

Massachusetts Economic Growth and Challenges in the Age of COVID-19

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Massachusetts at a Glance

3.3%

Unemployment Rate
Dec 2022
(21st lowest in the nation)

6.3%

Unemployment Rate (U-6)
2022
(24th lowest in the nation)

7.4%

Population Growth
2010-2020

4.8%

Job Growth
2021-2022

17.6%

Foreign Born Residents
2021
(7th highest in the nation)

10.4%

Below Poverty Rate
2021
(9th lowest in the nation)

39.9

Median Age
2021
(17th oldest in the nation)

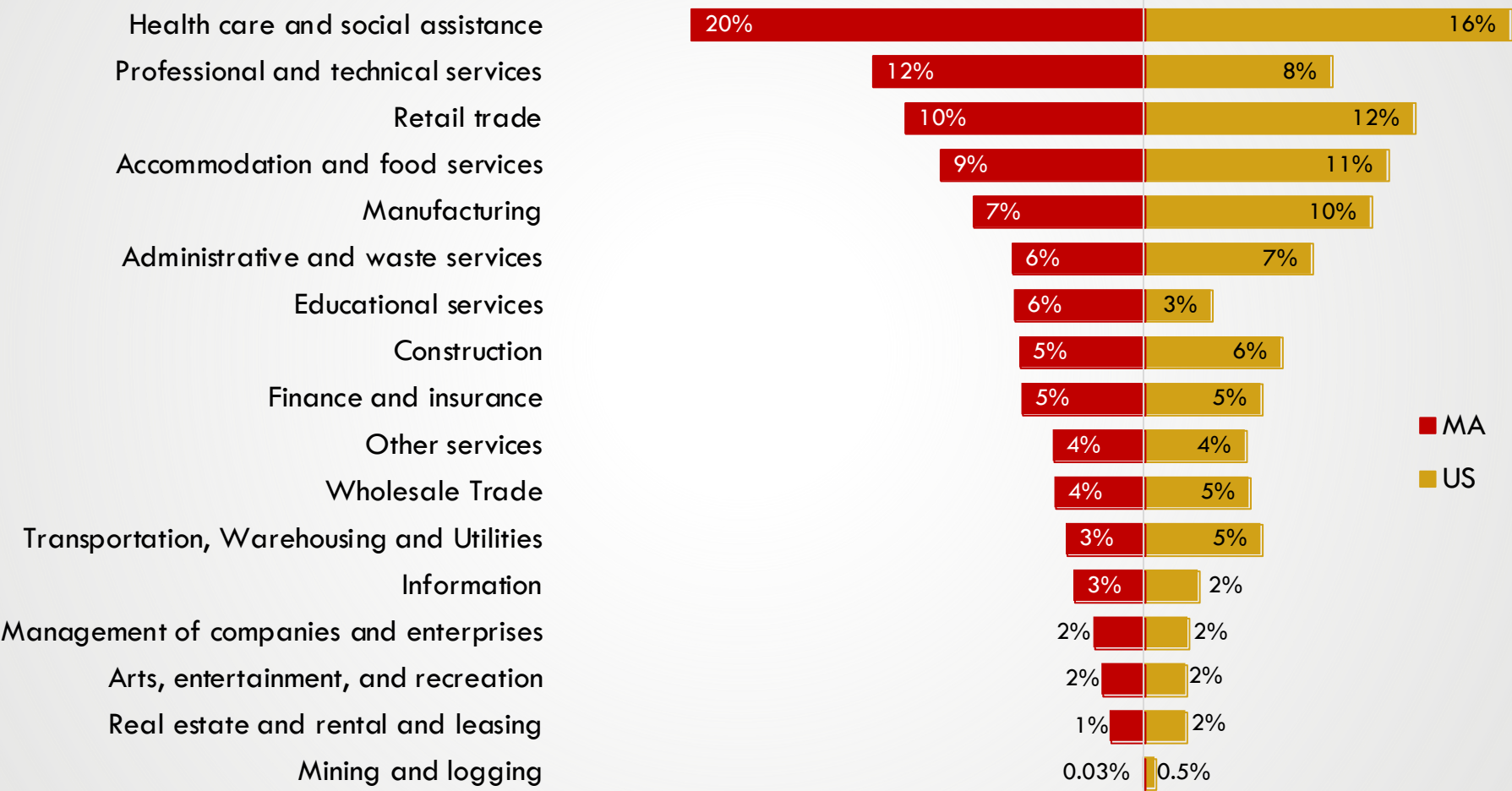
46.6%

Have a College Degree
2021
(Highest in the nation)

Sources: Massachusetts Executive Office of Labor and Workforce Development, Local Area Unemployment (LAU) Statistics; Bureau of Labor Statistics; U.S. Census Bureau American Community Survey 2021, 1 Year Estimates; UMass Donahue Institute MassDOT Vintage 2022 Population Projections. November 2022. (UMDI-DOT V2022).

MA is competitive in health care; professional services, and education compared to the US overall

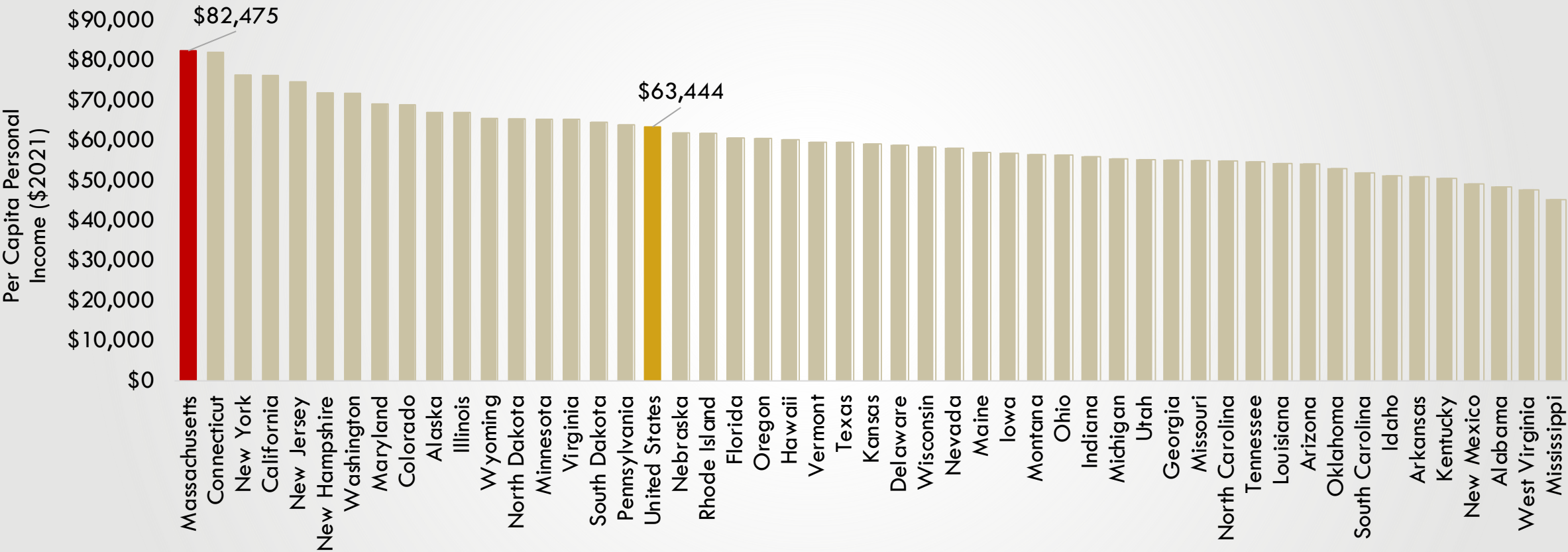
Industry Mix for Massachusetts and the United States, 2022 (Seasonally adjusted)



Source: Bureau of Labor Statistics Current Employment Statistics; UMDI analysis

Massachusetts per capita income reached \$82,475 in 2021 — 30% higher than the national average

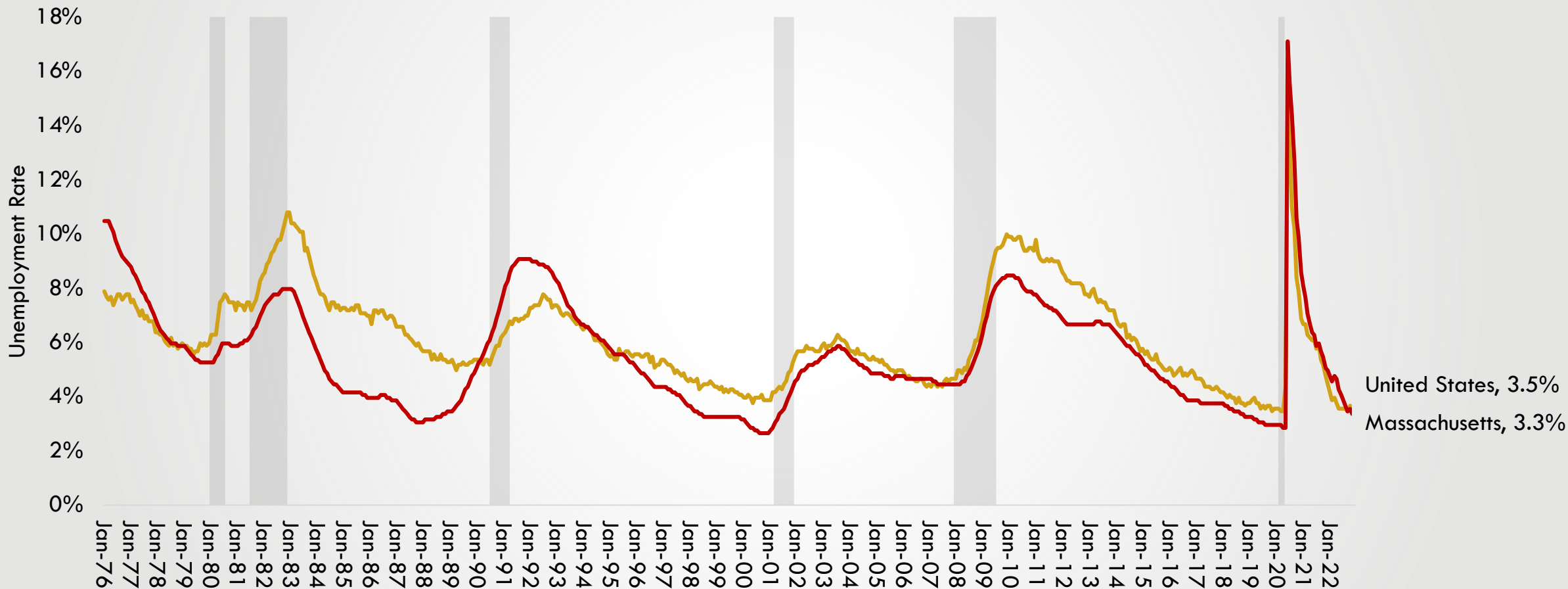
Per capita income by state, 2021



Source: U.S. Bureau of Economic Analysis (BEA), SAINCI Personal Income Summary: Personal Income, Population, Per Capita Personal Income; UMDI analysis

In the spring of 2020, unemployment reached historic highs and has since returned to pre-pandemic lows

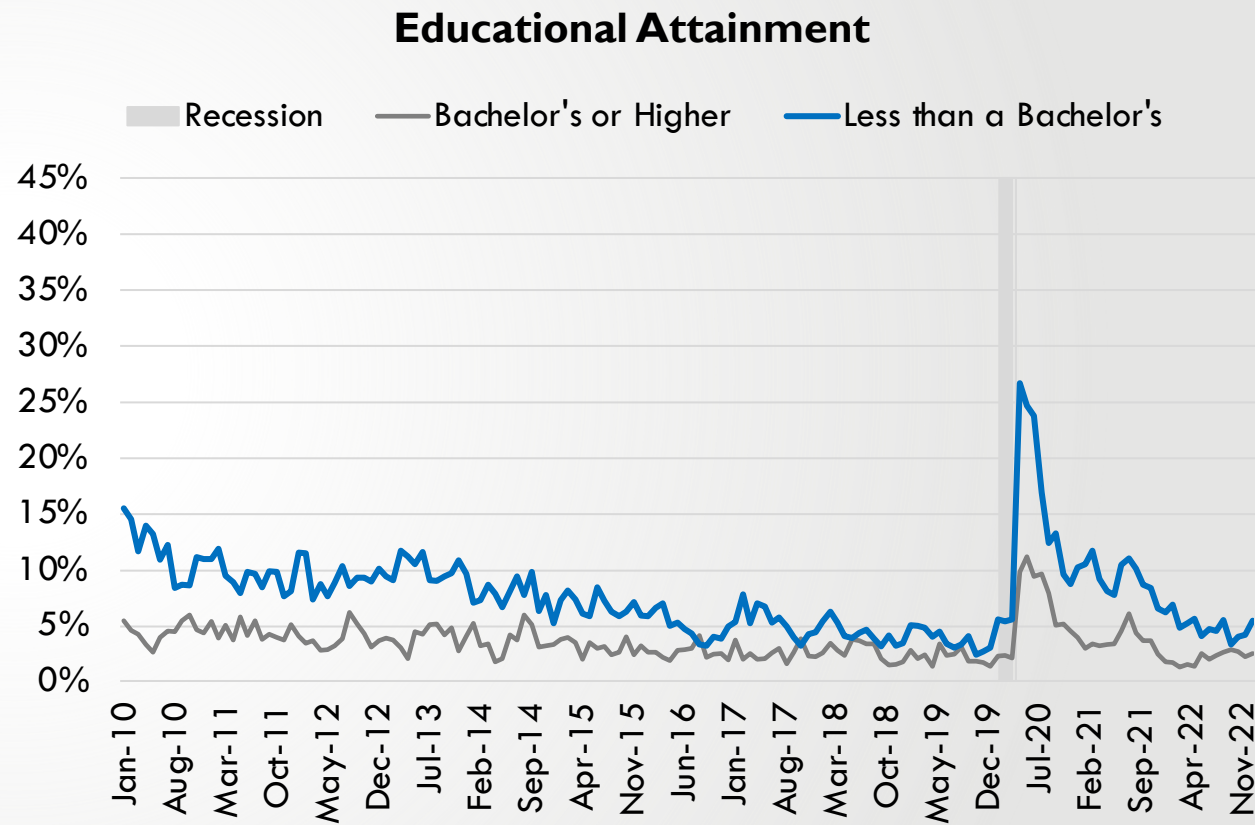
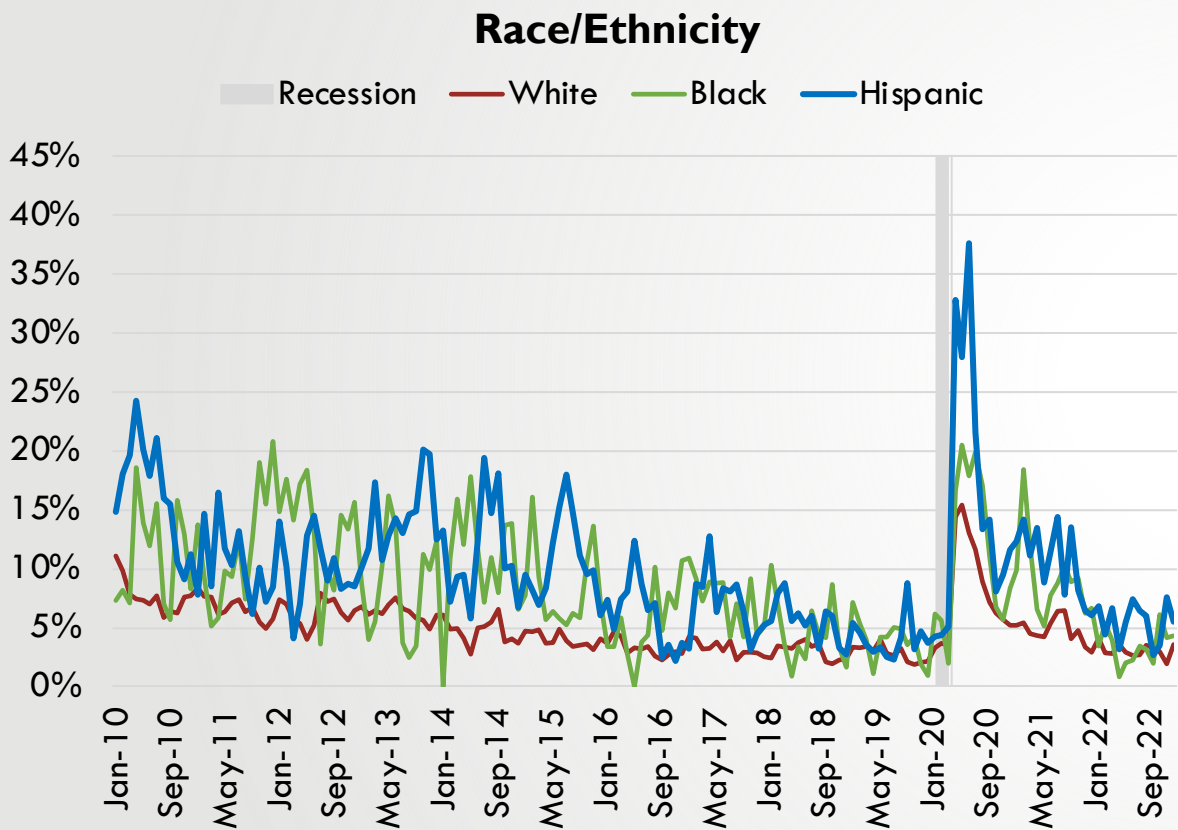
Unemployment rates in Massachusetts and the United States as of December 2022 (Seasonally adjusted)



Source: Massachusetts Executive Office of Labor and Workforce Development, Local Area Unemployment (LAU) Statistics; UMDI analysis

Unemployment has also been highest among people of color and workers with less than a Bachelor's Degree

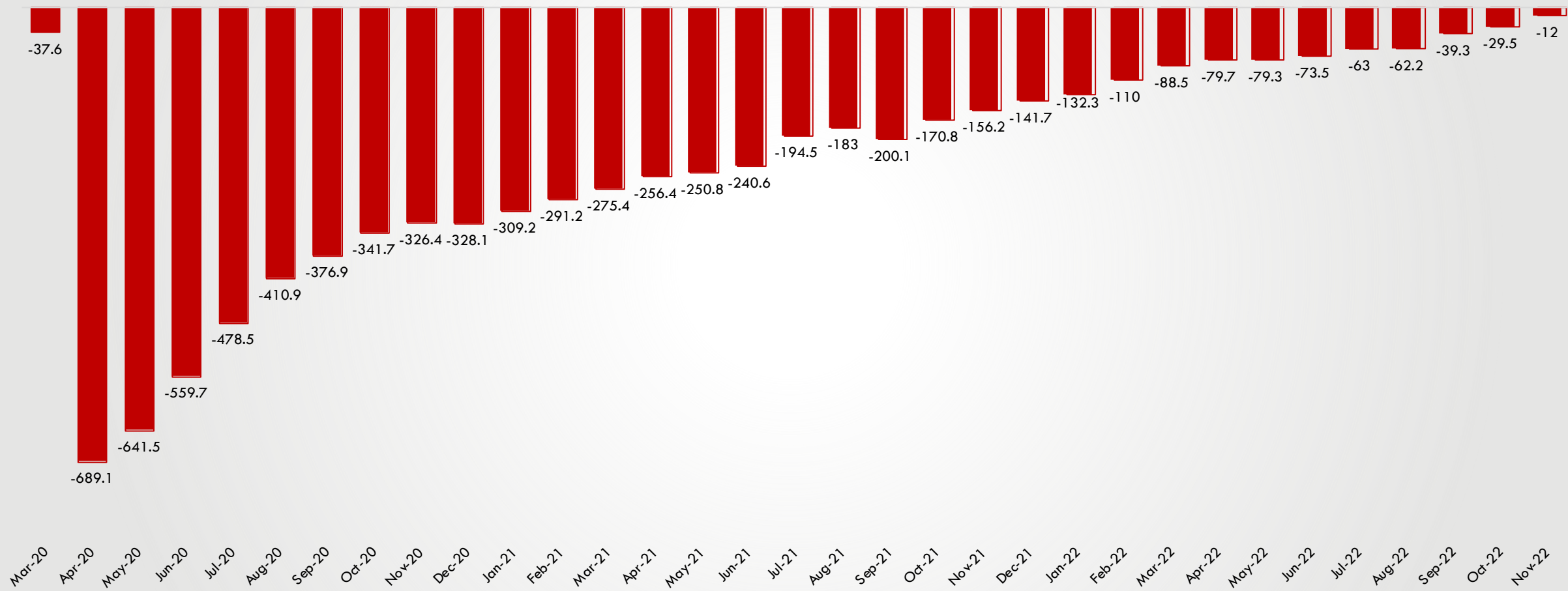
Unemployment rates in Massachusetts by demographics, January 2010-December 2022 (Not seasonally adjusted)



Source: Source: Sarah Flood, Miriam King, Renae Rodgers, Steven Ruggles, J. Robert Warren and Michael Westberry. Integrated Public Use Microdata Series, Current Population Survey: Version 9.0 [dataset]. Minneapolis, MN: IPUMS, 2021; UMDI analysis
Note: Data are not seasonally adjusted. Black and white are not Hispanic. Hispanic includes any race.

MA employment has nearly returned to pre-pandemic levels

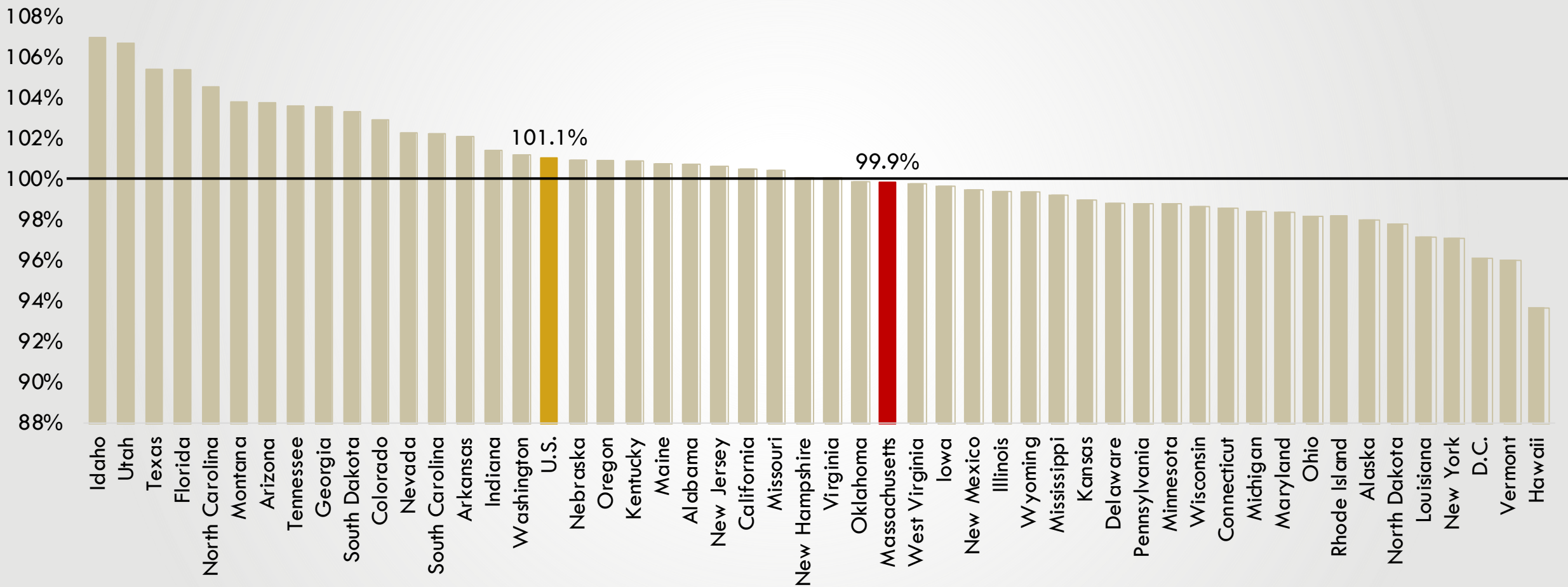
Jobs deficit in Massachusetts relative to February 2020 peak in 1,000s (Seasonally adjusted)



Source: Massachusetts Executive Office of Labor and Workforce Development, Current Employment Statistics (CES-790); UMDI analysis

The shutdown in Massachusetts was more severe than in most states, and MA ranks 28th in job recovery in the U.S.

Job recovery rates in Massachusetts and all states, February 2020 and November 2022 (Seasonally adjusted)



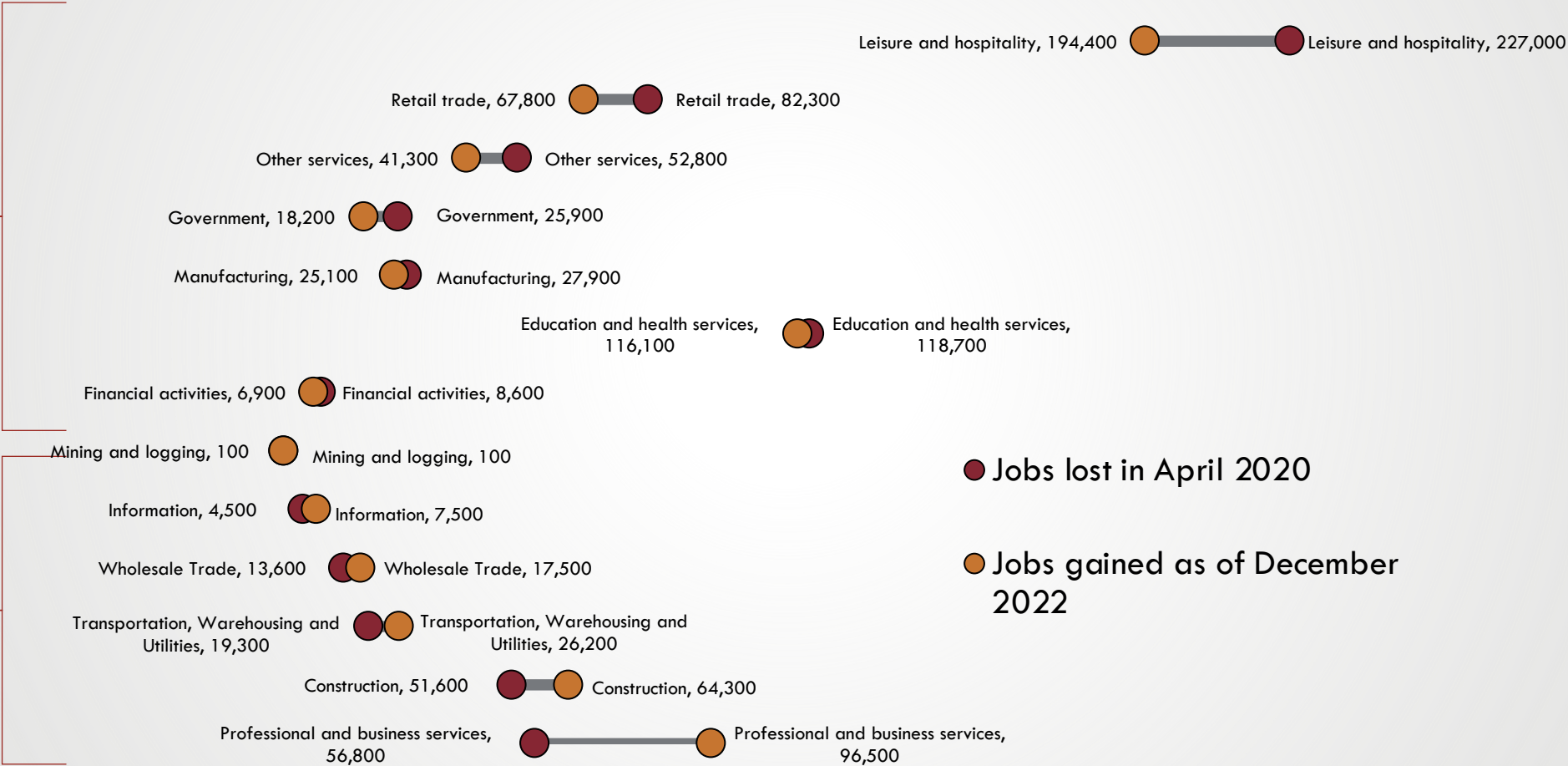
Source: Massachusetts Executive Office of Labor and Workforce Development, Current Employment Statistics (CES-790); UMDI analysis

More than two years since the pre-pandemic peak, leisure & hospitality and retail trade are still very slow to recover

Jobs lost in April 2020 and jobs gained as of December 2022 in Massachusetts (Seasonally adjusted)

Sectors with fewer jobs than in Feb. 2020

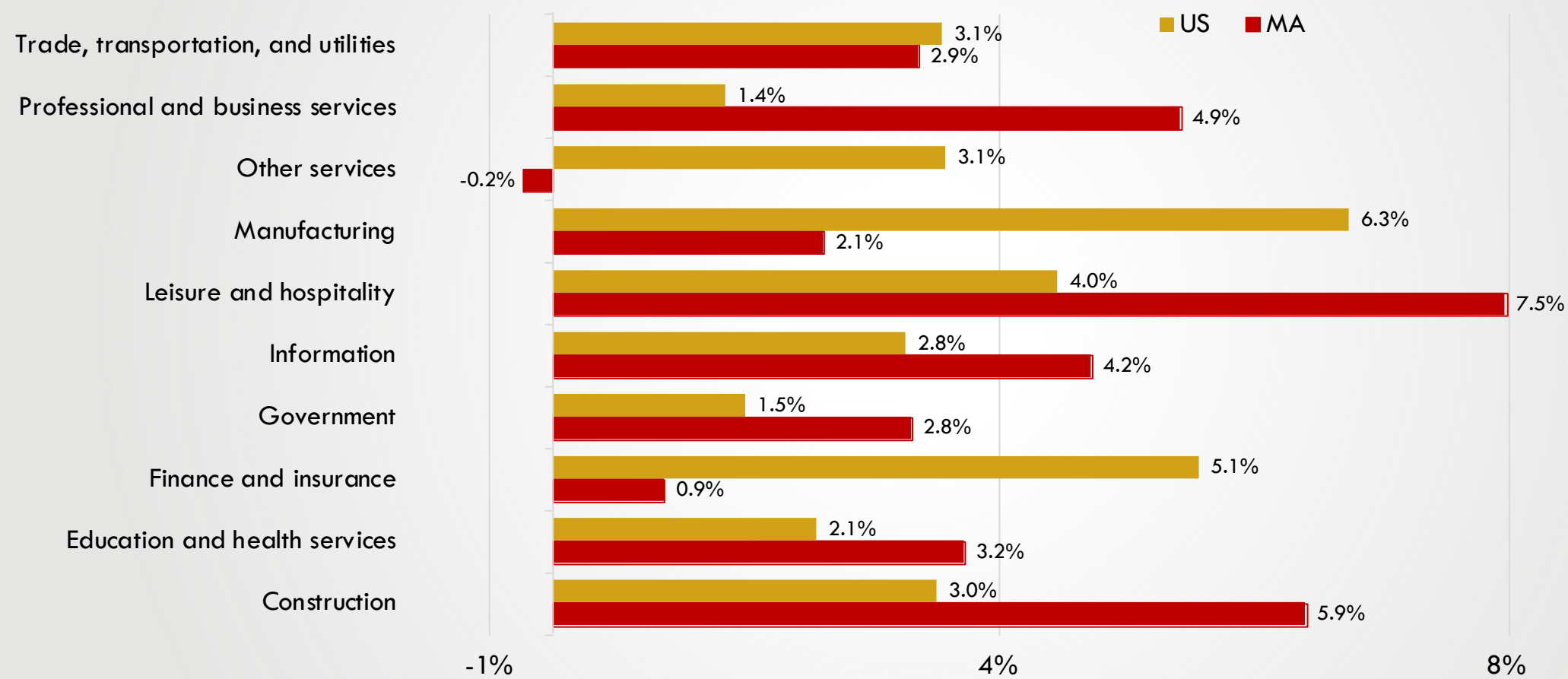
Sectors with more jobs than in Feb. 2020



Source: Massachusetts Executive Office of Labor and Workforce Development, Current Employment Statistics (CES-790); UMDI analysis

MA outpaced the US in professional services, leisure/hospitality, and construction; fell short in manufacturing and finance/information

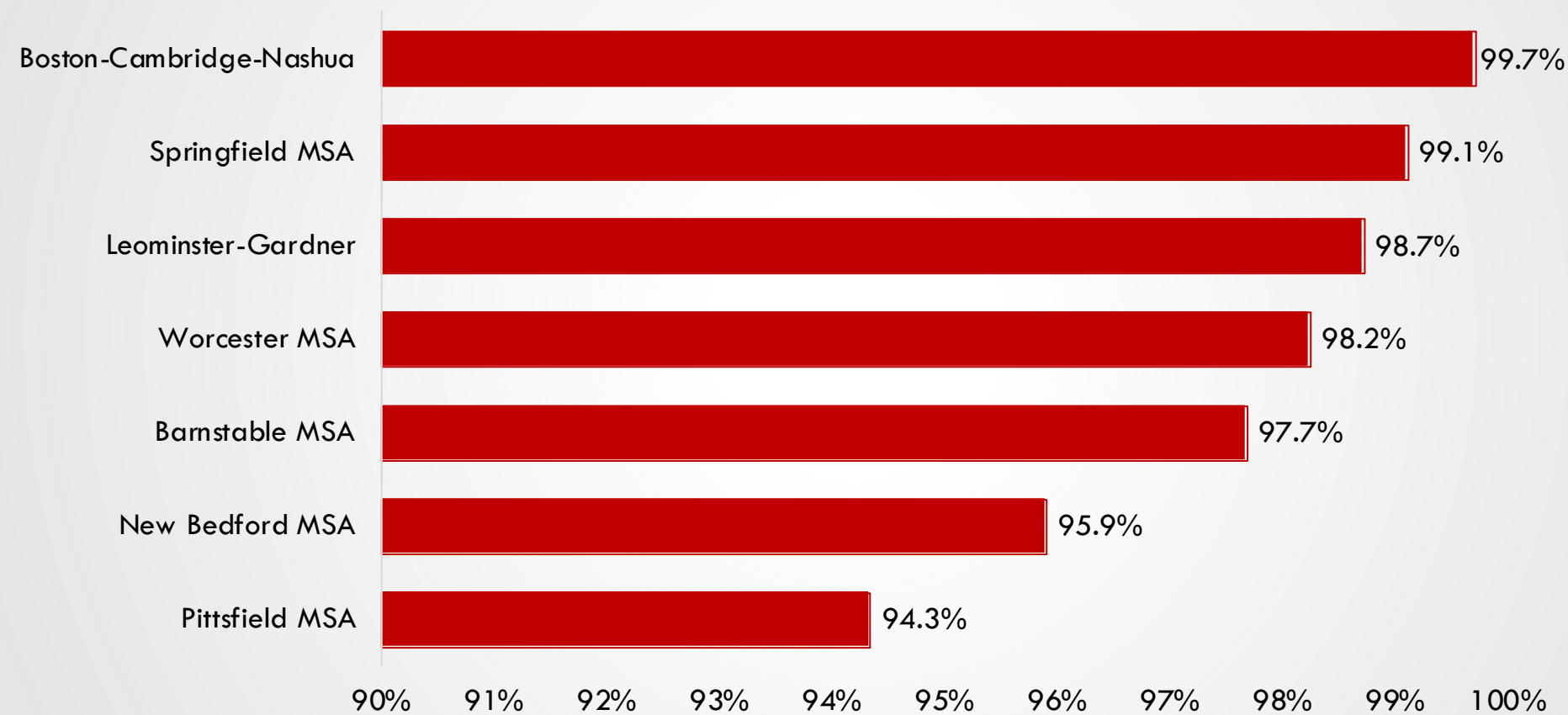
Percent Change in Employment by Industry, December 2021 - December 2022



Source: Massachusetts Executive Office of Labor and Workforce Development, Current Employment Statistics (CES-790); UMDI analysis

Greater Boston leads in MA metro areas in jobs recovery and is approaching pre-pandemic employment

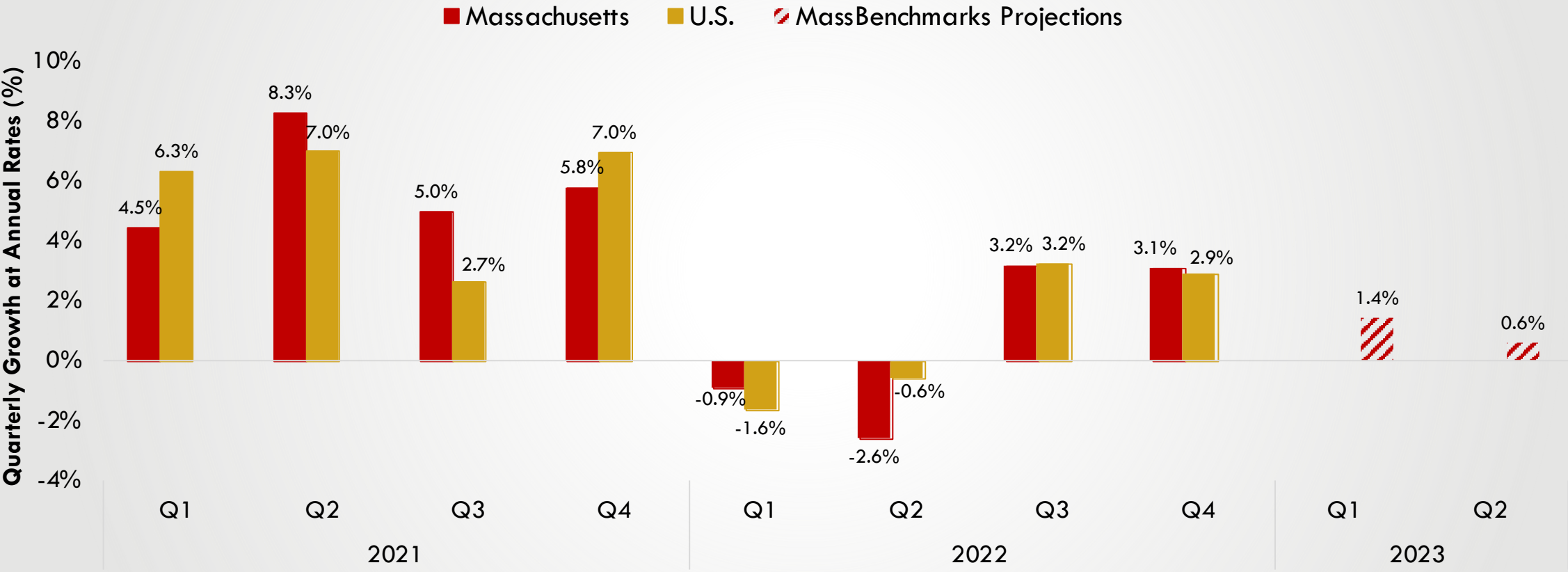
Job recovery rates in Massachusetts' MSAs, February 2020 and November 2022 (seasonally adjusted)



Source: Bureau of Labor Statistics, Current Employment Statistics; UMDI analysis

After strong GDP growth in MA and nationally through 2021, the first two quarters of 2022 saw GDP shrink, with a return to growth in Q3 & Q4

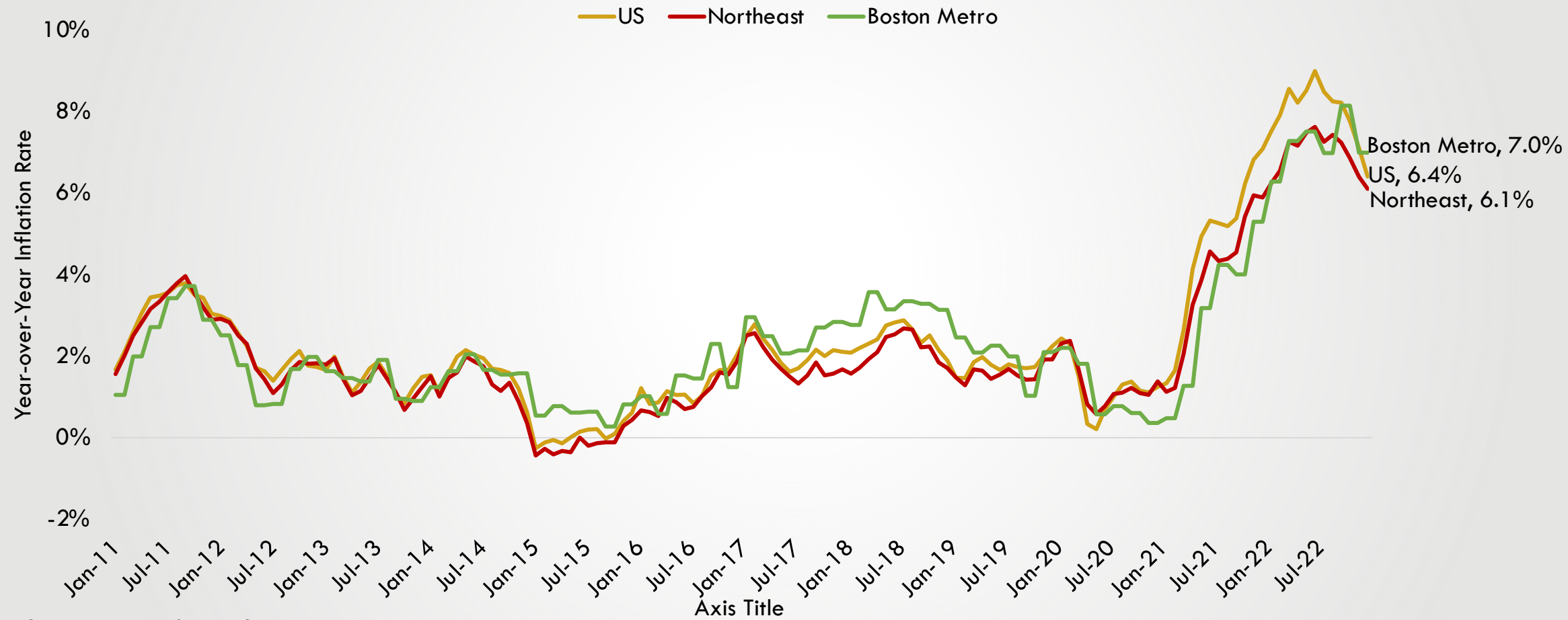
Quarterly Change in GDP for MA, US, and MassBenchmarks Projections, 2021-2023



Source: U.S. Bureau of Economic Analysis, MassBenchmarks calculations by Dr. Alan Clayton-Matthews

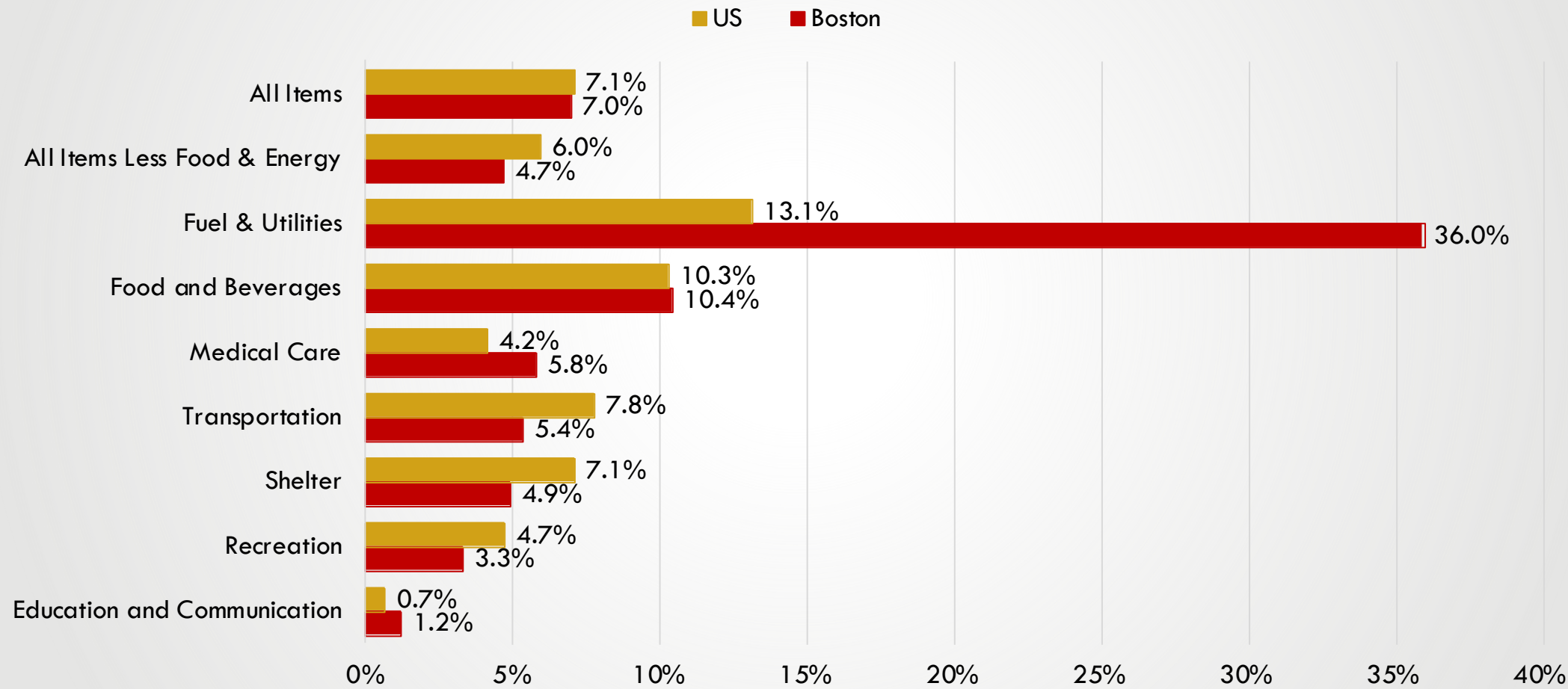
The Northeast and Boston Metro have closely tracked the overall inflation trajectory in the US

Inflation Rate for U.S., Northeast, and Boston-Cambridge-Newton, MA-NH MSA



Boston fuel & utilities prices rose far more than the rest of the nation

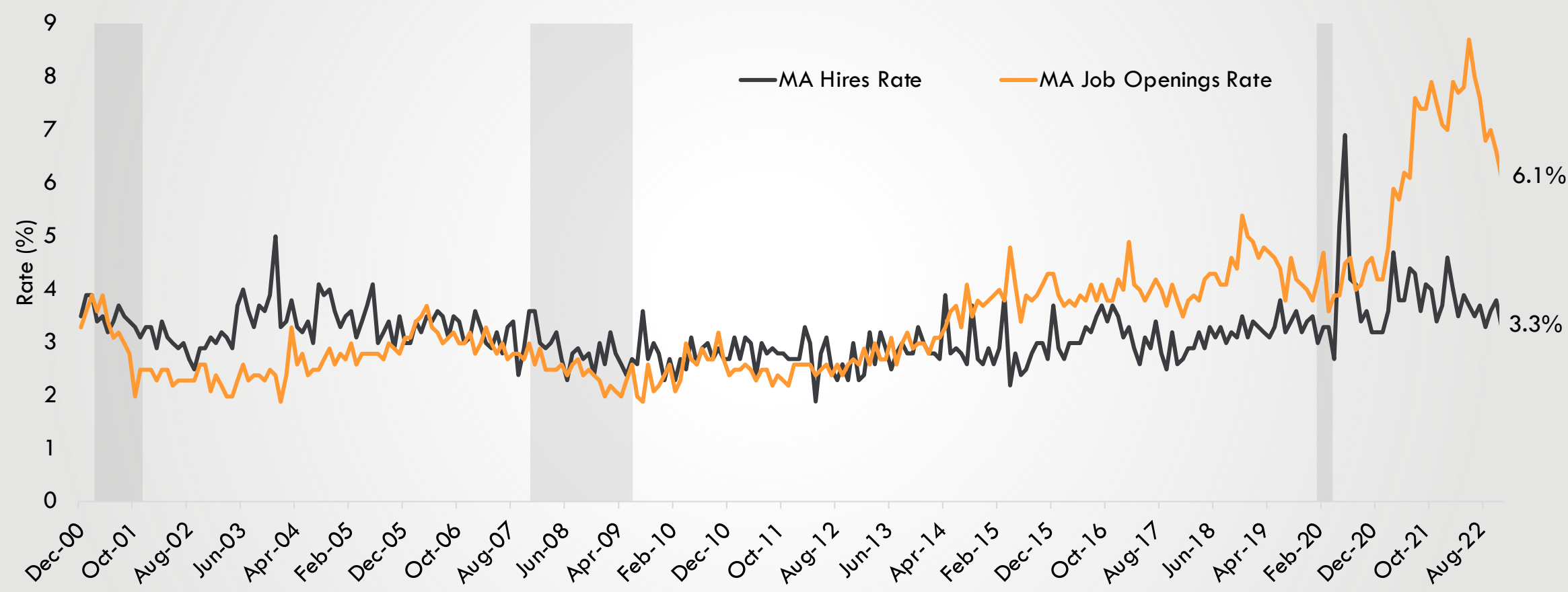
Year-over-Year Inflation in Boston MSA and United States, November 2022



Source: Bureau of Labor Statistics, UMDI Analysis

Massachusetts is experiencing a historically high job openings rate which vastly exceeds the hire rate

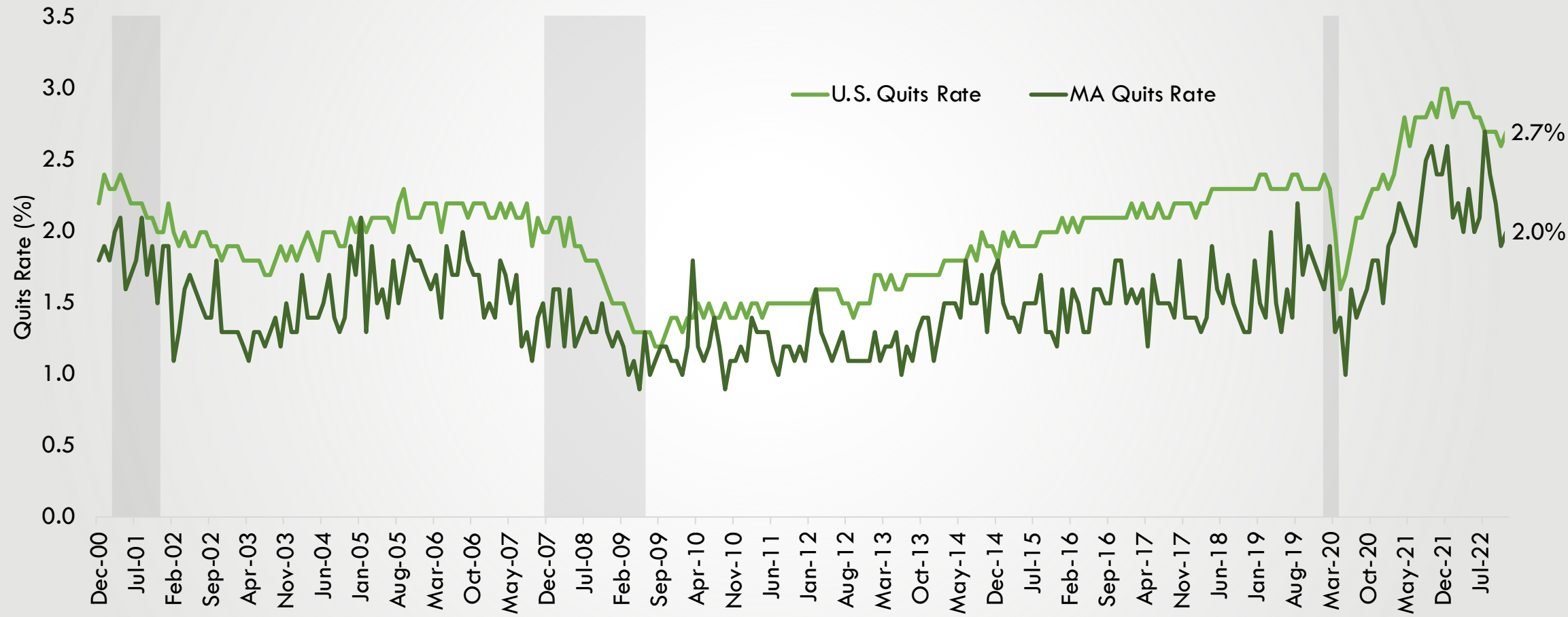
Job openings rate and hire rate in Massachusetts, December 2000-November 2022 (Seasonally adjusted)



Source: U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey (JOLTS); UMDI analysis

Both the state and the nation are experiencing historically high job quits rates

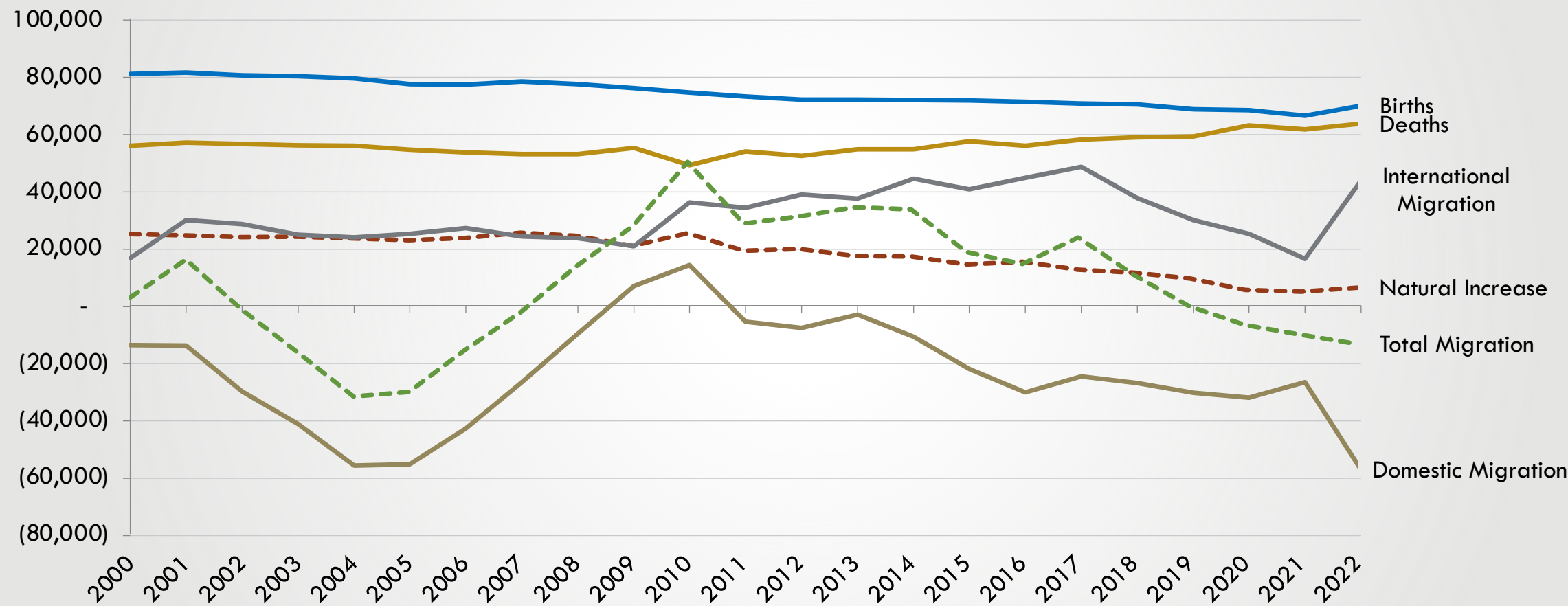
Job quits rate in Massachusetts and the United States, December 2000-November 2022 (Seasonally adjusted)



Source: U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey (JOLTS); UMDI analysis

Massachusetts population growth depends on international migration

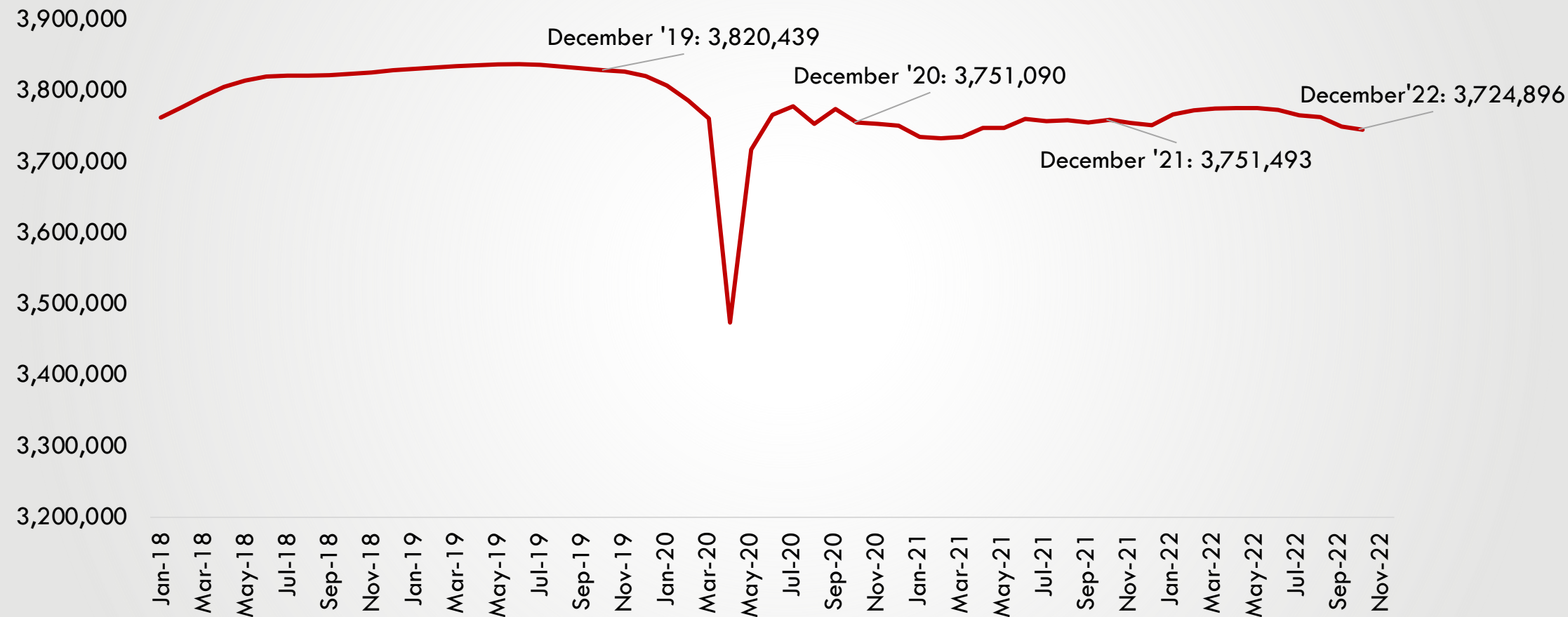
Massachusetts estimated components of population change, 2000-2022



Source: UMass Donahue Institute. Source Data: ST-2000-7; CO-EST2010-ALLDATA; and NST-EST2018-ALLDATA, U.S. Census Bureau Population Division.

The labor force has not recovered to pre-pandemic levels

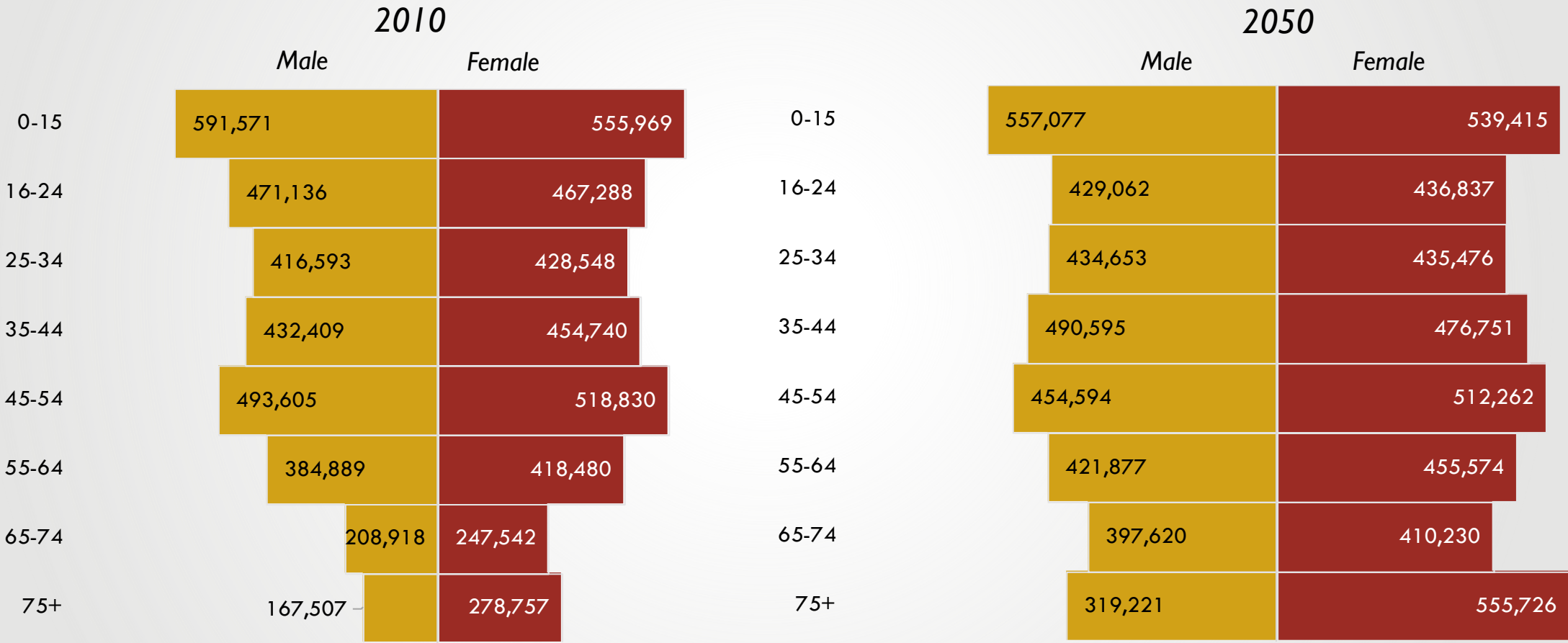
Massachusetts Labor Force, January 2018 - December 2022 (Seasonally adjusted)



Source: Massachusetts Executive Office of Labor and Workforce Development, Local Area Unemployment (LAU) Statistics; UMass Donahue Institute MassDOT Vintage 2018 Population Projections. September 2018. (UMDI-DOTV2018)

Massachusetts's growth in our 65+ age groups will far exceed growth in our working age population through 2050

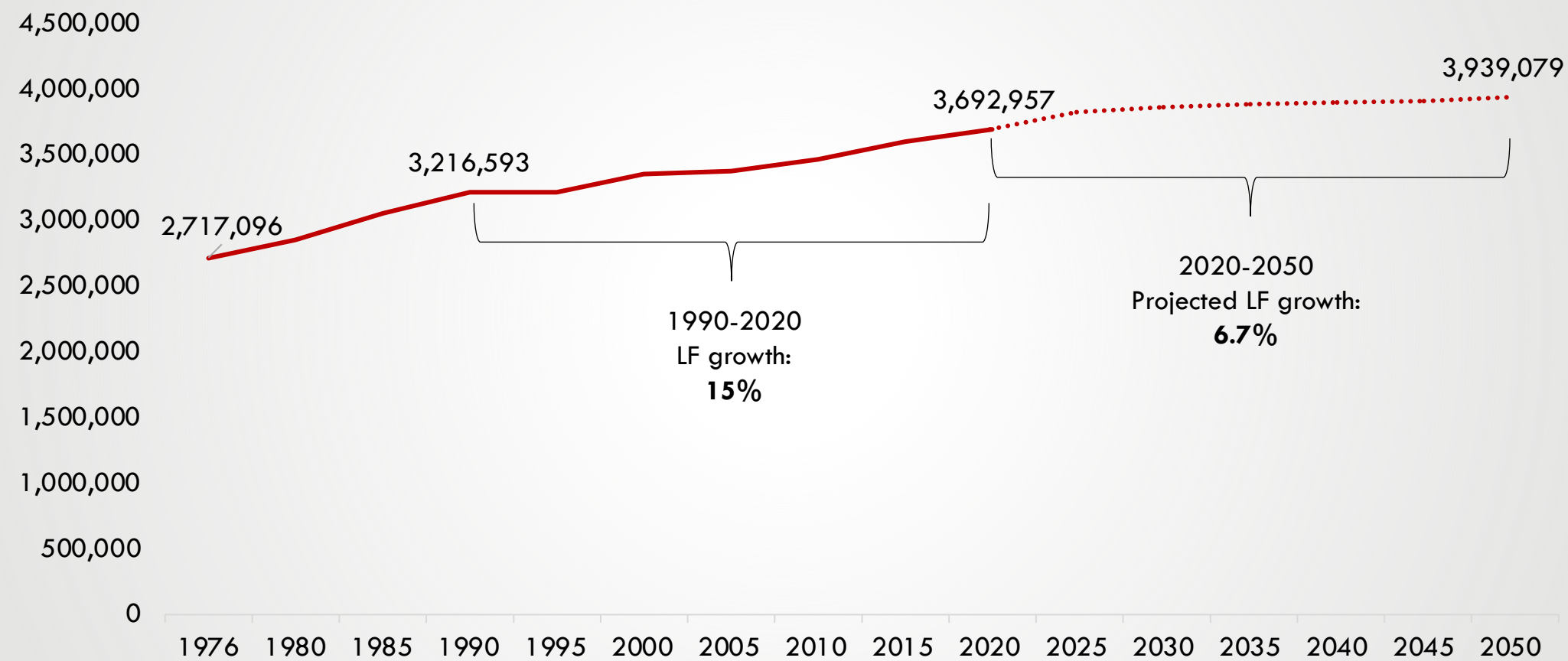
Population in Massachusetts by Age Groups



Source: UMass Donahue Institute MassDOT Vintage 2022 Population Projections. November 2022. (UMDI-DOTV2022).

The labor force in Massachusetts is projected to grow at a significantly slower pace over the next 30 years

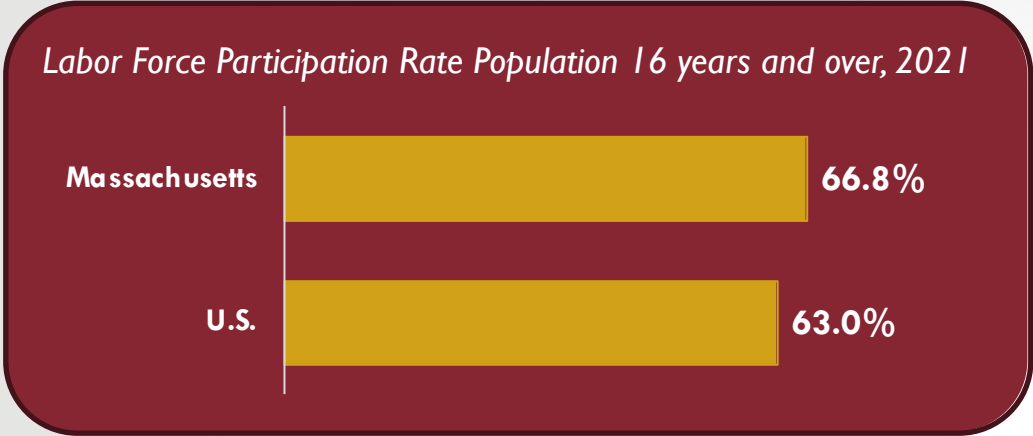
Projected Massachusetts Labor Force through 2050 (Seasonally adjusted)



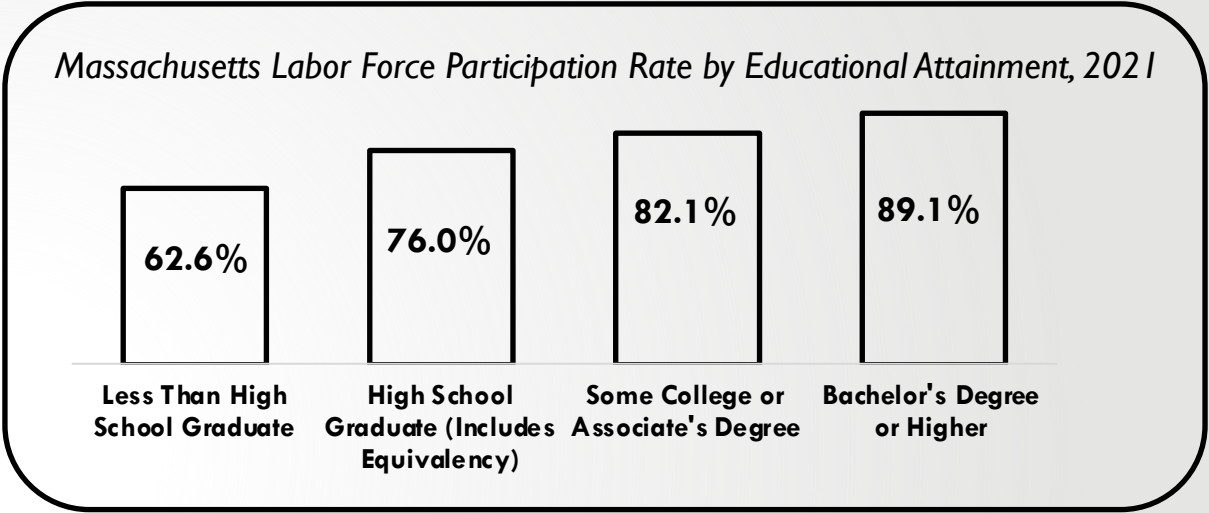
Source: Massachusetts Executive Office of Labor and Workforce Development, Local Area Unemployment (LAU) Statistics; UMass Donahue Institute MassDOT Vintage 2022 Population Projections. November 2022. (UMDI-DOTV2022).

Massachusetts labor force participation rates by demographic groups

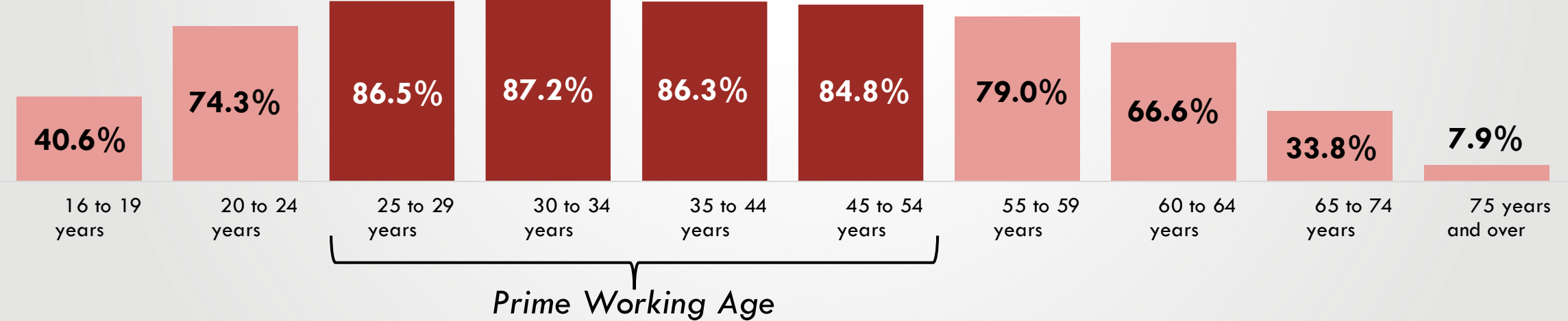
Labor Force Participation Rate Population 16 years and over, 2021



Massachusetts Labor Force Participation Rate by Educational Attainment, 2021



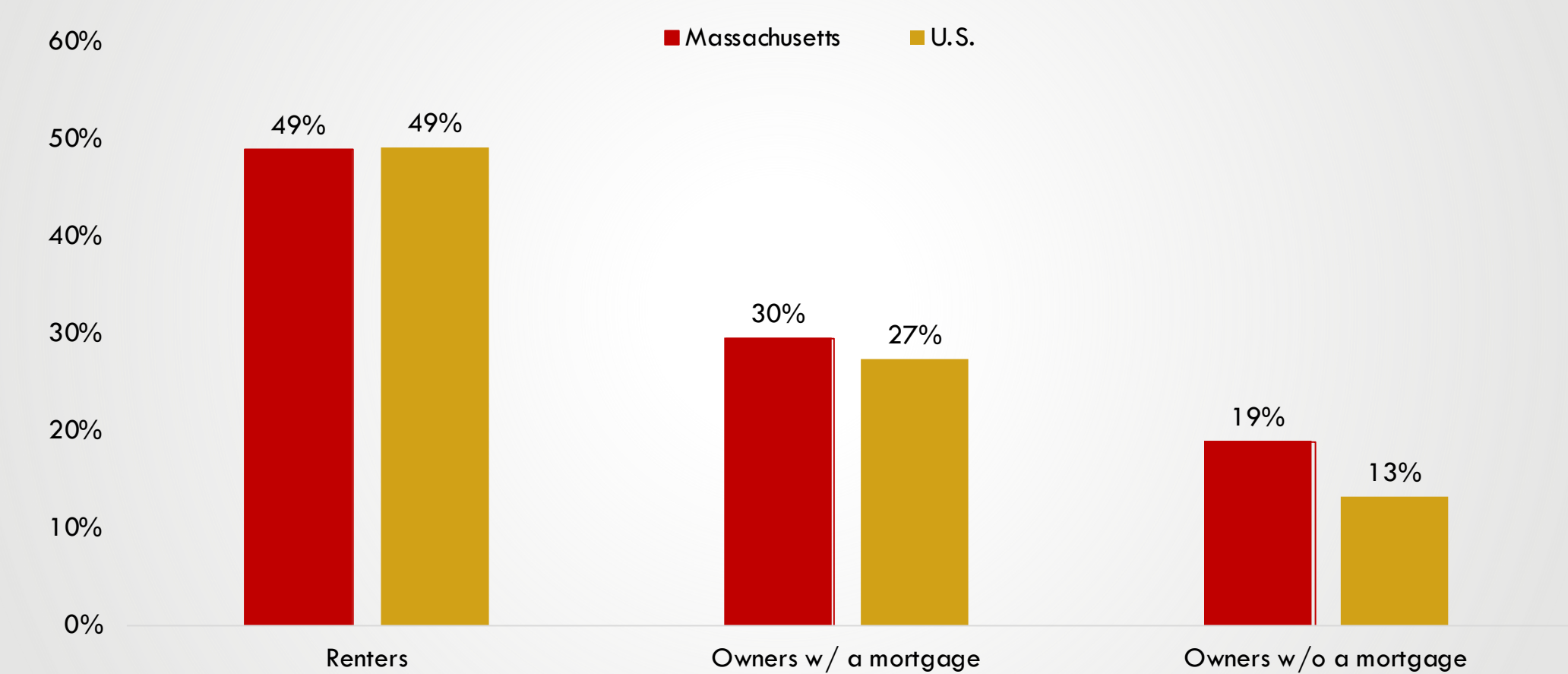
Massachusetts Labor Force Participation Rate by Age, 2021



Source: U.S. Census Bureau American Community Survey, 2021 5-Year Estimates

Massachusetts renters are similarly cost burdened compared to the nation, while our homeowners are more likely to be cost burdened

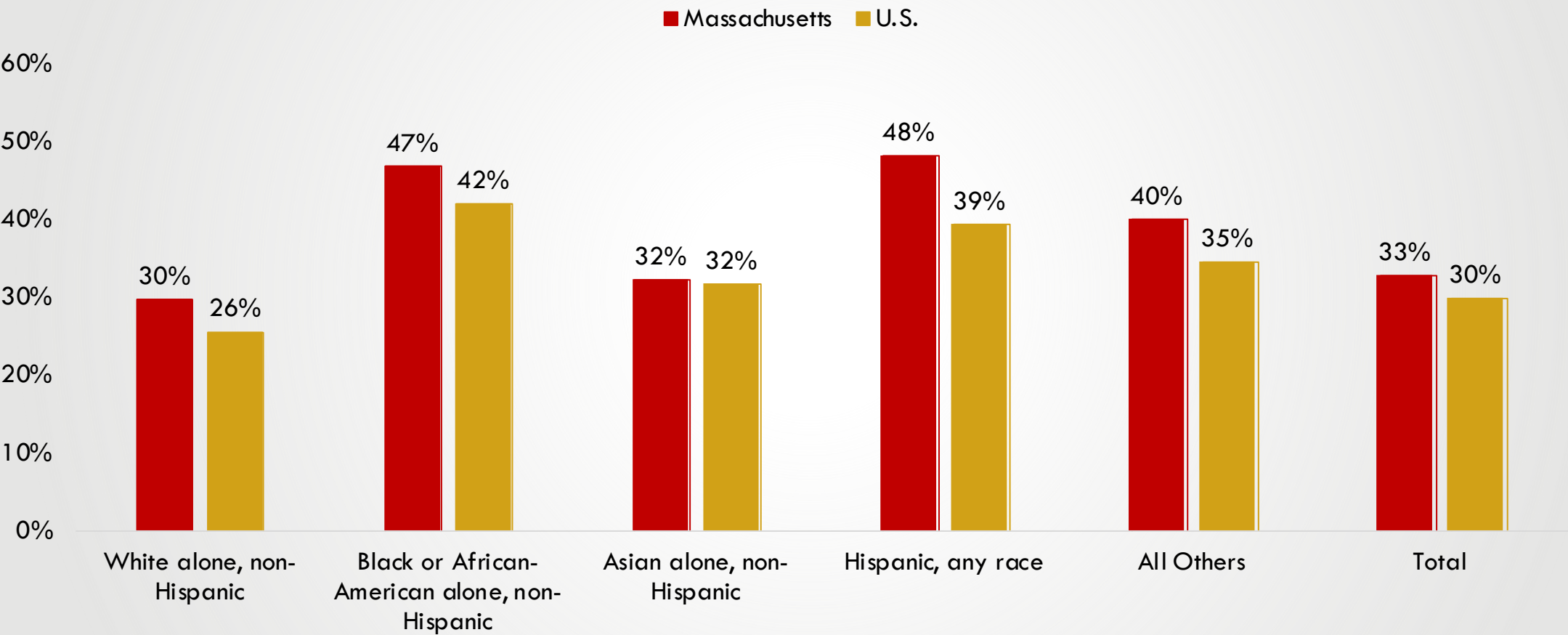
Housing-Cost-Burdened Households in Massachusetts and the United States (Spending 30 Percent or More of Income on Housing Costs)



Source: ACS 2016-2020 5-Year Estimates, Table DP04

Especially for Black and Hispanic households, housing cost burden tends to be more prevalent in Massachusetts compared to the nation

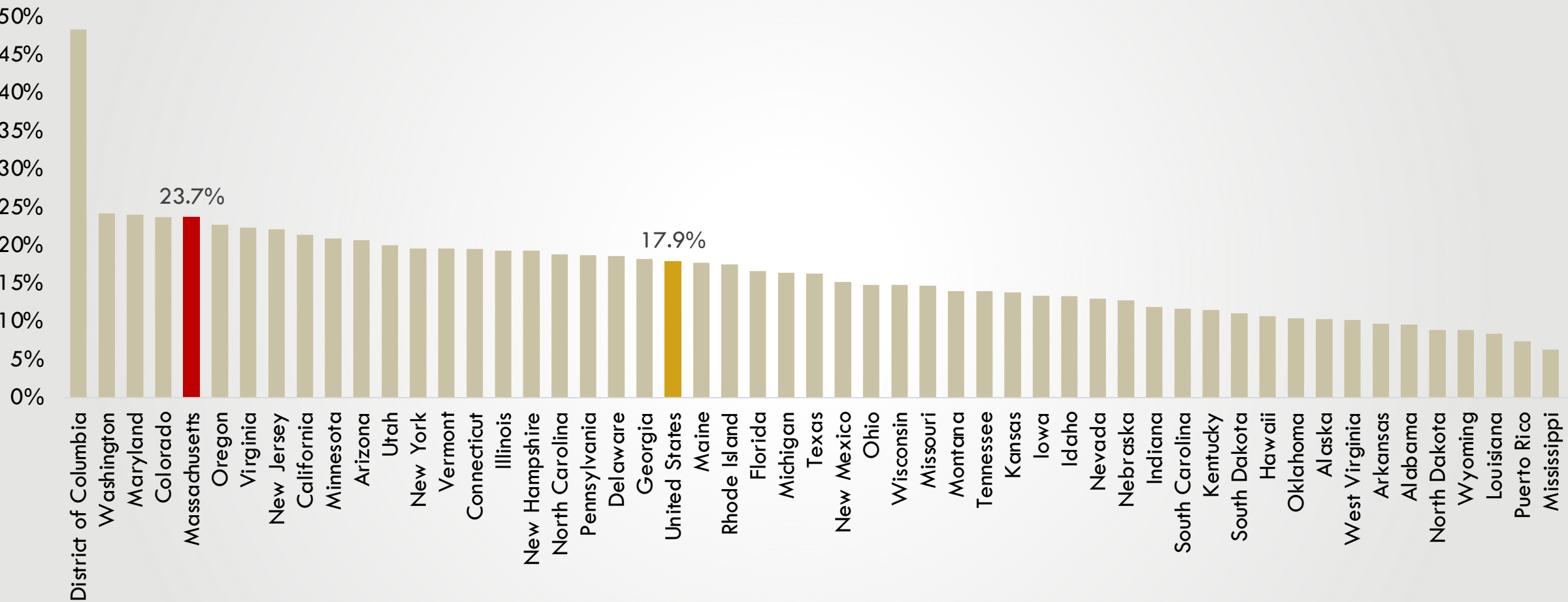
Housing-Cost-Burdened Households in Massachusetts and the United States by Race/Ethnicity



Source: HUD Comprehensive Housing Affordability Strategy, 2014-2018. Tabulations by UMass Donahue Institute. Includes owner-occupied and renters.

Massachusetts has the fifth-highest rate of remote work in the United States

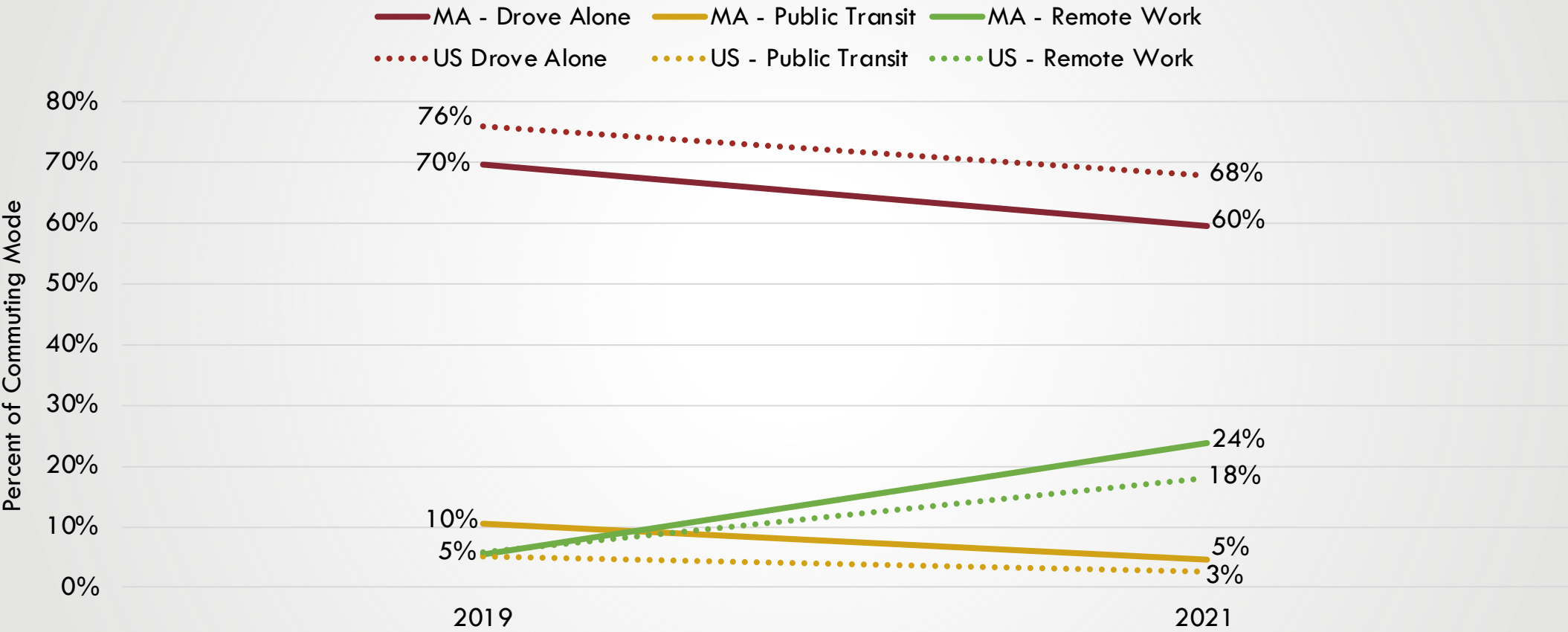
Percentage of workers who work from home, 2021



Source: US Census Bureau, American Community Survey One-Year Estimates, 2021.

The shift toward work from home during the pandemic disrupted established commuting patterns

Means of Transportation to Work for MA and US, 2019-2021

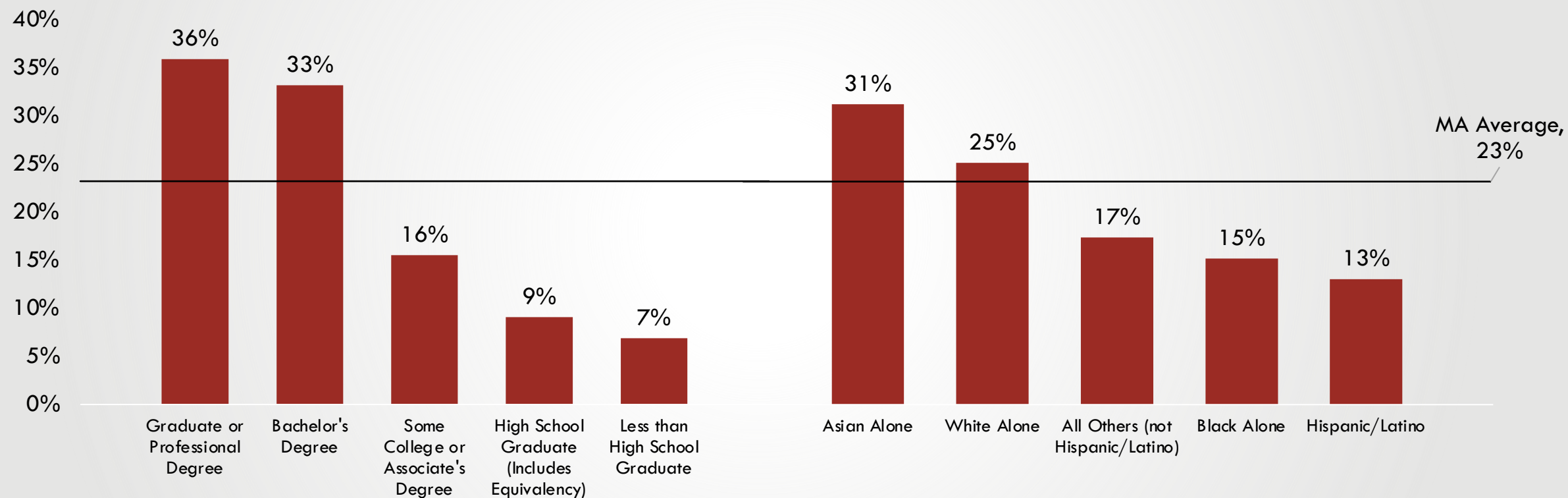


Source: US Census Bureau, American Community Survey One-Year Estimates, 2019 and 2021.

Note: Smaller groups, such as walking, biking, and carpooling are excluded for clarity, so numbers in graph do not sum to 100%.

Workers with at least a four-year college degree as well as Asian or white workers are more likely than average to work from home in MA

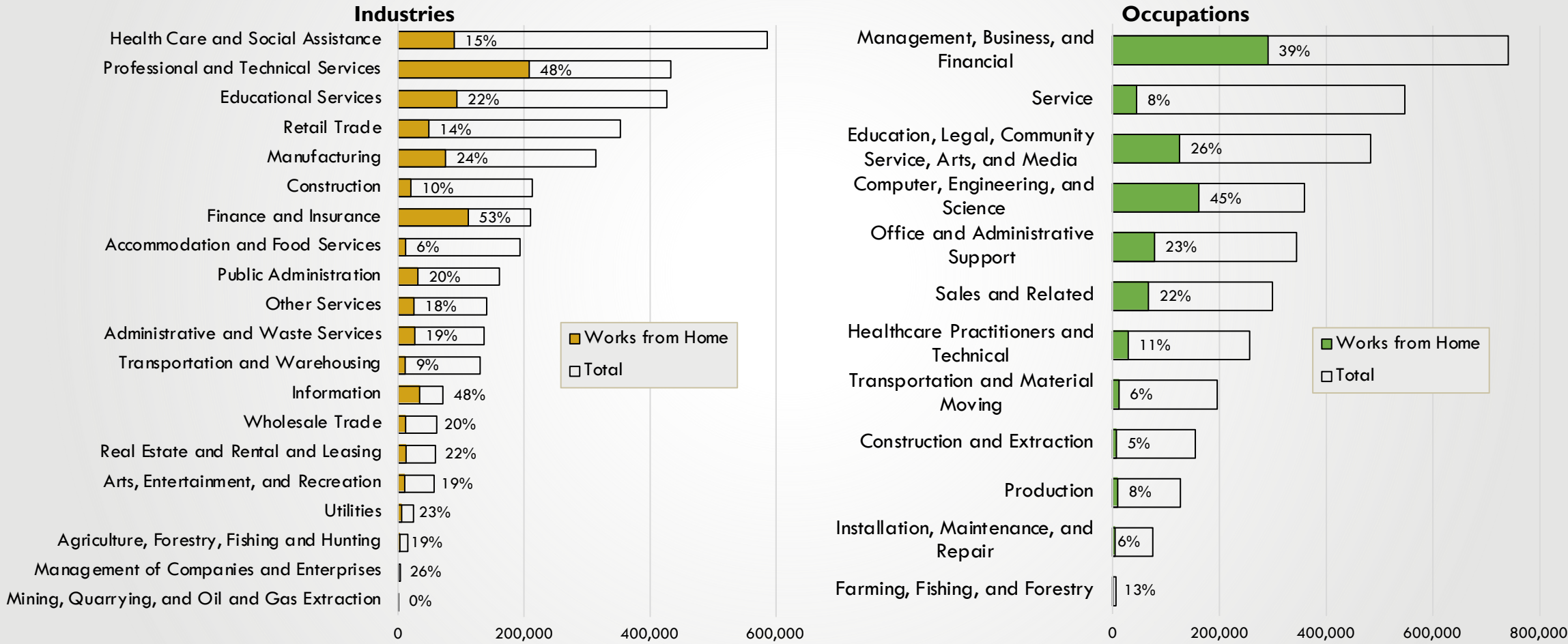
Percent of workers who worked from home in Massachusetts by demographic groups, 2021



Source: U.S. Census Bureau ACS Microdata, 2021. Steven Ruggles, Sarah Flood, Ronald Goeken, Megan Schouweiler and Matthew Sobek. IPUMS USA: Version 12.0 [dataset]. Minneapolis, MN: IPUMS, 2022. <https://doi.org/10.18128/D010.V12.0>

Jobs in STEM, technical, and financial fields are proportionally more likely to have workers who telecommute; sectors and occupations in health care and education also employ many remote workers

Percent of workers who worked from home in Massachusetts by industry and occupation, 2021



Source: U.S. Census Bureau ACS Microdata, 2021. Steven Ruggles, Sarah Flood, Ronald Goeken, Megan Schouweiler and Matthew Sobek. IPUMS USA: Version 12.0 [dataset]. Minneapolis, MN: IPUMS, 2022. <https://doi.org/10.18128/D010.V12.0>

Several MA cities have significantly higher rates of remote work for residents compared to the state and US

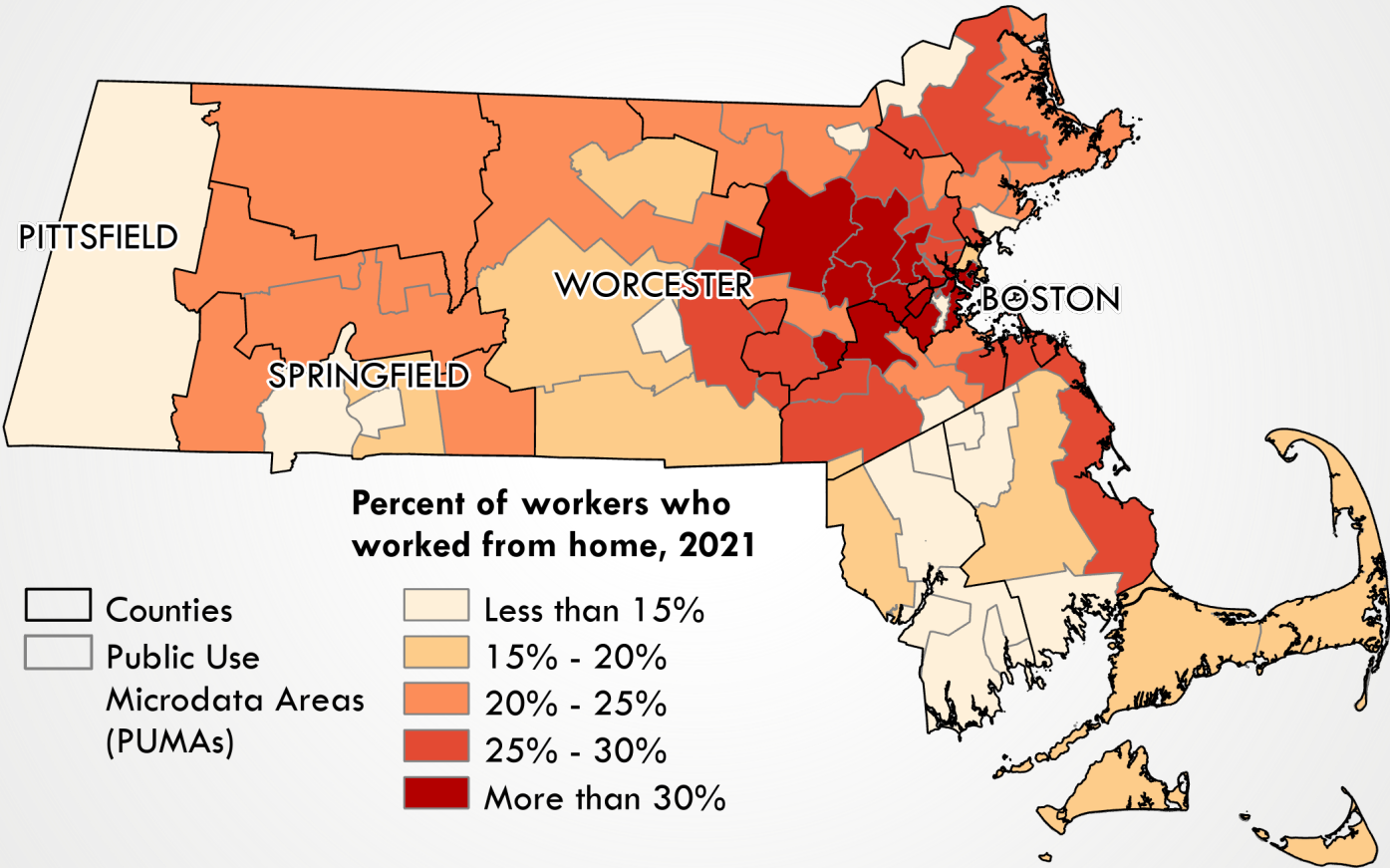
Percent of workers who work from home for selected MA cities, MA, and US, 2021

Cambridge	44%
Newton	44%
Somerville	37%
Boston	30%
Malden	26%
Framingham	26%
Quincy	25%
Massachusetts	23%
United States	18%
Lowell	14%
Brockton	13%
Worcester	12%
Lynn	11%
Springfield	11%
Fall River	8%
Lawrence	7%
New Bedford	6%

Source: US Census Bureau, American Community Survey One-Year Estimates, 2021.

Remote work occurs throughout the state but is concentrated in the Boston metro area and Middlesex County

Percent of workers who worked from home in Massachusetts by PUMA, 2021



Source: U.S. Census Bureau ACS Microdata, 2021. Steven Ruggles, Sarah Flood, Ronald Goeken, Megan Schouweiler and Matthew Sobek. IPUMS USA: Version 12.0 [dataset]. Minneapolis, MN: IPUMS, 2022. <https://doi.org/10.18128/D010.V12.0>

Metro South at a Glance

3.4%

Unemployment Rate
Plymouth County
Dec 2022
(7th highest in the state)

-2.1k

Job deficit compared to 2/20
Brockton-Bridgewater-Easton
MA NECTA Division
Dec 2022

7.3%

Population Growth
Plymouth County
2010-2020

2.0%

Job Growth
Brockton-Bridgewater-
Easton MA NECTA Division
2021-2022

10.3%

Foreign Born Residents
Plymouth County
2021
(7th highest in the state)

7.2%

Below Poverty Rate
Plymouth County
2021
(11th highest in the state)

42.7

Median Age
Plymouth County
2021
(4th oldest in the state)

42.7%

Have a College Degree
Plymouth County
2021
(6th highest in the state)

Sources: Massachusetts Executive Office of Labor and Workforce Development, Local Area Unemployment (LAU) Statistics and Current Employment Statistics; Bureau of Labor Statistics; U.S. Census Bureau American Community Survey 2021, 1 Year Estimates; UMass Donahue Institute MassDOT Vintage 2022 Population Projections. November 2022. (UMDI-DOT V2022).

Brockton at a Glance

4.5%

Unemployment Rate
Brockton, MA
Dec 2022

-1.0k

Job deficit compared to 2/20
Brockton, MA
Dec 2022

12.6%

Population Growth
Brockton, MA
2010-2020

2.8%

Job Growth
Brockton, MA
2021-2022

31.8%

Foreign Born Residents
Brockton, MA
2021

12.3%

Below Poverty Rate
Brockton, MA
2021

36.6

Median Age
Brockton, MA
2021

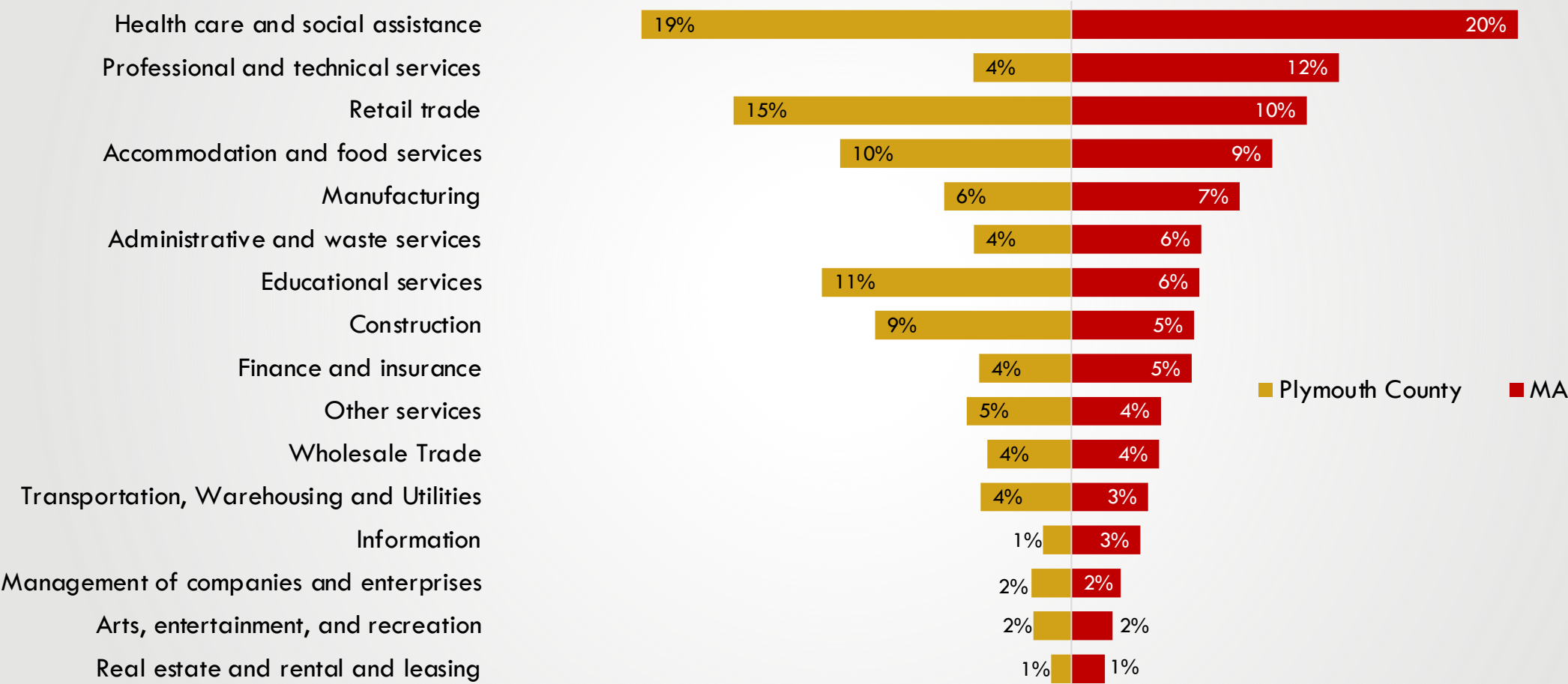
24.9%

Have a College Degree
Brockton, MA
2021

Sources: Massachusetts Executive Office of Labor and Workforce Development, Local Area Unemployment (LAU) Statistics and Current Employment Statistics; Bureau of Labor Statistics; U.S. Census Bureau American Community Survey 2021, 1 Year Estimates; UMass Donahue Institute MassDOT Vintage 2022 Population Projections. November 2022. (UMDI-DOT V2022).

The Plymouth County industry mix differs significantly from the Commonwealth overall

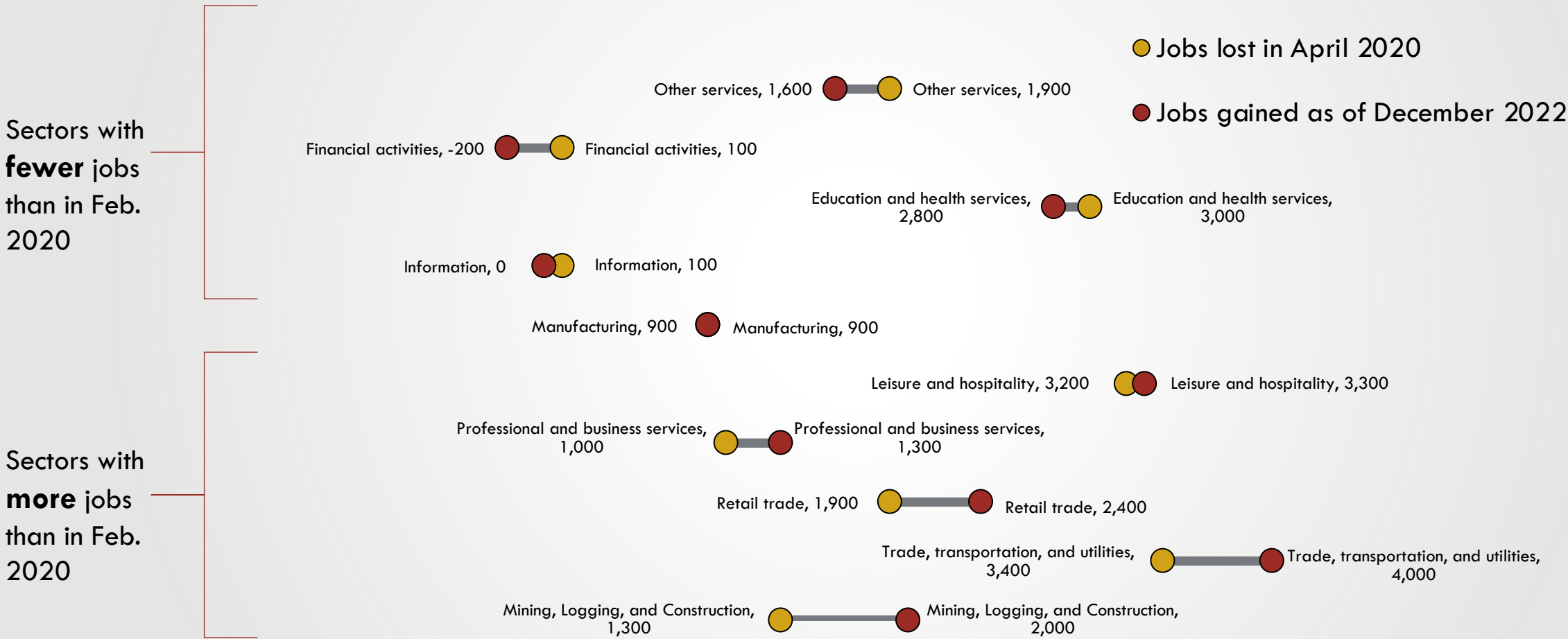
Industry Mix for Massachusetts and the Plymouth County 2022 (Seasonally adjusted)



Source: Bureau of Labor Statistics Current Employment Statistics; Massachusetts Executive Office of Labor and Workforce Development, ES202; UMDI analysis

Key job losses occurred in the region's least competitive industries, and gains were made in its most competitive sectors

Jobs lost in April 2020 and jobs gained as of December 2022 in Brockton NECTA (not seasonally adjusted)



Source: Massachusetts Executive Office of Labor and Workforce Development, Current Employment Statistics (CES-790); UMDI analysis

Question marks in the economy

- Rising prices, supply chains, and the future trajectory of inflation
- Forecast for a shrinking GDP into 2023 following up on a difficult 2022
- The economy has been adding more jobs, but the employment numbers are still not where they were prior to March 2020 – and recovery has been uneven across industries
- The Great Resignation and labor market disconnection—record job quits, record job openings, and lackluster labor force growth
- Continuous instability due to the global pandemic
- Russia's invasion of Ukraine and how the loss of the flow of goods and commodities are impacting food and commodity prices and supply chains

Thank you!

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