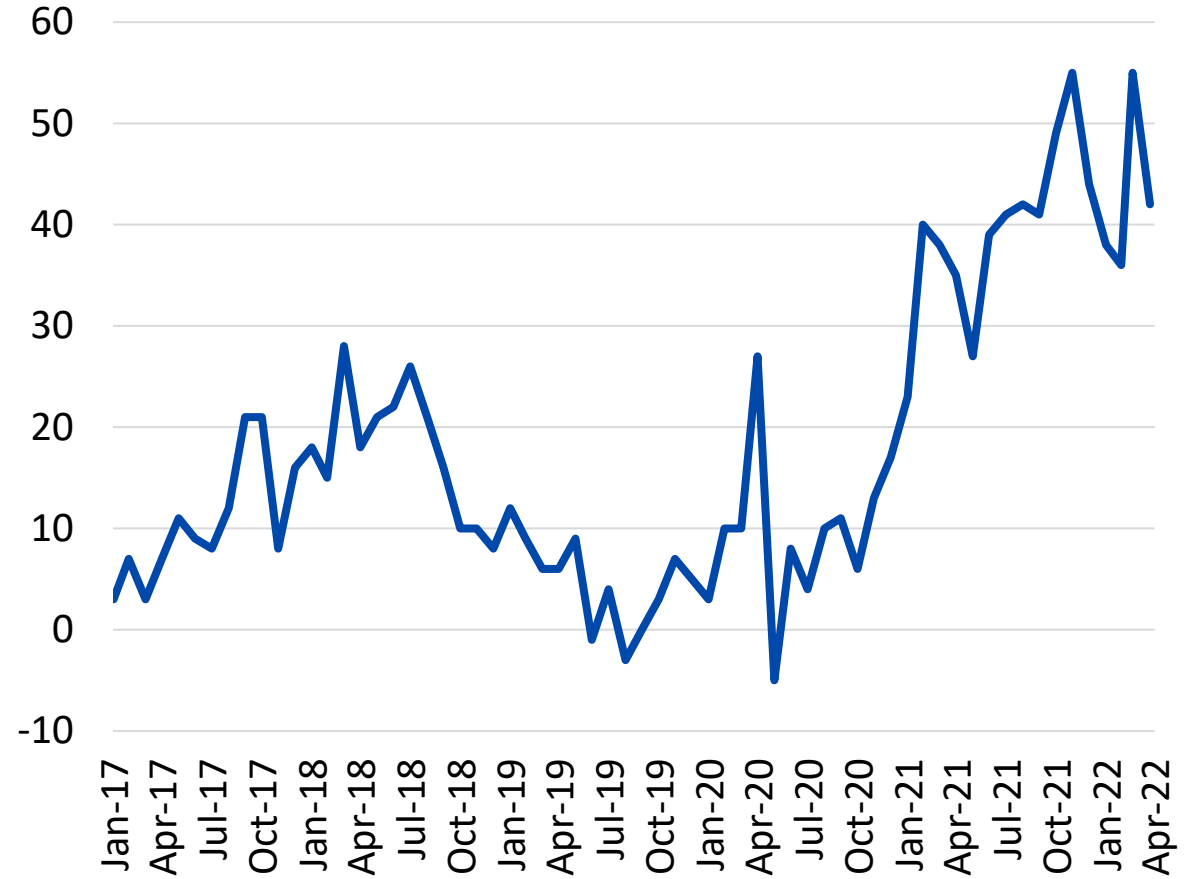
|                             |       |
|-----------------------------|-------|
| Transportation              | 29.6% |
| Food and Beverage           | 14.8% |
| Housing                     | 11.9% |
| Other Goods and Services    | 11.8% |
| Medical Care                | 9.9%  |
| Recreation                  | 7.4%  |
| Education and Communication | 4.9%  |
| Apparel                     | 2.0%  |

# Supply Chain Disruption Easing, but Still Impact Raw Materials Prices

### Prices Paid for Raw Materials Versus a Month Ago

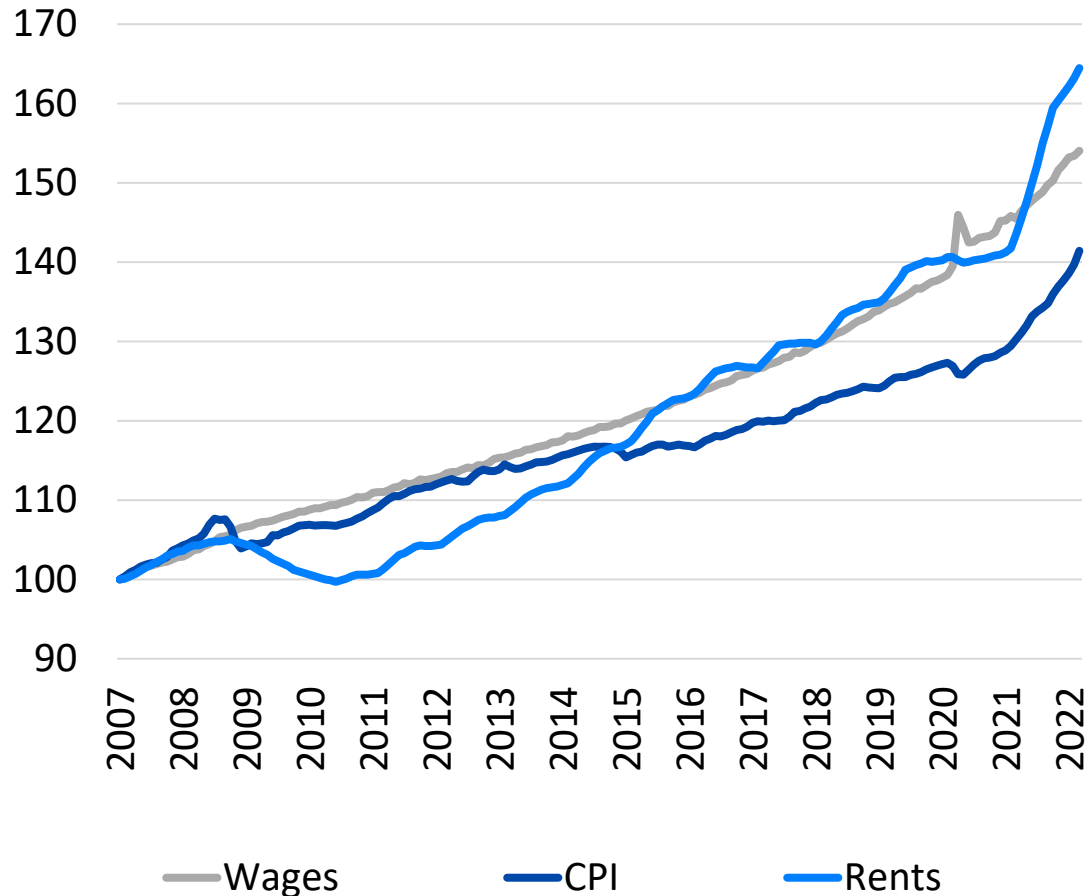


### Supplier Delivery Time Versus a Month Ago

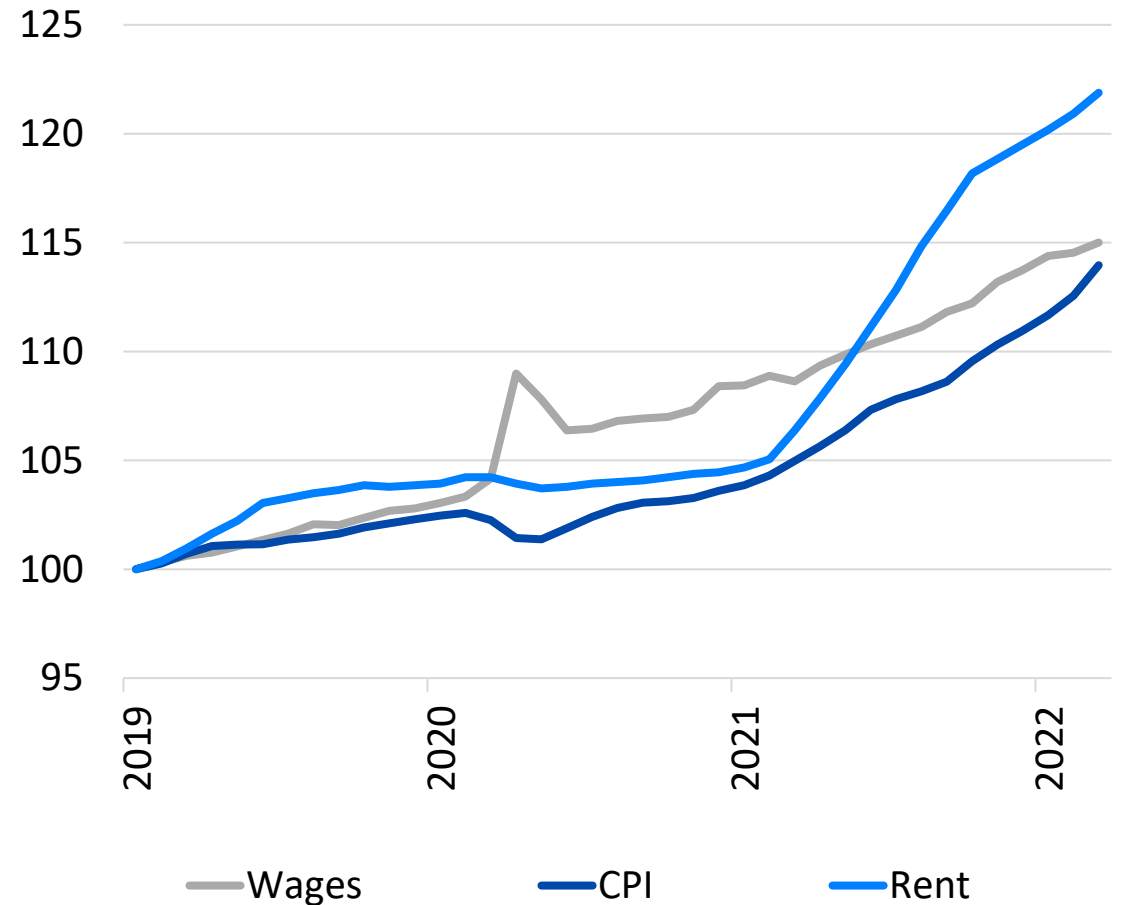


# Average Rents Rising Faster Than Inflation and Wage Growth

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



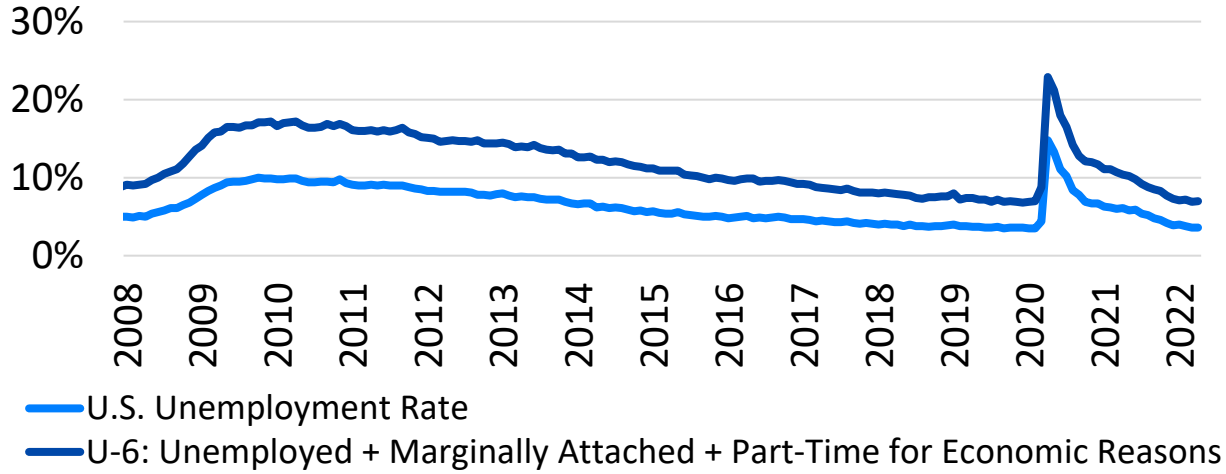
## Average Asking Rent vs. CPI vs. Wages 2019 to Present



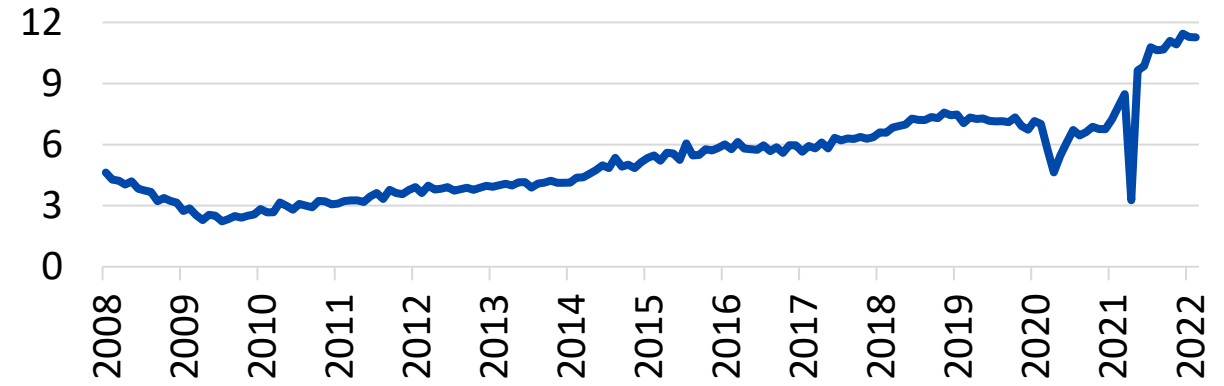
\*Data through March 2022 | Source: Yardi Matrix; U.S. Bureau of Labor Statistics (BLS)

# Unemployment at Record Lows; Demand for Workers Remains High

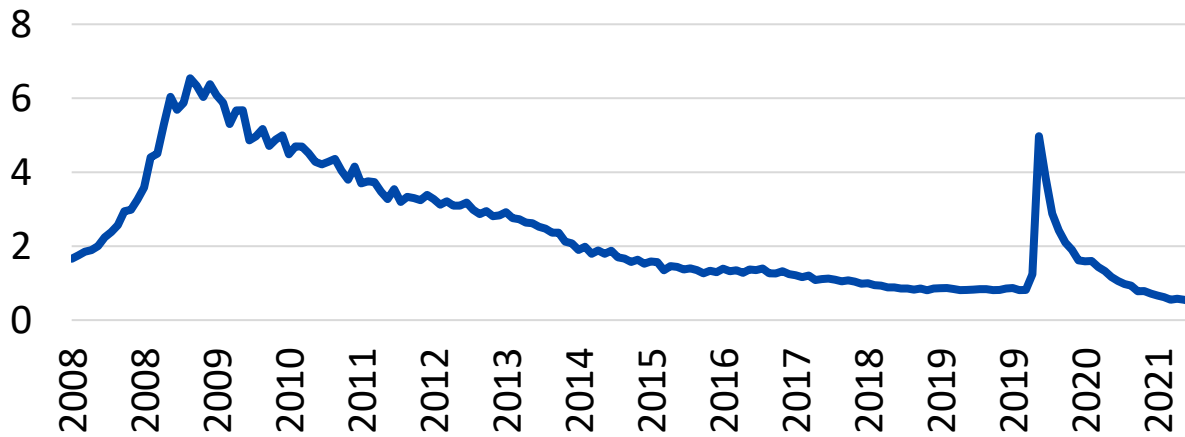
## Unemployment and Underemployment



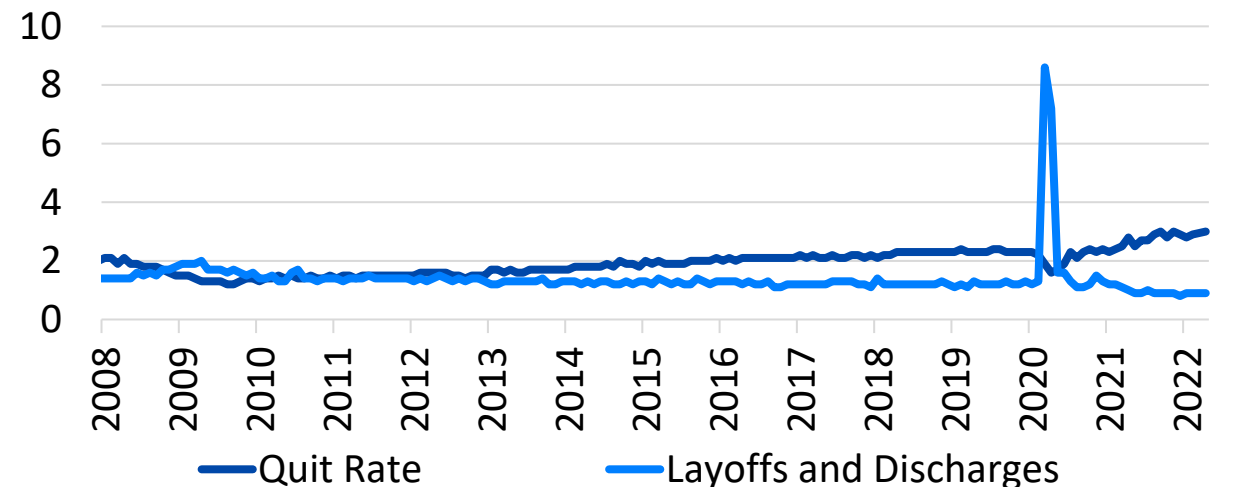
## U.S. Job Vacancies, Millions



## Unemployed Persons/Job Openings

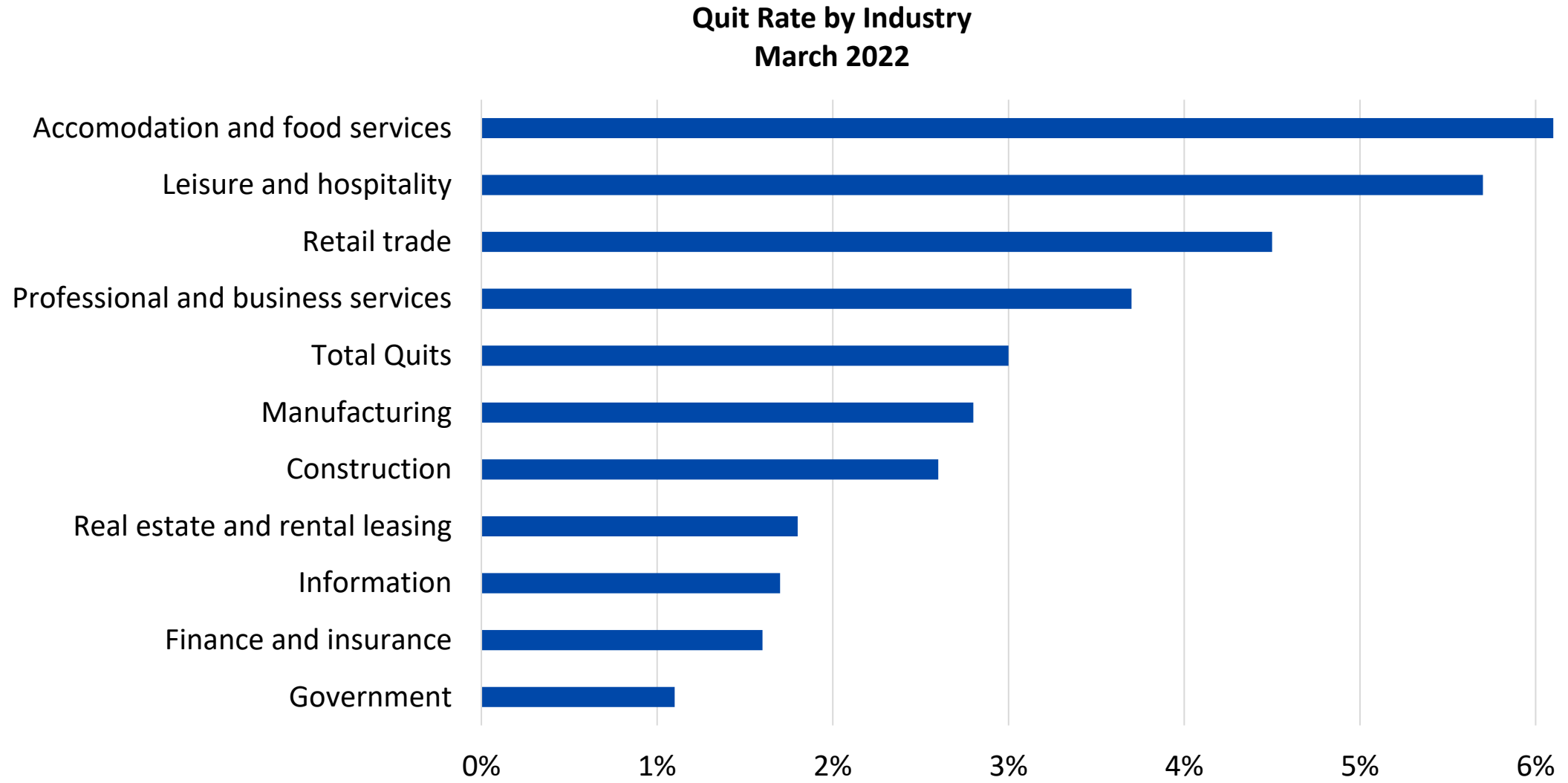


## Quits vs. Layoffs

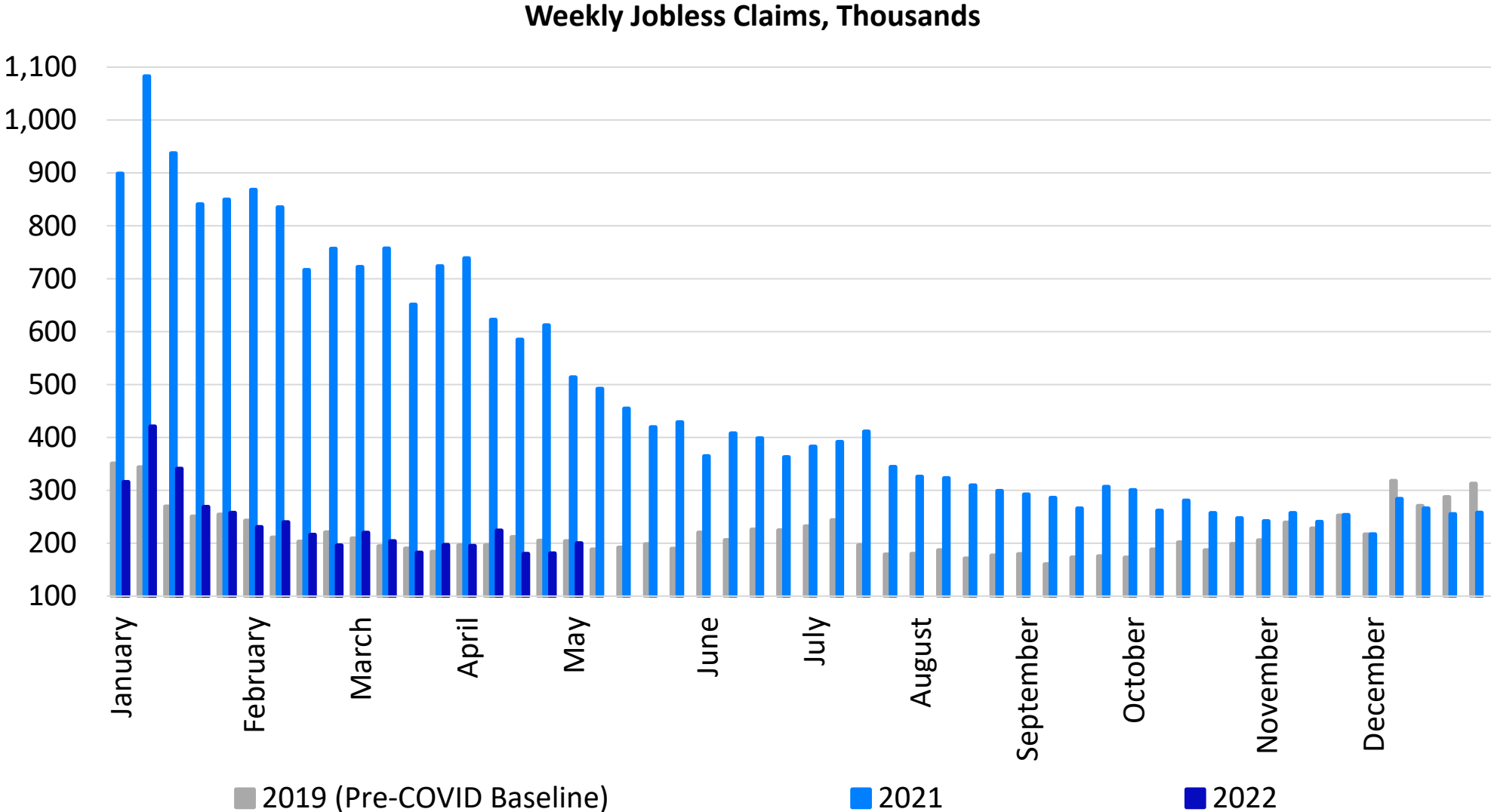




# Quit Rates Higher in Lower Wage Industries

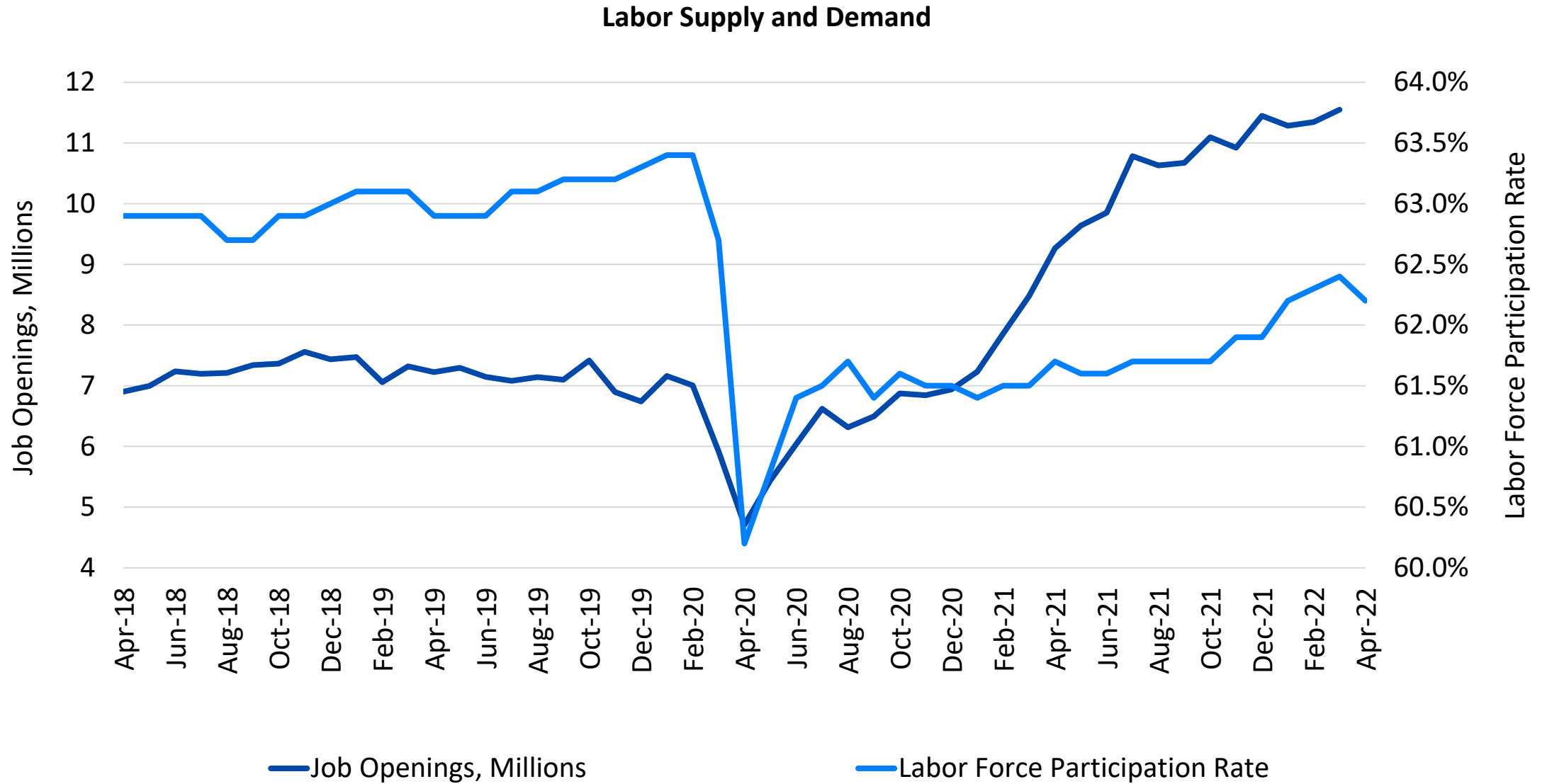


# Initial Jobless Claims In Line With Pre-COVID Levels



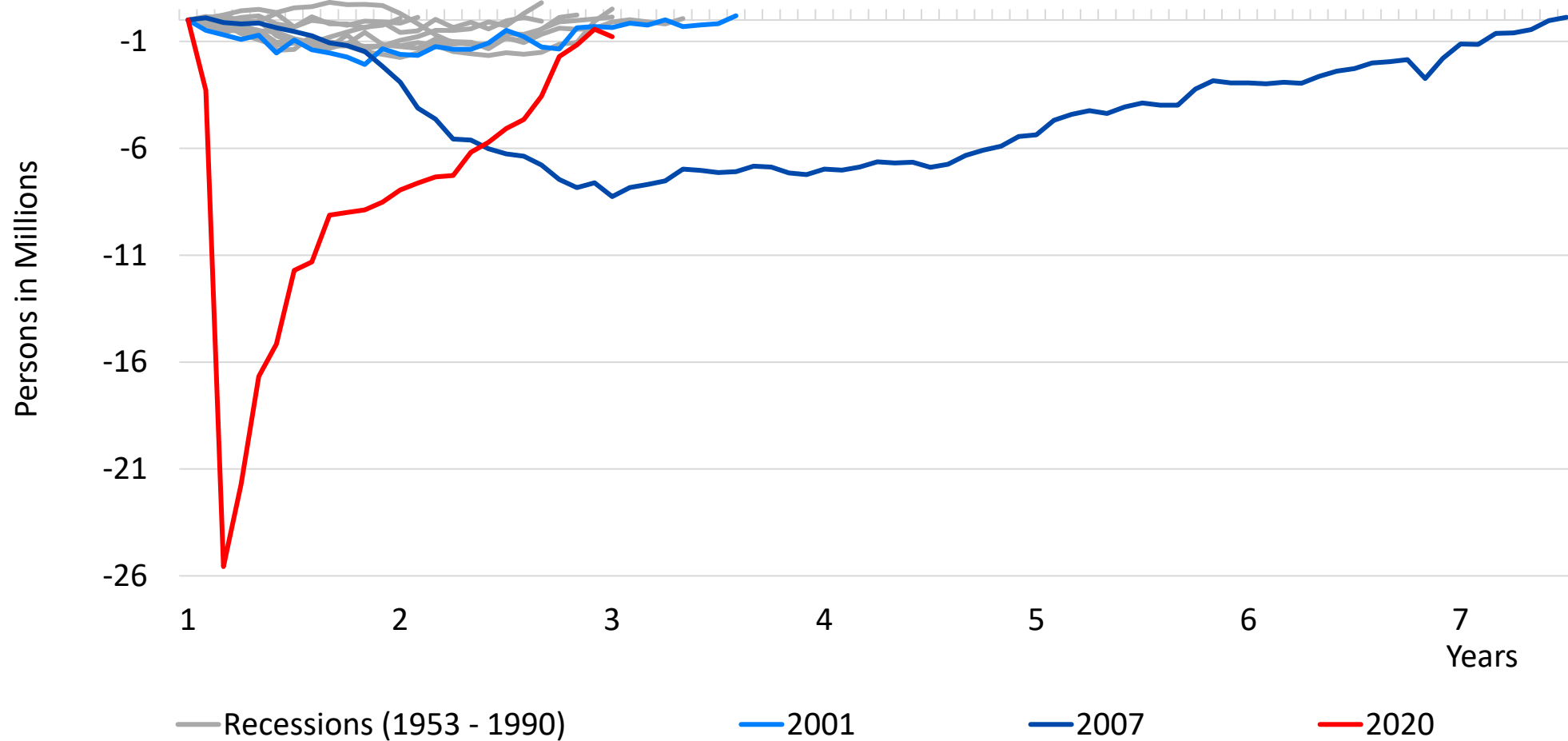
Source: Yardi Matrix; U.S. Department of Labor; U.S. Bureau of Labor Statistics

# Still a Significant Gap Between Labor Supply and Demand



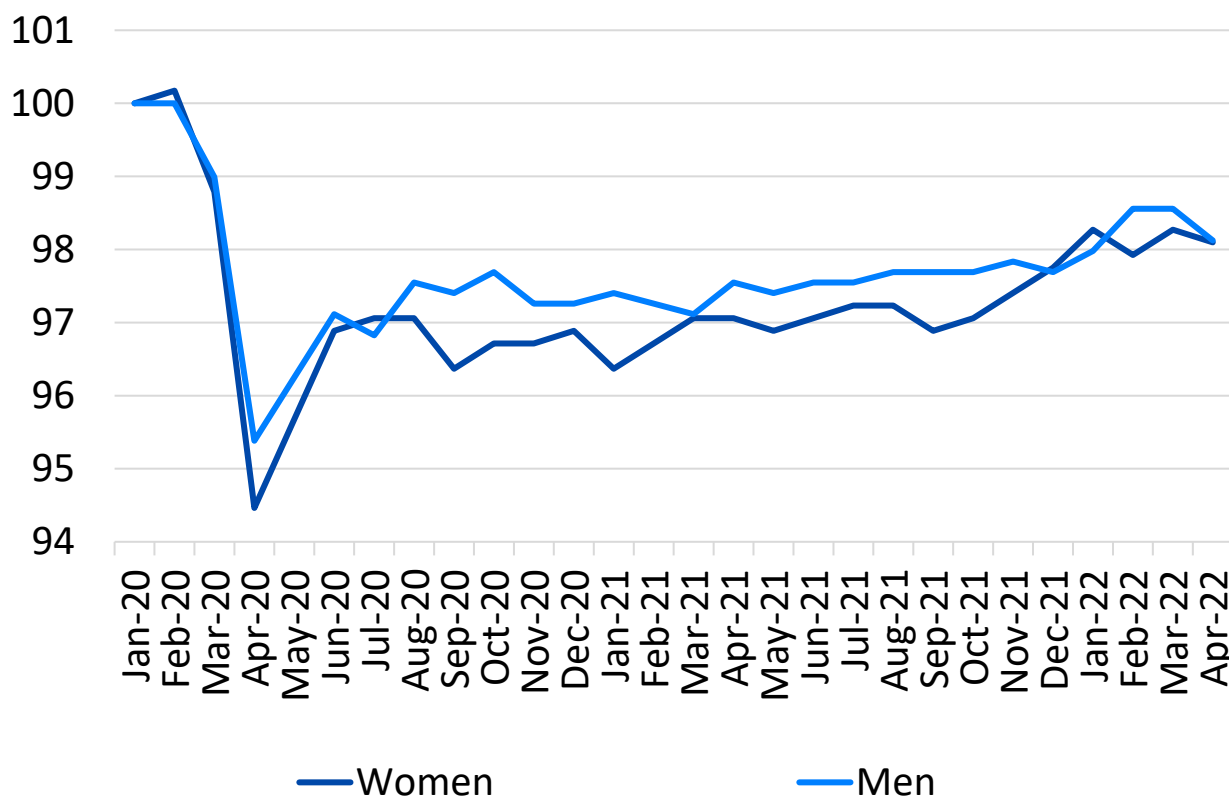
# US Employment Back to Pre-COVID Levels; It Was a "V"

## Change in U.S. Employment from Beginning of Recession (1953-2021)

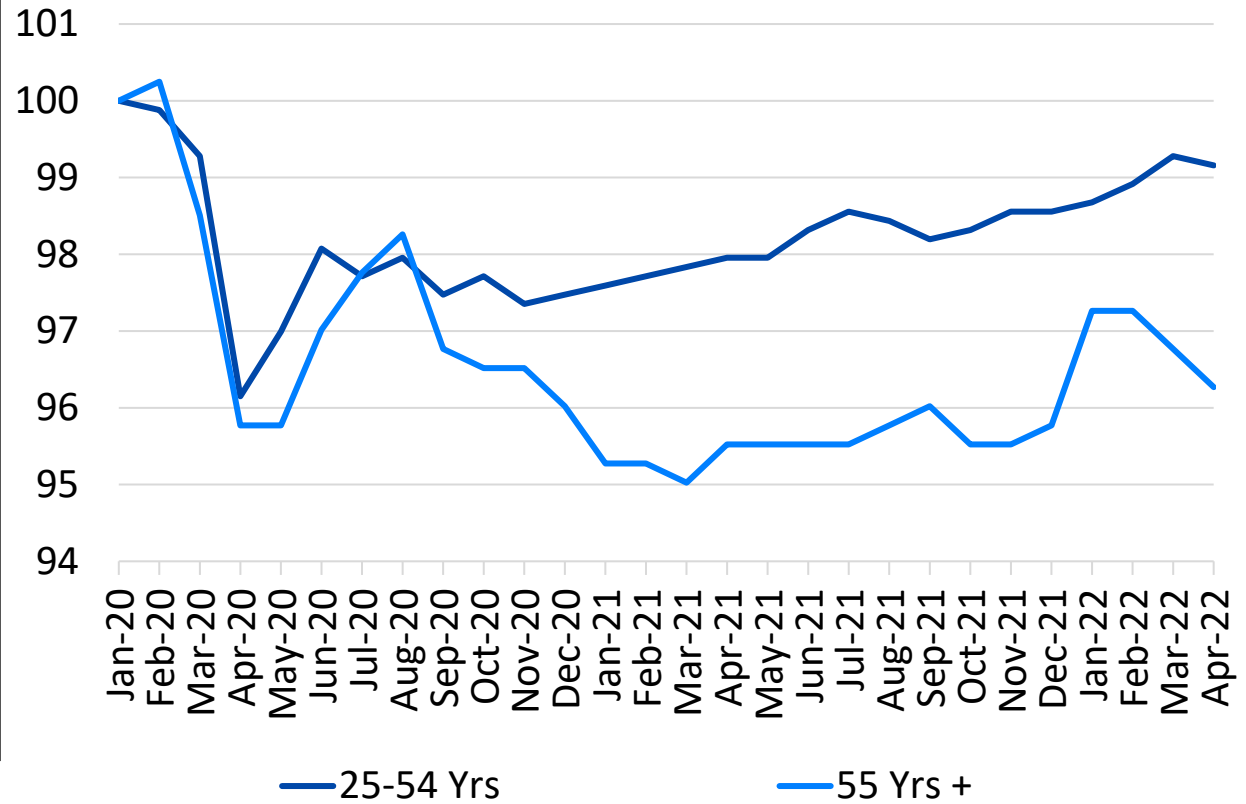


# Women and Men Returning to Workforce at Similar Rate; Workers Age 55+ Are Taking Time to Return

**Labor Force Participation Rate - Gender**  
Indexed Jan 2020 = 100

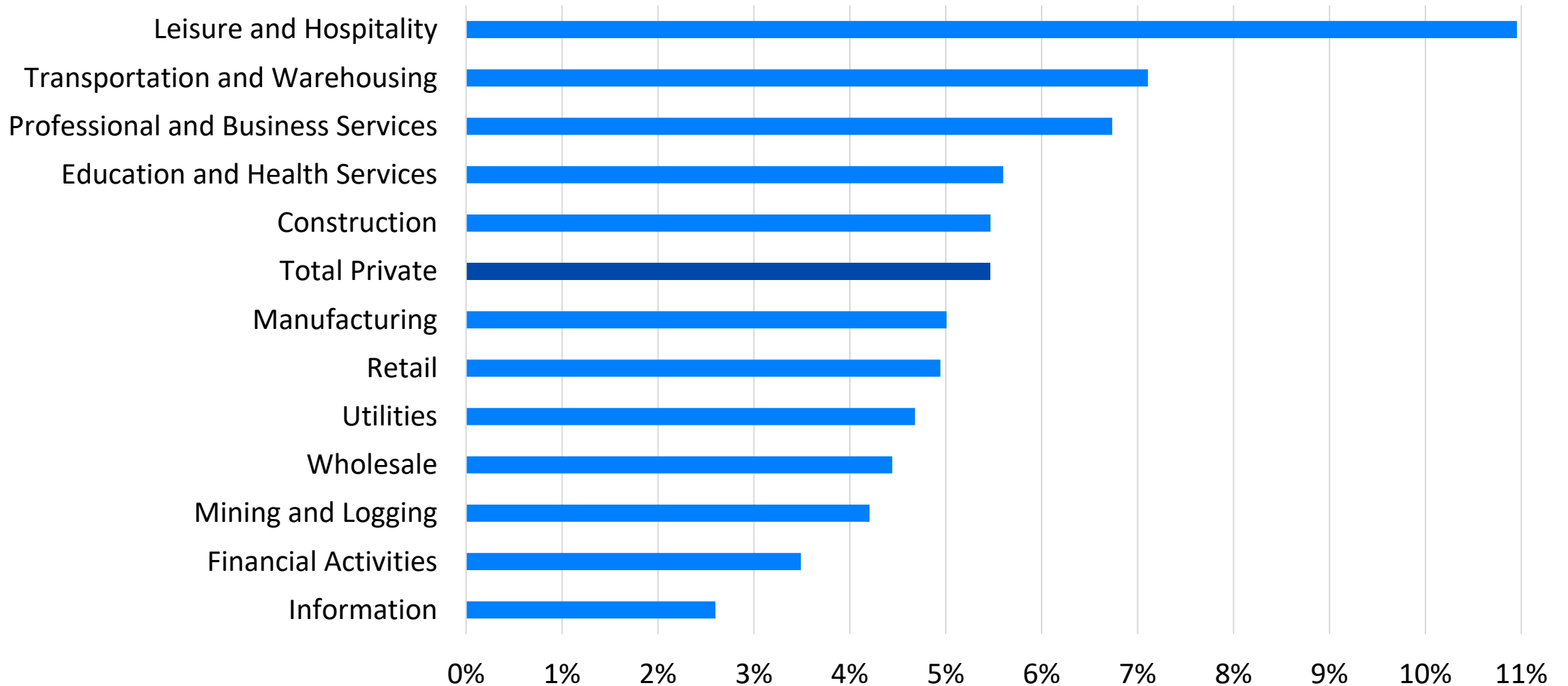


**Labor Force Participation Rate - Age**  
Indexed Jan 2020 = 100



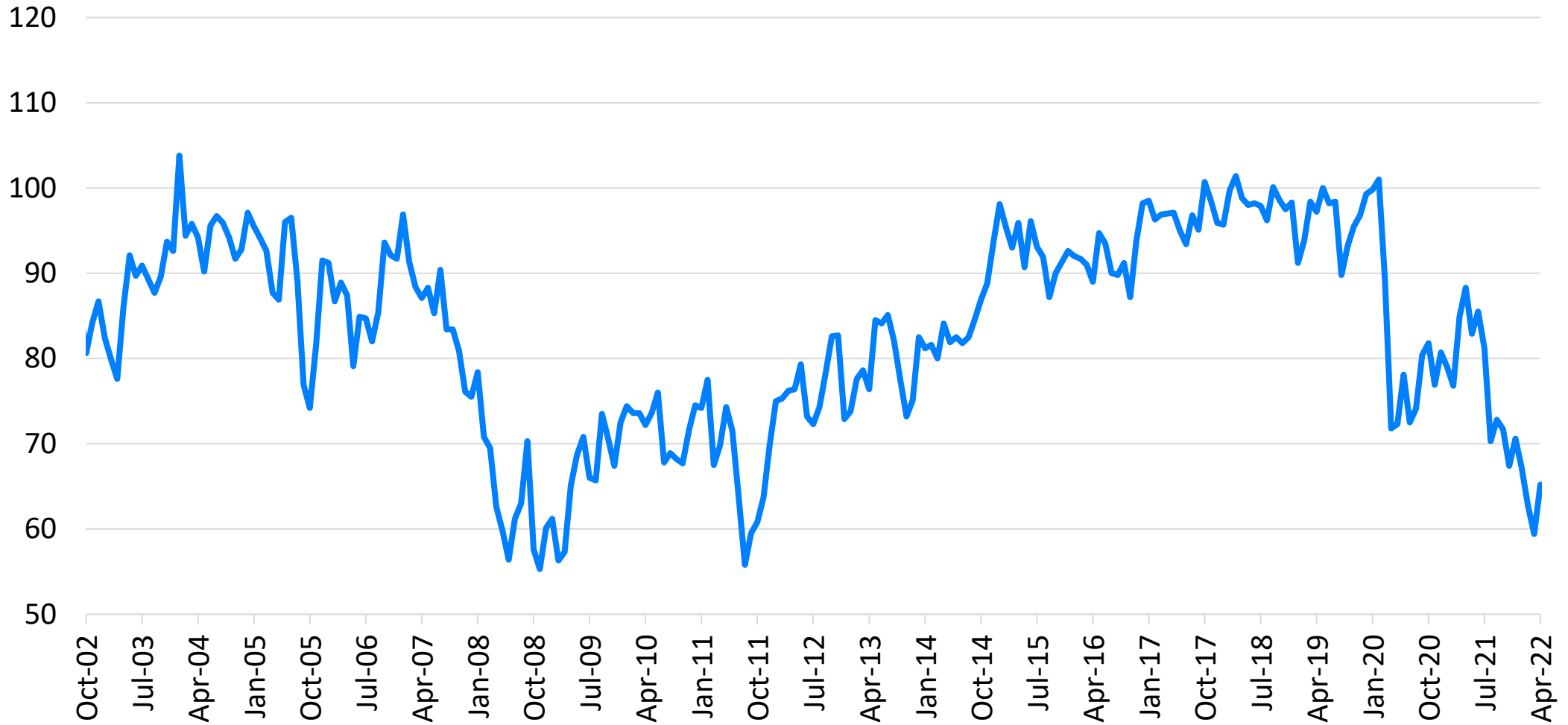
# Wage Growth Strongest at the Lower End in 2021

Annualized Change in Average Hourly Earnings (Apr 2021 - Apr 2022)



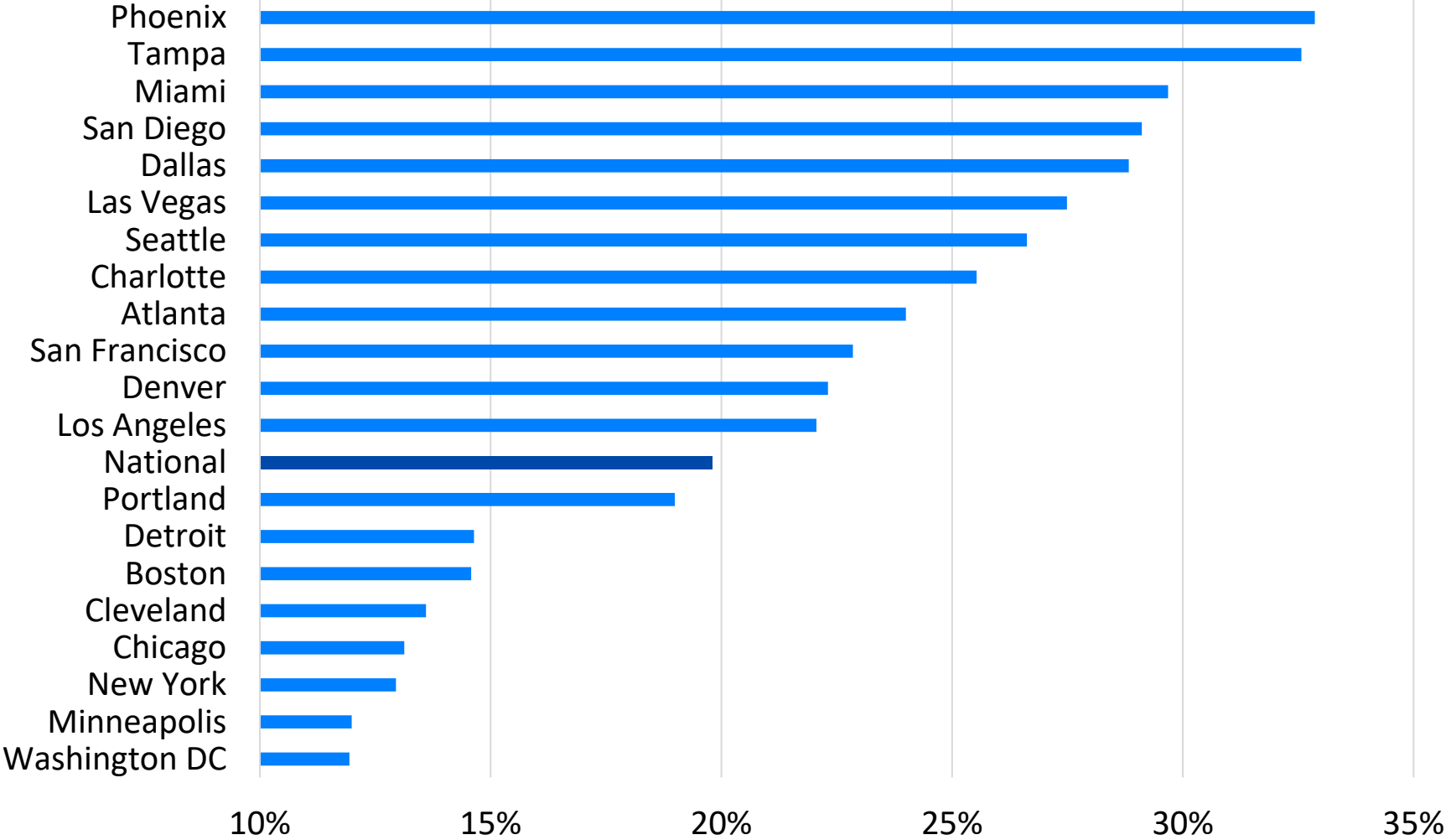
# Wages Not Keeping Up With Rising Prices; Consumer Sentiment Low

University of Michigan: Consumer Sentiment



# Home Prices Increasing More Than Rents in Most Locations Over Past Year

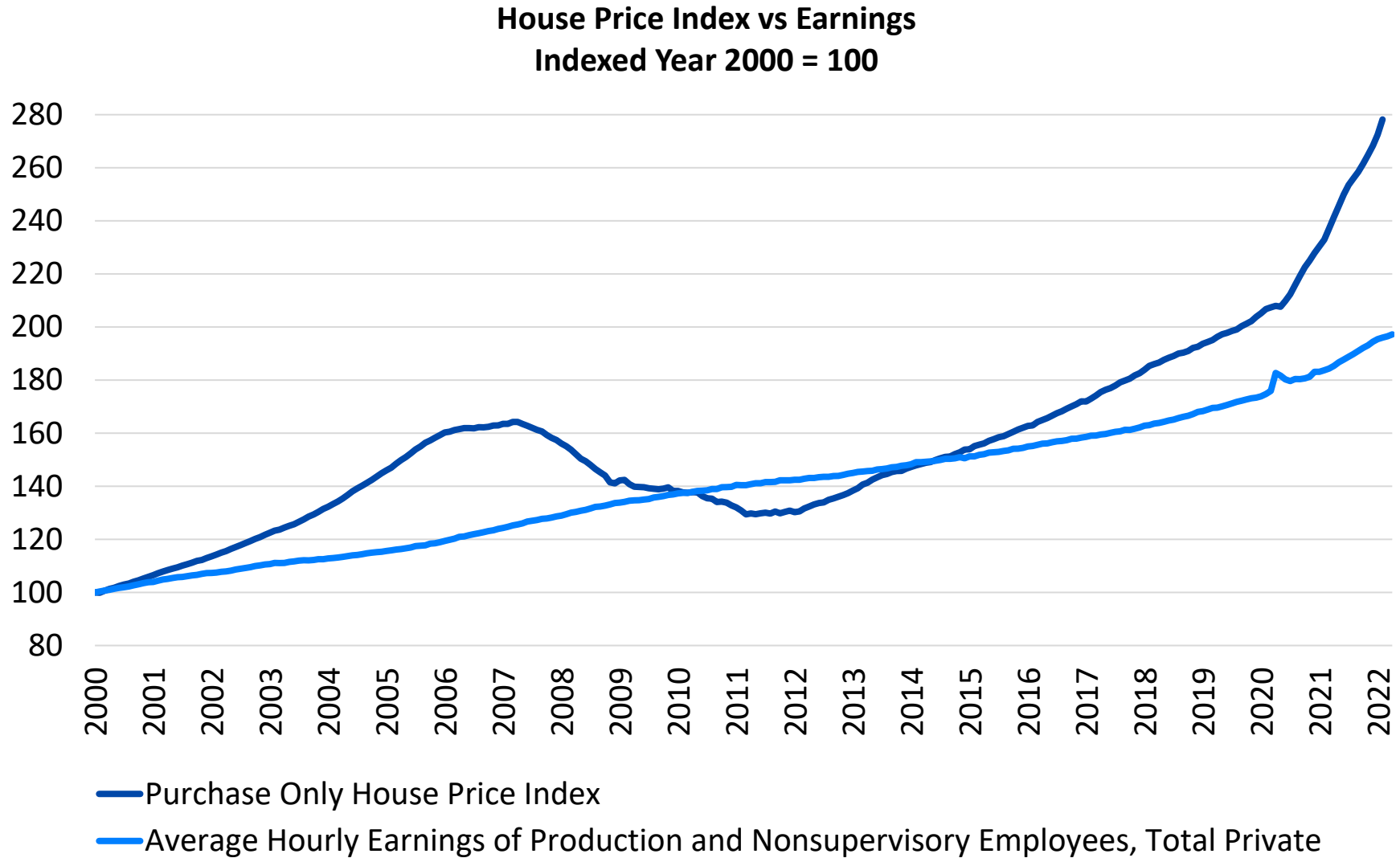
**S&P CoreLogic Case-Shiller Home Prices February 2022**  
**Year-over-Year, Not Seasonally Adjusted**



Source: Yardi Matrix; S&P Dow Jones Indices



# Purchasing a Home is Becoming More Difficult



# The Regulatory Environment is Heating Up

## Arizona

- Senate Bill 1099 – would prohibit rent increases >5%, allowing cities and counties to establish lower rates; would bar a landlord from increasing rent more than once a year
- Senate Bill 1587 – the max amount of rent increases would be the lesser of 10% of the lowest rent charged in the previous 12 months or 5% of lowest rate charged plus the rate of inflation

## California

- Tenant Protection Act of 2019 – limits annual rent increases to 5%, plus the rate of inflation

## Colorado

- Current proposals to cap mobile home rents by the greater of 3% or the local annual inflation rate

## Florida

- Senator Victor Torres is proposing to overturn Florida's rent-control ban

## New York

- Senate Bill S-3082 and Assembly Bill A-5573 – “Good Cause Eviction” – would prohibit landlords from evicting occupants without good cause; defines rent increase >3% of previous rental or 1.5% of consumer price index (CPI) as unreasonable

## Oregon

- Senate Bill 608 – rents can only be changed once per year, limited to 7%, plus the annual change in CPI

## Emergency Rental Assistance Program (ERAP)

- \$16.4 billion (66%) of ERA1 funding has been spent as of the most recent U.S. Department of Treasury report (Dec 31, 2021)

# The Regulatory Environment is Heating Up

## **Boston, Massachusetts**

- Rent Stabilization Advisory Committee created March 2022 to develop city rent stabilization plans

## **Los Angeles, California**

- Extended COVID-19 eviction moratorium through March 2023, allowing for repayment of unpaid rents to be due May 31, 2023

## **Miami, Florida**

- County commission advanced study to slow rent increases

## **Pasadena, California**

- Ballot measure in November to limit rent increases to once a year with a maximum of 75% of the annual increase in the CPI

## **Takoma Park, Maryland**

- Rent Stabilization Law – requires landlords to give at least a 2-month written notice of a rent increase; increases cannot exceed the city’s rent stabilization allowance, currently 2.6% until June 30, 2022

## **Tampa, Florida**

- City council directed staff to “search for solutions” to slow city’s rising rents

## **Santa Ana, California**

- Caps rent increases at 3% for apartments built before 1995

## **St. Paul, Minnesota**

- Rent Stabilization and Rent Control Ordinances beginning May 1st– limit rent increases to no more than 3% in a 12-month period, regardless of change of occupancy

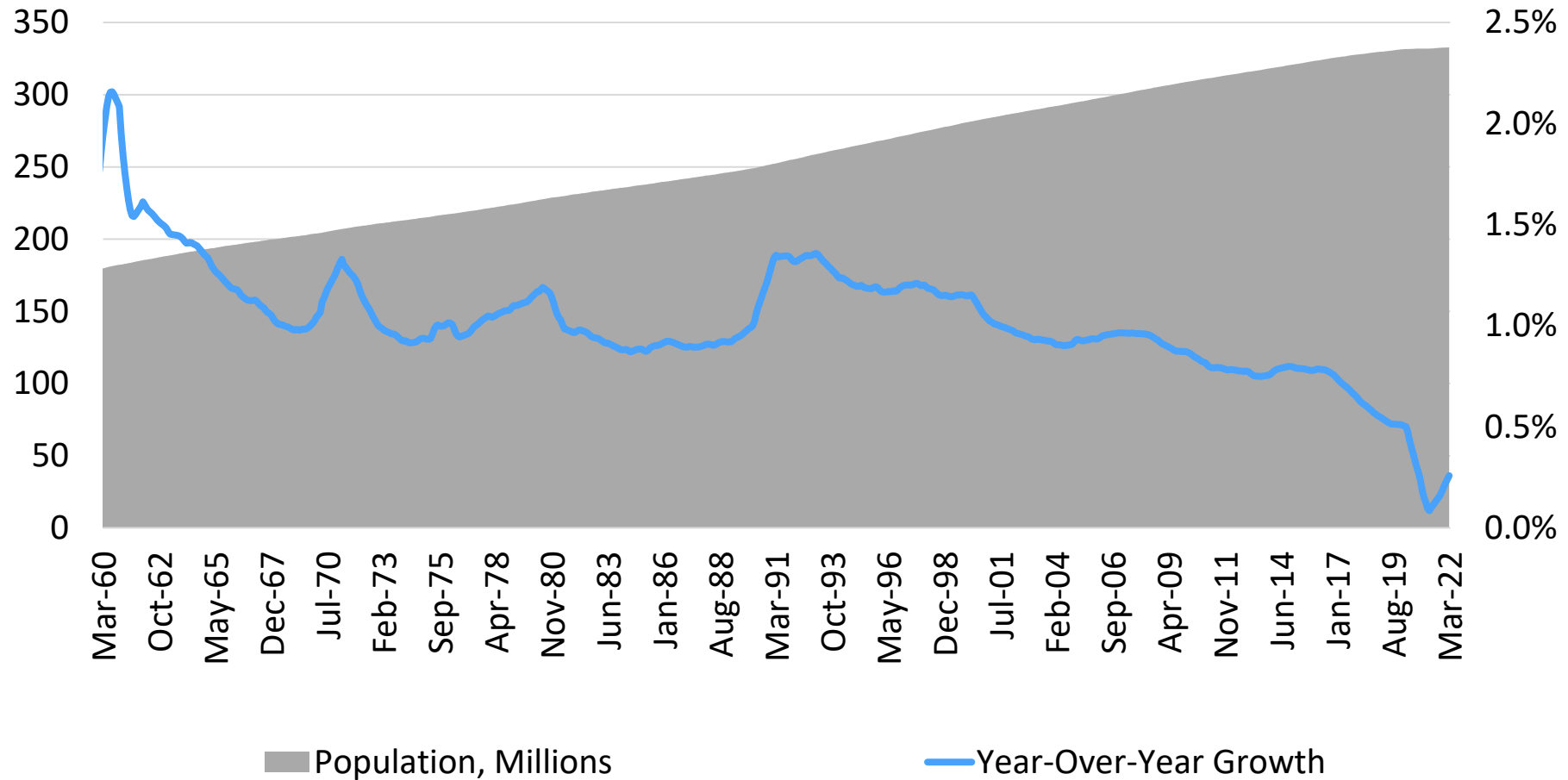
# Macroeconomic Summary & Outlook

- GDP and labor force participation are coming back slowly
- Bottlenecks are still occurring
- Demand remains strong; disruption is on the supply side
- Supply chain disruptions, a tighter-than-ever labor market and other factors leading to growing inflation, and it's not transitory (as we expected)
- People are moving back to cities and urban centers
- Residential asset type returns are still far above pre-pandemic trends
- Disruptions are creating massive pressures; the Fed has caught on and is beginning a tightening cycle
- The Fed's actions to slow inflation will take a year or two to cool things down
- Fed increasing interest rates in 2022 will start the clock ticking to the next recession ... which we think is likely sometime in 2024

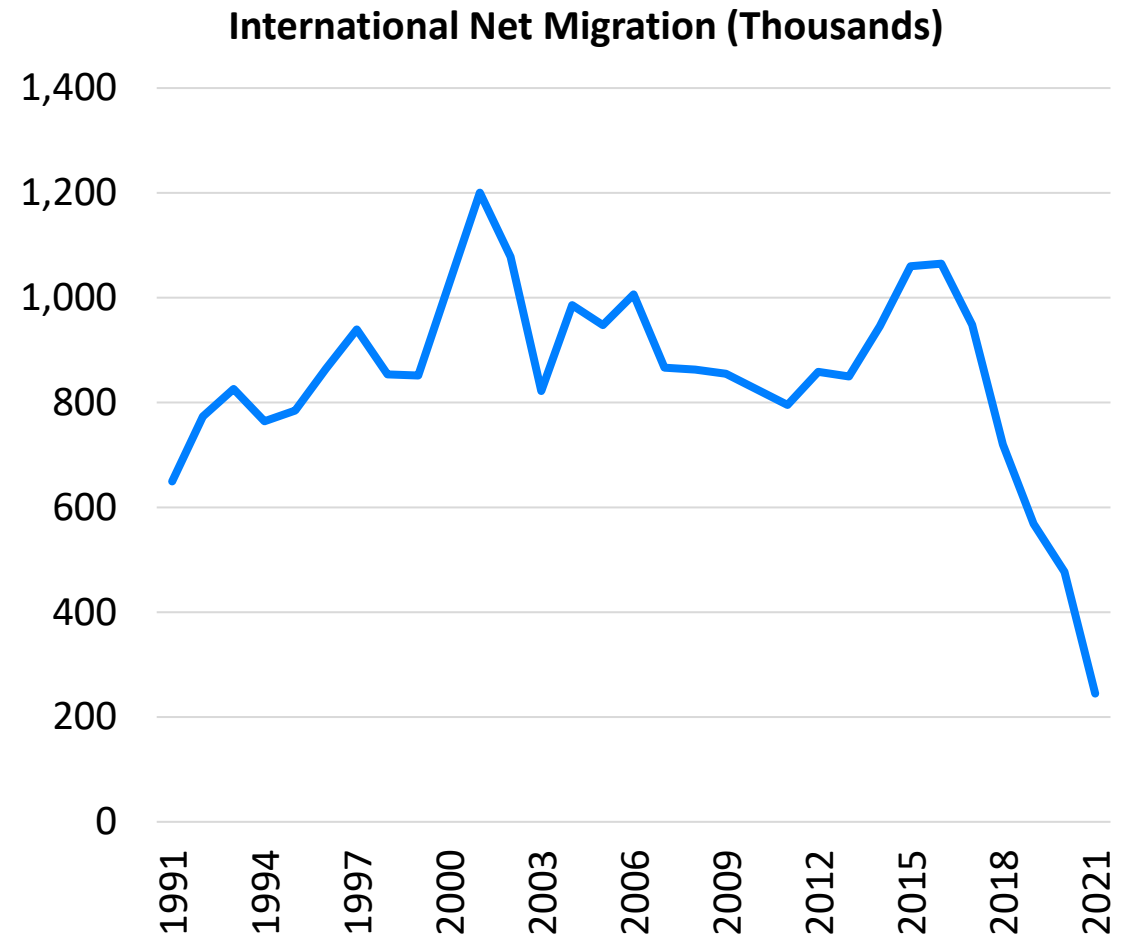
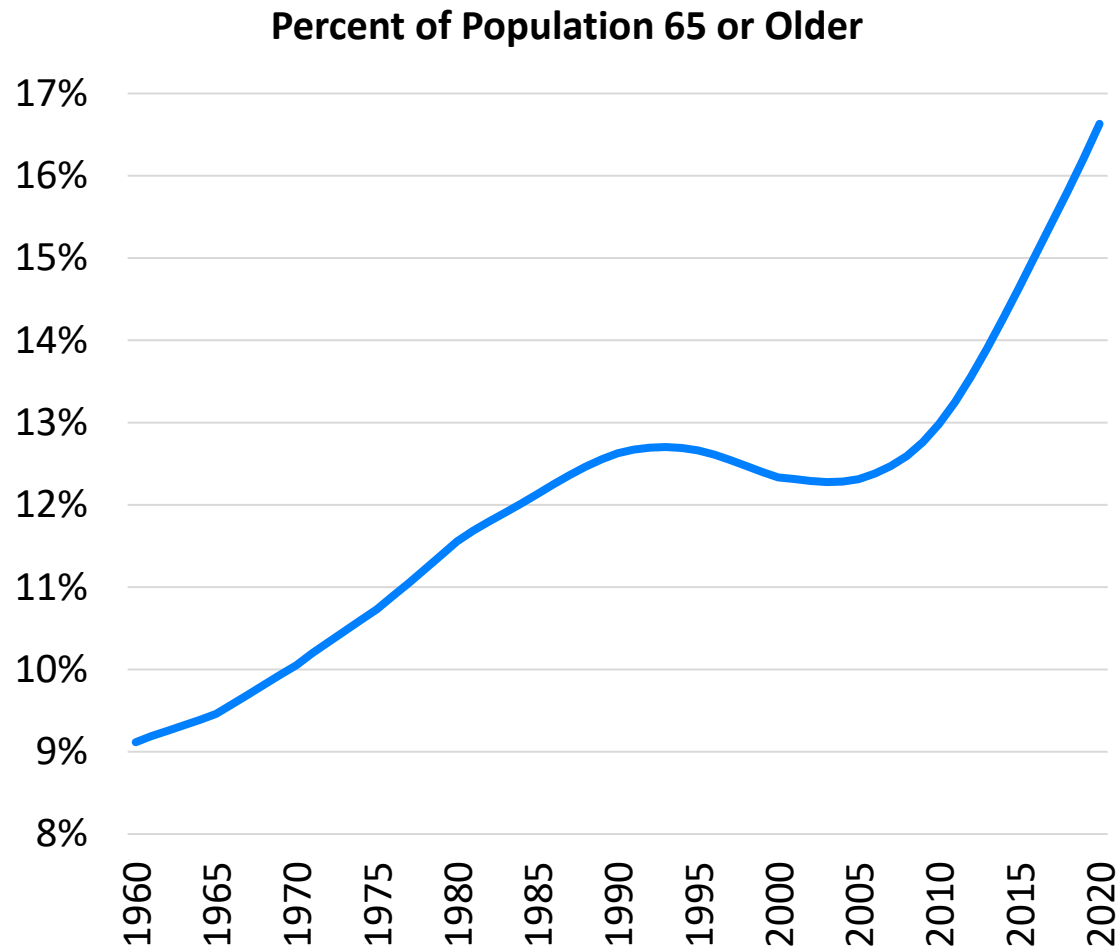
# MIGRATION AND DEMOGRAPHIC TRENDS IMPACTING HOUSING DEMAND

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# Overall U.S. Population Growth is Declining as Birth Rates Fall and International Immigration Fails to Back-Fill

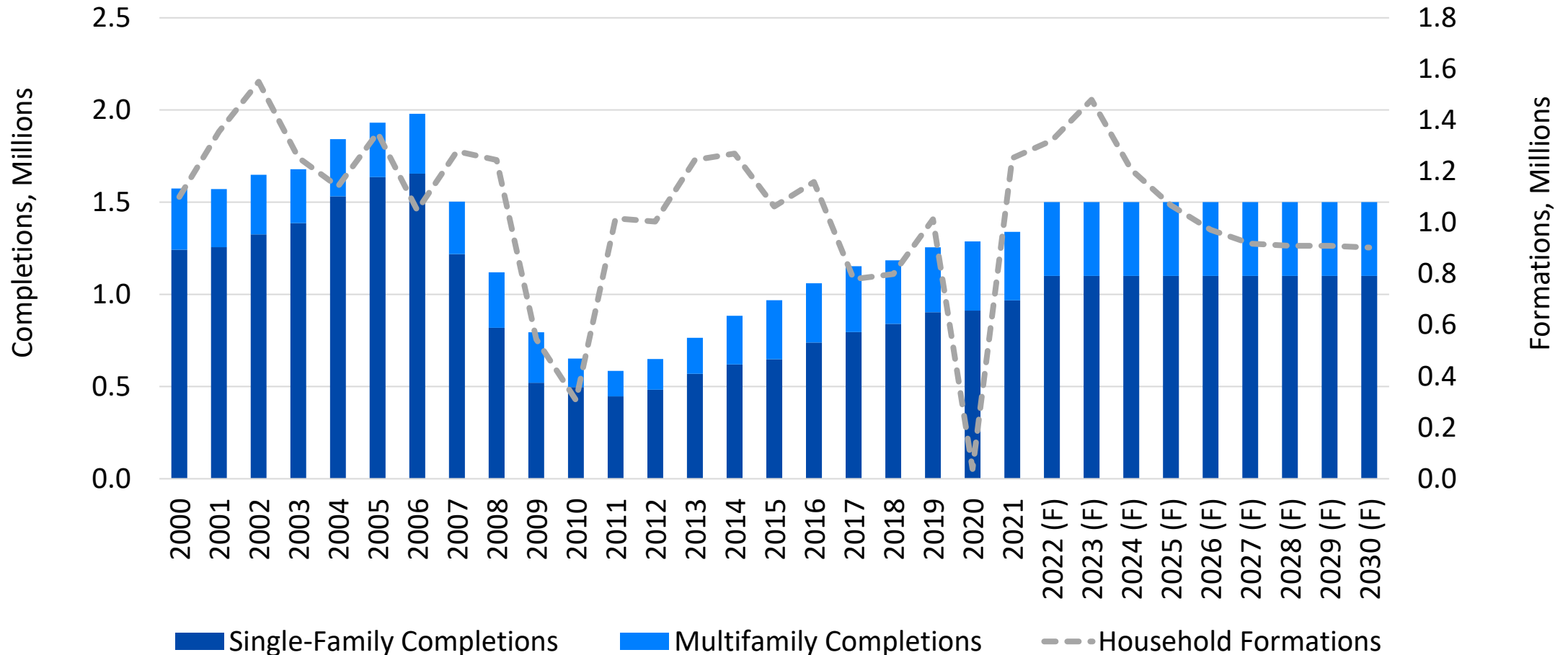


# The U.S. Population is Aging and International Immigration is Falling; Further Impacting the Labor Shortage



# Cumulative Deficit of Single-Family and Multifamily Housing Coming Out of the Great Recession is Pushing Prices Up

## Household Formations and Completions

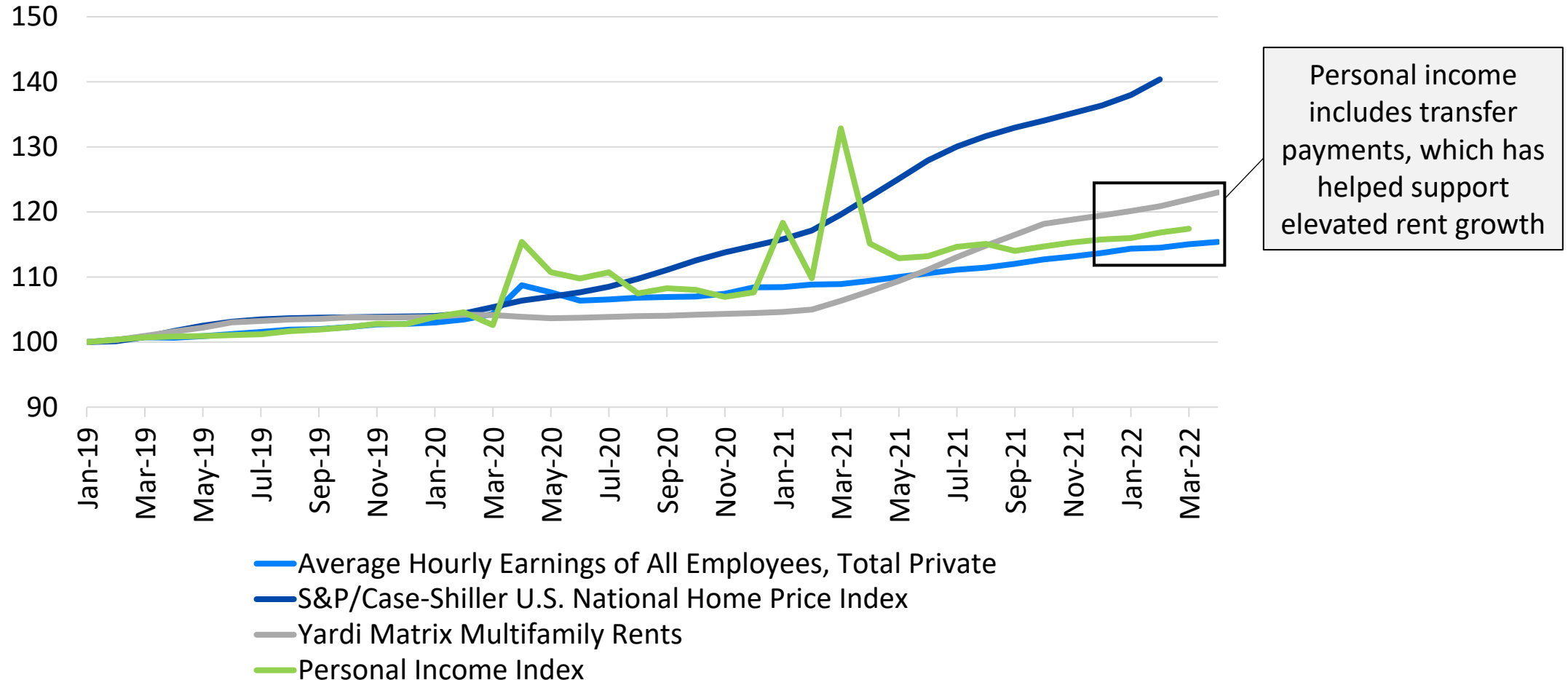


Source: Yardi Matrix; Moody's Analytics; National Association of Realtors (NAR); U.S. Census Bureau (BOC)



# Housing Supply/Demand Imbalances Keeping Rental Prices High in Multifamily and Single-Family; Wages and Income Not Keeping Up

**Wages vs. Home Prices vs. Multifamily Rents vs. Personal Income**  
**Indexed 2019 = 100**



# Work From Anywhere Continues to Fuel Migration

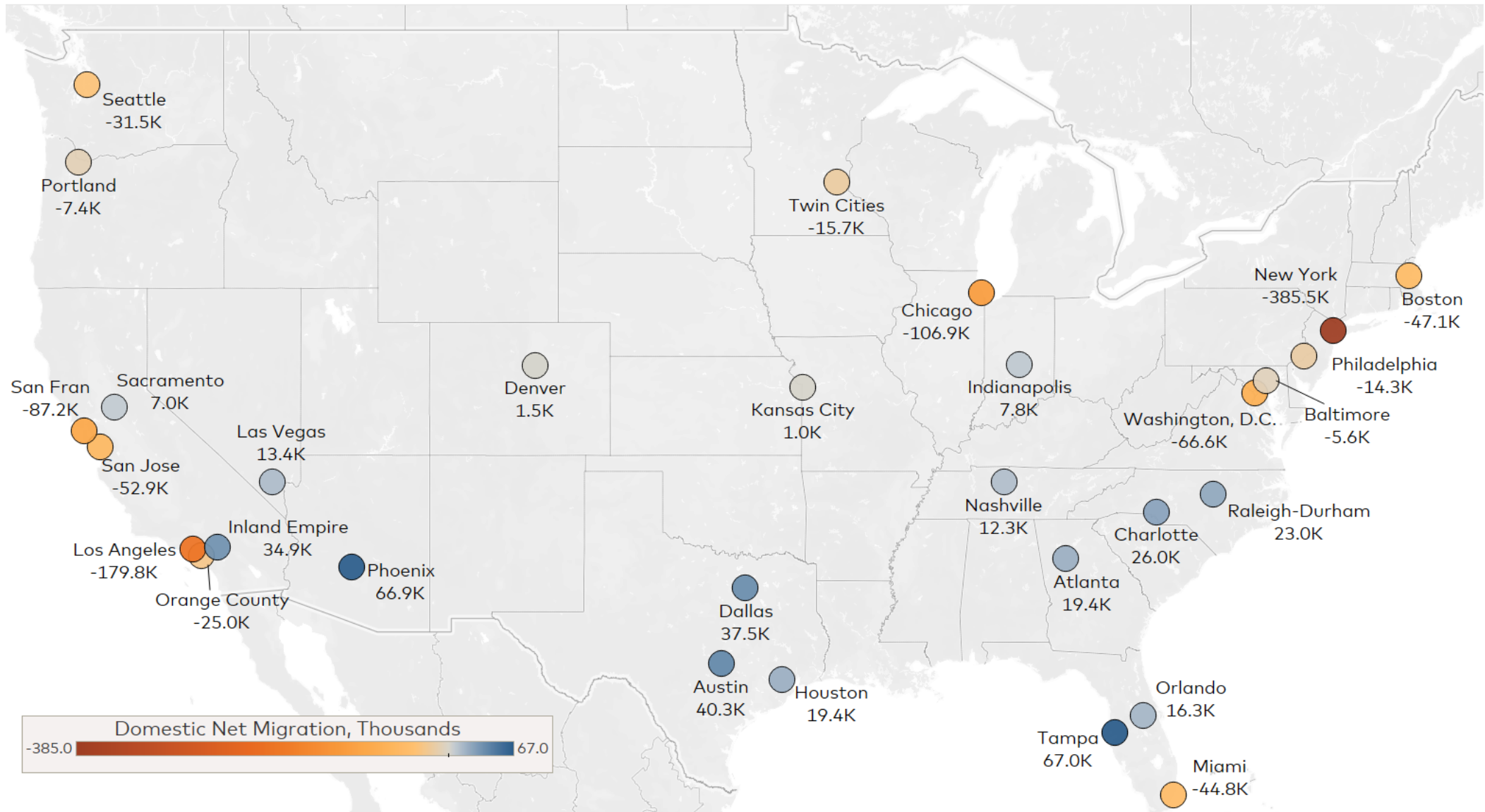
- The work from home revolution has fundamentally changed where home base is for employees: **work is not somewhere you go, but something you do**
- Industries such as technology, insurance and marketing are better equipped to handle remote work
- Prior to the pandemic, about **10%** of the U.S. labor force worked remotely full-time
  - As much as **25%** of the labor force is projected to work remotely full-time by the end of 2022
  - Remote opportunities are expected to steadily increase through 2023
- Employees are taking the opportunity to **move out of dense, costly metros to lower cost alternatives**
  - The metro areas with the greatest gains in new residents are in the Sun Belt
- There has been an absolute decline in the aggregate size of the nation's major metros (those with a population exceeding 1 million)
  - The shift to remote work has given smaller cities and communities the opportunity to compete with coastal hubs for residents
  - Cities that have appealing lifestyle elements but have historically lacked access to great professional jobs have started to see in-migration

# Migration Fueling Nationwide Rent Growth: San Francisco Model

San Francisco losing 2% of its population doesn't have a huge impact on the SF rental market, however that same 2% has a significant impact on the smaller markets where those out-migrants are moving to

| Market                       | 2021 Population  | 0.4% of San Francisco 2021 Population | 23K as a % of Each Market's Population |
|------------------------------|------------------|---------------------------------------|--|
| Las Vegas                    | 2,292,476        | 23,000                                | 1.0%                                   |
| Austin                       | 2,352,426        | 23,000                                | 1.0%                                   |
| Salt Lake City               | 2,818,981        | 23,000                                | 0.8%                                   |
| Phoenix                      | 4,946,145        | 23,000                                | 0.5%                                   |
| Dallas                       | 7,833,306        | 23,000                                | 0.3%                                   |
| <b>San Francisco (Total)</b> | <b>5,697,074</b> | <b>115,000</b>                        | <b>2.0%</b>                            |

# Migration Still Heavy Last Year in Southeast and Southwest



Source: Yardi Matrix; U.S. Census Bureau, "Annual Resident Population Estimates and Estimated Components of Resident Population Change: Net domestic migration in period 7/1/2020 to 6/30/2021"



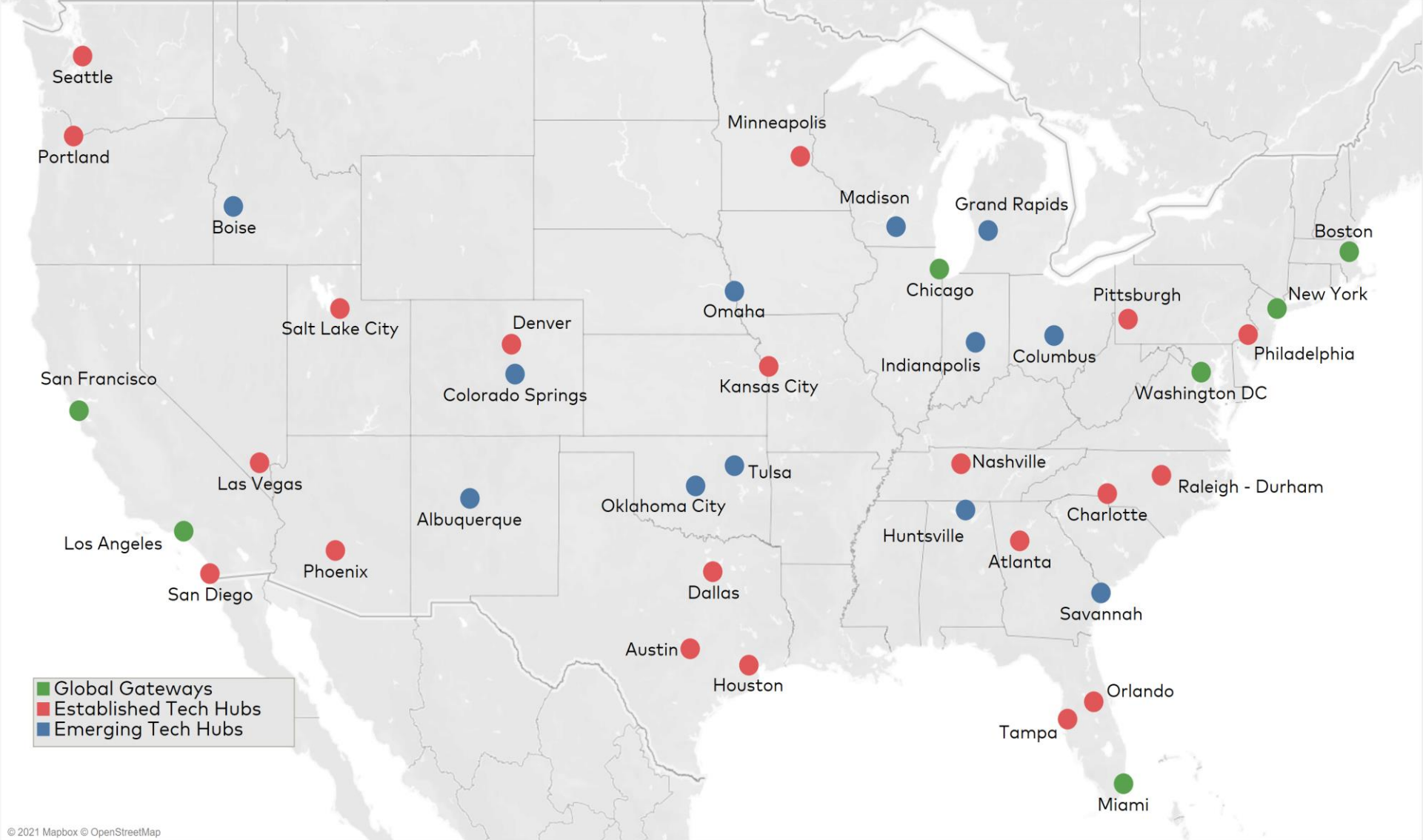
# Introduction to our Investment Risk Analysis

These demographic trends impact markets in different ways, and should be considered when making investment decisions

The Investment Risk Analysis combines our previously released national analyses of **political risk, infrastructure** and **environmental risk**

*Interactive workbook available for subscribers*

# Our Market Universe for Investment Strategy Analysis



| Weighting        | 25%                      |                              |               | 25%            |        |                |         | 25%                             |                         |                              | 25%                |                         |                          | 100%           |
|------------------|--------------------------|------------------------------|---------------|----------------|--------|----------------|---------|---------------------------------|-------------------------|------------------------------|--------------------|-------------------------|--------------------------|----------------|
|                  | FUNDAMENTALS             |                              |               | INFRASTRUCTURE |        |                |         | POLITICAL RISK                  |                         |                              | ENVIRONMENTAL RISK |                         |                          | OVERALL RATING |
| MARKET           | Historical Supply/Demand | Quality of Tech Labor Market | Affordability | Water          | Energy | Transportation | Schools | Philosophy Toward Affordability | Urban Policing/Security | Tax Burden/Pension Liability | Natural Disasters  | Pollution (Air & Water) | State & Local Government |                |
| Los Angeles      | 1                        | 2                            | 1             | 1              | 1      | 3              | 1       | 0.5                             | 2                       | 2                            | 1                  | 2                       | 2                        | 1.50           |
| San Francisco    | 1                        | 3                            | 1             | 1              | 1      | 1              | 2       | 0.5                             | 1                       | 1                            | 1                  | 3                       | 3                        | 1.52           |
| Houston          | 1                        | 1                            | 2             | 1              | 1      | 3              | 2       | 3                               | 1                       | 3                            | 1                  | 1                       | 1                        | 1.60           |
| Tulsa            | 1                        | 1                            | 3             | 2              | 2      | 1              | 1       | 3                               | 1                       | 2                            | 2                  | 1                       | 1                        | 1.63           |
| Chicago          | 1                        | 1                            | 2             | 3              | 3      | 1              | 1       | 2                               | 1                       | 1                            | 3                  | 2                       | 2                        | 1.75           |
| Dallas           | 1                        | 2                            | 2             | 2              | 1      | 2              | 3       | 2                               | 2                       | 2                            | 2                  | 1                       | 1                        | 1.75           |
| Miami            | 1                        | 1                            | 1             | 1              | 1      | 3              | 3       | 3                               | 1                       | 2                            | 1                  | 3                       | 2                        | 1.75           |
| Washington D.C.  | 1                        | 3                            | 1             | 3              | 2      | 2              | 1       | 0.5                             | 3                       | 2                            | 1                  | 1                       | 3                        | 1.79           |
| San Diego        | 2                        | 2                            | 1             | 2              | 1      | 2              | 1       | 1                               | 3                       | 1                            | 1                  | 3                       | 3                        | 1.79           |
| Las Vegas        | 1                        | 1                            | 2             | 2              | 3      | 2              | 2       | 2                               | 1                       | 2                            | 3                  | 1                       | 2                        | 1.81           |
| New York         | 1                        | 3                            | 1             | 3              | 1      | 2              | 1       | 1                               | 2                       | 2                            | 1                  | 3                       | 3                        | 1.85           |
| Nashville        | 1                        | 2                            | 2             | 3              | 3      | 2              | 2       | 2                               | 2                       | 2                            | 2                  | 1                       | 1                        | 1.88           |
| Albuquerque      | 2                        | 1                            | 3             | 1              | 3      | 1              | 1       | 3                               | 1                       | 2                            | 3                  | 1                       | 2                        | 1.88           |
| Atlanta          | 3                        | 2                            | 2             | 2              | 3      | 3              | 1       | 2                               | 1                       | 1                            | 2                  | 1                       | 2                        | 1.90           |
| Savannah         | 1                        | 2                            | 3             | 2              | 2      | 2              | 2       | 3                               | 2                       | 2                            | 1                  | 2                       | 1                        | 1.92           |
| Seattle          | 1                        | 3                            | 1             | 3              | 2      | 2              | 1       | 1                               | 1                       | 3                            | 2                  | 2                       | 3                        | 1.92           |
| Portland         | 1                        | 3                            | 1             | 2              | 2      | 3              | 2       | 0.5                             | 1                       | 3                            | 3                  | 2                       | 2                        | 1.94           |
| Orlando          | 2                        | 2                            | 2             | 1              | 1      | 3              | 1       | 2                               | 2                       | 3                            | 2                  | 3                       | 1                        | 1.96           |
| Colorado Springs | 3                        | 3                            | 2             | 1              | 3      | 1              | 2       | 2                               | 1                       | 1                            | 2                  | 3                       | 2                        | 2.02           |
| Huntsville       | 2                        | 3                            | 3             | 3              | 2      | 1              | 1       | 3                               | 1                       | 1                            | 2                  | 2                       | 2                        | 2.02           |
| Boston           | 1                        | 3                            | 1             | 3              | 3      | 2              | 2       | 1                               | 3                       | 2                            | 1                  | 2                       | 3                        | 2.04           |
| Philadelphia     | 3                        | 3                            | 2             | 1              | 1      | 1              | 2       | 2                               | 3                       | 1                            | 2                  | 2                       | 3                        | 2.06           |
| Kansas City      | 2                        | 1                            | 3             | 2              | 1      | 3              | 3       | 3                               | 1                       | 2                            | 3                  | 1                       | 2                        | 2.06           |
| Denver           | 1                        | 3                            | 1             | 2              | 2      | 1              | 3       | 2                               | 3                       | 2                            | 2                  | 2                       | 3                        | 2.08           |
| Omaha            | 3                        | 1                            | 3             | 2              | 3      | 1              | 2       | 3                               | 2                       | 2                            | 3                  | 1                       | 1                        | 2.08           |
| Pittsburgh       | 2                        | 2                            | 3             | 1              | 2      | 2              | 2       | 3                               | 3                       | 1                            | 2                  | 2                       | 2                        | 2.10           |
| Columbus         | 2                        | 1                            | 3             | 3              | 2      | 1              | 1       | 3                               | 2                       | 2                            | 3                  | 1                       | 3                        | 2.10           |
| Phoenix          | 2                        | 2                            | 2             | 1              | 3      | 3              | 3       | 2                               | 2                       | 1                            | 3                  | 2                       | 2                        | 2.13           |
| Austin           | 1                        | 3                            | 2             | 2              | 2      | 3              | 3       | 3                               | 2                       | 2                            | 1                  | 3                       | 1                        | 2.13           |
| Tampa            | 3                        | 2                            | 2             | 3              | 1      | 2              | 2       | 2                               | 3                       | 3                            | 1                  | 3                       | 1                        | 2.17           |
| Charlotte        | 1                        | 2                            | 3             | 3              | 3      | 3              | 3       | 3                               | 1                       | 3                            | 2                  | 1                       | 1                        | 2.17           |
| Oklahoma City    | 3                        | 1                            | 3             | 3              | 1      | 2              | 3       | 3                               | 1                       | 3                            | 2                  | 2                       | 2                        | 2.23           |
| Minneapolis      | 1                        | 2                            | 2             | 3              | 3      | 3              | 3       | 2                               | 1                       | 2                            | 3                  | 2                       | 3                        | 2.25           |
| Grand Rapids     | 1                        | 3                            | 3             | 2              | 1      | 1              | 3       | 3                               | 2                       | 2                            | 3                  | 3                       | 2                        | 2.27           |
| Raleigh-Durham   | 1                        | 3                            | 2             | 3              | 3      | 2              | 2       | 3                               | 3                       | 3                            | 2                  | 2                       | 2                        | 2.38           |
| Indianapolis     | 3                        | 1                            | 3             | 3              | 3      | 2              | 3       | 3                               | 2                       | 3                            | 2                  | 2                       | 2                        | 2.44           |
| Salt Lake City   | 2                        | 3                            | 2             | 2              | 2      | 3              | 3       | 3                               | 3                       | 3                            | 3                  | 1                       | 2                        | 2.46           |
| Boise            | 3                        | 3                            | 2             | 3              | 3      | 3              | 3       | 3                               | 3                       | 3                            | 3                  | 2                       | 2                        | 2.75           |
| Madison          | 3                        | 2                            | 3             | 3              | 3      | 1              | 3       | 3                               | 3                       | 3                            | 3                  | 3                       | 3                        | 2.79           |

## Investment Risk Base Case Scenario: Ranked by Score

| LEGEND                        |
|-------------------------------|
| Red = High Investment Risk    |
| Yellow = Mild Investment Risk |
| Green = Low Investment Risk   |



| Weighting        | 40%                      |                              |               | 40%            |        |                |         | 10%                             |                         |                              | 10%                |                         |                          | 100%           |
|------------------|--------------------------|------------------------------|---------------|----------------|--------|----------------|---------|---------------------------------|-------------------------|------------------------------|--------------------|-------------------------|--------------------------|----------------|
|                  | FUNDAMENTALS             |                              |               | INFRASTRUCTURE |        |                |         | POLITICAL RISK                  |                         |                              | ENVIRONMENTAL RISK |                         |                          | OVERALL RATING |
| MARKET           | Historical Supply/Demand | Quality of Tech Labor Market | Affordability | Water          | Energy | Transportation | Schools | Philosophy Toward Affordability | Urban Policing/Security | Tax Burden/Pension Liability | Natural Disasters  | Pollution (Air & Water) | State & Local Government |                |
| Los Angeles      | 1                        | 2                            | 1             | 1              | 1      | 3              | 1       | 0.5                             | 2                       | 2                            | 1                  | 2                       | 2                        | 1.45           |
| San Francisco    | 1                        | 3                            | 1             | 1              | 1      | 1              | 2       | 0.5                             | 1                       | 1                            | 1                  | 3                       | 3                        | 1.48           |
| Houston          | 1                        | 1                            | 2             | 1              | 1      | 3              | 2       | 3                               | 1                       | 3                            | 1                  | 1                       | 1                        | 1.57           |
| Tulsa            | 1                        | 1                            | 3             | 2              | 2      | 1              | 1       | 3                               | 1                       | 2                            | 2                  | 1                       | 1                        | 1.60           |
| Miami            | 1                        | 1                            | 1             | 1              | 1      | 3              | 3       | 3                               | 1                       | 2                            | 1                  | 3                       | 2                        | 1.60           |
| San Diego        | 2                        | 2                            | 1             | 2              | 1      | 2              | 1       | 1                               | 3                       | 1                            | 1                  | 3                       | 3                        | 1.67           |
| Chicago          | 1                        | 1                            | 2             | 3              | 3      | 1              | 1       | 2                               | 1                       | 1                            | 3                  | 2                       | 2                        | 1.70           |
| New York         | 1                        | 3                            | 1             | 3              | 1      | 2              | 1       | 1                               | 2                       | 2                            | 1                  | 3                       | 3                        | 1.77           |
| Dallas           | 1                        | 2                            | 2             | 2              | 1      | 2              | 3       | 2                               | 2                       | 2                            | 2                  | 1                       | 1                        | 1.80           |
| Las Vegas        | 1                        | 1                            | 2             | 2              | 3      | 2              | 2       | 2                               | 1                       | 2                            | 3                  | 1                       | 2                        | 1.80           |
| Albuquerque      | 2                        | 1                            | 3             | 1              | 3      | 1              | 1       | 3                               | 1                       | 2                            | 3                  | 1                       | 2                        | 1.80           |
| Washington D.C.  | 1                        | 3                            | 1             | 3              | 2      | 2              | 1       | 0.5                             | 3                       | 2                            | 2                  | 1                       | 3                        | 1.82           |
| Orlando          | 2                        | 2                            | 2             | 1              | 1      | 3              | 1       | 2                               | 2                       | 3                            | 2                  | 3                       | 1                        | 1.83           |
| Seattle          | 1                        | 3                            | 1             | 3              | 2      | 2              | 1       | 1                               | 1                       | 3                            | 2                  | 2                       | 3                        | 1.87           |
| Denver           | 1                        | 3                            | 1             | 2              | 2      | 1              | 3       | 2                               | 3                       | 2                            | 2                  | 2                       | 3                        | 1.93           |
| Portland         | 1                        | 3                            | 1             | 2              | 2      | 3              | 2       | 0.5                             | 1                       | 3                            | 3                  | 2                       | 2                        | 1.95           |
| Savannah         | 1                        | 2                            | 3             | 2              | 2      | 2              | 2       | 3                               | 2                       | 2                            | 1                  | 2                       | 1                        | 1.97           |
| Columbus         | 2                        | 1                            | 3             | 3              | 2      | 1              | 1       | 3                               | 2                       | 2                            | 3                  | 1                       | 3                        | 1.97           |
| Nashville        | 1                        | 2                            | 2             | 3              | 3      | 2              | 2       | 2                               | 2                       | 2                            | 2                  | 1                       | 1                        | 2.00           |
| Philadelphia     | 3                        | 3                            | 2             | 1              | 1      | 1              | 2       | 2                               | 3                       | 1                            | 2                  | 2                       | 3                        | 2.00           |
| Boston           | 1                        | 3                            | 1             | 3              | 3      | 2              | 2       | 1                               | 3                       | 2                            | 1                  | 2                       | 3                        | 2.07           |
| Pittsburgh       | 2                        | 2                            | 3             | 1              | 2      | 2              | 2       | 3                               | 3                       | 1                            | 2                  | 2                       | 2                        | 2.07           |
| Kansas City      | 2                        | 1                            | 3             | 2              | 1      | 3              | 3       | 3                               | 1                       | 2                            | 3                  | 1                       | 2                        | 2.10           |
| Atlanta          | 3                        | 2                            | 2             | 2              | 3      | 3              | 1       | 2                               | 1                       | 1                            | 2                  | 1                       | 2                        | 2.13           |
| Colorado Springs | 3                        | 3                            | 2             | 1              | 3      | 1              | 2       | 2                               | 1                       | 1                            | 2                  | 3                       | 2                        | 2.13           |
| Huntsville       | 2                        | 3                            | 3             | 3              | 2      | 1              | 1       | 3                               | 1                       | 1                            | 2                  | 2                       | 2                        | 2.13           |
| Omaha            | 3                        | 1                            | 3             | 2              | 3      | 1              | 2       | 3                               | 2                       | 2                            | 3                  | 1                       | 1                        | 2.13           |
| Grand Rapids     | 1                        | 3                            | 3             | 2              | 1      | 1              | 3       | 3                               | 2                       | 2                            | 3                  | 3                       | 2                        | 2.13           |
| Tampa            | 3                        | 2                            | 2             | 3              | 1      | 2              | 2       | 2                               | 3                       | 3                            | 1                  | 3                       | 1                        | 2.17           |
| Austin           | 1                        | 3                            | 2             | 2              | 2      | 3              | 3       | 3                               | 2                       | 2                            | 1                  | 3                       | 1                        | 2.20           |
| Phoenix          | 2                        | 2                            | 2             | 1              | 3      | 3              | 3       | 2                               | 2                       | 1                            | 3                  | 2                       | 2                        | 2.20           |
| Oklahoma City    | 3                        | 1                            | 3             | 3              | 1      | 2              | 3       | 3                               | 1                       | 3                            | 2                  | 2                       | 2                        | 2.27           |
| Minneapolis      | 1                        | 2                            | 2             | 3              | 3      | 3              | 3       | 2                               | 1                       | 2                            | 3                  | 2                       | 3                        | 2.30           |
| Raleigh-Durham   | 1                        | 3                            | 2             | 3              | 3      | 2              | 2       | 3                               | 3                       | 3                            | 2                  | 2                       | 2                        | 2.30           |
| Charlotte        | 1                        | 2                            | 3             | 3              | 3      | 3              | 3       | 3                               | 1                       | 3                            | 2                  | 1                       | 1                        | 2.37           |
| Salt Lake City   | 2                        | 3                            | 2             | 2              | 2      | 3              | 3       | 3                               | 3                       | 3                            | 3                  | 1                       | 2                        | 2.43           |
| Indianapolis     | 3                        | 1                            | 3             | 3              | 3      | 2              | 3       | 3                               | 2                       | 3                            | 2                  | 2                       | 2                        | 2.50           |
| Madison          | 3                        | 2                            | 3             | 3              | 3      | 1              | 3       | 3                               | 3                       | 3                            | 3                  | 3                       | 3                        | 2.67           |
| Boise            | 3                        | 3                            | 2             | 3              | 3      | 3              | 3       | 3                               | 3                       | 3                            | 3                  | 2                       | 2                        | 2.80           |

## Investment Risk Alternative Scenario: Ranked by Score

| LEGEND                        |
|-------------------------------|
| Red = High Investment Risk    |
| Yellow = Mild Investment Risk |
| Green = Low Investment Risk   |

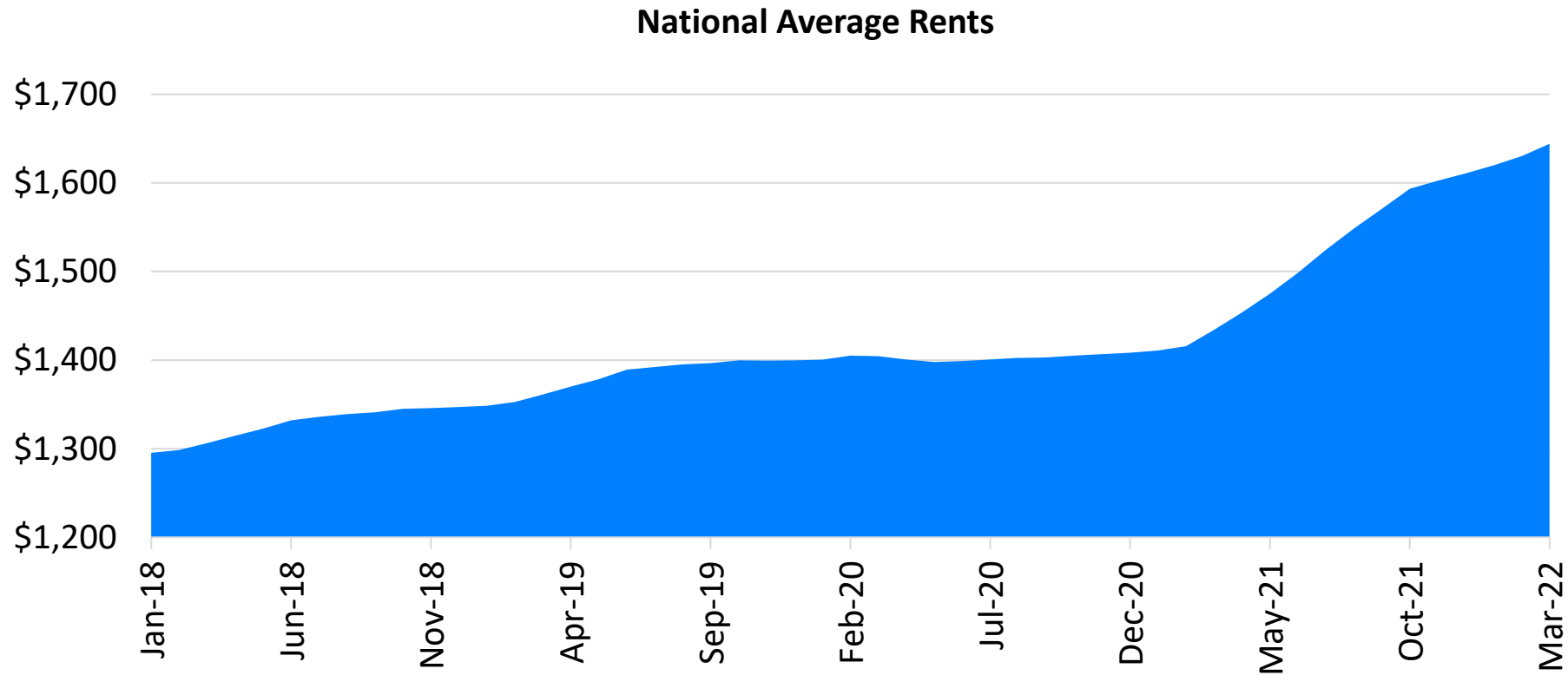




# MULTIFAMILY FUNDAMENTALS

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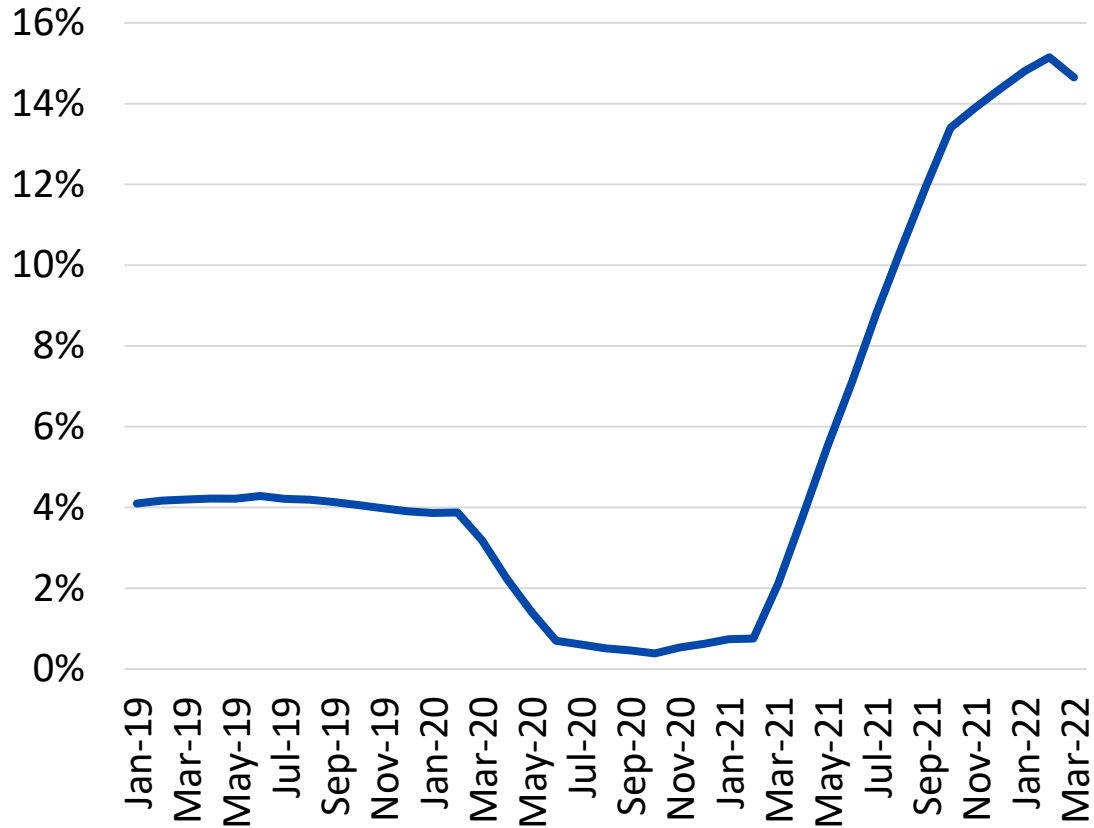
# National Multifamily Rents Have Surged, But Growth is Moderating



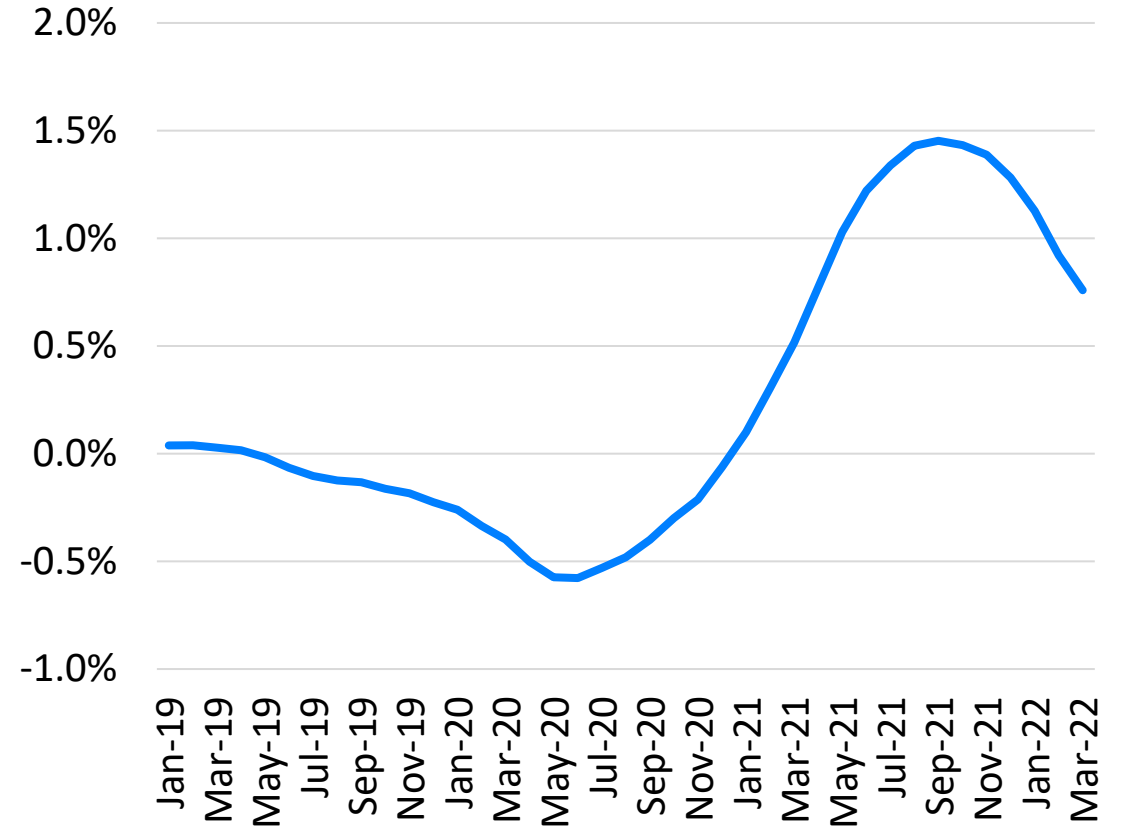
|  | % Change | \$ Change |
|--|----------|-----------|
| Year-over-Year: Mar '21 – Mar '22          | 14.7%    | \$210.10  |
| Month-over-Month: Feb '22 – Mar '22        | 0.9%     | \$13.89   |
| Pre-pandemic to Current: Mar '20 – Mar '22 | 17.1%    | \$239.60  |

# On a Year-over-Year Basis, Rents and Occupancy Slowing Only Slightly Over the Last Couple of Months

### National Rents: Year-over-Year

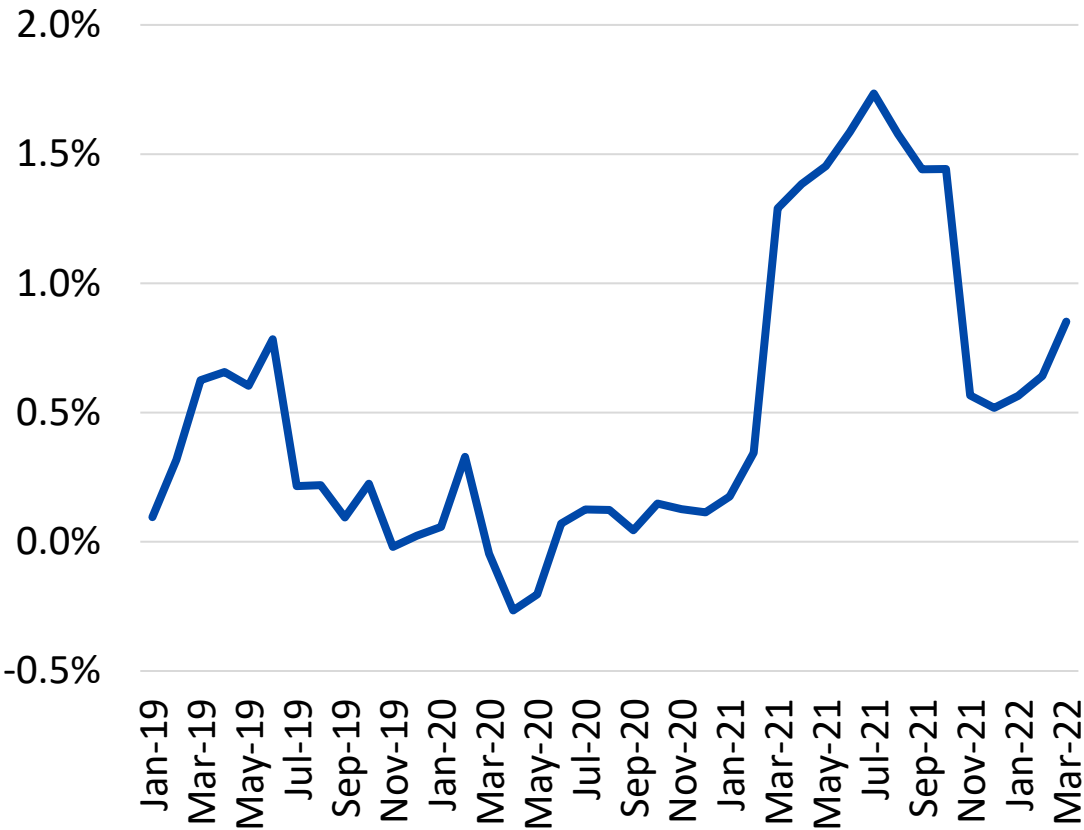


### National Occupancy: Year-over-Year

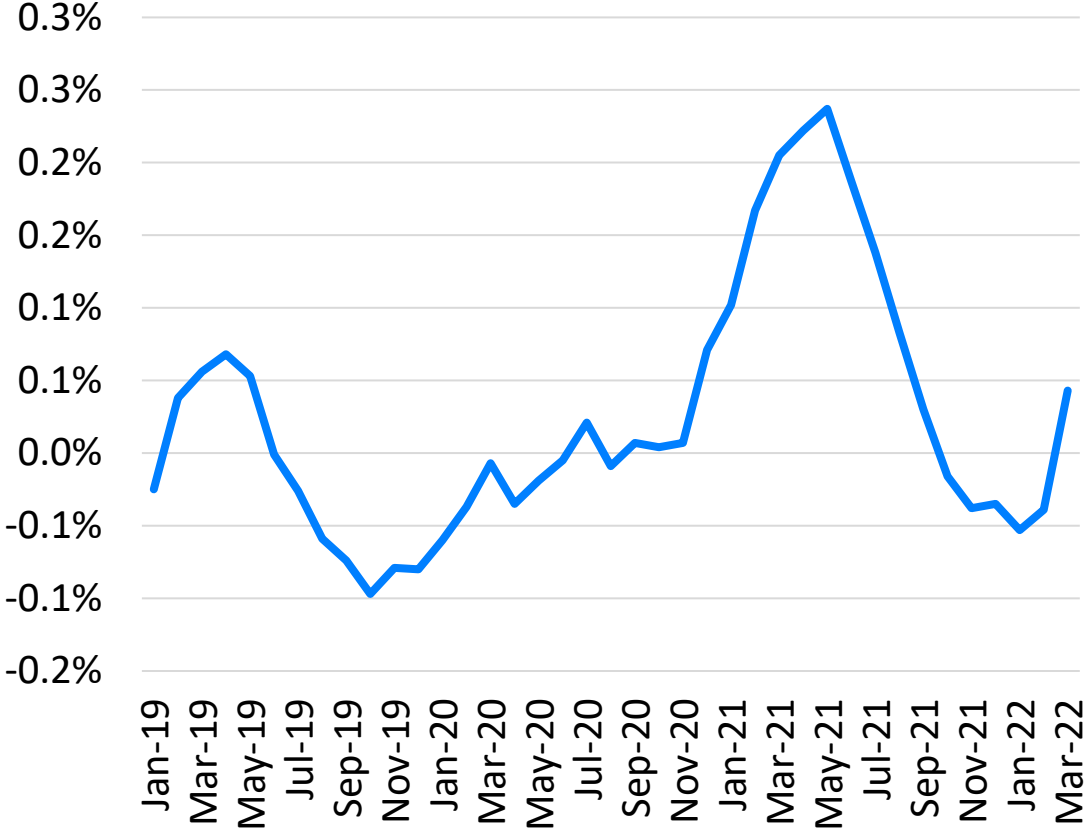


# Sequential Rents and Occupancy Have Been Trending Upwards Since the Start of 2022

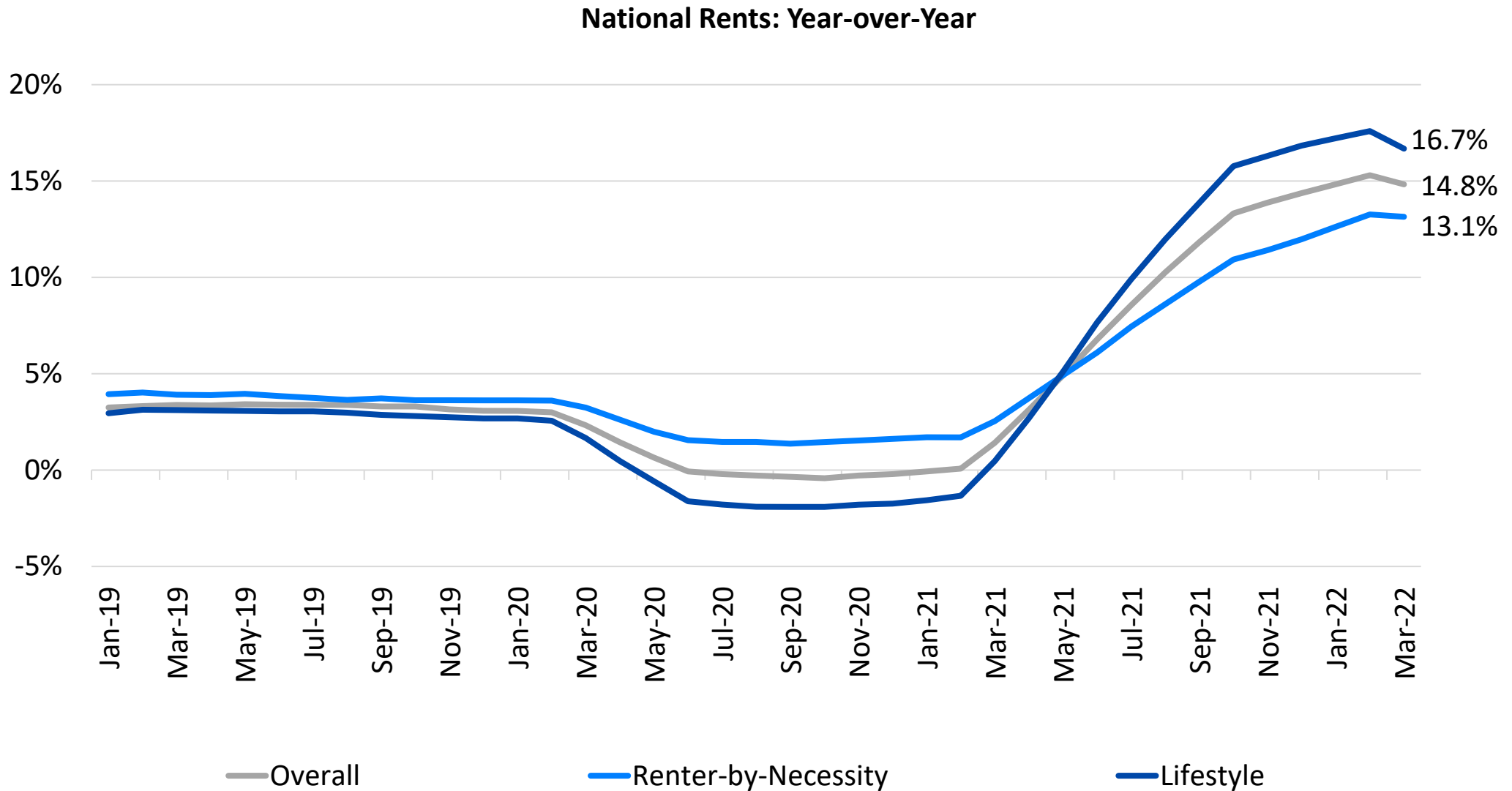
### National Rents: Month-over-Month



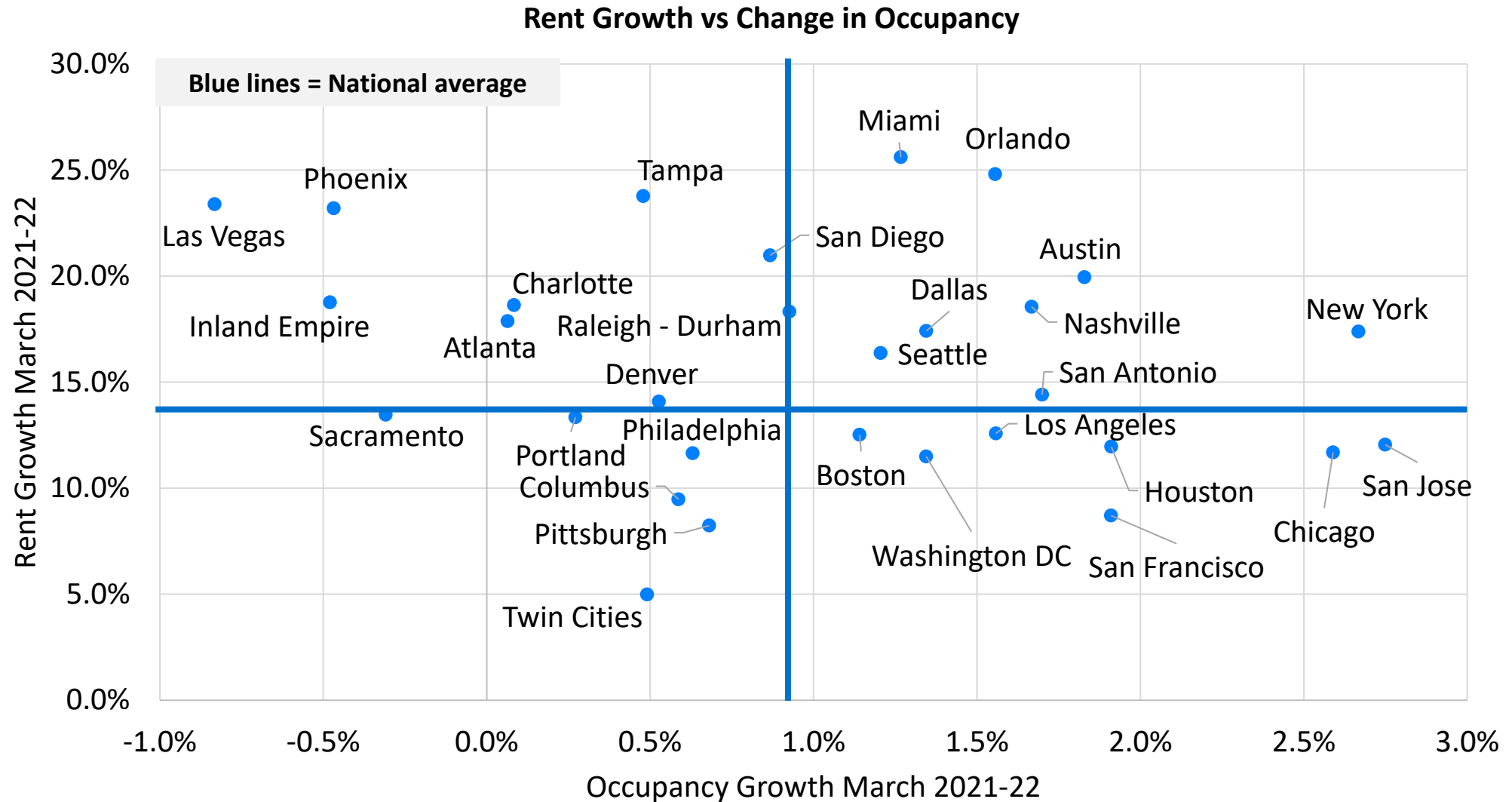
### National Occupancy: Month-over-Month



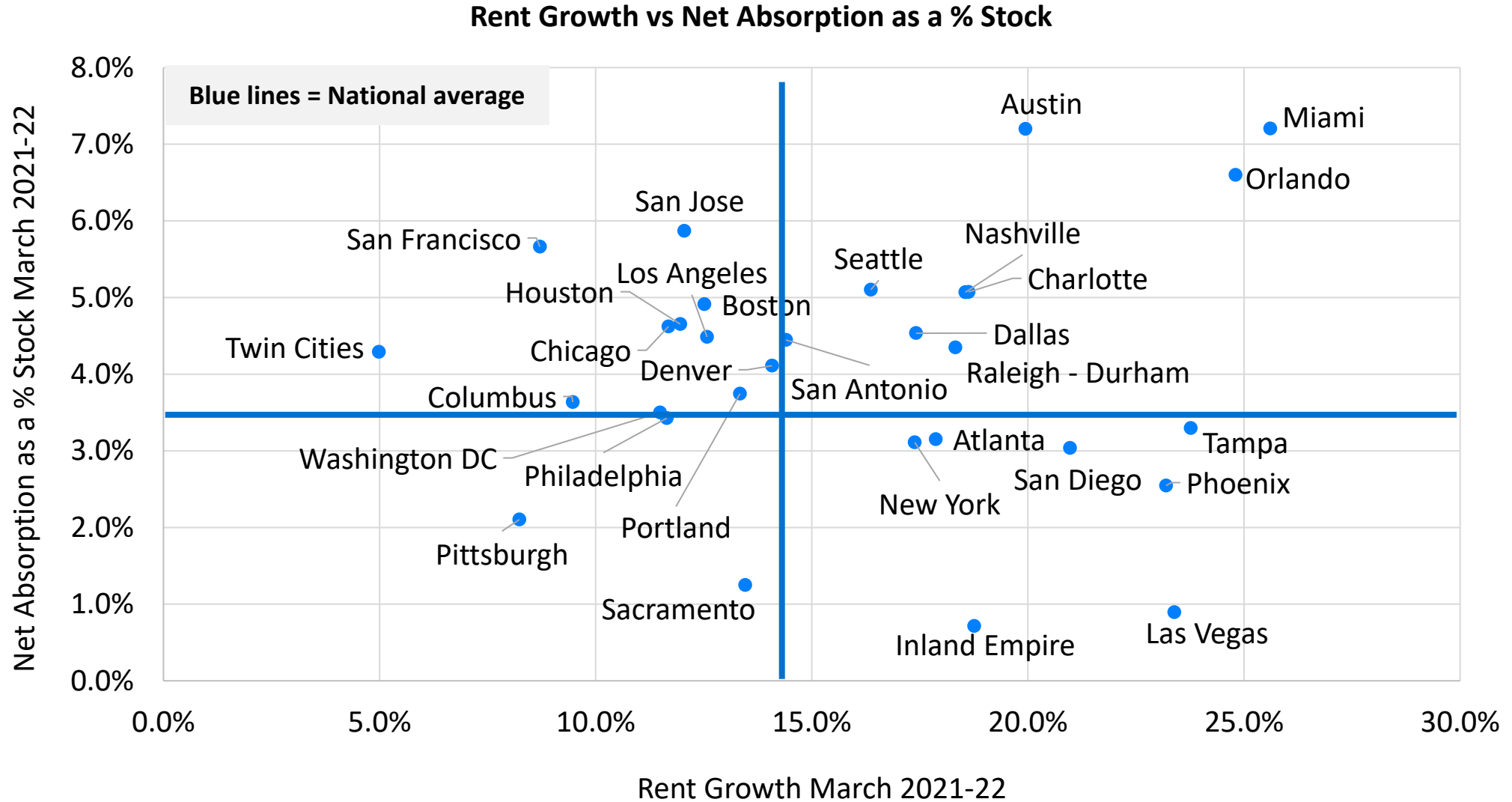
# Rents Are up Across the Board, Particularly for Lifestyle Units



# Rent & Occupancy Growth Highest in Emerging Tech Hub Markets, with New York Bouncing Back



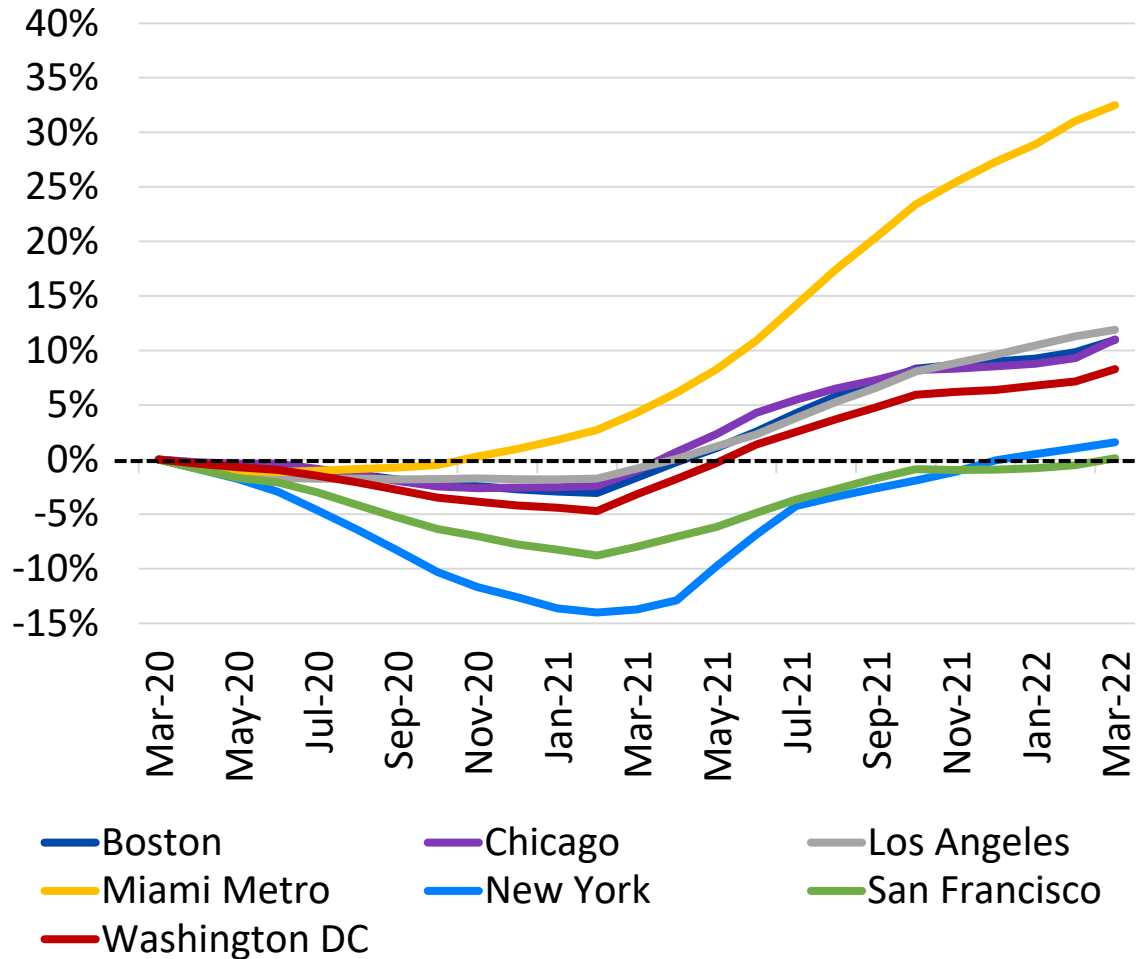
# Absorption and Rent Growth Have Been Strongest in Tech Hub Markets, Primarily in the Sunbelt



# Rent Growth Recovered Quicker in Tech Hub than Gateway Markets

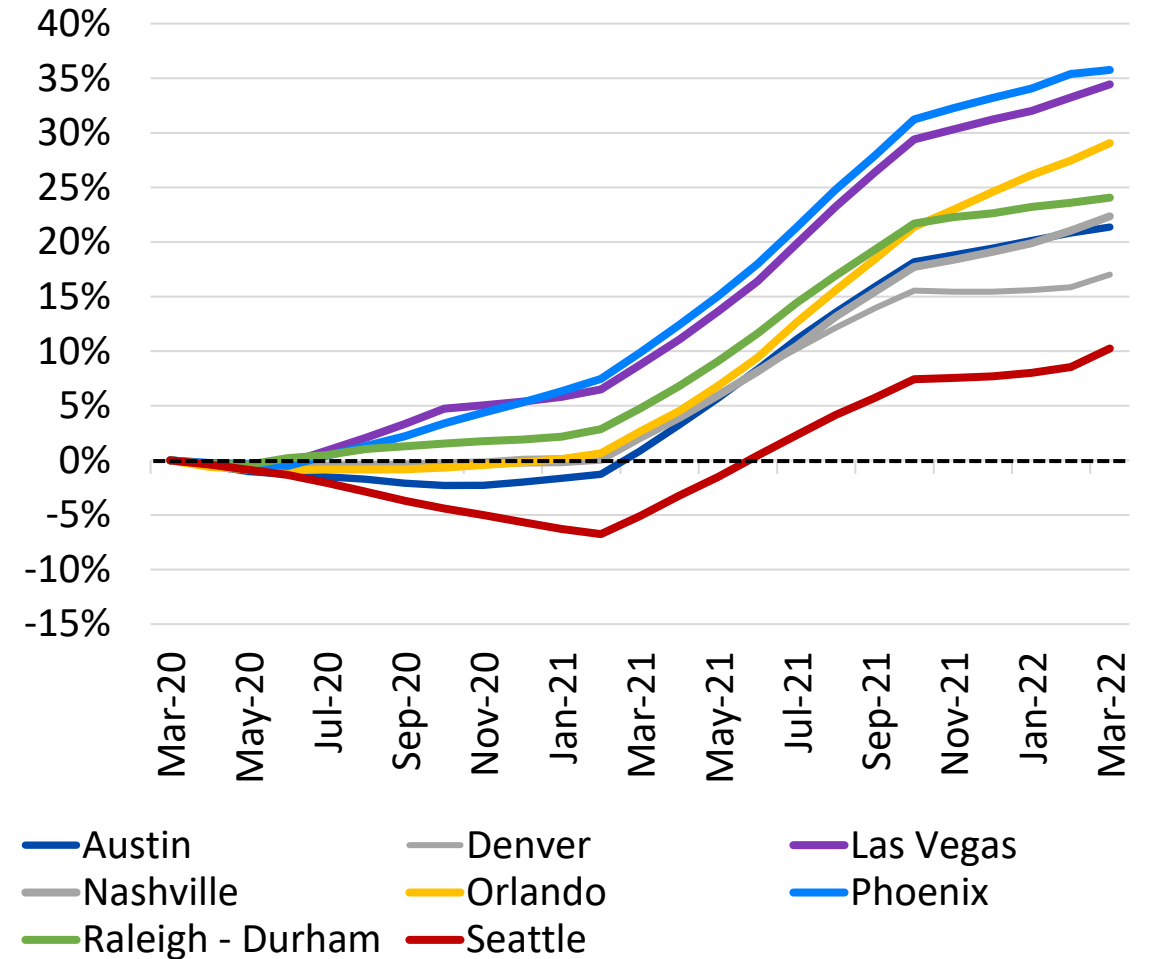
## GATEWAY MARKETS

Change in Rents Since March 2020



## TECH HUB MARKETS

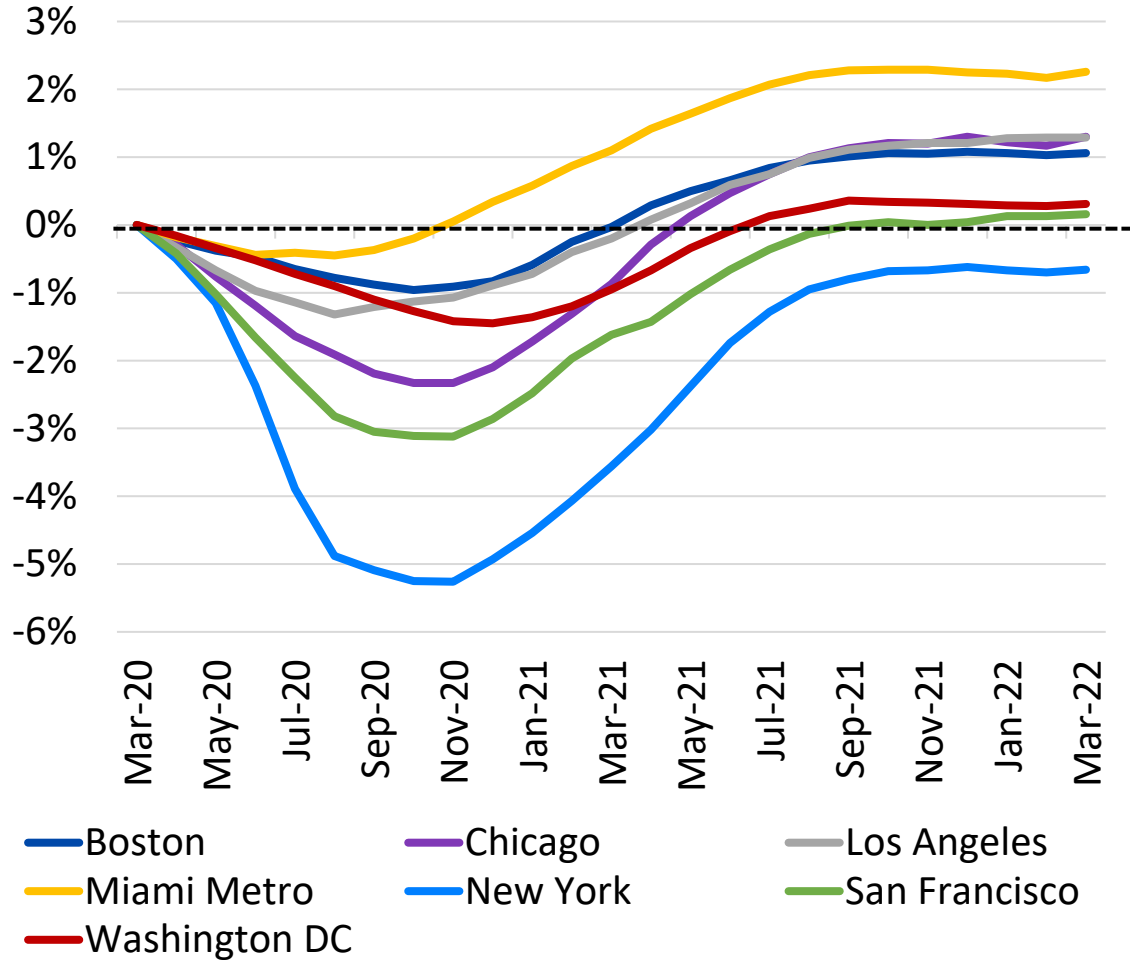
Change in Rents Since March 2020



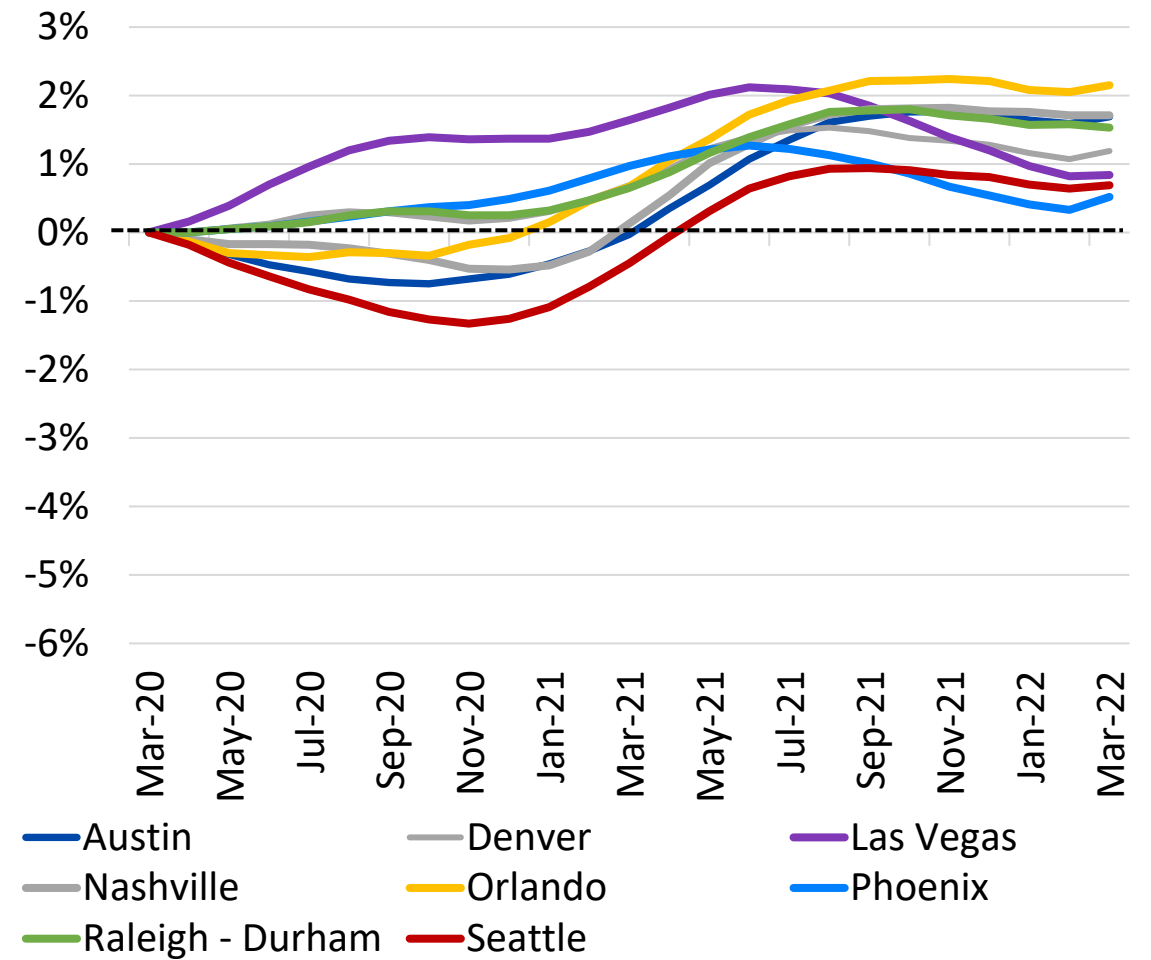


# Occupancy in Tech Hub Markets Also Outperforming Gateway Markets

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



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



# There is a Huge Spread Between New and Renewal Rents in Most Markets

## Tampa, FL Example

### Rental Rates

12-month period ending April 2022

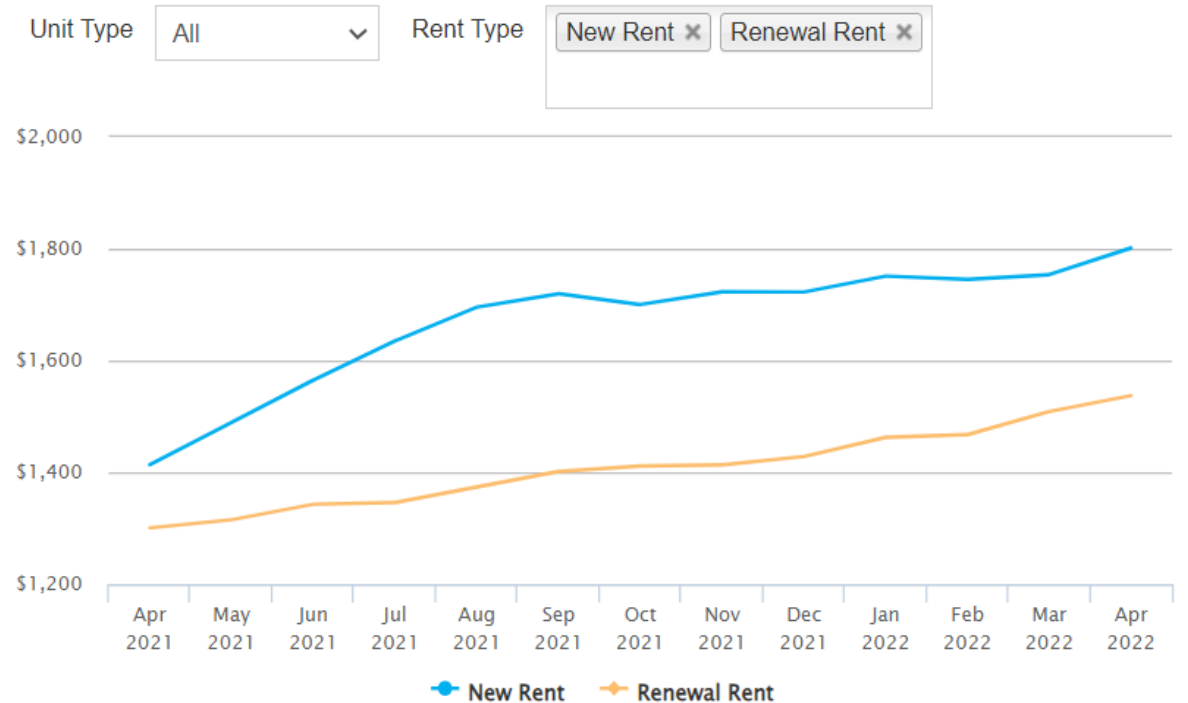
| Unit Type            | In-Place       | Renewal        | New Leases     |
|----------------------|----------------|----------------|----------------|
| Studio               | \$1,291        | \$1,251        | \$1,545        |
| Year Change (%)      | + 11.9%        | + 8.0%         | + 29.8%        |
| 1 Bed / 1 Bath       | \$1,232        | \$1,239        | \$1,485        |
| Year Change (%)      | + 11.0%        | + 11.5%        | + 27.5%        |
| 2 Bed / 1 Bath       | \$1,220        | \$1,251        | \$1,434        |
| Year Change (%)      | + 9.4%         | + 11.2%        | + 23.1%        |
| 2 Bed / 2 Bath       | \$1,518        | \$1,527        | \$1,828        |
| Year Change (%)      | + 11.1%        | + 11.2%        | + 28.3%        |
| 3 Bed / 2 Bath       | \$1,675        | \$1,677        | \$2,005        |
| Year Change (%)      | + 11.0%        | + 10.3%        | + 26.2%        |
| <b>Total Average</b> | <b>\$1,399</b> | <b>\$1,409</b> | <b>\$1,677</b> |
| Year Change (%)      | + 10.7%        | + 11.1%        | + 26.8%        |

Current Month | Annual Average

### Rental Rate Trends

Average Rent \$/Unit for the last 13 months

Latest Year - Monthly | History - Quarterly



# Increased Price Difference Leading to Less Turnover and More Renewals

## Tampa, FL Example

### Operational Metrics

12-month period ending April 2022

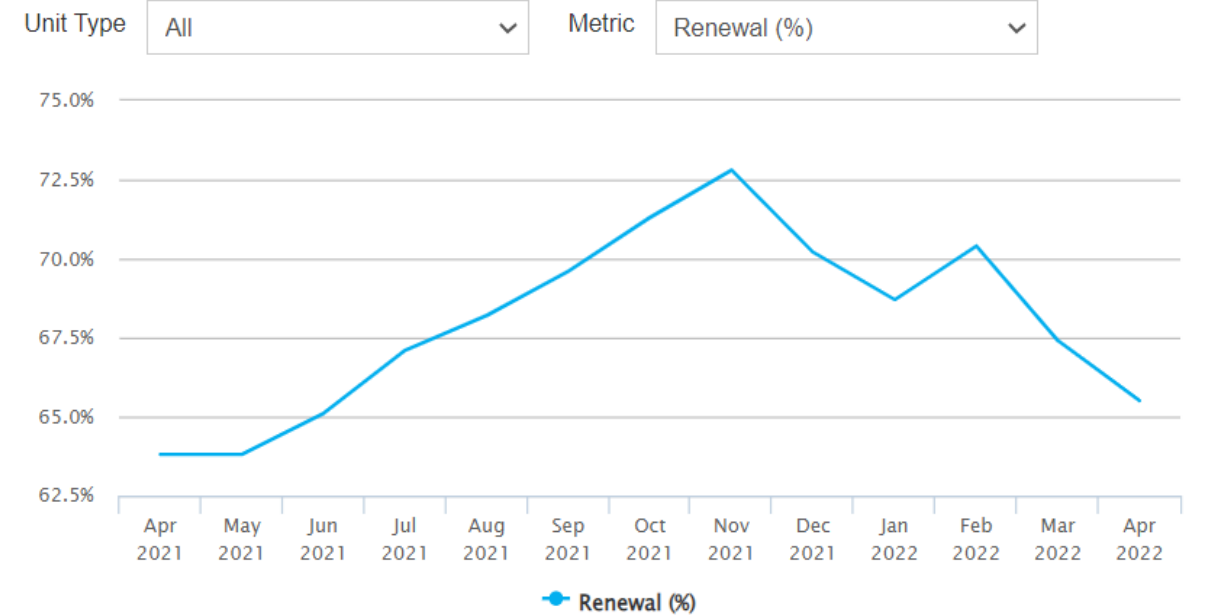
Current Month | Annual Average

| Unit Type            | Renewal (%)   | Turnover (%)   | Avg Lease Term |               | Resident Length of Stay (mo.) |
|----------------------|---------------|----------------|----------------|---------------|-------------------------------|
|                      |               |                | New (mo.)      | Renewal (mo.) |                               |
| Studio               | 66.6 %        | 46.8 %         | 12.4           | 12.0          | 19.2                          |
| Year Change (%)      | + 18.8%       | - 15.0%        | + 0.4%         | - 0.5%        | - 2.1%                        |
| 1 Bed / 1 Bath       | 67.2 %        | 42.0 %         | 12.1           | 11.9          | 22.2                          |
| Year Change (%)      | + 4.8%        | - 11.6%        | - 0.5%         | + 1.1%        | + 5.9%                        |
| 2 Bed / 1 Bath       | 69.5 %        | 37.2 %         | 12.0           | 11.9          | 25.0                          |
| Year Change (%)      | + 3.3%        | - 8.7%         | - 0.4%         | + 1.5%        | - 0.2%                        |
| 2 Bed / 2 Bath       | 69.0 %        | 39.6 %         | 12.2           | 11.9          | 22.1                          |
| Year Change (%)      | + 7.4%        | - 12.2%        | - 0.9%         | + 1.8%        | + 1.7%                        |
| 3 Bed / 2 Bath       | 67.5 %        | 40.8 %         | 12.0           | 12.0          | 21.6                          |
| Year Change (%)      | + 5.5%        | - 11.4%        | - 0.5%         | + 2.2%        | + 0.8%                        |
| <b>Total Average</b> | <b>68.1 %</b> | <b>40.8 %</b>  | <b>12.1</b>    | <b>11.9</b>   | <b>22.3</b>                   |
| Year Change (%)      | <b>+ 6.1%</b> | <b>- 11.9%</b> | <b>- 0.6%</b>  | <b>+ 1.5%</b> | <b>+ 3.1%</b>                 |

### Operational Metric Trends

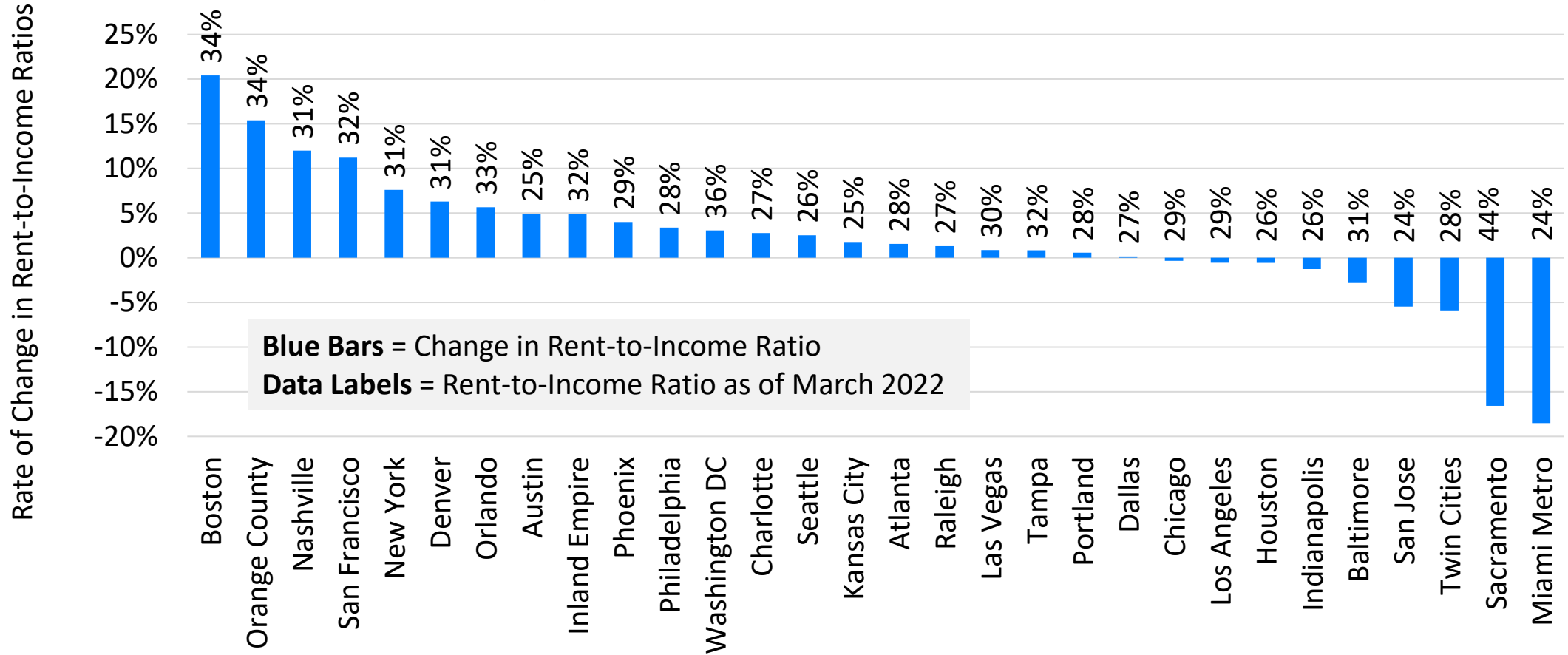
Previous 13 months

Latest Year - Monthly | History - Quarterly



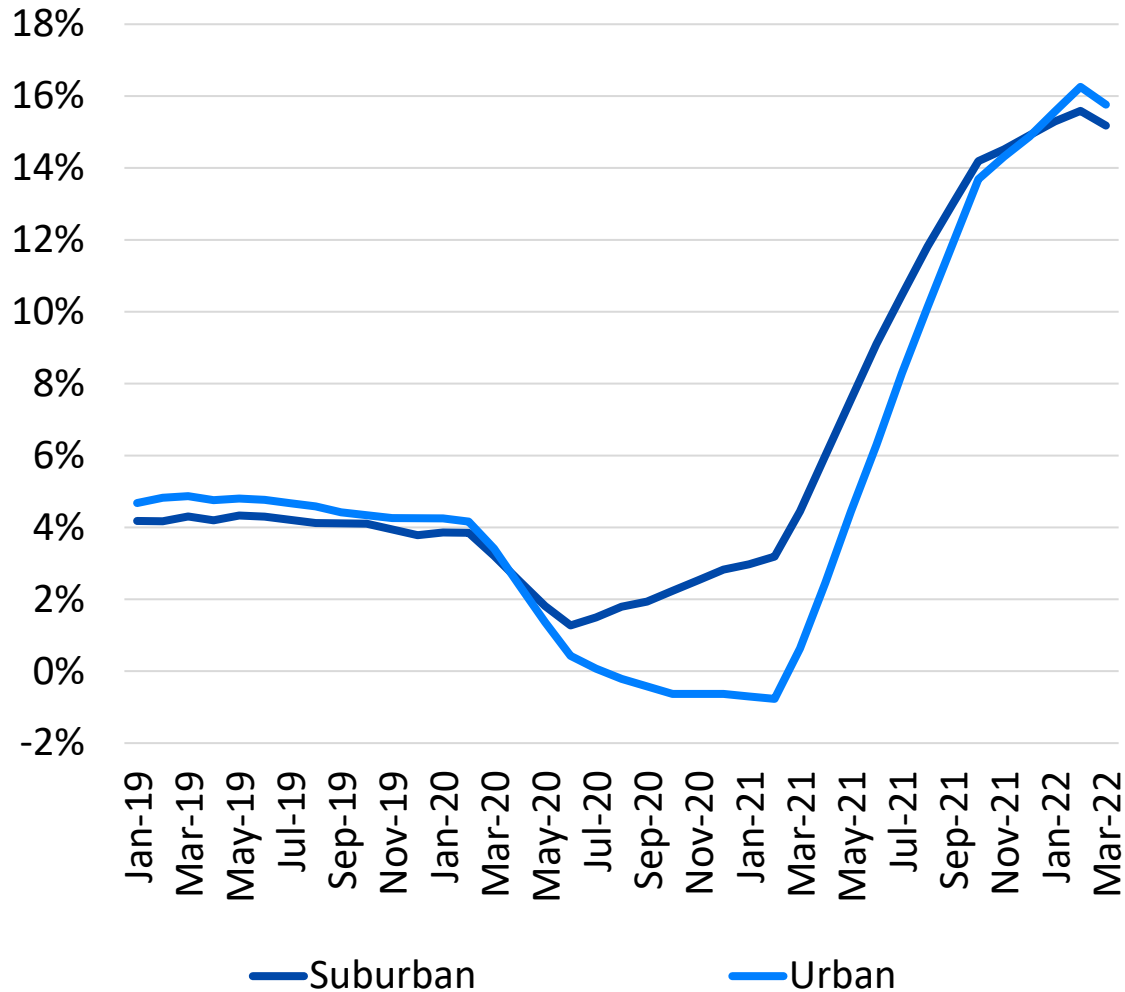
# Changes in Rent-to-Income Ratios Indicate Ability to Absorb Moderate Increases in Rents

Rate of Change in Rent-to-Income Ratio March 2021-March 2022

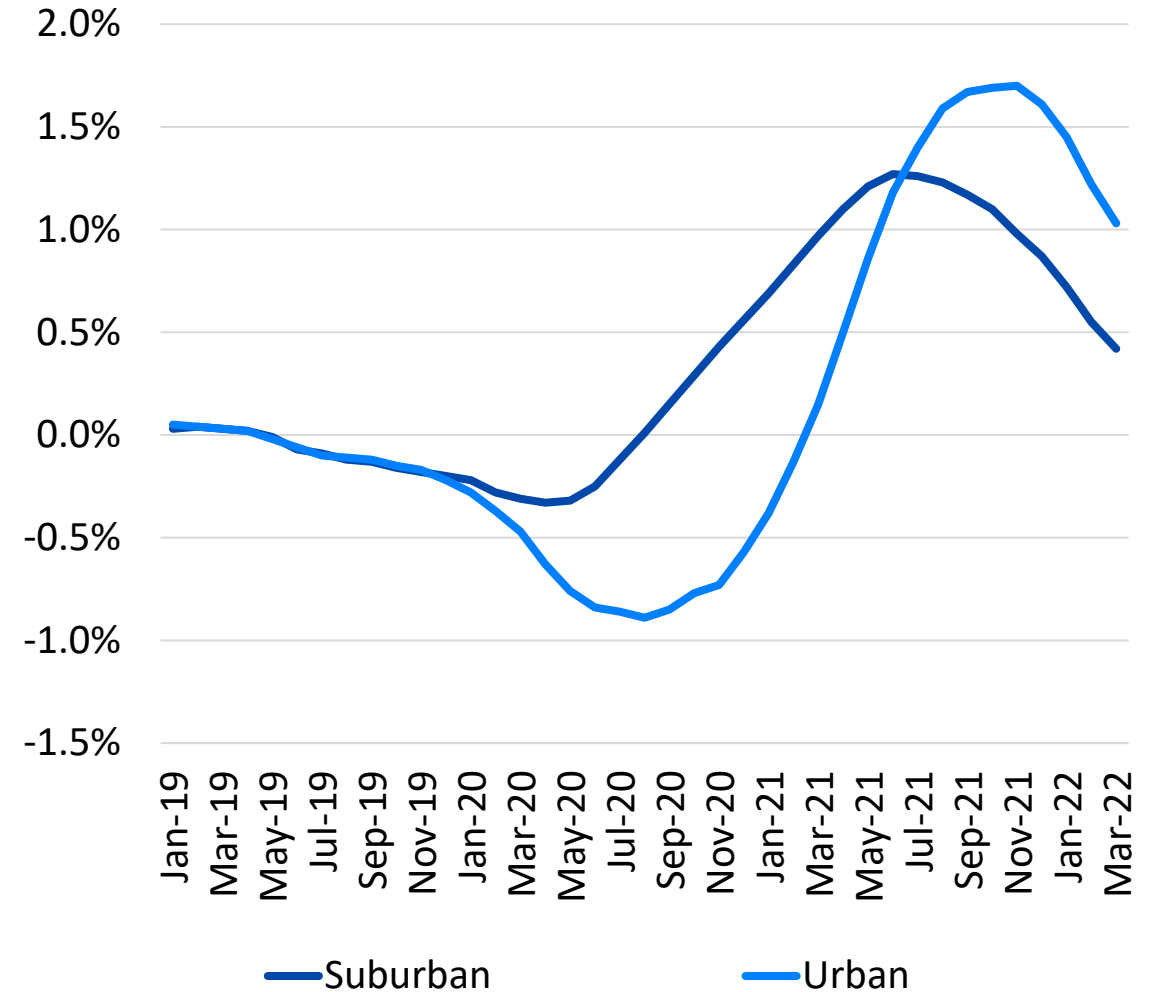


# Urban Multifamily Has Completely Recovered

## Year-over-Year Multifamily Rent Growth

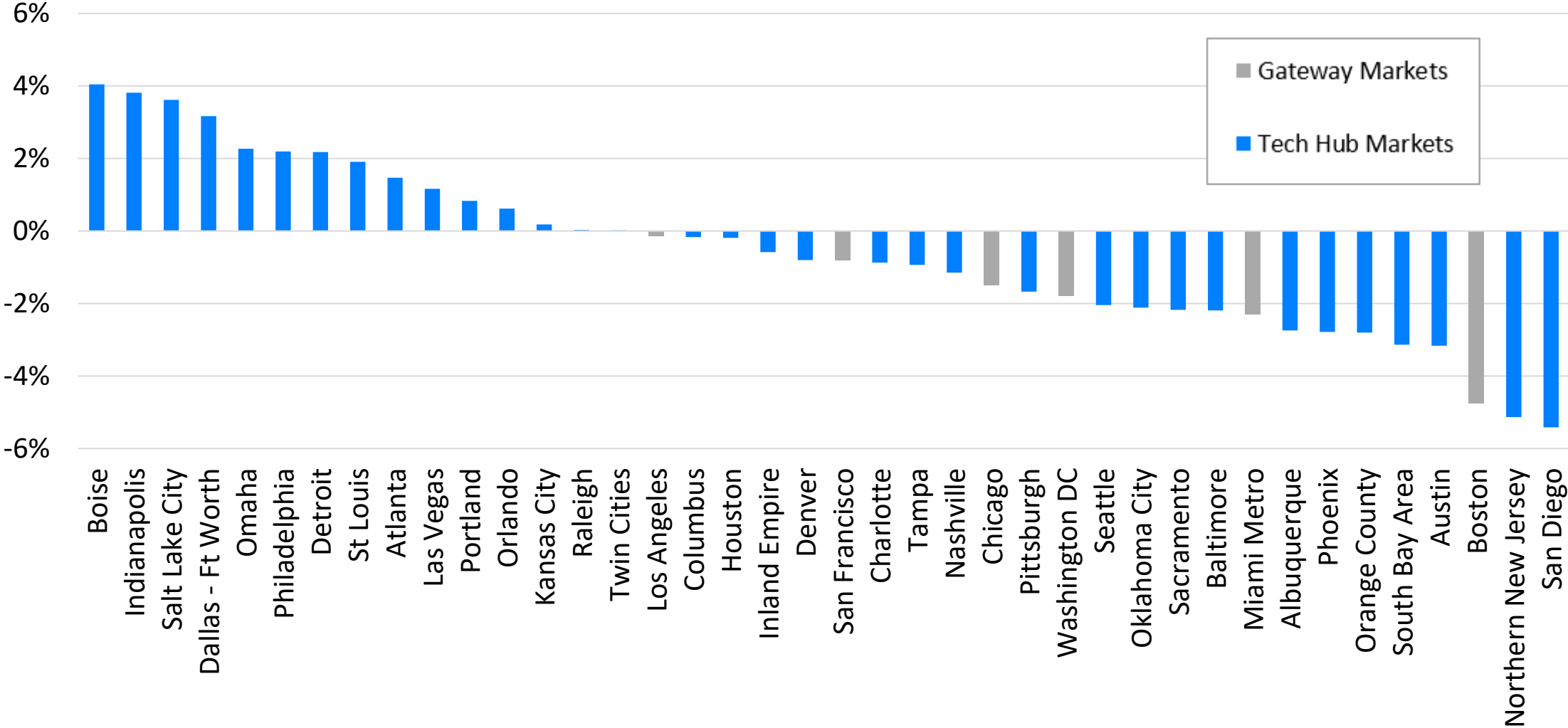


## Year-over-Year Multifamily Occupancy Growth



# Movement Back to Urban Cores

Difference Between Suburban and Urban Rent Growth March 2021-2022



## Tertiary Markets Performing Exceptionally Well, Likely Fueled by Growing Ability to Work from Anywhere

| Market                  | Mar 2021 Rent | Mar 2022 Rent | YOY Rent Growth |
|-------------------------|---------------|---------------|-----------------|
| Southwest Florida Coast | \$1,443       | \$2,009       | 39.2%           |
| Jacksonville            | \$1,216       | \$1,494       | 22.8%           |
| Savannah - Hilton Head  | \$1,238       | \$1,517       | 22.6%           |
| Tucson                  | \$1,025       | \$1,233       | 20.2%           |
| Pensacola               | \$1,272       | \$1,513       | 19.0%           |
| Spokane                 | \$1,120       | \$1,320       | 17.8%           |
| Central Valley          | \$1,279       | \$1,490       | 16.5%           |
| Huntsville              | \$966         | \$1,112       | 15.1%           |
| El Paso                 | \$837         | \$955         | 14.0%           |
| Grand Rapids            | \$1,066       | \$1,213       | 13.8%           |
| Richmond - Tidewater    | \$1,232       | \$1,400       | 13.7%           |
| Tulsa                   | \$792         | \$899         | 13.5%           |
| Colorado Springs        | \$1,315       | \$1,493       | 13.5%           |
| Tacoma                  | \$1,495       | \$1,690       | 13.0%           |
| Reno                    | \$1,403       | \$1,582       | 12.8%           |

| Market                 | Mar 2021 Rent | Mar 2022 Rent | YOY Rent Growth |
|------------------------|---------------|---------------|-----------------|
| Cincinnati             | \$1,059       | \$1,188       | 12.2%           |
| Central East Texas     | \$1,045       | \$1,167       | 11.8%           |
| Birmingham             | \$1,082       | \$1,205       | 11.4%           |
| Baton Rouge            | \$1,029       | \$1,145       | 11.2%           |
| Dayton                 | \$889         | \$988         | 11.2%           |
| New Orleans            | \$1,055       | \$1,169       | 10.7%           |
| Little Rock            | \$812         | \$897         | 10.5%           |
| Milwaukee              | \$1,191       | \$1,315       | 10.4%           |
| Lansing - Ann Arbor    | \$1,078       | \$1,190       | 10.3%           |
| Bridgeport - New Haven | \$1,592       | \$1,753       | 10.1%           |
| Cleveland - Akron      | \$994         | \$1,083       | 9.0%            |
| Louisville             | \$990         | \$1,074       | 8.6%            |
| Madison                | \$1,269       | \$1,371       | 8.0%            |
| Cincinnati             | \$1,059       | \$1,188       | 12.2%           |
| Central East Texas     | \$1,045       | \$1,167       | 11.8%           |



# Takeaways from Our April 2022 Multifamily Rent and Occupancy Forecast

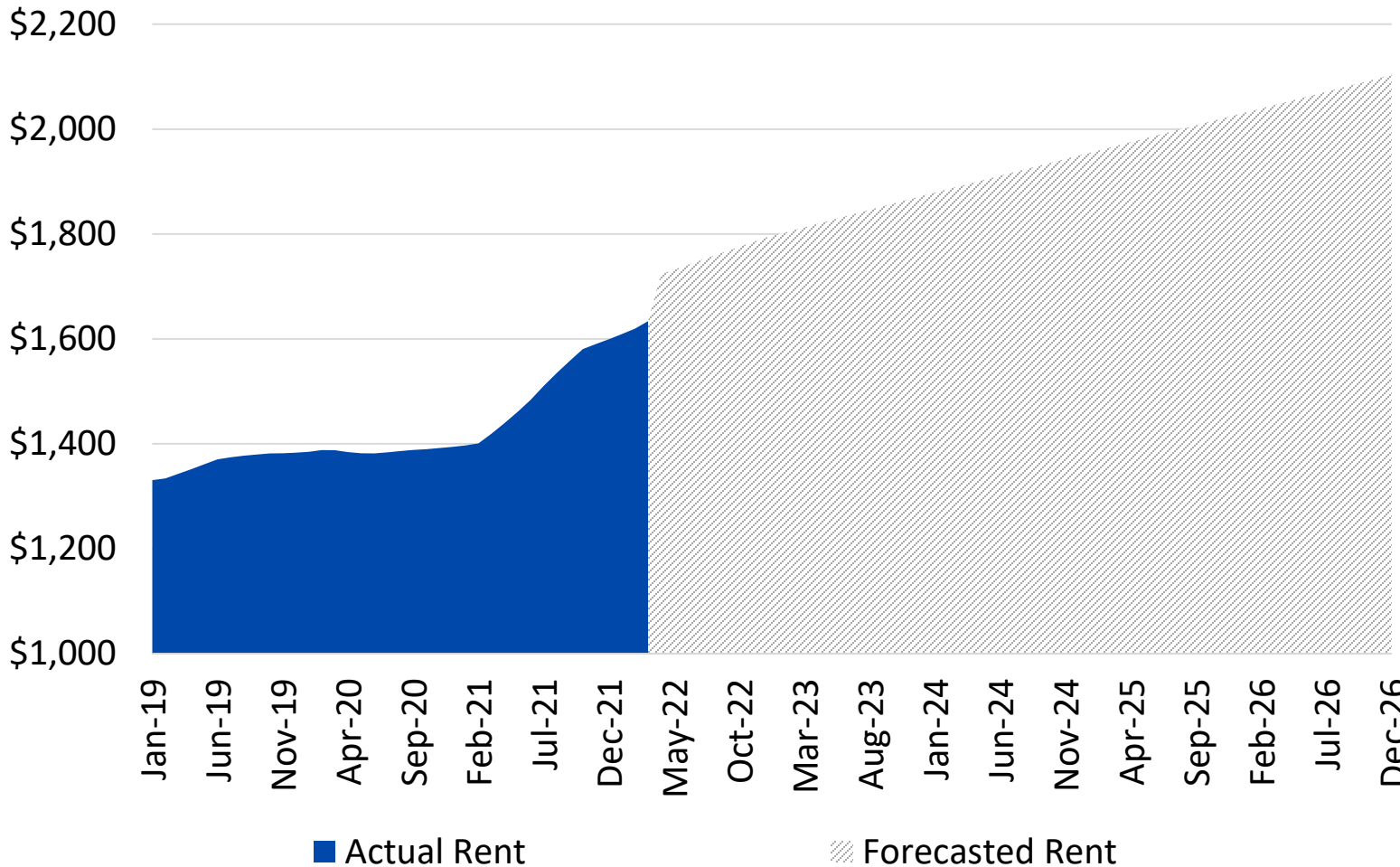
- Multifamily rent growth is beginning to decelerate, with year-over-year growth falling 0.4% to 14.7% in March
- It is difficult to tell at this point whether this deceleration is the beginning of a larger slowdown or just a temporary aberration in the historic growth seen over the past year
- Our forecast remains positive, although the Fed's reaction to the current economy and the war in Ukraine could have possible adverse effects that will cause turbulence and disrupt growth trajectories
- If the Fed manages to lower inflation without triggering a deep recession, then multifamily should remain in a good position. Demand will remain strong as rising mortgage rates limit the pool of prospective single-family buyers and supply will remain constrained as developers can't build fast enough to keep up with rising demand





# Rents Forecasted to Keep Increasing, Albeit at More Moderate Pace; Multifamily Growth Should Continue to Be Strong

**Historical & Forecasted National Rents**



| Year | Rent Growth Forecast | Occupancy Forecast |
|------|----------------------|--------------------|
| 2022 | 6.5%-9.0%            | 96.1%              |
| 2023 | 4.4%                 | 96.1%              |
| 2024 | 4.1%                 | 96.1%              |
| 2025 | 3.9%                 | 96.1%              |
| 2026 | 3.8%                 | 96.1%              |

**Based on YTD '22, we expect to revise upward our forecasts in the next few weeks, most likely to ~+9%**



# Tech Hub and Gateway Markets Alike Forecasted For Another Year of Strong Multifamily Rent Growth

| Market               | YoY Rent Growth Year-End 2022 | Occupancy Year-End 2022 | YoY Rent Growth Year-End 2023 | Occupancy Year-End 2023 | Market             | YoY Rent Growth Year-End 2022 | Occupancy Year-End 2022 | YoY Rent Growth Year-End 2023 | Occupancy Year-End 2023 |
|----------------------|-------------------------------|-------------------------|-------------------------------|-------------------------|--------------------|-------------------------------|-------------------------|-------------------------------|-------------------------|
| <b>Miami Metro</b>   | <b>9.9%</b>                   | <b>96.8%</b>            | <b>5.8%</b>                   | <b>96.4%</b>            | Phoenix            | 7.7%                          | 95.9%                   | 4.7%                          | 95.7%                   |
| San Diego            | 9.4%                          | 97.7%                   | 4.1%                          | 97.7%                   | Sacramento         | 7.7%                          | 96.6%                   | 5.1%                          | 96.7%                   |
| Salt Lake City       | 9.2%                          | 96.8%                   | 4.9%                          | 96.5%                   | Atlanta            | 7.6%                          | 95.5%                   | 4.4%                          | 95.8%                   |
| Inland Empire        | 9.1%                          | 97.8%                   | 5.3%                          | 97.6%                   | Portland           | 7.6%                          | 96.2%                   | 6.4%                          | 95.3%                   |
| Orlando              | 9.1%                          | 96.2%                   | 5.4%                          | 96.1%                   | Indianapolis       | 7.2%                          | 95.6%                   | 3.4%                          | 95.5%                   |
| Las Vegas            | 8.5%                          | 95.7%                   | 5.0%                          | 96.1%                   | <b>Los Angeles</b> | <b>7.0%</b>                   | <b>97.0%</b>            | <b>4.6%</b>                   | <b>97.5%</b>            |
| Austin               | 8.3%                          | 95.6%                   | 5.3%                          | 95.4%                   | Nashville          | 7.0%                          | 96.0%                   | 4.4%                          | 96.4%                   |
| Charlotte            | 8.1%                          | 96.1%                   | 5.7%                          | 95.7%                   | Raleigh-Durham     | 7.0%                          | 95.8%                   | 5.5%                          | 95.9%                   |
| Tampa                | 8.1%                          | 96.8%                   | 5.0%                          | 97.0%                   | Columbus           | 6.8%                          | 95.6%                   | 4.2%                          | 95.7%                   |
| Boise                | 8.0%                          | 96.7%                   | 5.8%                          | 95.7%                   | Seattle            | 6.7%                          | 96.5%                   | 4.0%                          | 96.7%                   |
| <b>San Francisco</b> | <b>7.8%</b>                   | <b>96.7%</b>            | <b>4.8%</b>                   | <b>96.5%</b>            | Detroit            | 6.6%                          | 96.6%                   | 4.5%                          | 96.3%                   |



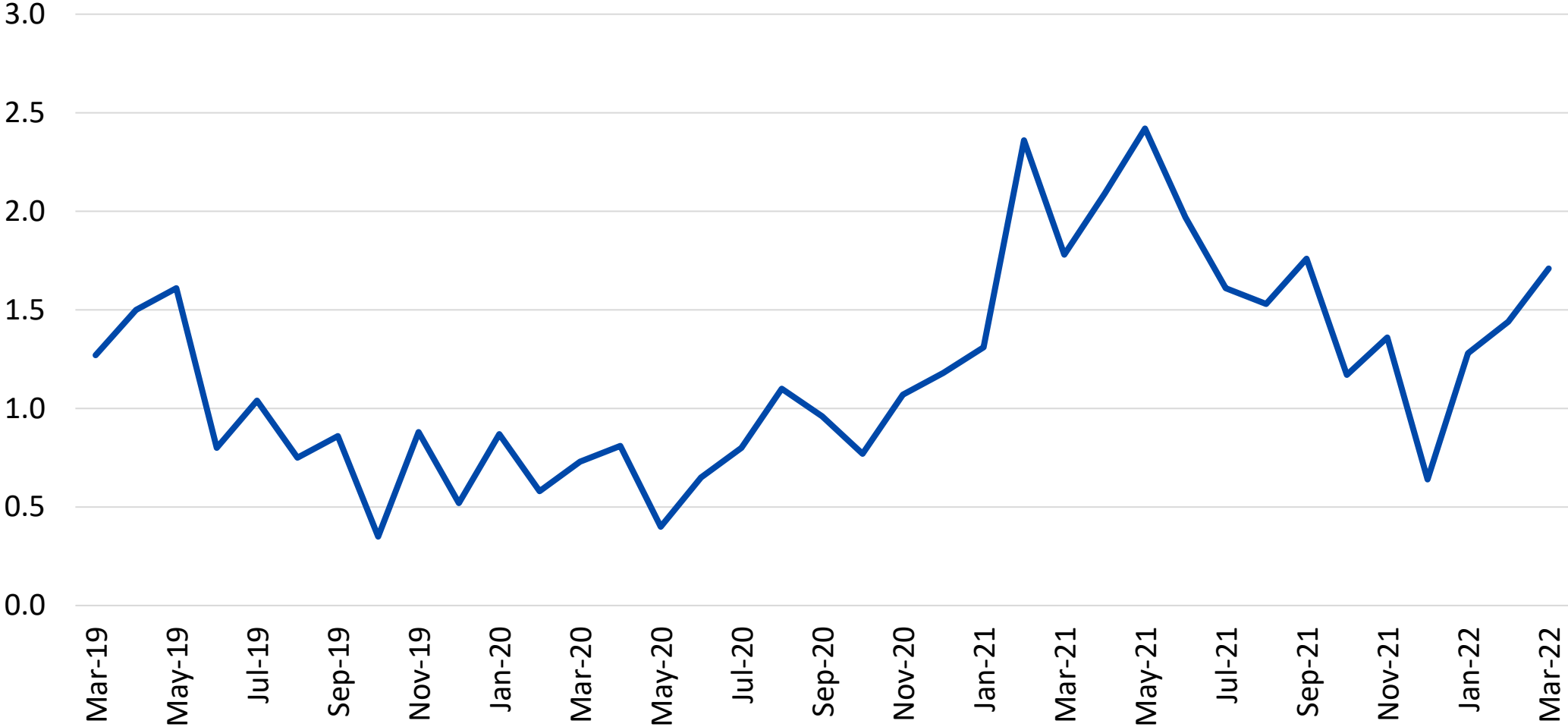
# Weakest Markets Still Forecasted to Have 3%-Plus Rent Growth

| Market            | YoY Rent Growth Year-End 2022 | Occupancy Year-End 2022 | YoY Rent Growth Year-End 2023 | Occupancy Year-End 2023 | Market         | YoY Rent Growth Year-End 2022 | Occupancy Year-End 2022 | YoY Rent Growth Year-End 2023 | Occupancy Year-End 2023 |
|-------------------|-------------------------------|-------------------------|-------------------------------|-------------------------|----------------|-------------------------------|-------------------------|-------------------------------|-------------------------|
| South Bay Area    | 6.4%                          | 95.8%                   | 6.0%                          | 96.3%                   | Albuquerque    | 5.3%                          | 96.3%                   | 5.8%                          | 96.2%                   |
| Omaha             | 6.4%                          | 96.6%                   | 4.4%                          | 96.7%                   | Philadelphia   | 5.3%                          | 96.7%                   | 3.8%                          | 96.6%                   |
| Orange County     | 6.2%                          | 97.1%                   | 3.5%                          | 97.2%                   | <b>Chicago</b> | <b>5.1%</b>                   | <b>95.1%</b>            | <b>3.9%</b>                   | <b>94.9%</b>            |
| Dallas - Ft Worth | 5.9%                          | 95.7%                   | 4.4%                          | 95.7%                   | N. New Jersey  | 5.1%                          | 97.2%                   | 4.9%                          | 97.2%                   |
| <b>New York</b>   | <b>5.9%</b>                   | <b>97.8%</b>            | <b>4.0%</b>                   | <b>98.4%</b>            | Pittsburgh     | 4.7%                          | 95.6%                   | 4.5%                          | 95.7%                   |
| Denver            | 5.8%                          | 95.6%                   | 5.7%                          | 95.8%                   | Oklahoma City  | 4.6%                          | 94.5%                   | 3.7%                          | 94.7%                   |
| Houston           | 5.7%                          | 93.6%                   | 3.9%                          | 93.5%                   | Washington DC  | 4.0%                          | 95.8%                   | 3.8%                          | 96.1%                   |
| Kansas City       | 5.7%                          | 95.5%                   | 3.9%                          | 95.7%                   | St Louis       | 3.9%                          | 95.2%                   | 2.9%                          | 95.1%                   |
| Baltimore         | 5.4%                          | 96.0%                   | 4.1%                          | 95.7%                   | Twin Cities    | 3.5%                          | 96.4%                   | 3.3%                          | 97.0%                   |
| <b>Boston</b>     | <b>5.4%</b>                   | <b>96.5%</b>            | <b>4.4%</b>                   | <b>97.2%</b>            |                |                               |                         |                               |                         |
| Long Island       | 5.4%                          | 96.8%                   | 3.4%                          | 96.3%                   |                |                               |                         |                               |                         |



# Multifamily Absorption Continued to Increase During First Quarter

## Net Absorption-to-Completions Ratio



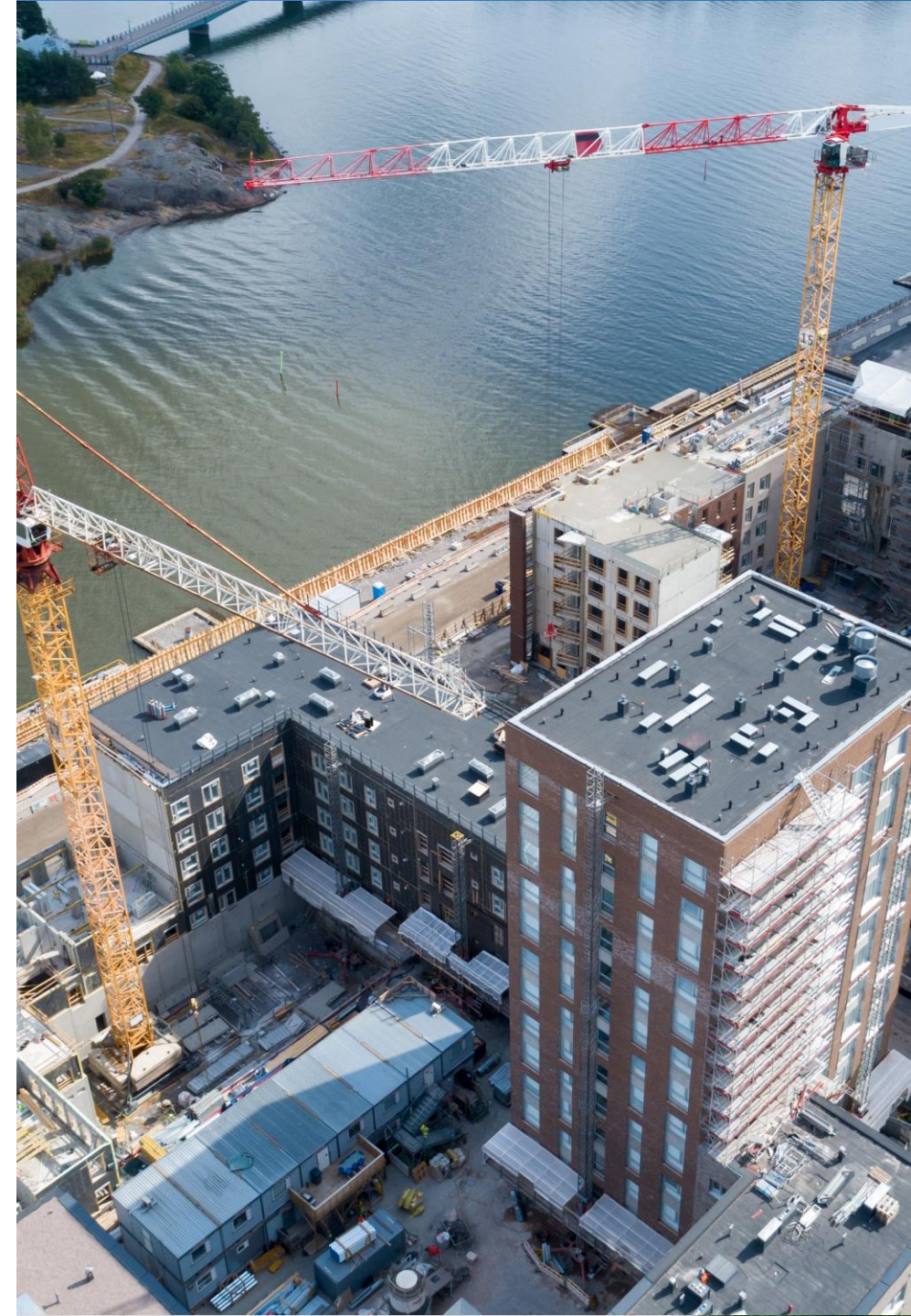
Source: Yardi Matrix

## Diverse Set of Markets Have the Highest Absorption-to-Completions Ratio

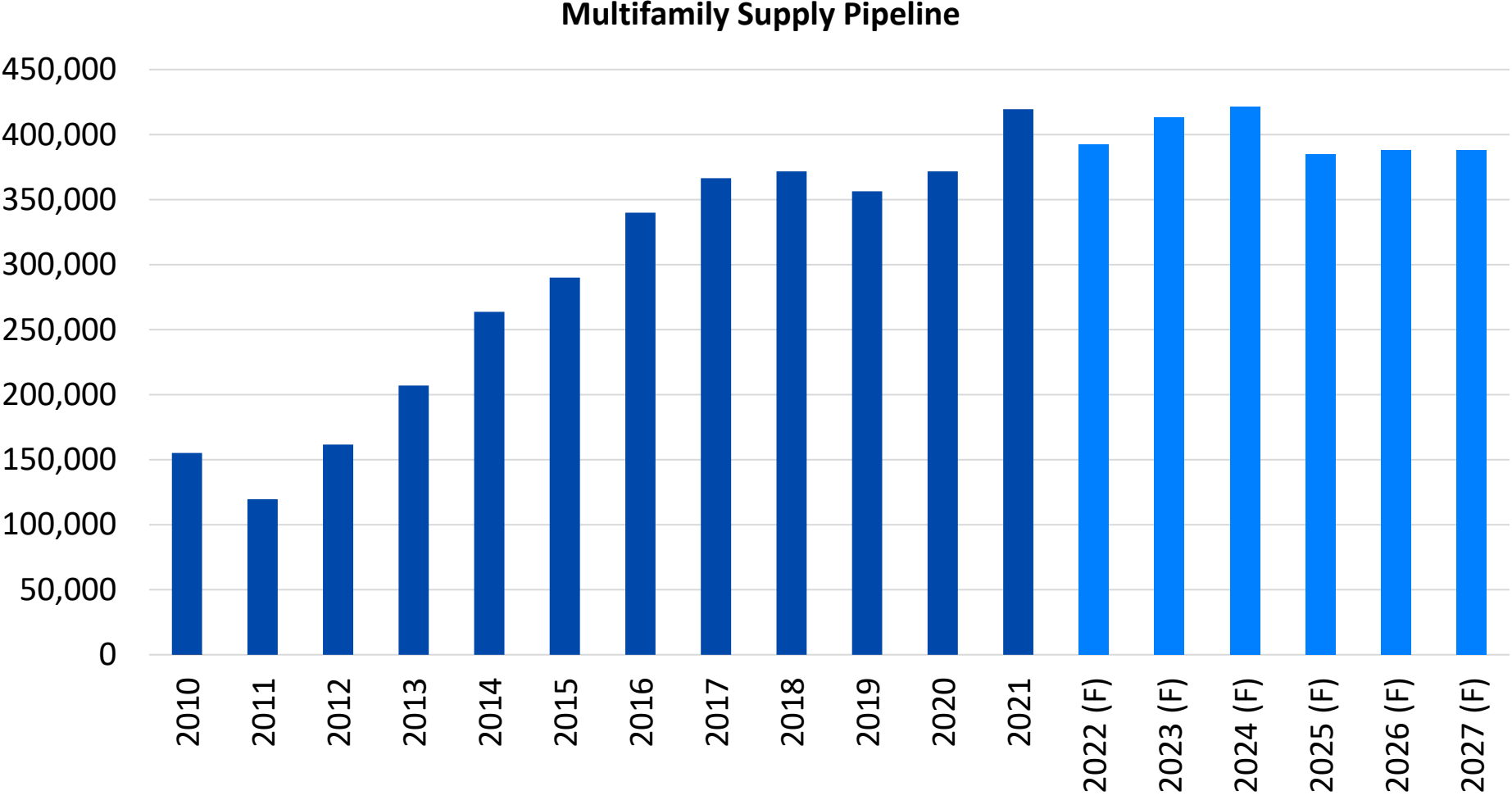
| Market                 | Net Absorption Q1 2021 | Absorption to Completions Ratio Q1 2021 | Net Absorption Q1 2022 | Absorption to Completions Ratio Q1 2022 | Change in Absorption to Completions Ratio Q1 2021 – Q1 2022 |
|------------------------|------------------------|---|------------------------|---|---|
| Columbus               | 1,940                  | 1.5                                     | 556                    | 7.1                                     | 5.6   |
| Savannah - Hilton Head | 817                    | 2.8                                     | 1,030                  | 6.3                                     | 3.5   |
| Las Vegas              | 584                    | 0.6                                     | 762                    | 3.5                                     | 3.0   |
| Philadelphia           | 2,833                  | 3.8                                     | 1,794                  | 6.2                                     | 2.5   |
| North Central Florida  | 733                    | 0.9                                     | 868                    | 2.8                                     | 1.9   |
| Salt Lake City         | 1,846                  | 2.9                                     | 1,640                  | 4.7                                     | 1.8   |
| Grand Rapids           | -30                    | -0.1                                    | 341                    | 1.3                                     | 1.4   |
| SW Florida Coast       | 1,866                  | 1.6                                     | 1,713                  | 2.7                                     | 1.0   |
| Nashville              | 1,081                  | 0.7                                     | 1,896                  | 1.6                                     | 0.9   |
| Tampa                  | 2,450                  | 1.2                                     | 1,942                  | 2.0                                     | 0.9   |
| Birmingham             | 229                    | 0.7                                     | 315                    | 1.5                                     | 0.8   |
| Raleigh                | 1,610                  | 0.6                                     | 1,845                  | 1.2                                     | 0.6   |
| St Louis               | 895                    | 2.2                                     | 235                    | 2.8                                     | 0.5   |
| Tulsa                  | 170                    | 2.3                                     | 201                    | 2.8                                     | 0.5   |
| Austin                 | 3,514                  | 1.4                                     | 3,761                  | 1.8                                     | 0.4   |

# Takeaways from Our Q2 2022 Multifamily Supply Forecast

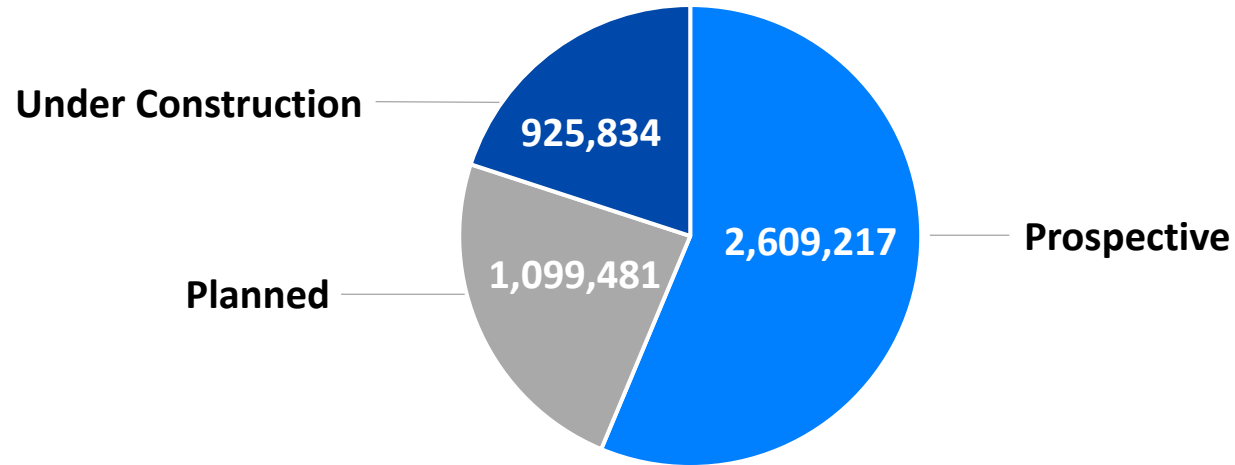
- Multifamily development activity continues at an elevated level
- Lengthening completion times are tapering the pace of deliveries
- Despite longer construction timeframes, full year 2022 deliveries are forecast to total approx. 392,000 units, a 3.7% increase over the Q1 forecast
- Multifamily development remains elevated, with March 2022 completions above 500,000 for the first time
- Rent growth and economic expansion and a still-favorable financing environment suggest multi-family construction starts will remain robust, supporting completions through 2027 at or above 2.3% of inventory



# New Multifamily Supply is Expected to Stabilize, But Will Remain Higher Than Pre-Pandemic Years



# New Supply Pipeline: Where is New Supply Concentrated?



| Top 10 Markets | Units  | UC as a % of Existing Stock |
|----------------|--------|-----------------------------|
| Huntsville     | 6,853  | 16.9%                       |
| Boise          | 4,015  | 15.2%                       |
| Austin         | 41,415 | 14.5%                       |
| Madison        | 7,530  | 13.8%                       |
| Miami          | 20,656 | 12.8%                       |
| Pensacola      | 4,734  | 12.6%                       |
| Nashville      | 18,878 | 12.3%                       |
| Salt Lake City | 14,089 | 12.0%                       |
| Montana        | 1,854  | 11.8%                       |
| NW Arkansas    | 4,612  | 11.8%                       |

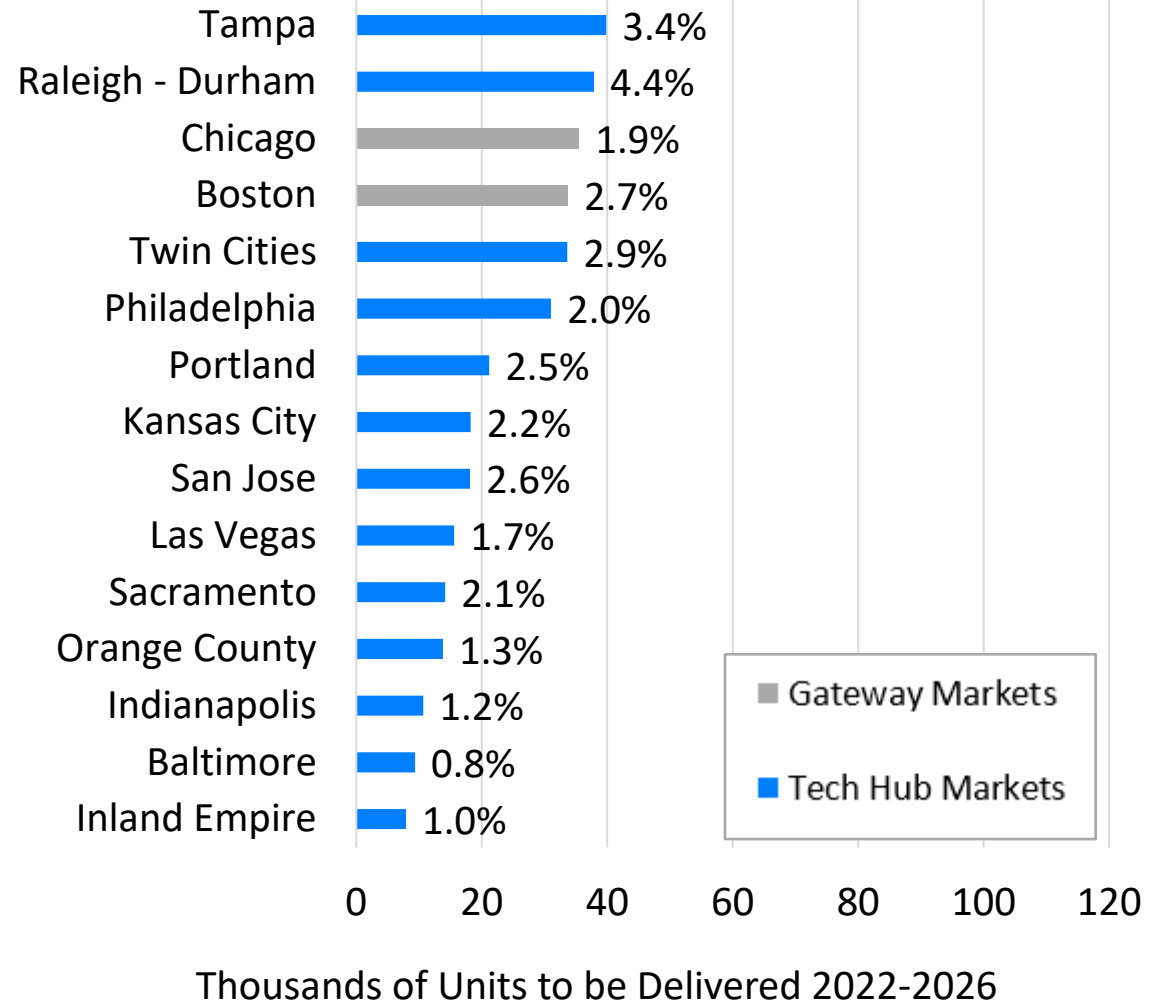
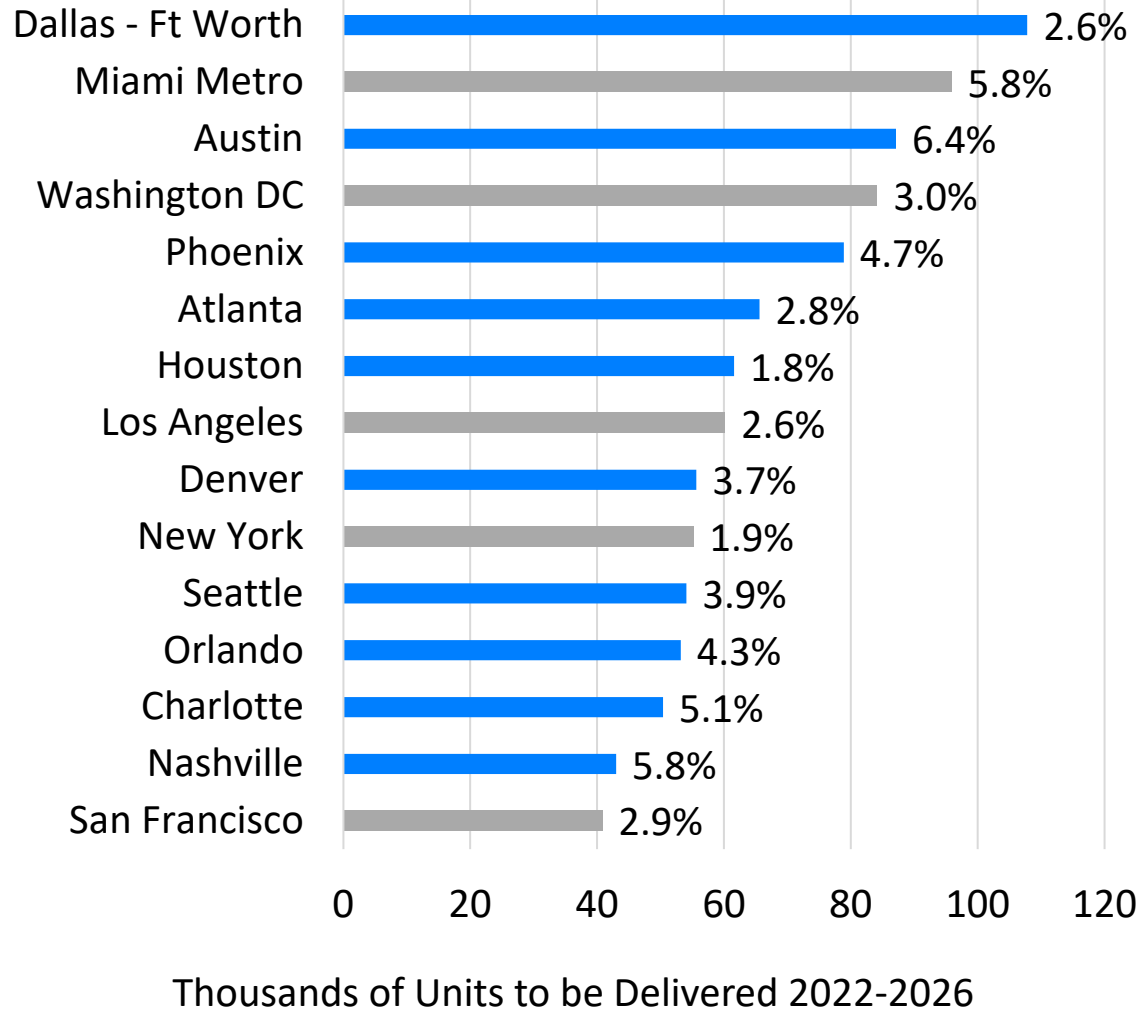
| Top 10 Markets   | Units  | Planned as a % of Existing Stock |
|------------------|--------|----------------------------------|
| Fort Lauderdale  | 27,021 | 24.3%                            |
| Portland, ME     | 3,375  | 23.4%                            |
| Miami            | 34,871 | 23.2%                            |
| Chicago - Urban  | 40,870 | 21.3%                            |
| Colorado Springs | 7,570  | 17.6%                            |
| Northern NJ      | 43,037 | 17.6%                            |
| Asheville        | 3,311  | 16.5%                            |
| LA Metro         | 31,368 | 15.8%                            |
| Boise            | 3,751  | 15.8%                            |
| White Plains     | 11,424 | 15.3%                            |

| Top 10 Markets     | Units   | Prospective as a % of Existing Stock |
|--------------------|---------|--------------------------------------|
| Miami              | 104,834 | 69.9%                                |
| Boise              | 14,032  | 59.1%                                |
| Wilmington         | 11,697  | 50.2%                                |
| SW Florida Coast   | 36,110  | 44.3%                                |
| San Fran Peninsula | 54,707  | 42.0%                                |
| Raleigh - Durham   | 63,759  | 37.2%                                |
| Pensacola          | 13,067  | 35.4%                                |
| Orlando            | 86,880  | 35.3%                                |
| Nashville          | 47,276  | 31.6%                                |
| South Bay Area     | 43,043  | 31.4%                                |



# The Few Markets with Multifamily Supply >5%/Yr Also Have Lot of Migration

Forecasted New Unit Deliveries 2022-2026 - Percentages Denote Avg Annual Growth as a % of Stock



\*Gateway markets have gray bars | Source: Yardi Matrix

# SINGLE-FAMILY RENTALS IN BUILD-TO-RENT COMMUNITIES

---

# National Housing Snapshot

|   |       |               |
|---|-------|---------------|
| Total U.S. Housing Units  | 142.5 | MILLION UNITS |
| Total Occupied Households   | 127.4 | MILLION UNITS |
| Renter Occupied Households<br><i>~20M Professionally Managed Multifamily</i>                  | 44.0  | MILLION UNITS |
| SFRs<br><i>~500K Institutional Owned SFR</i><br><i>~135K SFR in Built-to-Rent Communities</i> | 17.0  | MILLION UNITS |

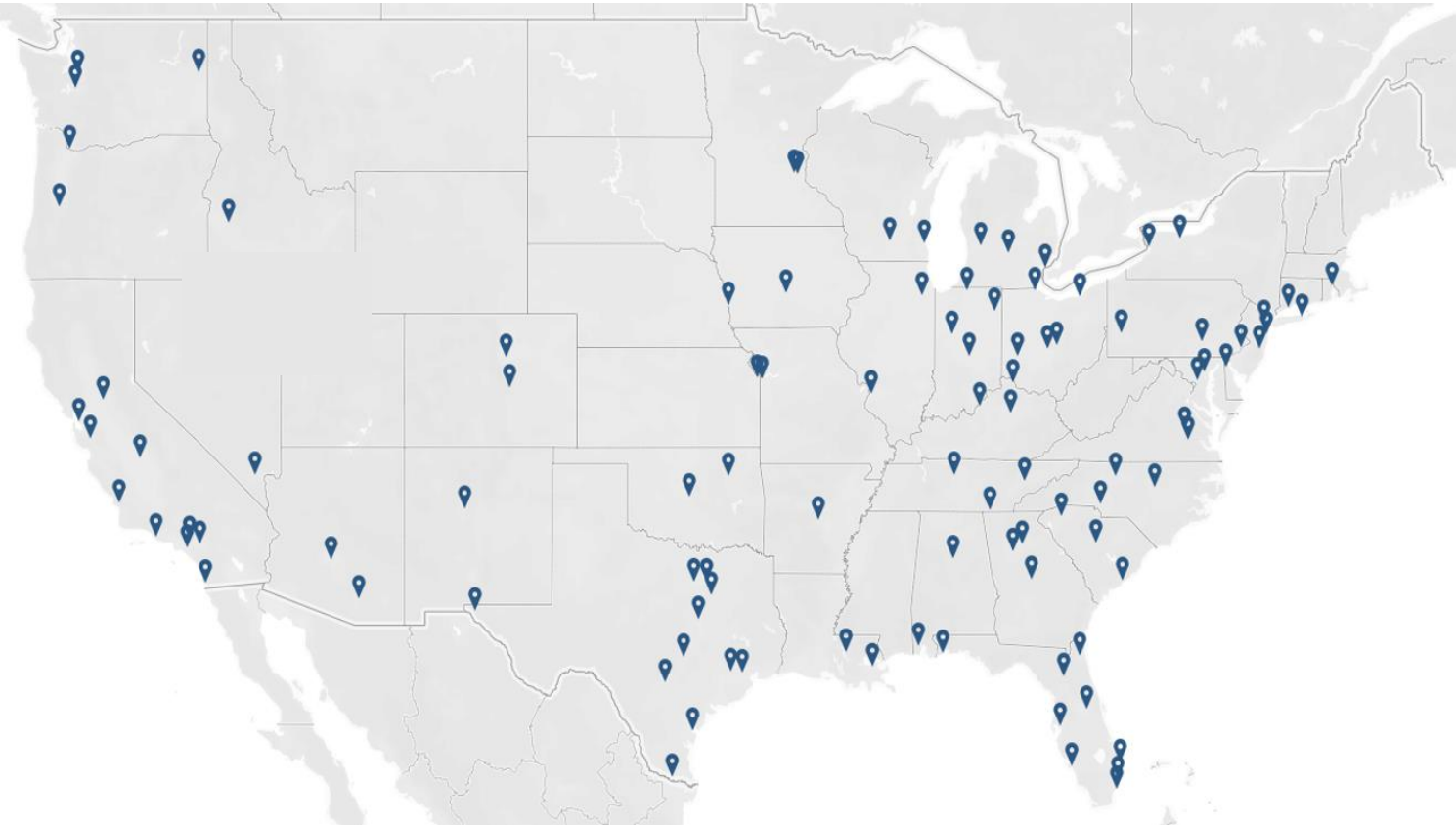
# Over \$50 Billion of Capital Flooded the SFR Sector Since 2020 and There is Still Another \$30 Billion of Capital Waiting to be Invested, but Meeting Resistance

## SFR & BTR ANNOUNCEMENTS IN 2022:

| Date    | Action                                   | Companies  | Value           |
|---------|--|--|-----------------|
| Jan-22  | SFR Partnership                          | Heitman, Sylvan Road                                     | \$640,000,000   |
| Jan-22  | Joint Venture                            | Harrison Street, CORE Spaces                             | \$1,500,000,000 |
| Jan-22  | Add 3,500 New Homes                      | Transcendent Investment Management, Electra America      | \$1,250,000,000 |
| Jan-22  | Choice Lease Program to Reduce Rents     | Home Partners of America, Blackstone                     | \$1,000,000,000 |
| Jan-22  | Joint Venture                            | Pretium, Onyx East                                       | \$600,000,000   |
| Jan-22  | Debt Facility                            | The Promise Homes Company                                | \$200,000,000   |
| Feb-22  | Launch Initial BFR Development in Venice | Coastal Ridge Real Estate, Halstatt Real Estate Partners | N/A             |
| Feb-22  | Expansion of 1,000+ BTR Units Across TX  | Wan Bridge, Land Tejas                                   | N/A             |
| Feb-22  | SFR Partnership                          | Advenir Oakley Capital, Oakley Group                     | N/A             |
| Mar-22  | Joint Venture                            | InvitationHomes, Rockpoint Group                         | \$300,000,000   |
| Mar-22  | Joint Venture                            | Magnolia Capital, Principal Real Estate Investors        | N/A             |
| Apr-22  | Investment                               | Monroe Capital, Second Avenue Group                      | \$250,000,000   |
| Apr-22  | Investment                               | BLG, Second Avenue Group                                 | \$150,000,000   |
| Apr-200 | Investment                               | Waterton, Second Avenue Group                            | \$500,000,000   |

# Single-Family Rentals in Build-to-Rent Communities Are *now a Part of the Yardi Matrix Data Service!*

### Yardi Matrix Single-Family Rental Coverage Map



| Status             | Properties   | Units          |
|--------------------|--------------|----------------|
| Completed          | 720          | 94,997         |
| Under Construction | 172          | 24,793         |
| Planned            | 76           | 12,937         |
| Prospective        | 74           | 14,721         |
| <b>TOTALS</b>      | <b>1,042</b> | <b>147,448</b> |

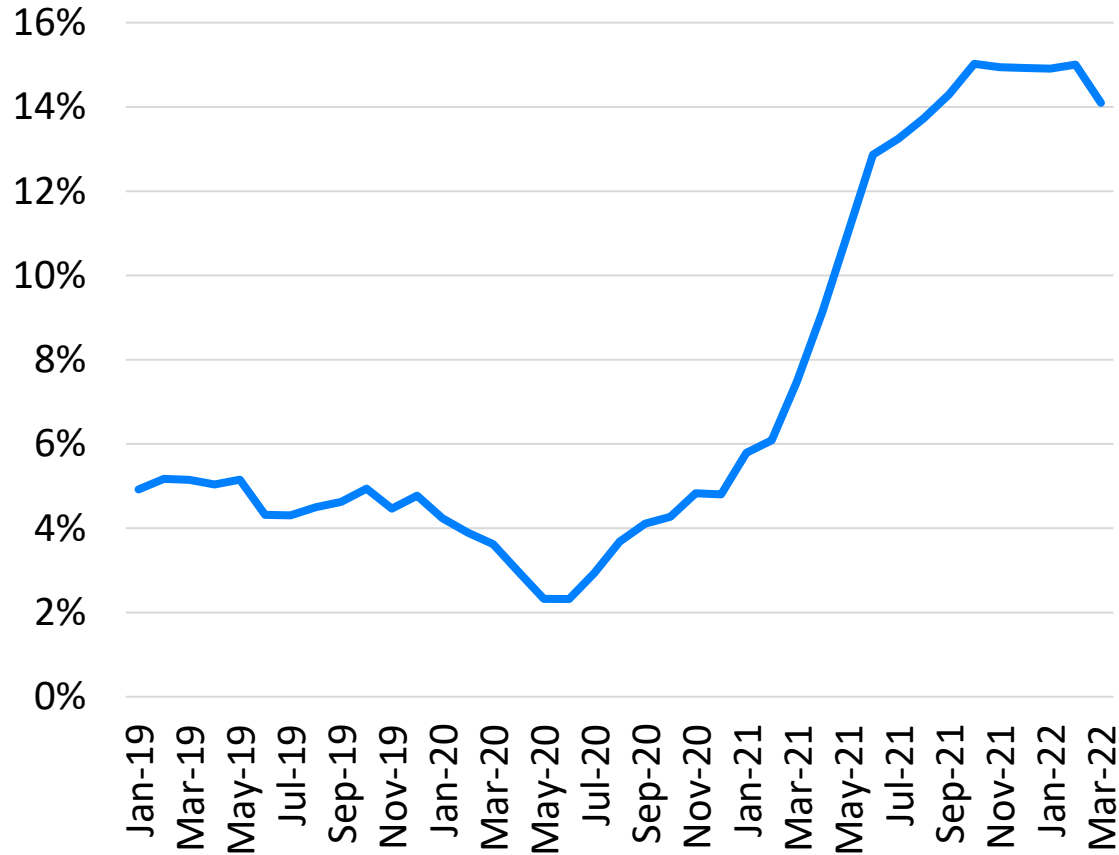


\*Yardi Matrix coverage include single-family rentals and built-to-rent over 50 units. Complete explanation of our definition is available upon request

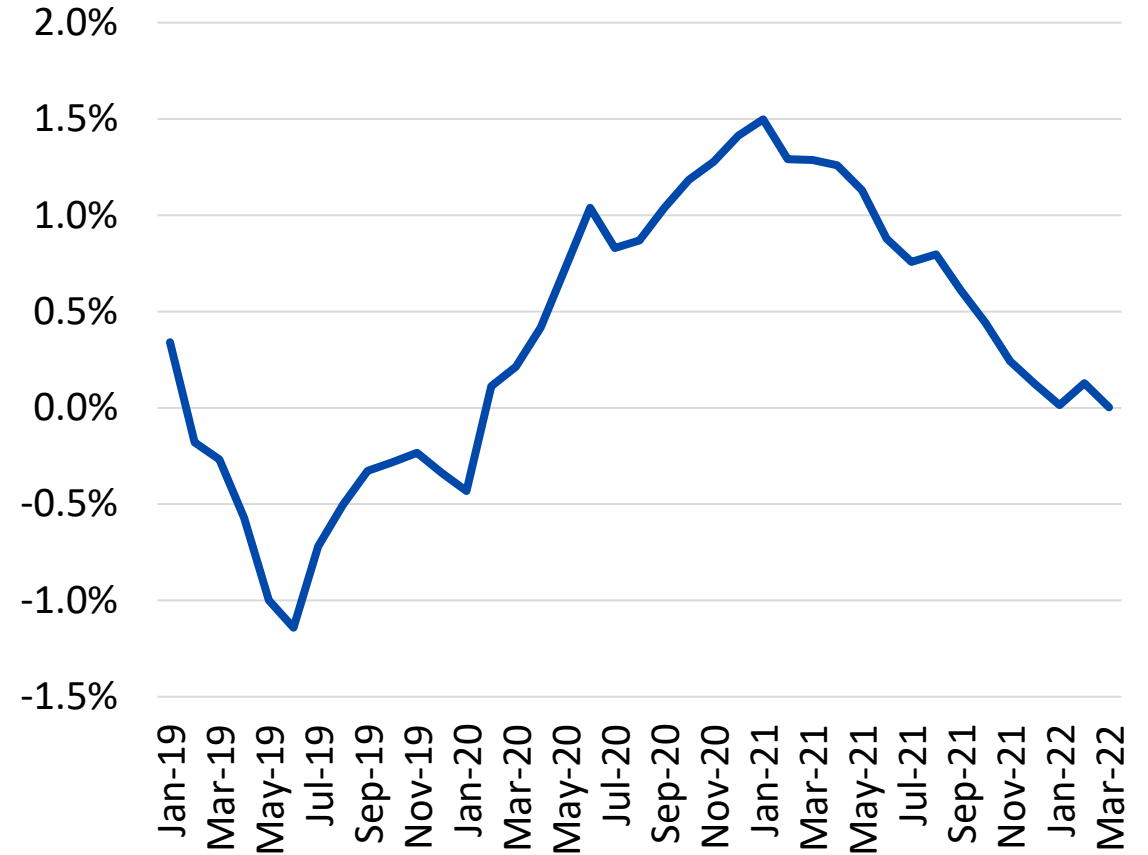
Source: Yardi Matrix

# Single-Family Rental Fundamentals Are Strong

## Year-over-Year Rent Growth

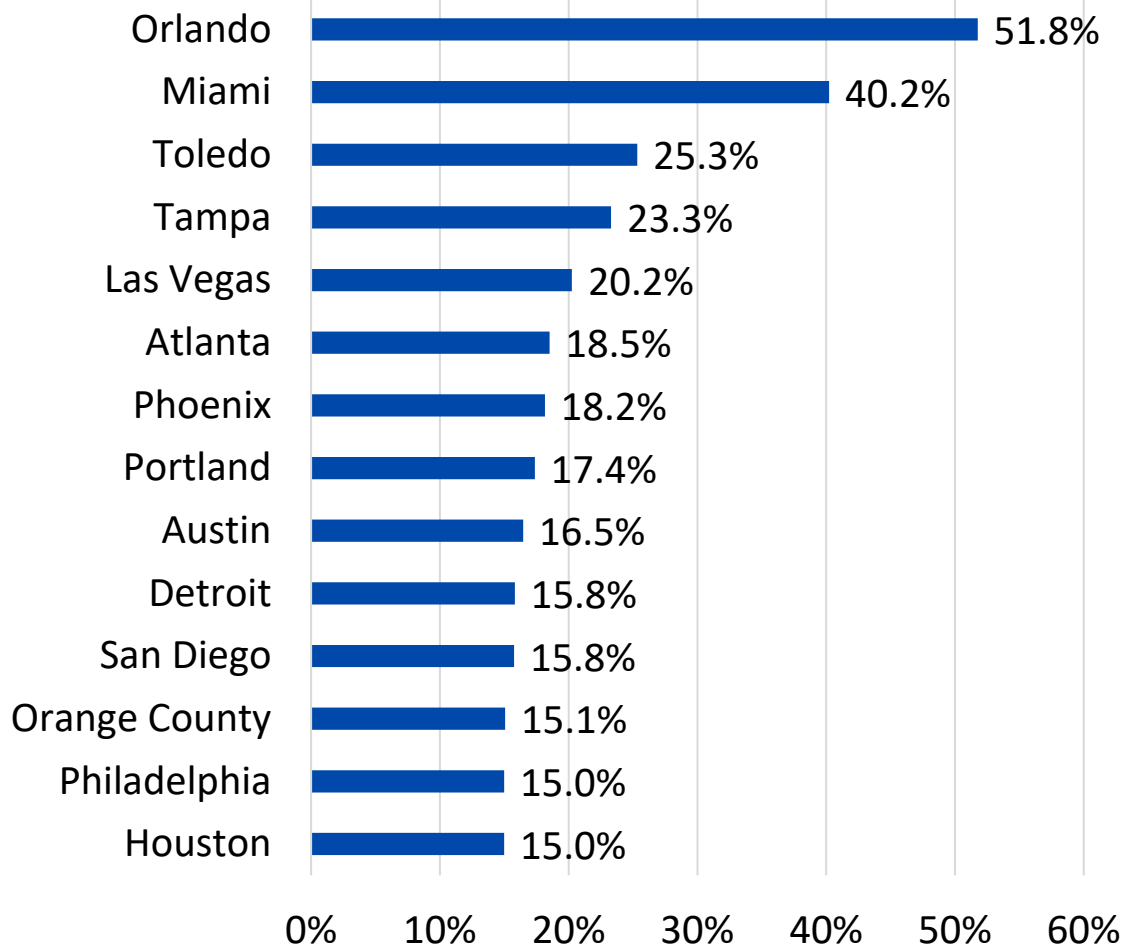


## Year-over-Year Occupancy Growth

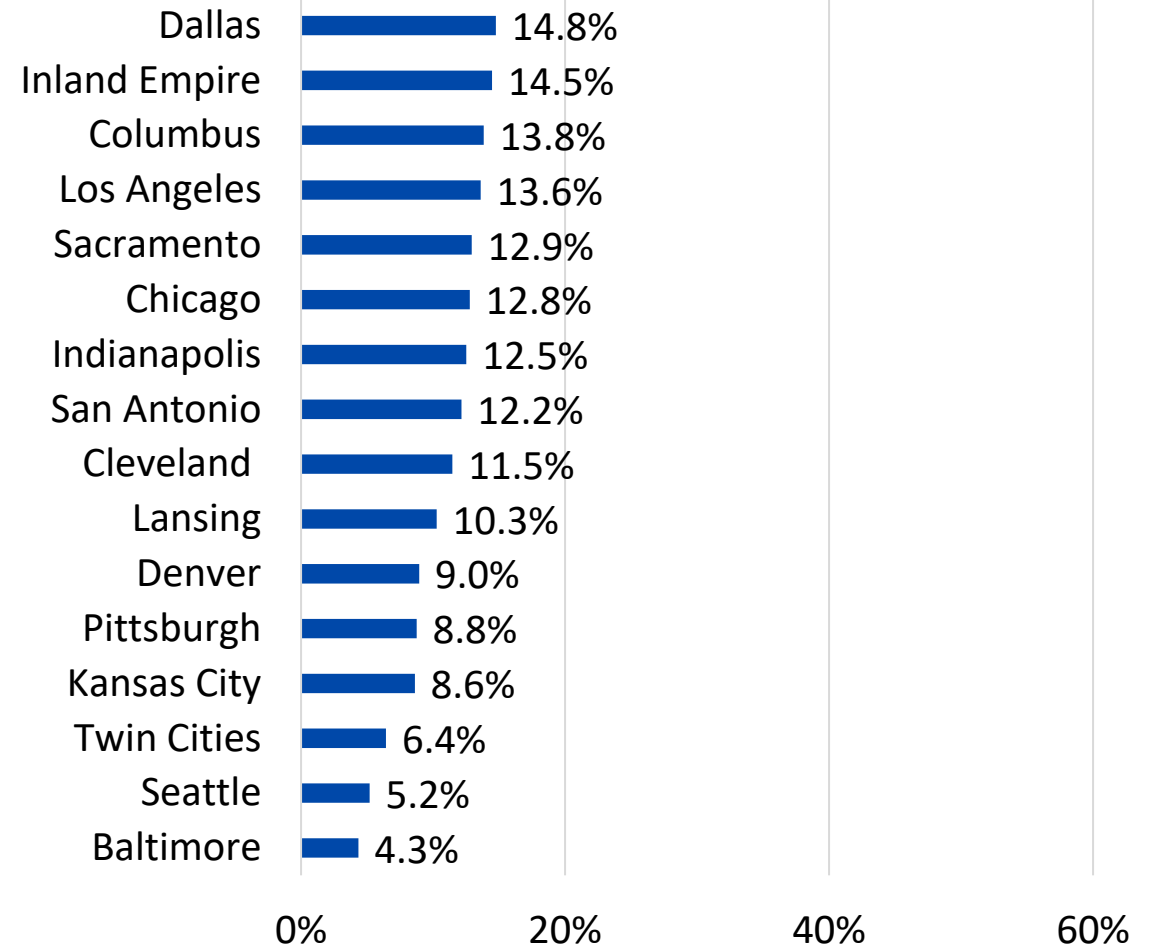


# Single-Family Rent Growth is Solid in All Major Markets

## March Year-over-Year Rent Growth

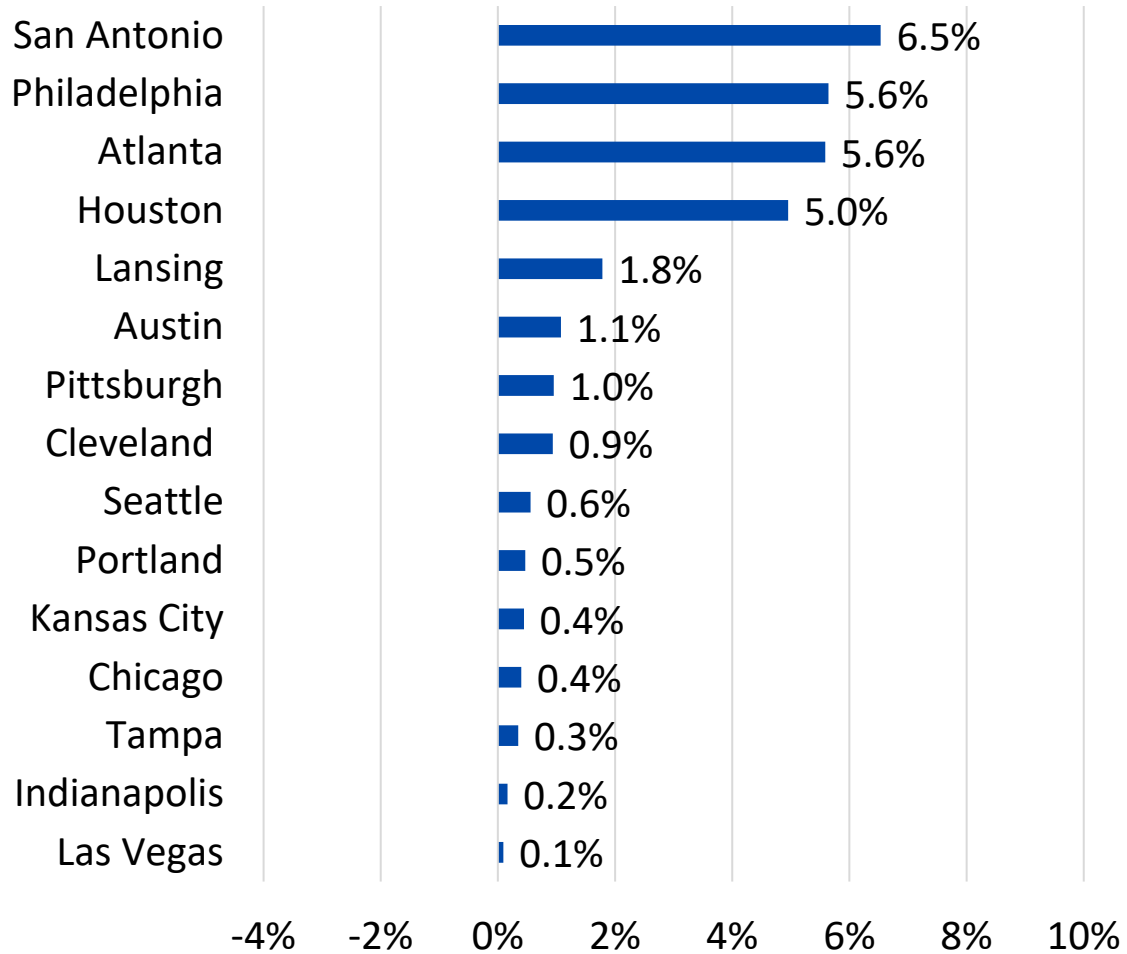


## March Year-over-Year Rent Growth

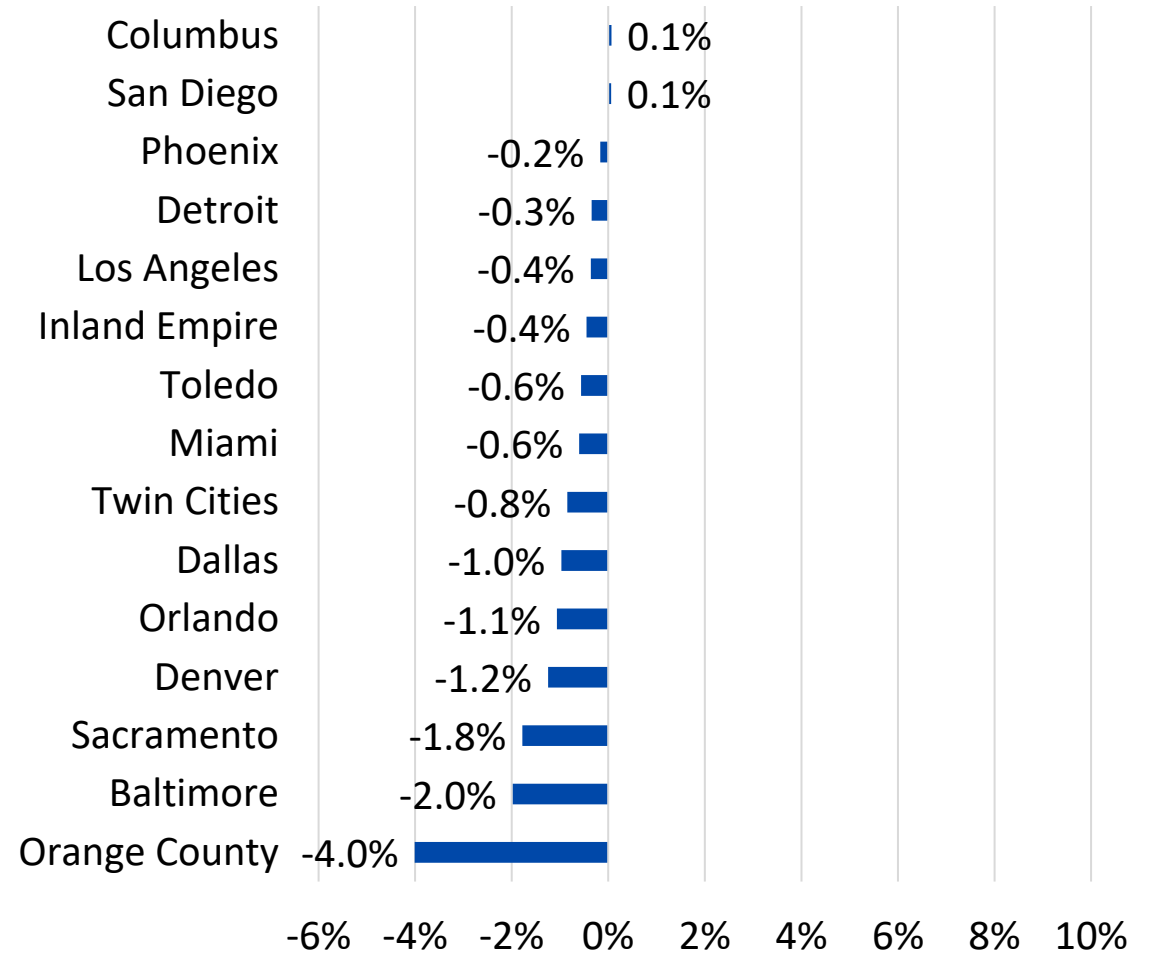


# However; There is More Disparity in Occupancy

## March Year-over-Year Occupancy Growth



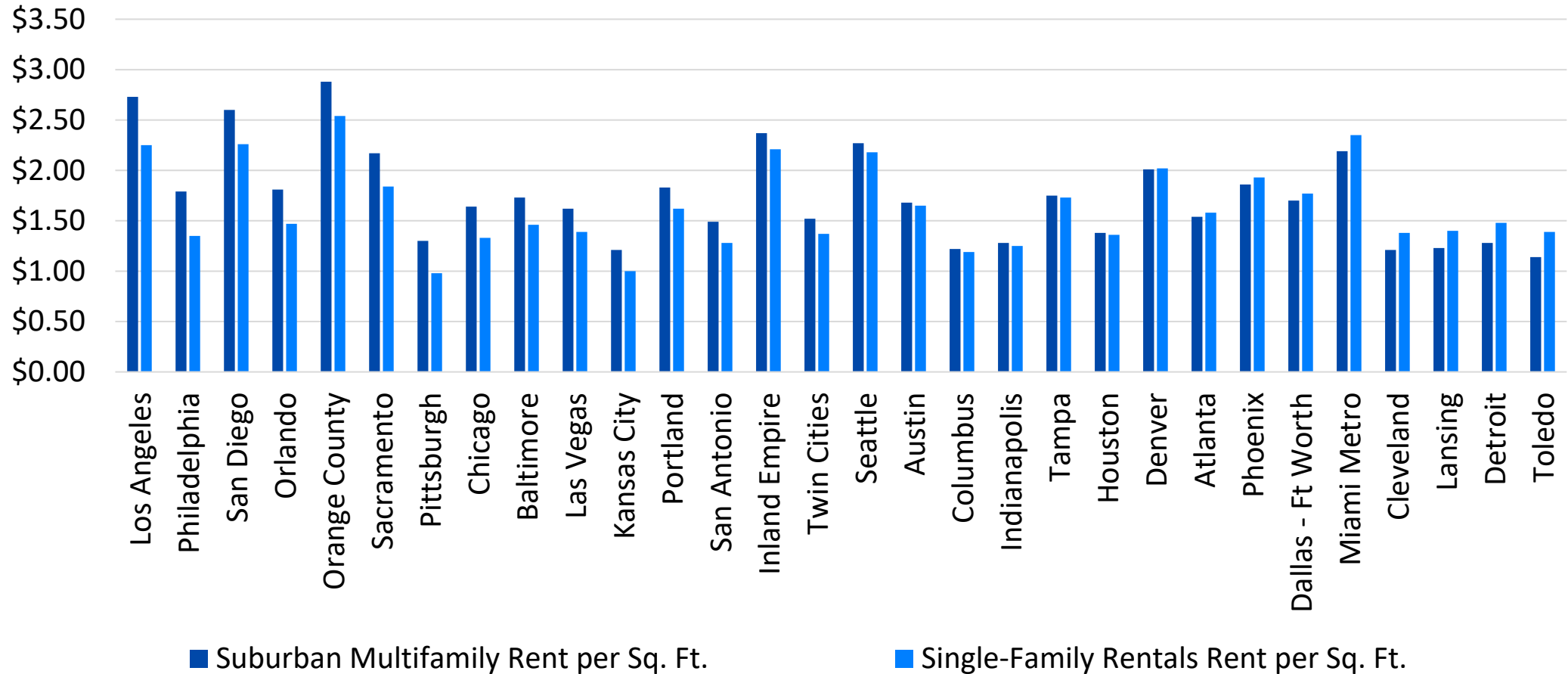
## March Year-over-Year Occupancy Growth





# Rents per Sq. Ft. Are Higher for Suburban Multifamily Rentals Than Single-Family Rentals in Most Markets

March 2022 Rent per Sq. Ft.  
Suburban Multifamily vs. Single-Family Rentals



# New Single-Family Rental Supply Pipeline: Where is New Supply Concentrated?

| Status                                     | Properties   | Units         |
|--|--------------|---------------|
| Under Construction                         | 172          | 24,793        |
| Planned                                    | 76           | 12,937        |
| Prospective                                | 74           | 14,721        |
| <b>TOTAL NEW SUPPLY</b>                    | <b>322</b>   | <b>52,451</b> |
| Completed                                  | 720          | 94,997        |
| <b>NEW SUPPLY AS A % OF EXISTING STOCK</b> | <b>44.7%</b> | <b>55.2%</b>  |

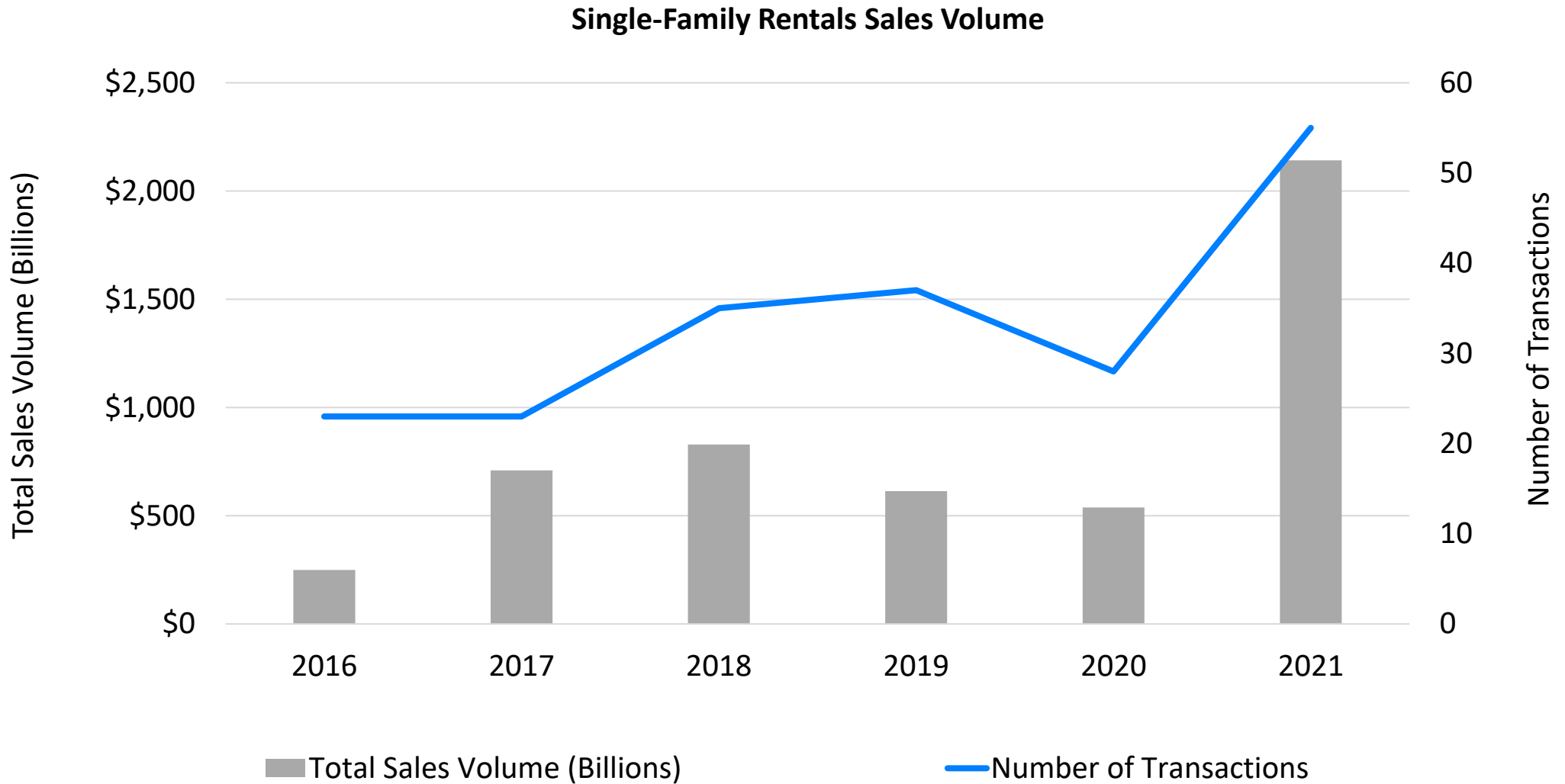
| Top 10 Markets     | Units | UC as a % of Existing Stock |
|--------------------|-------|-----------------------------|
| Chattanooga        | 252   | 393.8%                      |
| Raleigh - Durham   | 673   | 382.4%                      |
| SW Florida Coast   | 720   | 313.0%                      |
| Colorado Springs   | 168   | 233.3%                      |
| Charlotte          | 1,182 | 191.9%                      |
| Atlanta - Suburban | 848   | 176.7%                      |
| Winston-Salem      | 190   | 158.3%                      |
| Pensacola          | 610   | 145.6%                      |
| Tampa              | 989   | 127.6%                      |
| Huntsville         | 222   | 124.7%                      |

| Top 10 Markets     | Units | Planned as a % of Existing Stock |
|--------------------|-------|----------------------------------|
| Orlando            | 965   | 288.1%                           |
| SW Florida Coast   | 424   | 184.3%                           |
| Birmingham         | 359   | 144.8%                           |
| Raleigh - Durham   | 254   | 144.3%                           |
| Huntsville         | 236   | 132.6%                           |
| New Orleans        | 396   | 119.3%                           |
| Richmond           | 320   | 89.6%                            |
| Atlanta - Suburban | 390   | 81.3%                            |
| Albany             | 260   | 74.9%                            |
| Charlotte          | 434   | 70.5%                            |

| Top 10 Markets       | Units | Prospective as a % of Existing Stock |
|----------------------|-------|--------------------------------------|
| Bay Area - East Bay  | 752   | 1,212.9%                             |
| Raleigh - Durham     | 1,379 | 783.5%                               |
| SW Florida Coast     | 612   | 266.1%                               |
| Bay Area - South Bay | 114   | 228.0%                               |
| Omaha                | 108   | 216.0%                               |
| Charlotte            | 1078  | 175.0%                               |
| Boise                | 252   | 115.1%                               |
| Athens               | 311   | 109.5%                               |
| San Antonio          | 974   | 95.5%                                |
| Atlanta - Suburban   | 451   | 94.0%                                |



# Like Multifamily, Single-Family Rental Sales Volume Surged Last Year



# Yardi Matrix House View – May 2022

## **MACROECONOMIC UPDATE**

- The recovery out of the pandemic has been rapid (V-shaped)
- There has been a lot of disruption as a result in labor, goods and money supply
- Inflation is soaring, and the Fed has been too slow to react, so now they are playing catch up
- The economy is at an inflection point as a result

## **MULTIFAMILY INDUSTRY**

- Inflation, geopolitics and the changing nature of work have all impacted housing demand
- There are two enduring themes we continue to see: growth in e-commerce and work-from-anywhere
- Multifamily fundamentals are great, but the capital markets are going crazy since they are quicker to respond to disruptions
- The amplified changes in demographics will continue to benefit the multifamily industry, but less so

## **OUTLOOK**

- We expect the economy and multifamily industry to continue their stellar growth, just at a more moderate pace
- It'll be a bumpy ride for the next couple years until the next recession hits, which we are expecting in 2024-2025
- Amid all the noise, the key to success will still be thoughtful market selection



THANK YOU

Feel free to contact me with any questions

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