



# The U.S. Labor Shortage: Past Trends, Current Conditions, and the Way Forward

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# Quantifying the labor shortage

- Shortage: Supply < demand at prevailing prices
- Metric: Unemployed per job openings ratio (UJOR)

$$UJOR_t = \frac{\text{Unemployed}_t}{\text{Job Openings}_t}$$

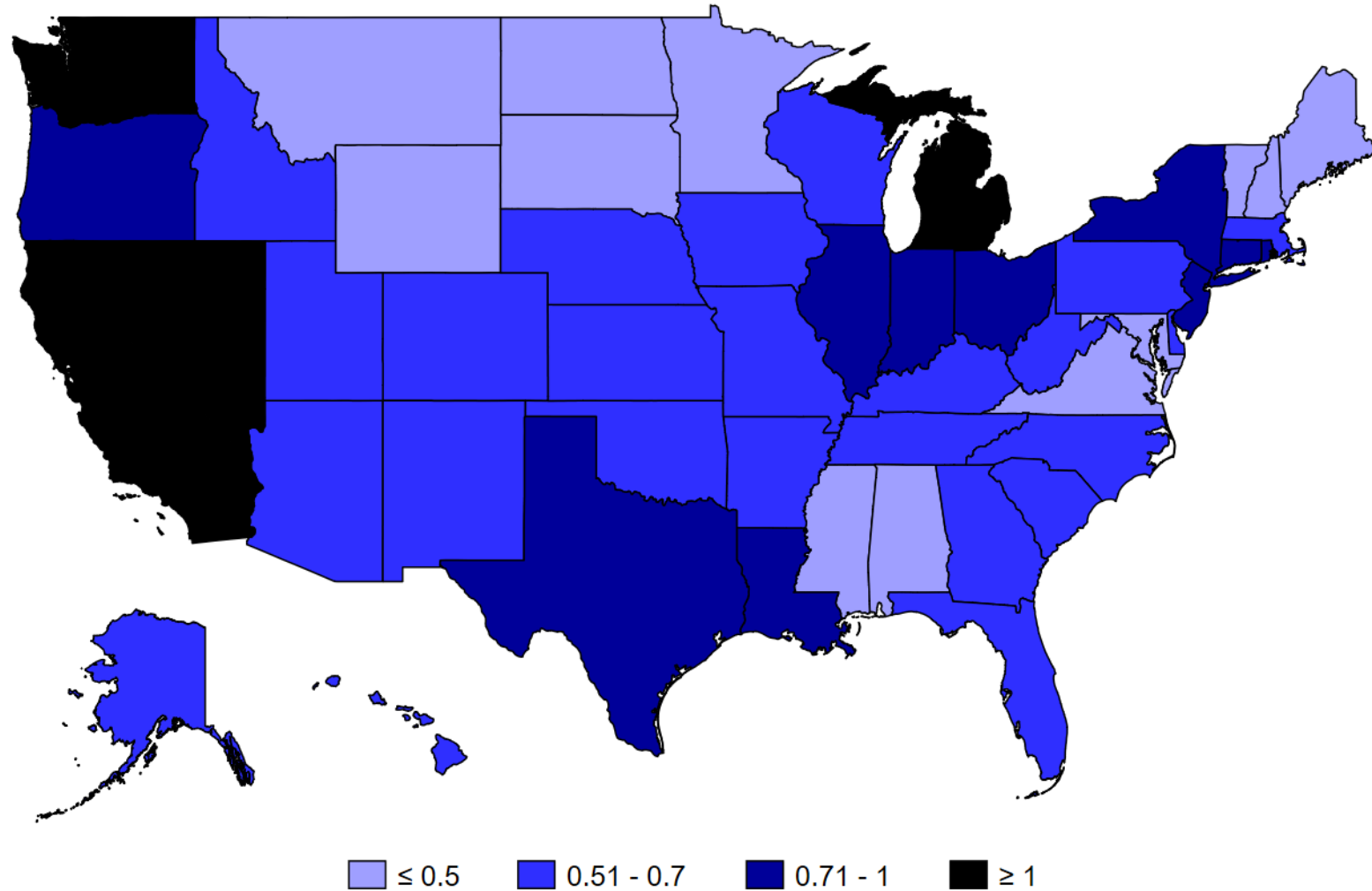
# Although COVID-19 made it worse, the current labor shortage predates the pandemic



**Source:** U.S. Bureau of Labor Statistics Job Openings and Labor Turnover Survey (JOLTS), data series JTS0000000000000000UOR. Data are seasonally adjusted.



# Although still widespread, the labor shortage had eased in many states by June 2024



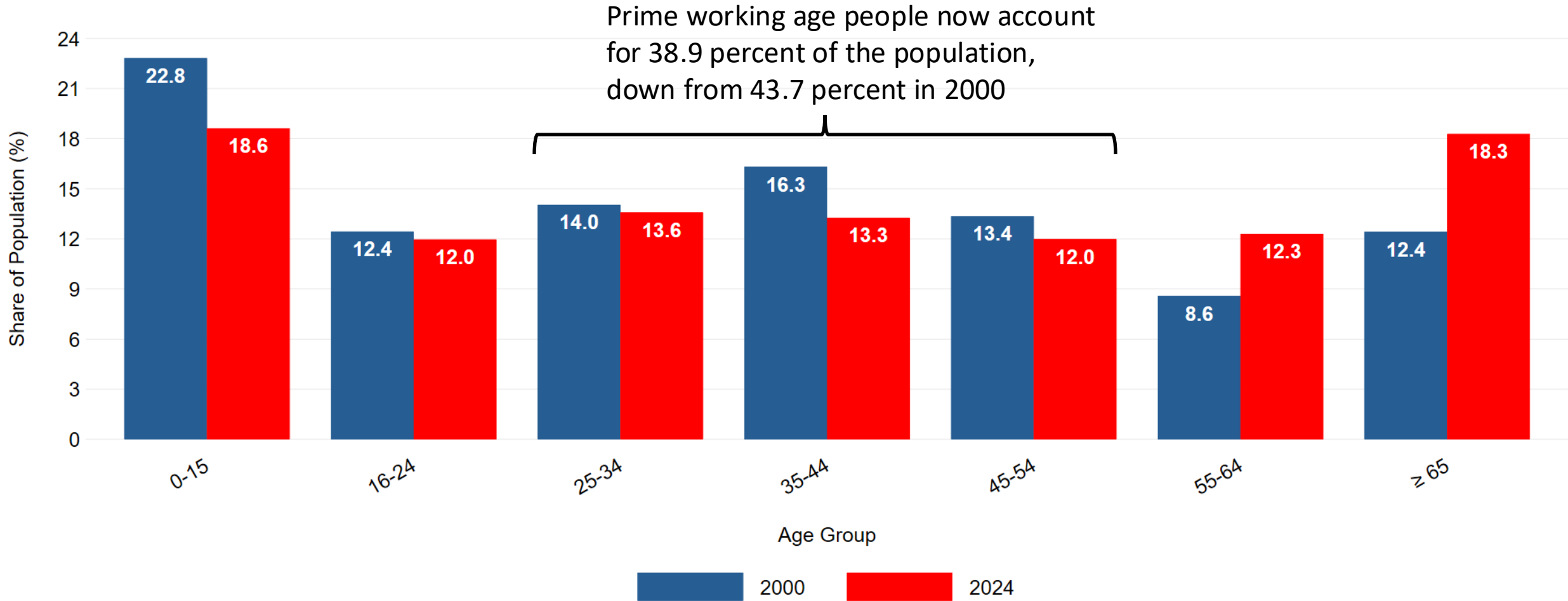
Source: U.S. Bureau of Labor Statistics Job Openings and Labor Turnover Survey (JOLTS). Data are seasonally adjusted.

# Factors driving the labor shortage

- Two key issues are:
  - Population aging
  - Trends in labor force participation
- Both issues predate the COVID-19 pandemic

# Population Aging

# Since 2000, 55-plus representation has grown from 21 to 30.6 percent of the population

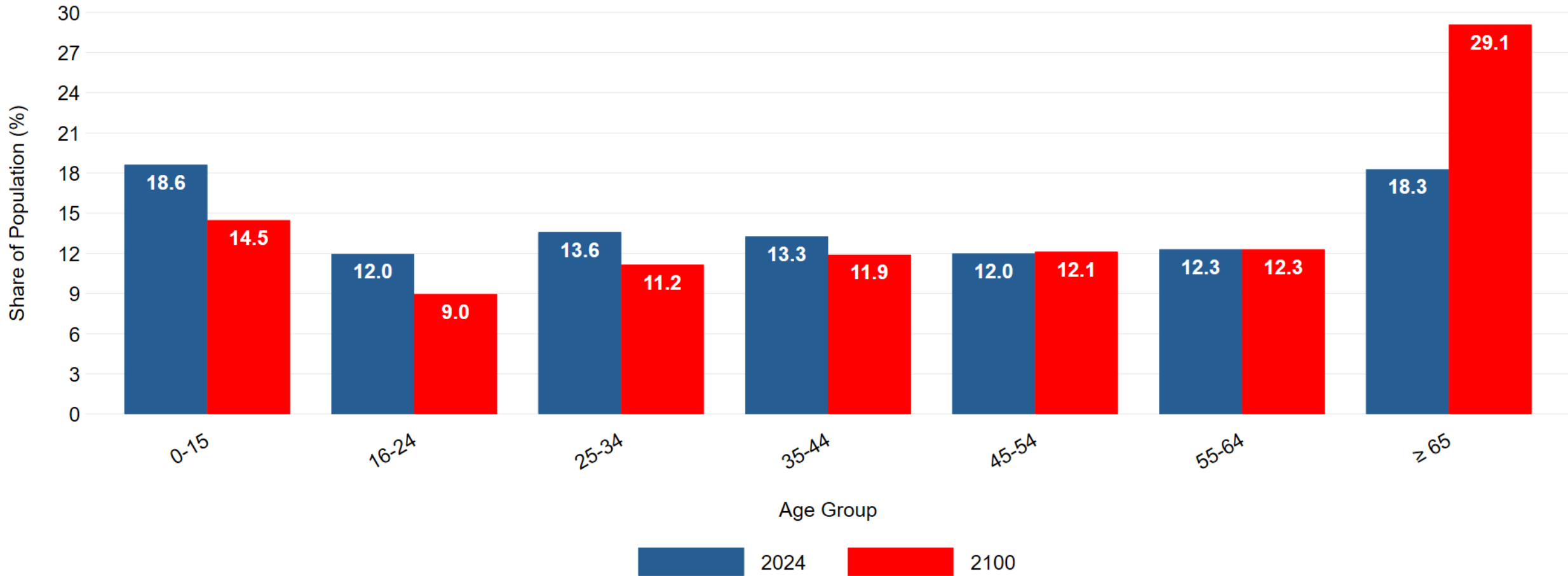


**Note:** 2000 age distribution based on 5% decennial U.S. Census microdata extract downloaded from IPUMS USA ([usa.ipums.org](http://usa.ipums.org)).

2024 age distributions based on 2023 vintage of U.S. Census Population Projections (main series estimates).



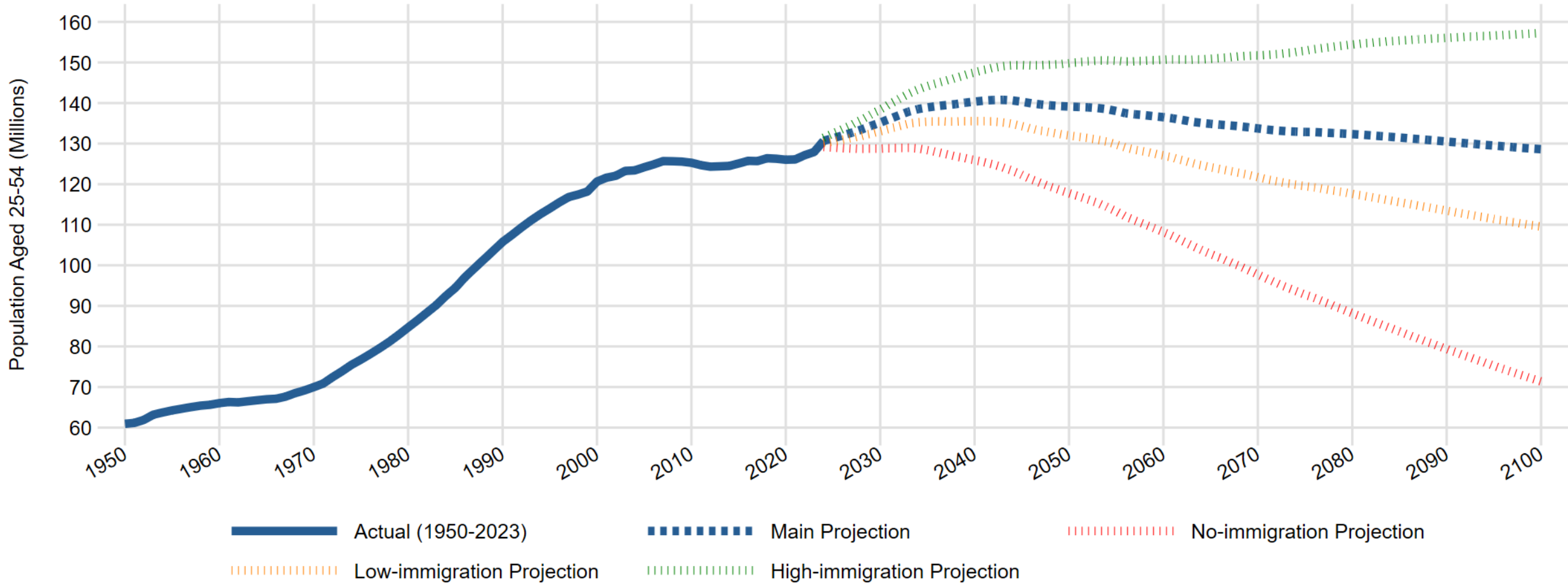
# By 2100, people aged 55-plus will outnumber the prime working age population



**Note:** 2000 age distribution based on 5% decennial U.S. Census microdata extract downloaded from IPUMS USA ([usa.ipums.org](http://usa.ipums.org)).

2024 age distributions based on 2023 vintage of U.S. Census Population Projections (main series estimates).

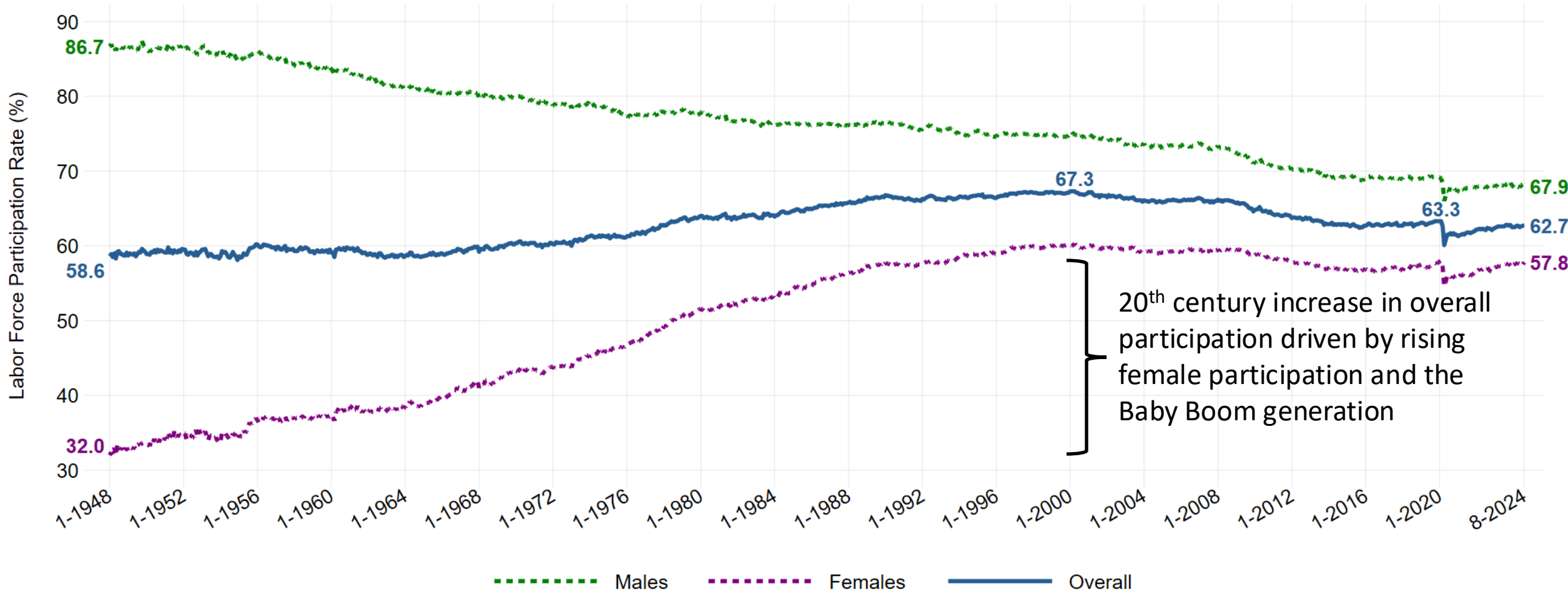
# Future growth in the prime working age population will depend heavily on immigration



**Source:** Historical data (1950-2023) from U.S. Bureau of Labor Statistics. Downloaded from FRED ([fred.stlouisfed.org/series/LNU00000060](https://fred.stlouisfed.org/series/LNU00000060)). Annual averages calculated from monthly data. Population projections (2024-2100) from U.S. Census Population Projections 2023-2100.

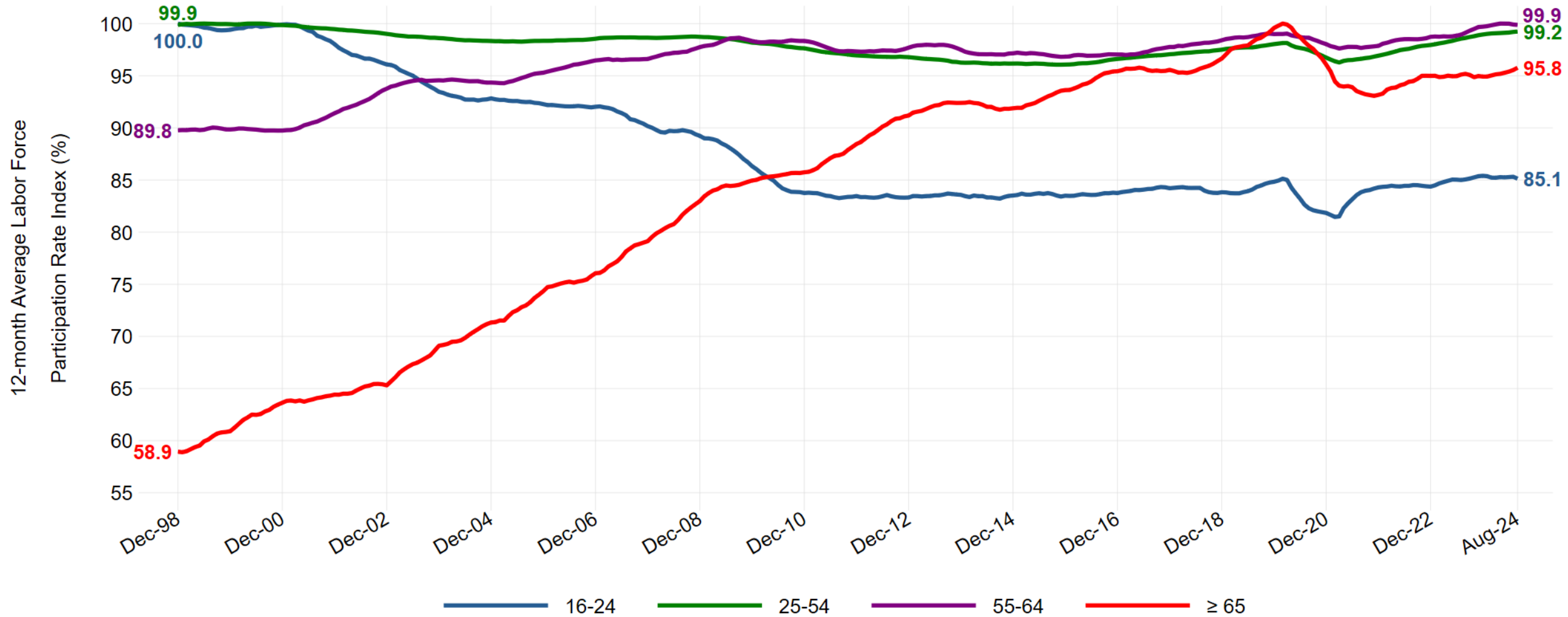
# Labor Force Participation

# Since 2000, population aging has been a central driver of falling labor force participation



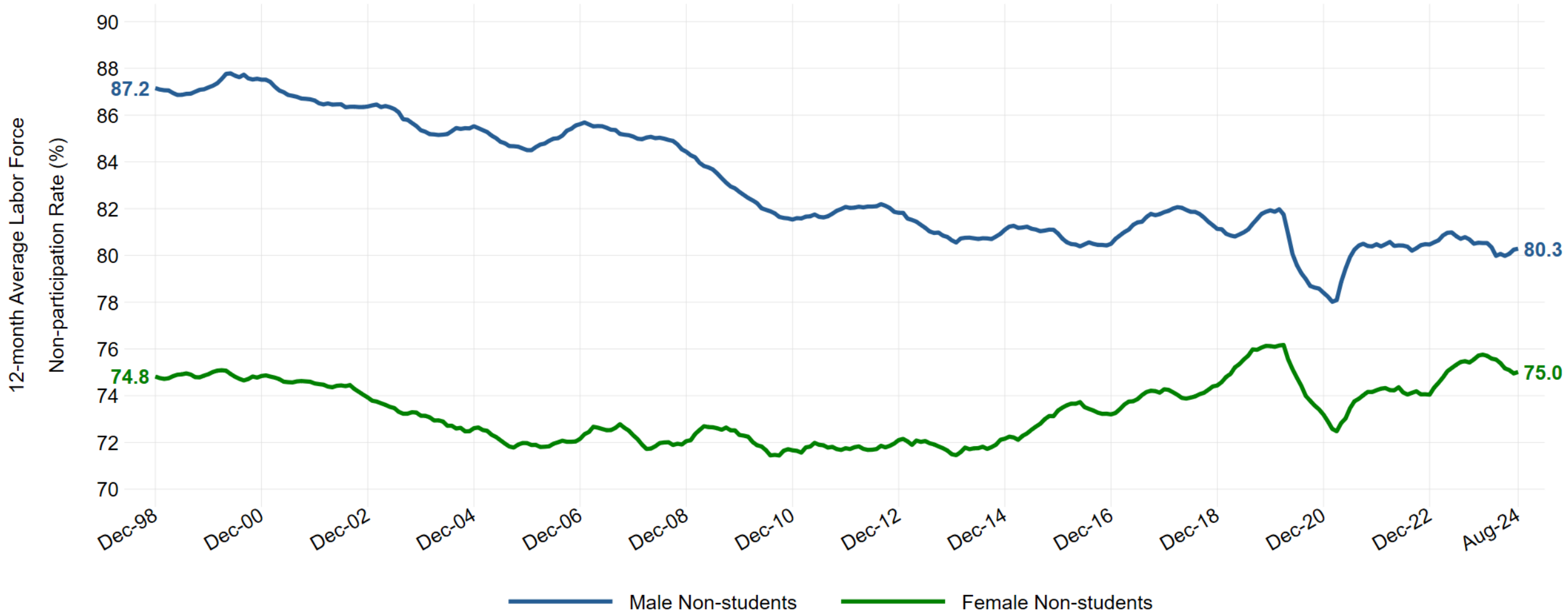
**Source:** Monthly data from Current Population Survey (CPS). Downloaded from BLS labor force data archive. Data are seasonally adjusted.

# Average participation among those aged 16-24 is 85 percent of its December 1998 value



**Note:** January 1998 - August 2024 basic monthly Current Population Survey (CPS) microdata. Downloaded from IPUMS CPS ([cps.ipums.org](https://cps.ipums.org)). Data are not seasonally adjusted.

# Labor force participation among non-student males age 16-24 has fallen significantly



**Note:** January 1998 - August 2024 basic monthly Current Population Survey (CPS) microdata. Downloaded from IPUMS CPS ([cps.ipums.org](https://cps.ipums.org)). Data are not seasonally adjusted.

# Optimism for 2025 and beyond

The labor market  
has cooled  
quickly in recent  
months

Innovation is  
expanding the  
pool of available  
labor

There are  
plausible ways to  
grow the labor  
force

Questions?