



COMING SOON:

**Vintage 2023**

**Population Estimates**

**Global, National, and Regional Demographic  
Trends Affecting Boston's Population**

*BPDA Research Division*



**boston planning &  
development agency**

# Global, National, and Regional Demographic Trends Affecting Boston's Population

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- 2 United States Population Trends
- 3 Boston Population Trends
- 4 Summary
- 5 Next Presentation: Boston Population Projections

# Global, National, and Regional Demographic Trends Affecting Boston's Population

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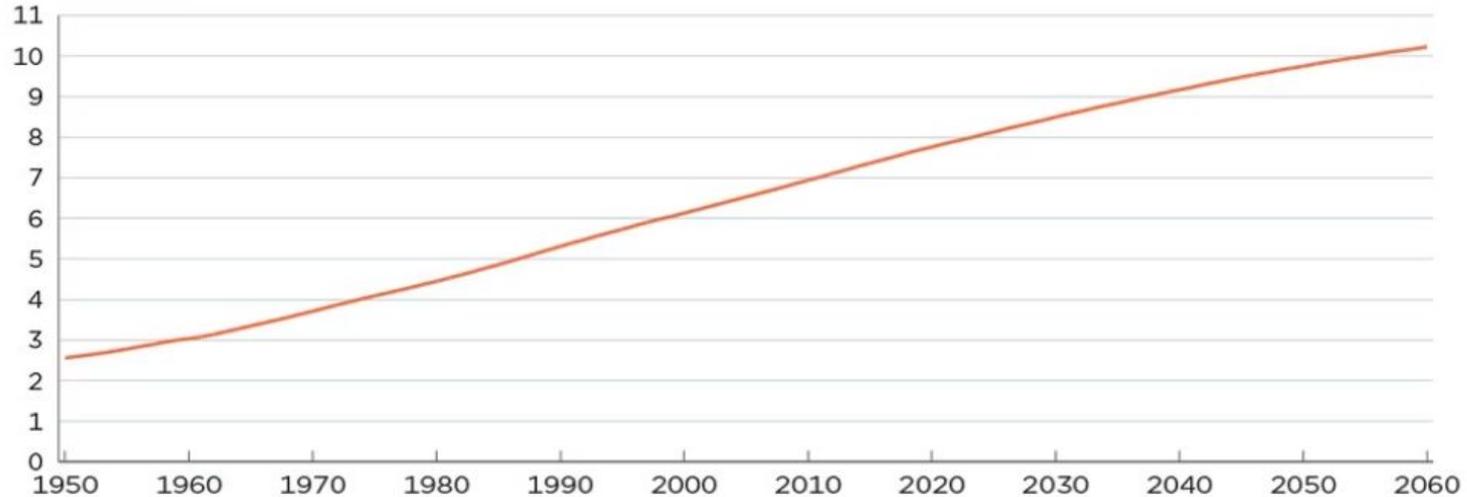
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# The world's population is projected to triple over 110 years from 1950 to 2060

Figure 1a.

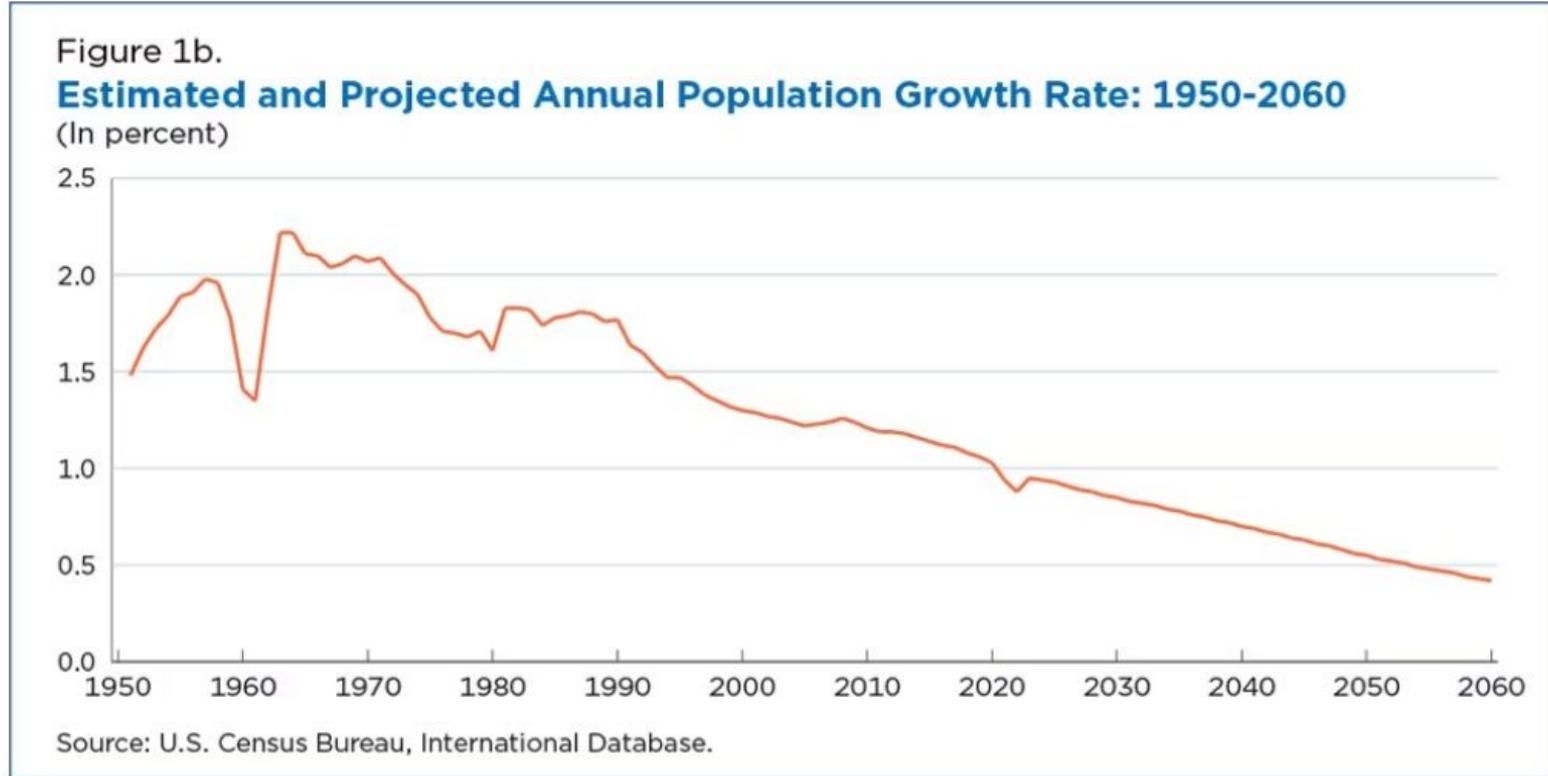
## Estimated and Projected World Population: 1950-2060

(In billions)



Source: U.S. Census Bureau, International Database.

# However, the rate of growth is rapidly decelerating



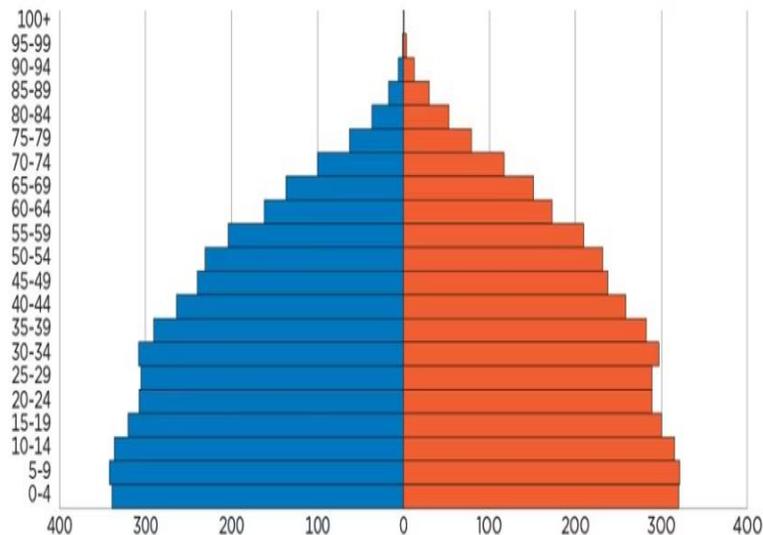
# The world's population will **age** due to decreasing birth rates and longer life expectancy

Figure 3a.

## Global Population Pyramid by Age Group: 2023

(In millions)

■ Male ■ Female

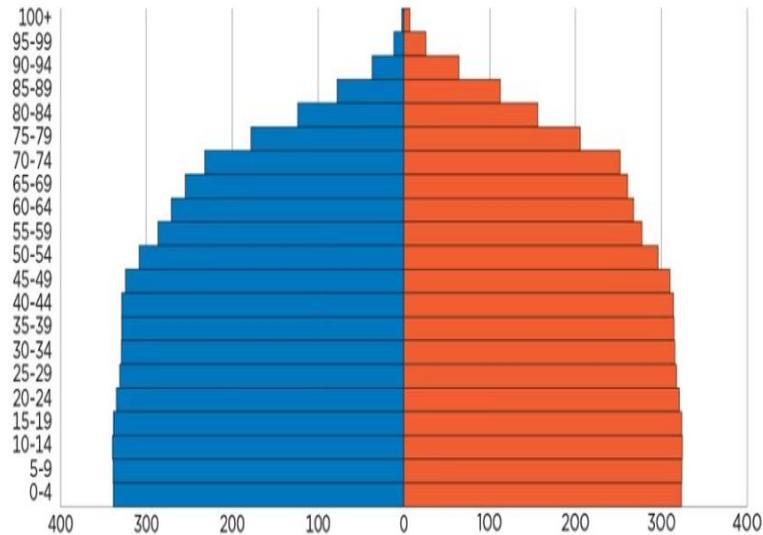


Source: U.S. Census Bureau, International Database.

Figure 3b.

## Projected Global Population Pyramid by Age Group: 2060

■ Male ■ Female



Source: U.S. Census Bureau, International Database.

# Three factors drive population change:



**Births**



**Deaths**



**Migration**



# As societies develop economically, **views on children change** and **births tend to fall**

- **In agrarian economies, children can be viewed as capital goods**
  - children are a financially beneficial source of labor that contributes to family income
- **In modern industrial/post-industrial economies, children can be viewed as consumption goods**
  - children are not financial contributors and must be enjoyed for their own sakes
  - children may require large investments in education to achieve independence



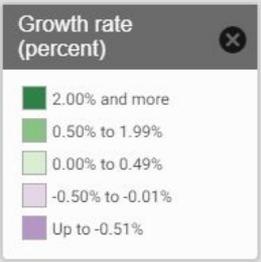
# Life expectancy **increased** during the 20<sup>th</sup> Century leading an **aging** population

- **Economic development**
  - Better nutrition and housing
- **Public health measures**
  - Clean drinking water and wastewater treatment
- **Medical advancements**
  - Antibiotics, vaccines, and other medical technologies



## Lack of unifying understanding of the role of international migration

- **Economic perspective** - a country should admit migrants until the marginal migrant makes a negative contribution to the national treasury
- **Cultural perspective** - migrants do not possess the same cultural heritage as native born
- The UN's Universal Declaration of Human Rights, Article 13, states that a person has a right to leave a country but is silent on a right to enter another country



France, Spain, and the UK have stable populations

Some sub-Saharan African countries such as Nigeria are still growing rapidly

Japan, Russia, and some European countries are already losing population

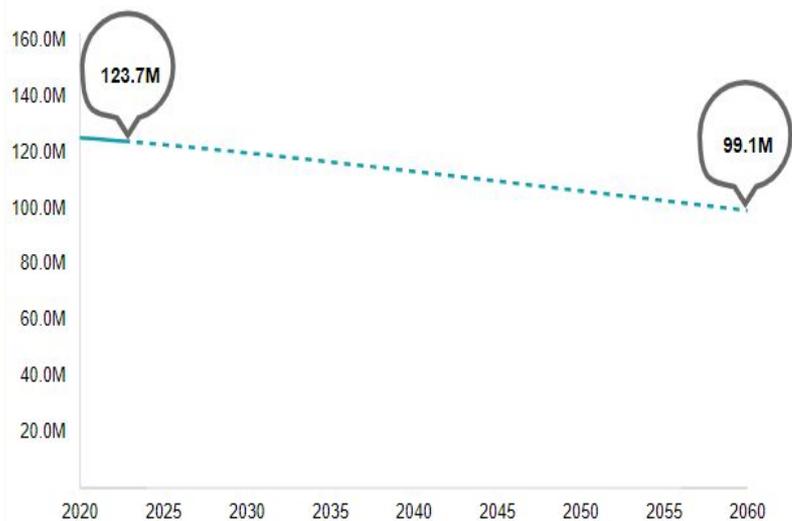
# Japan - shrinking population

- low births: 1.4 births per woman
- low immigration: 2.0% foreign born

### Population by Age and Sex



### Current and Projected Population



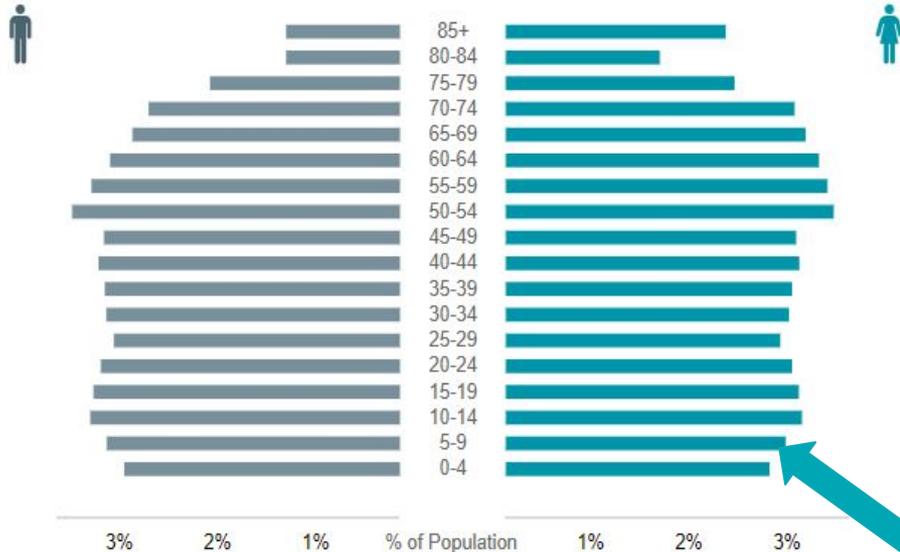
**Fewer people in younger cohorts**

Source: U.S. Census Bureau, International Data Base, birth rate 2023, foreign born share 2019

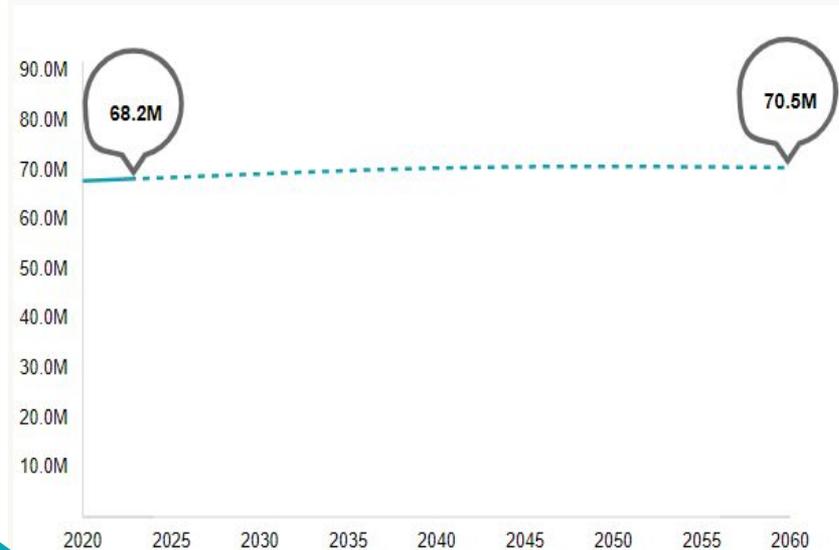
# France - stable population

- moderate births: 1.9 births per woman
- moderate immigration: 12.8% foreign born

Population by Age and Sex



Current and Projected Population



Source: U.S. Census Bureau, International Data Base  
birth rate 2023, foreign born share 2019

**Balanced younger  
and older cohorts**

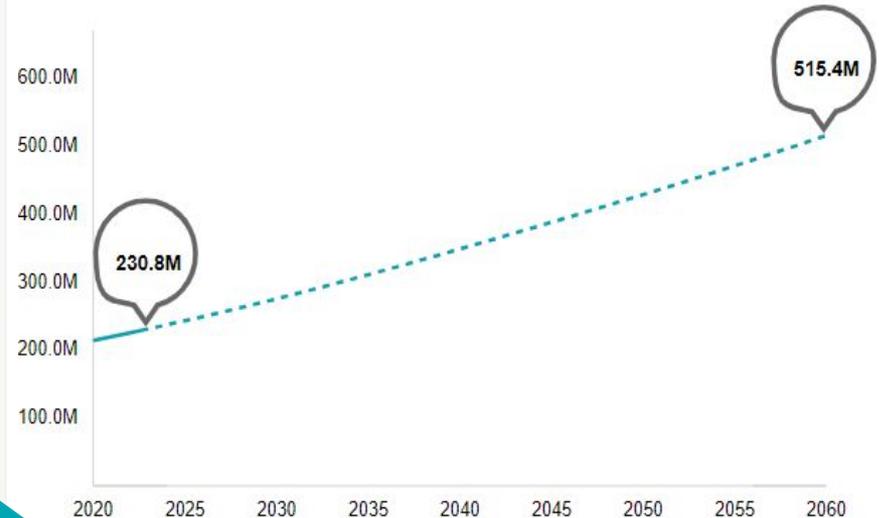
# Nigeria - growing rapidly

- high births: 4.6 births per woman
- low immigration: 0.6% foreign born

Population by Age and Sex



Current and Projected Population

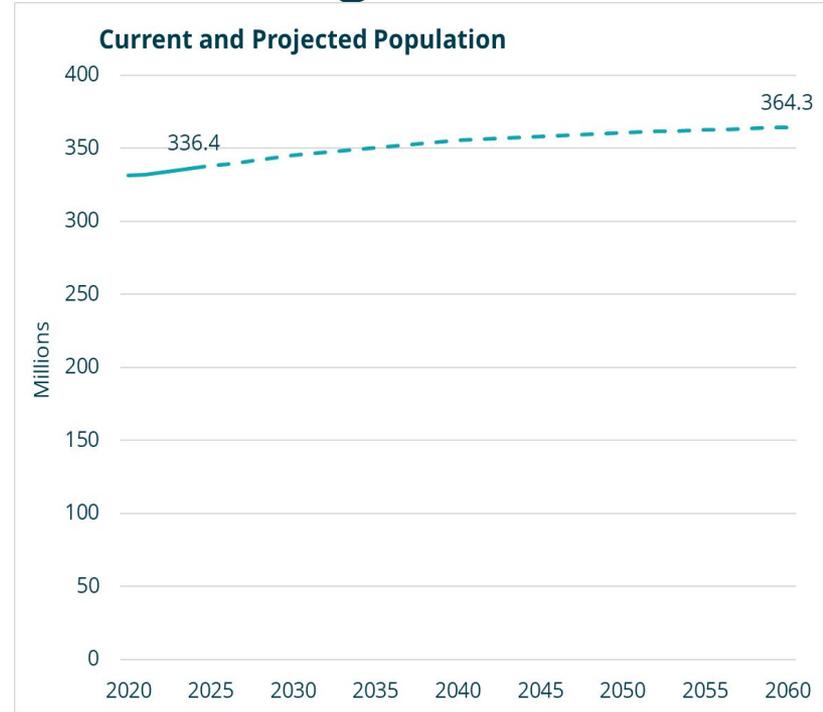
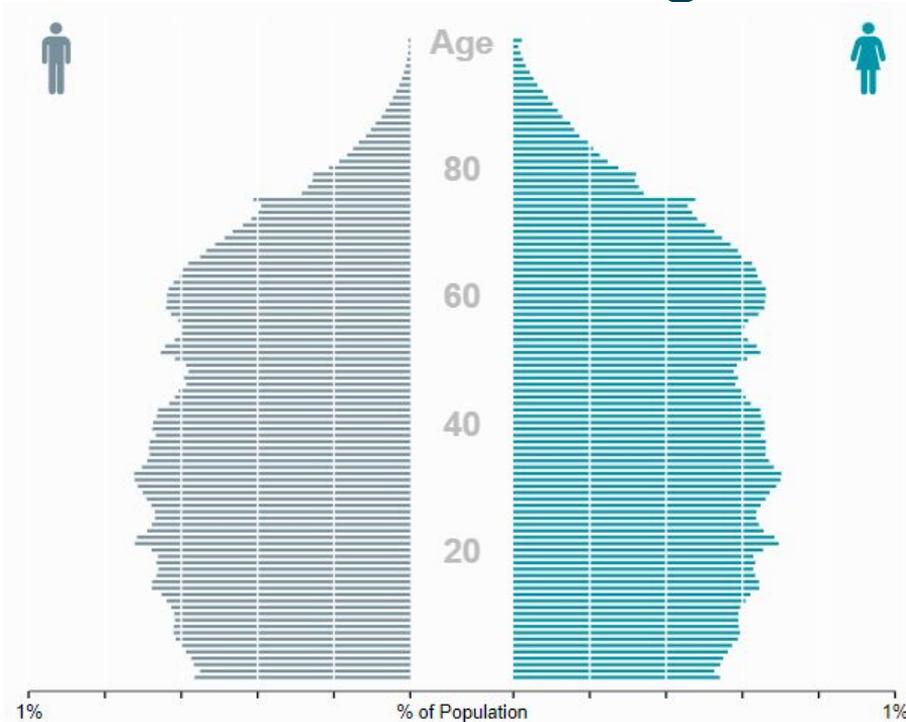


Source: U.S. Census Bureau, International Data Base  
birth rate 2023, foreign born share 2019

More people in  
younger cohorts

# United States - growing slowly

- low births: 1.7 births per woman
- moderate immigration: 13.8% foreign born



Source: U.S. Census Bureau, International Data Base  
birth rate 2023, foreign born share 2022 American Community Survey

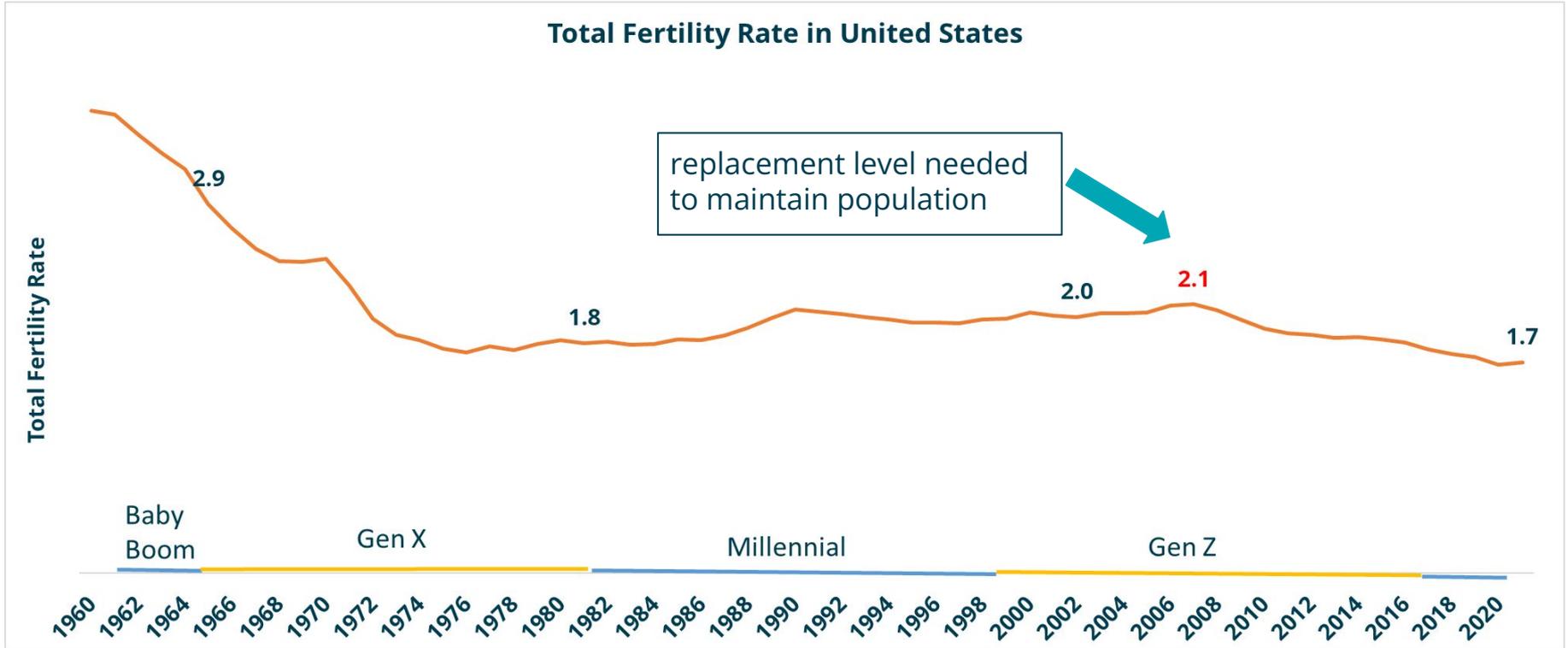
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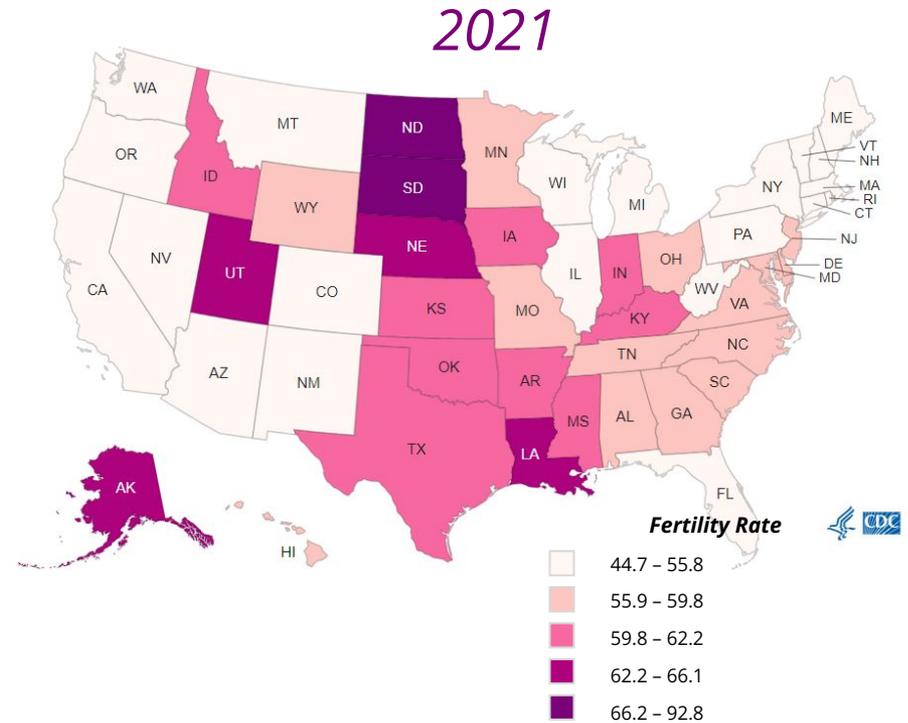
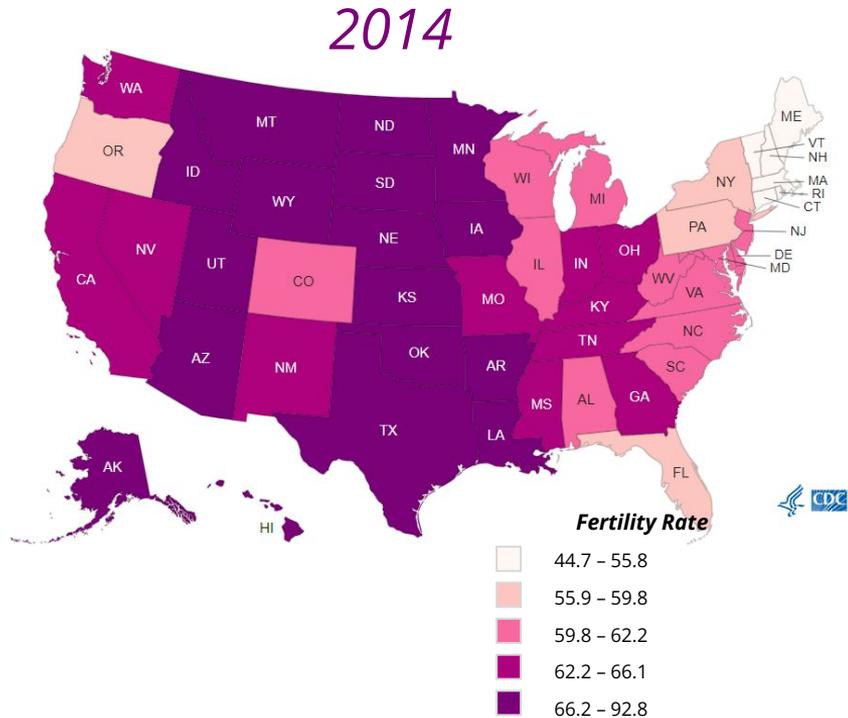


# Total fertility rates in the United States have declined since 2008, to 1.7 births per woman



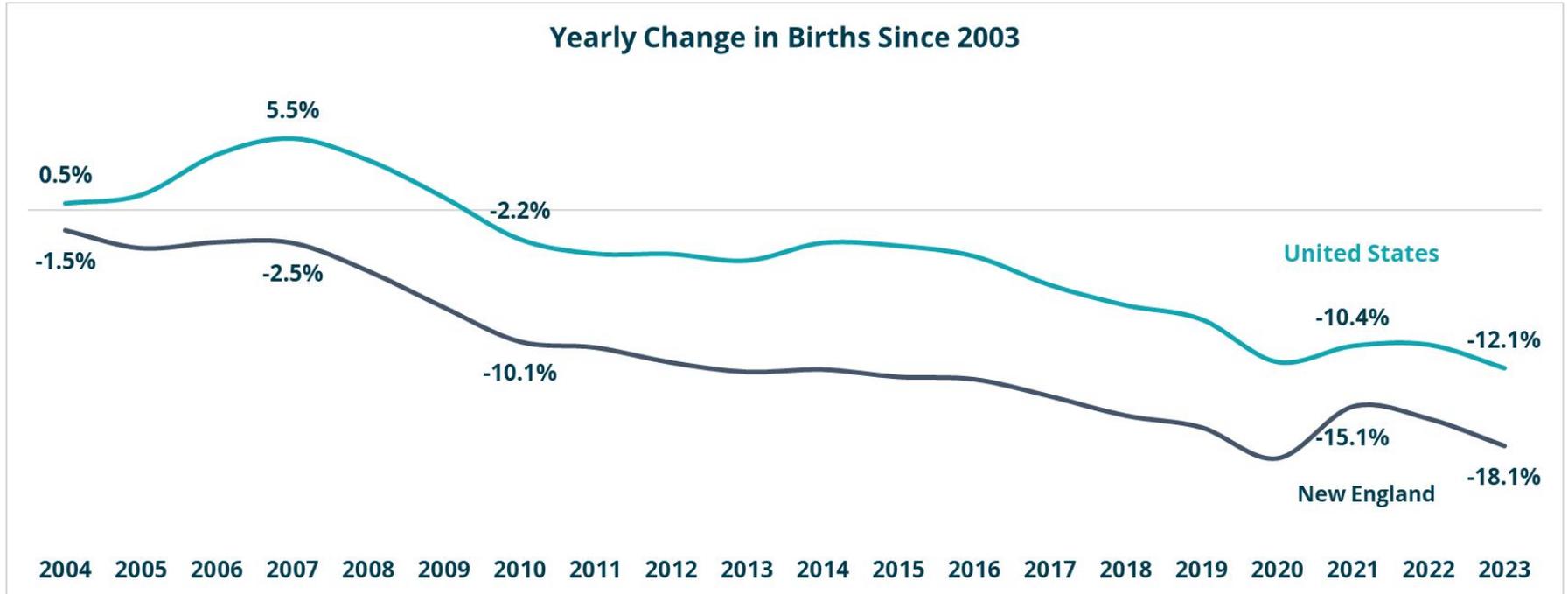
Source: World Bank, Total Fertility Rate for the United States

# Fertility rates (per 1000 women aged 15-44) have fallen across the country, and are **lowest** in New England



Source: Centers for Disease Control and Prevention, [National Center for Health Statistics](#)

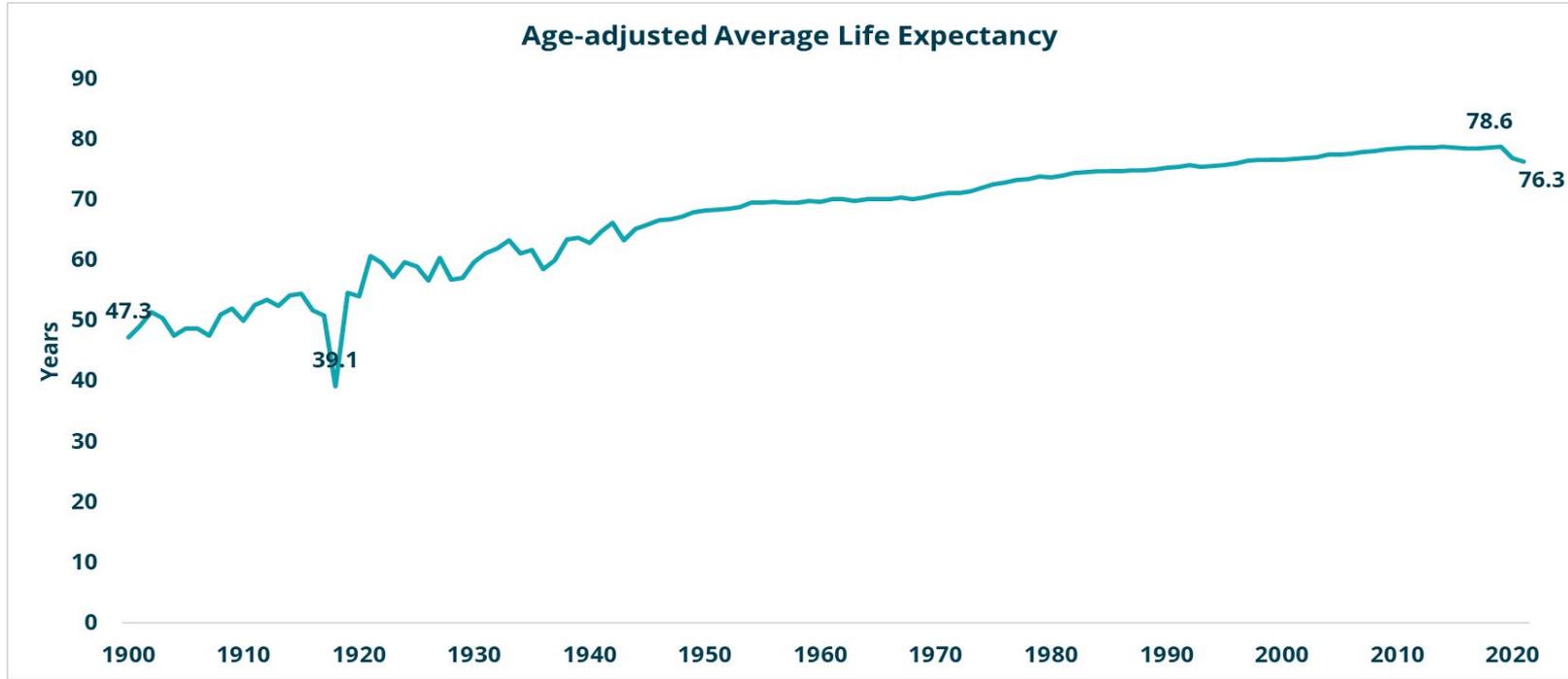
# Birth rates for women of childbearing age have been declining nationally and regionally



Source: Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital System, Natality on CDC Wonder Online Database, BPDA Research Division Analysis



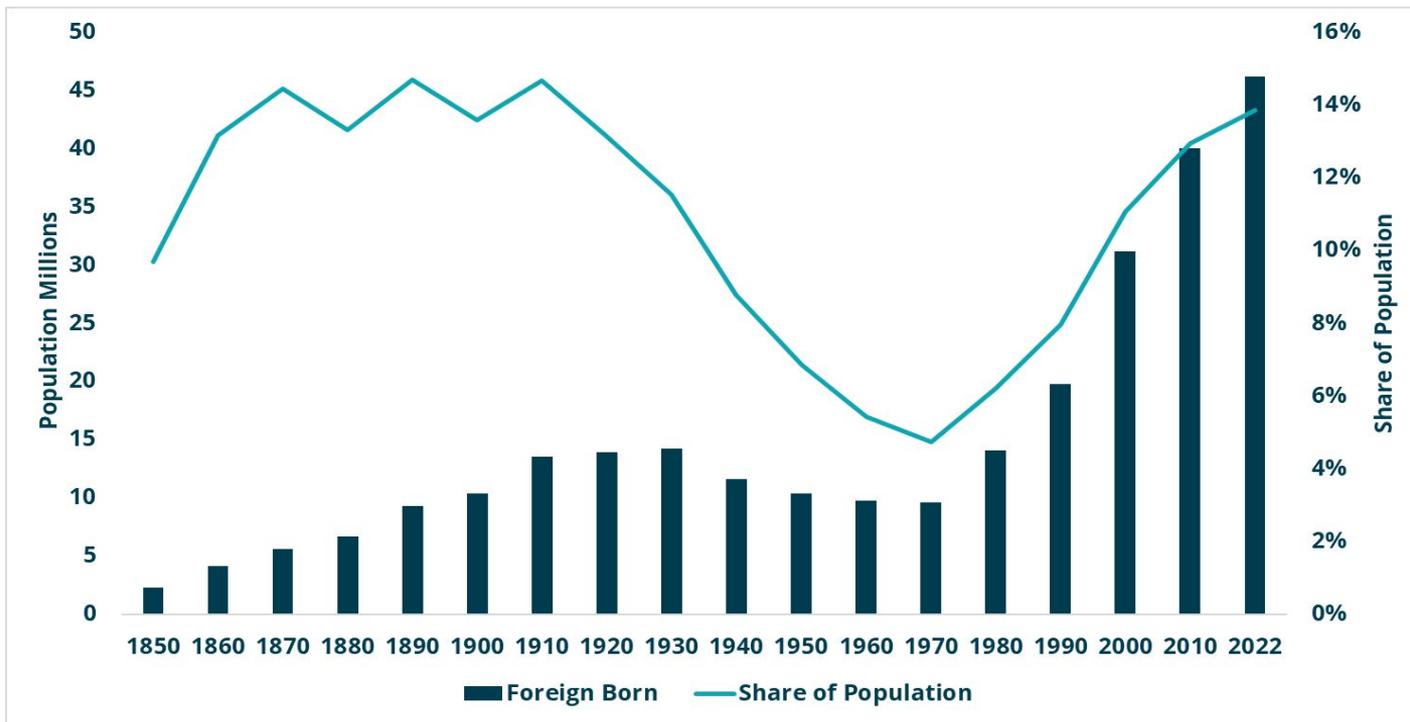
# Over the last century, life expectancy greatly increased, leading to an aging population



Source: NCHS, National Vital Statistics System, historical data, 1900-1998

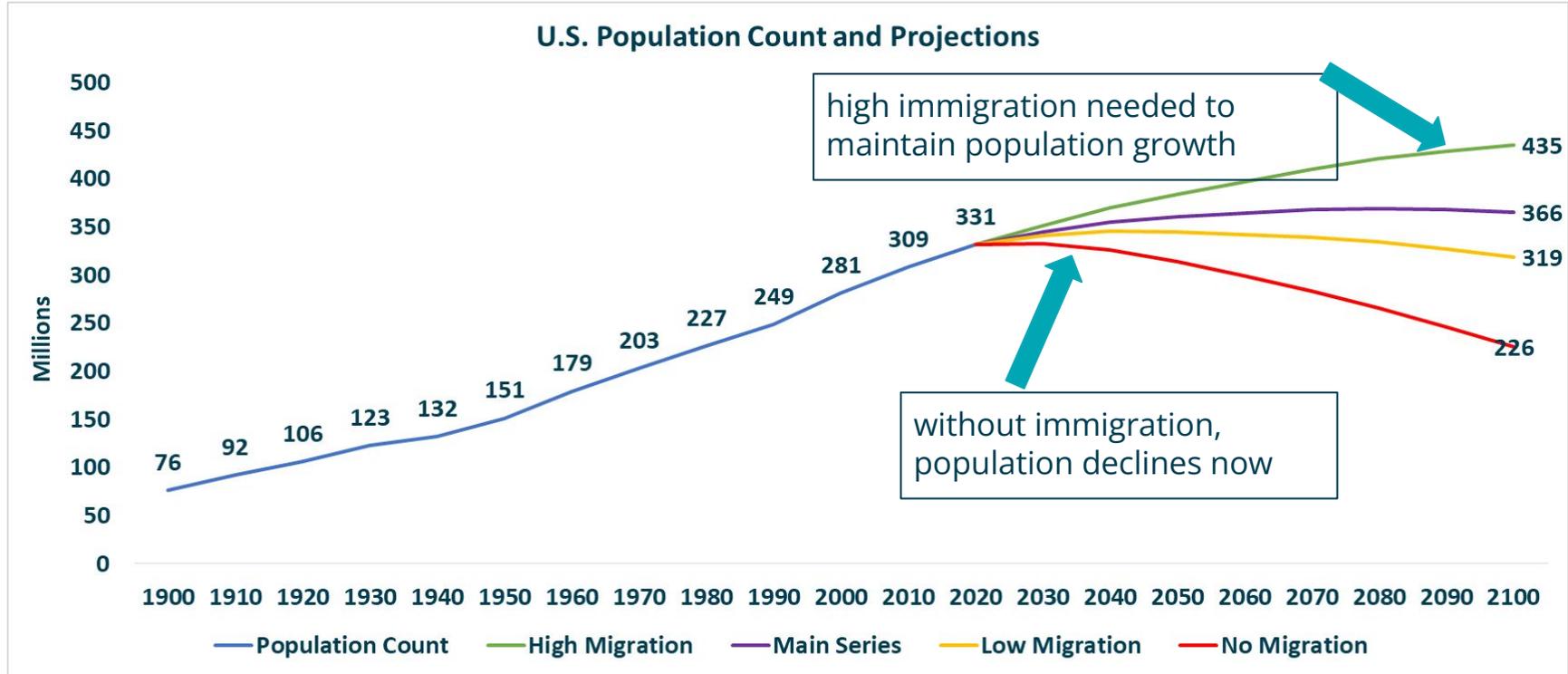


# Immigration drove U.S. population growth during a period of low birth rates since 1970



Source: 1850-2000 Censuses & 2010 & 2022 American Community Survey, BPDA Research Division Analysis

# Without high levels of immigration, the U.S. population likely declines due to lower birth rates



Source: U.S. Census Bureau & BPDA Research Division

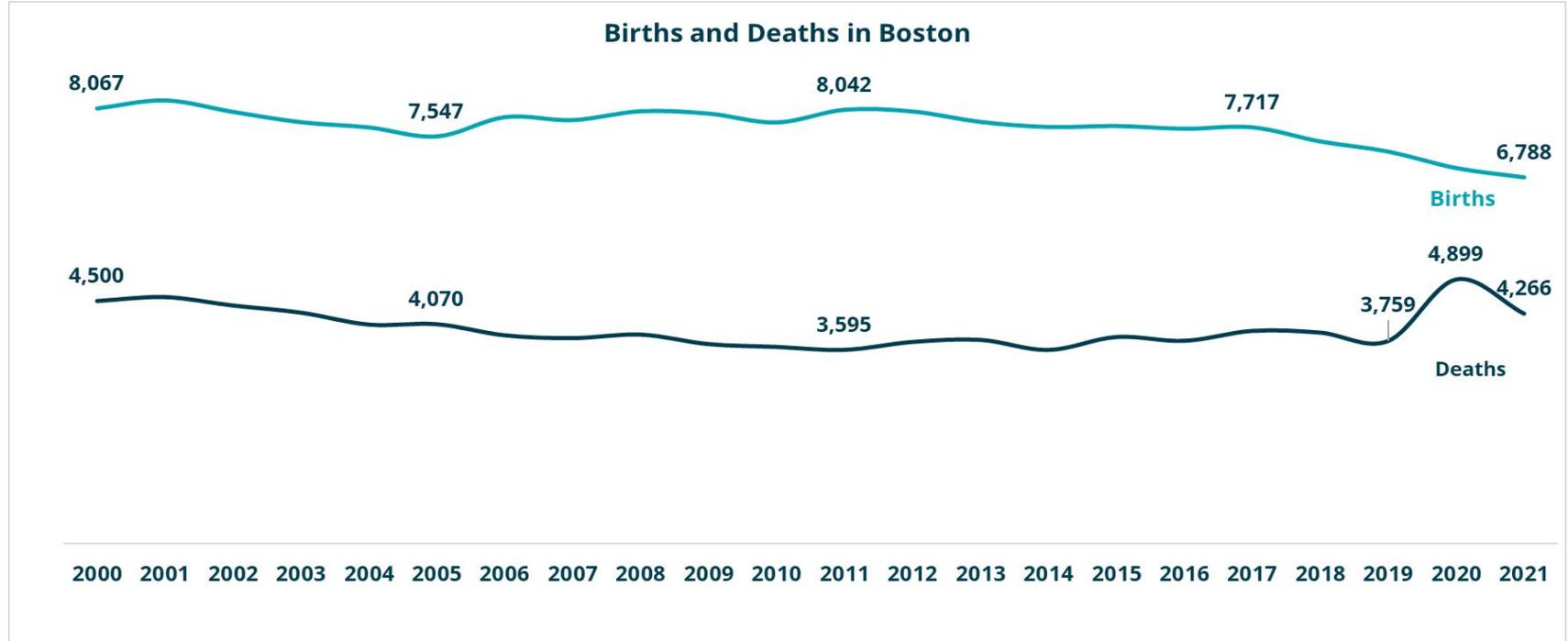
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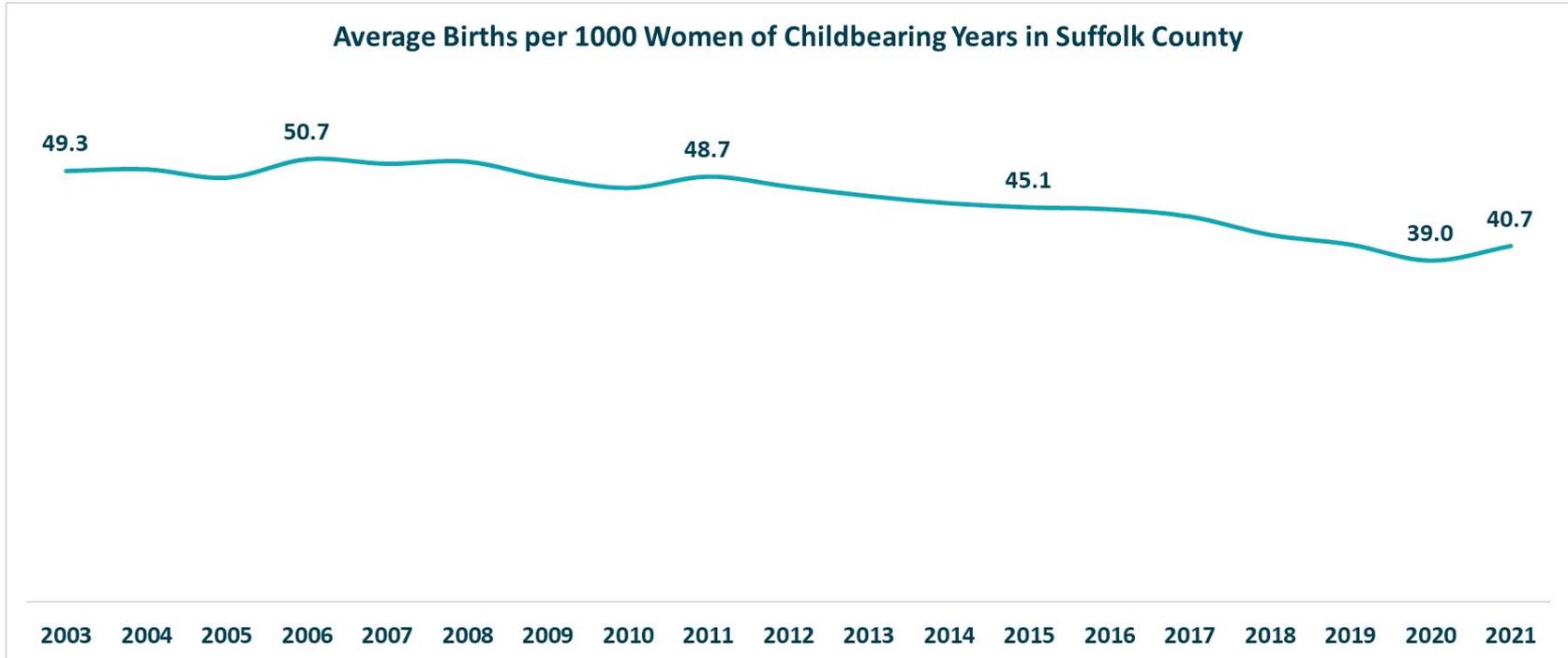


# Boston births have been declining and deaths have been rising since 2011 - before the pandemic effect in 2020-2021





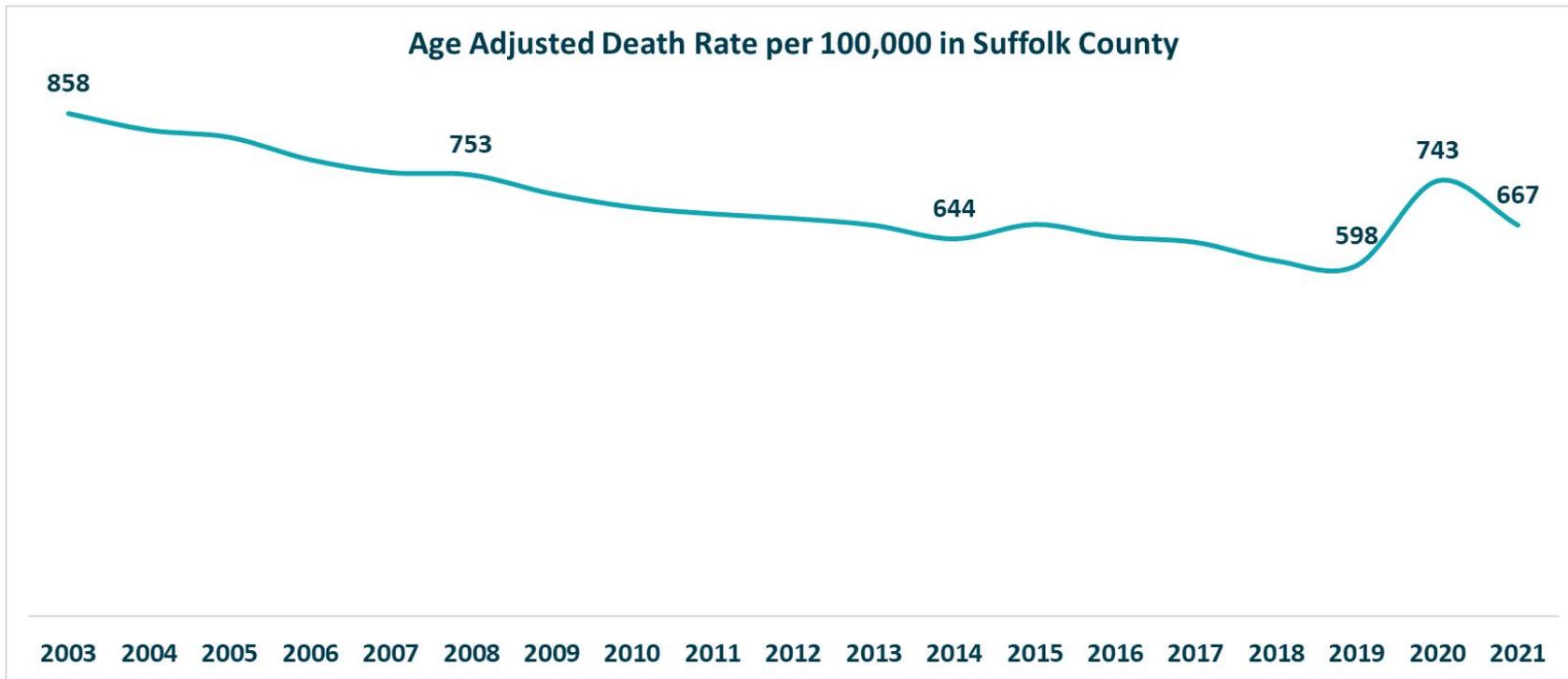
# The birth rate for women of childbearing age has been **declining** in Suffolk County since 2003



Source: Centers for Disease Control and Prevention, National Center for Health Statistics

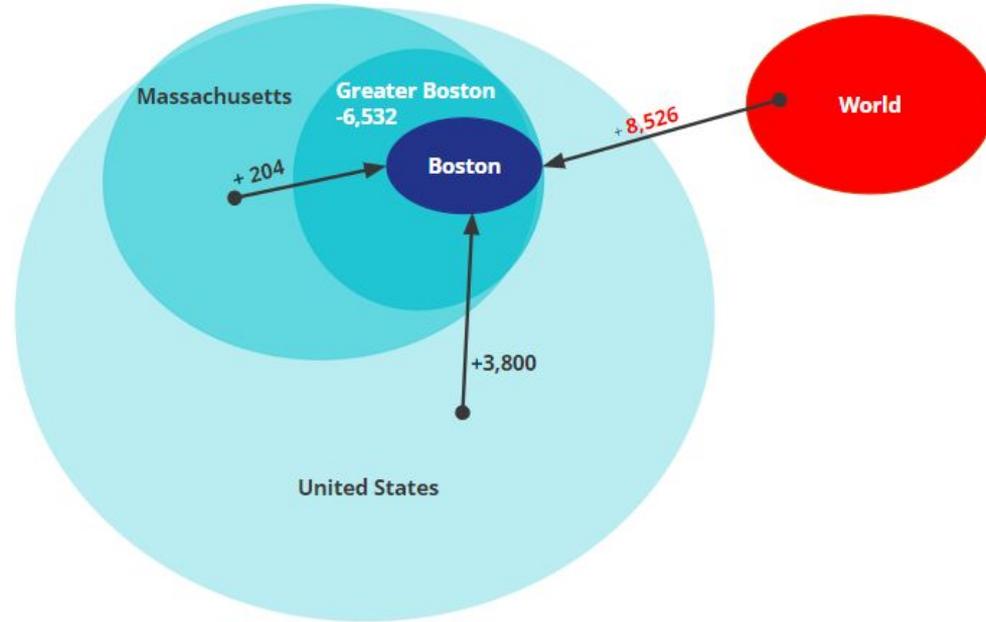


# Until COVID-19, the age-adjusted death rate in Suffolk County had been declining



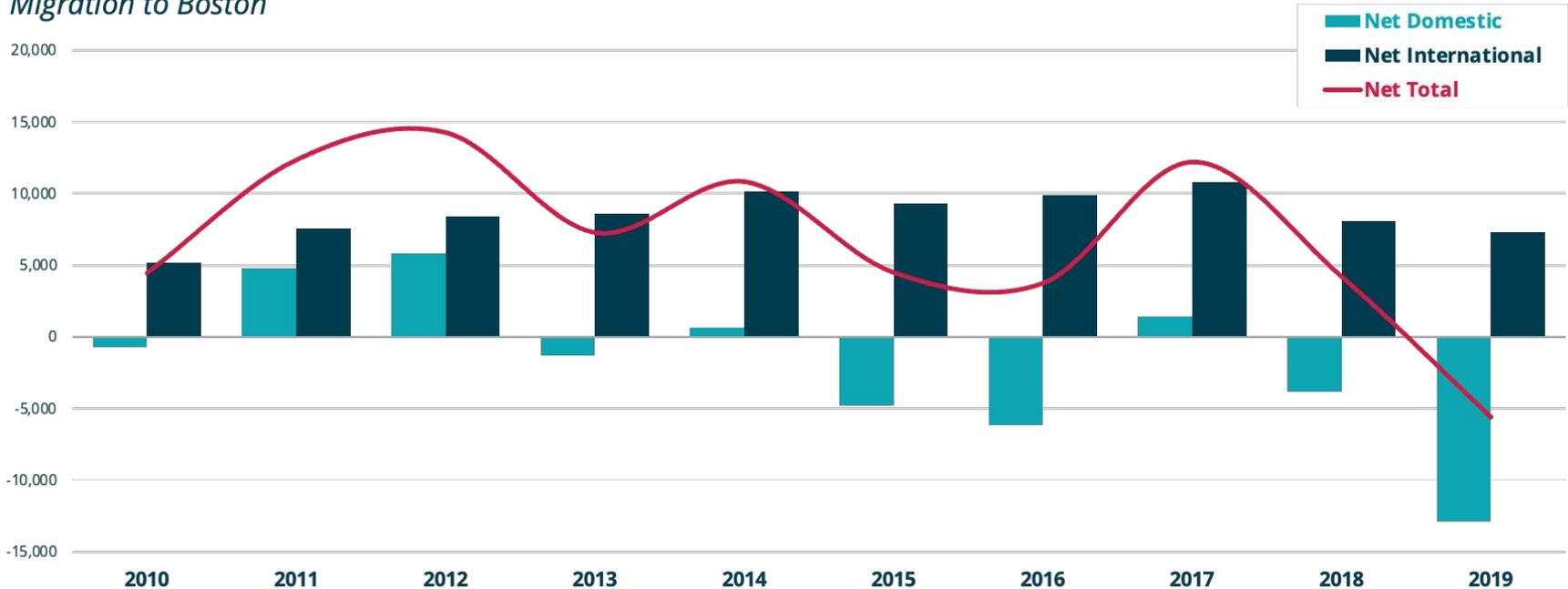
Source: Centers for Disease Control and Prevention, National Center for Health Statistics

# Boston has seen **net positive** international migration but **net negative** regional migration



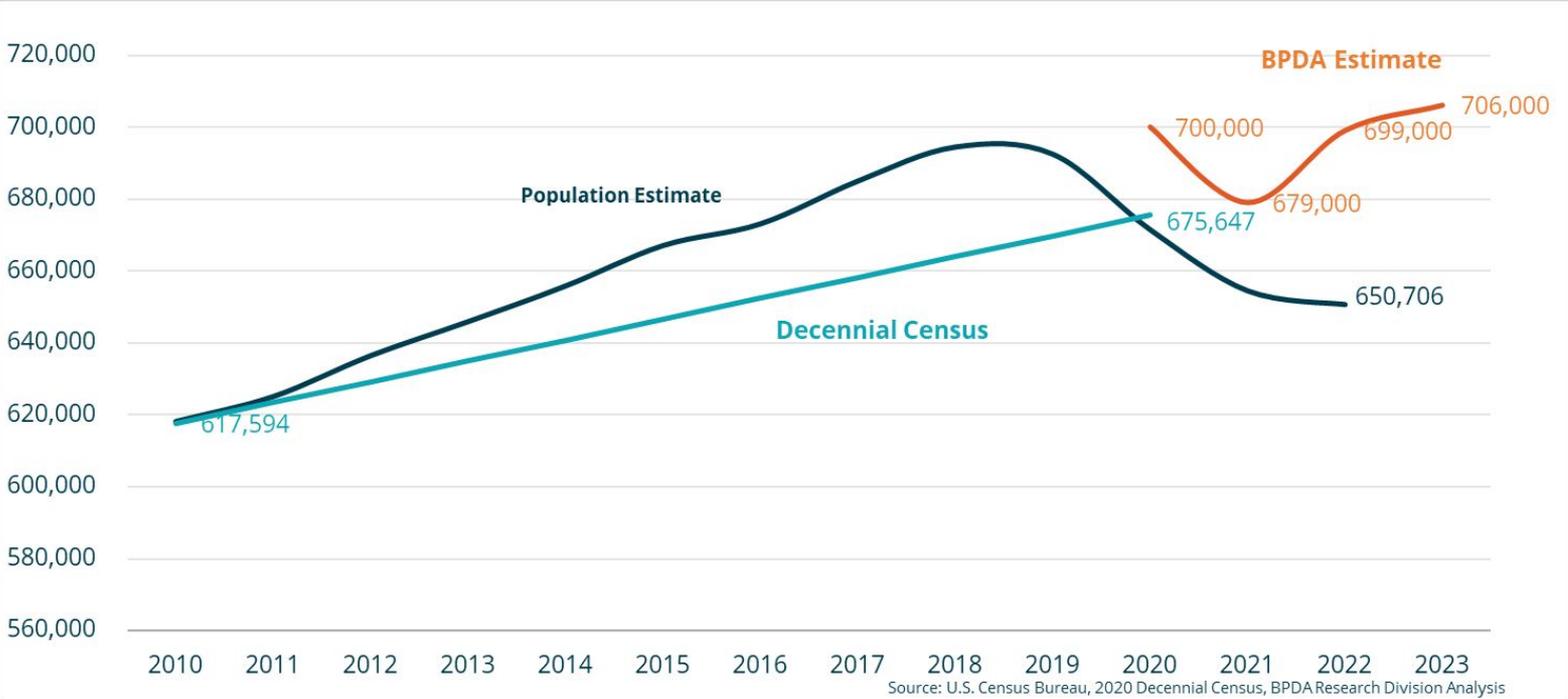
# Recent net migration to Boston peaked in 2012 at ~14,000 before falling to -5,590 in 2019

*Migration to Boston*



Source: 2010-2019 American Community Survey, BPDA Research Division Analysis

# Boston's population was undercounted in the 2020 Census, then fell during the pandemic but rebounded by 2022 - a recovery the Census estimates have not yet captured



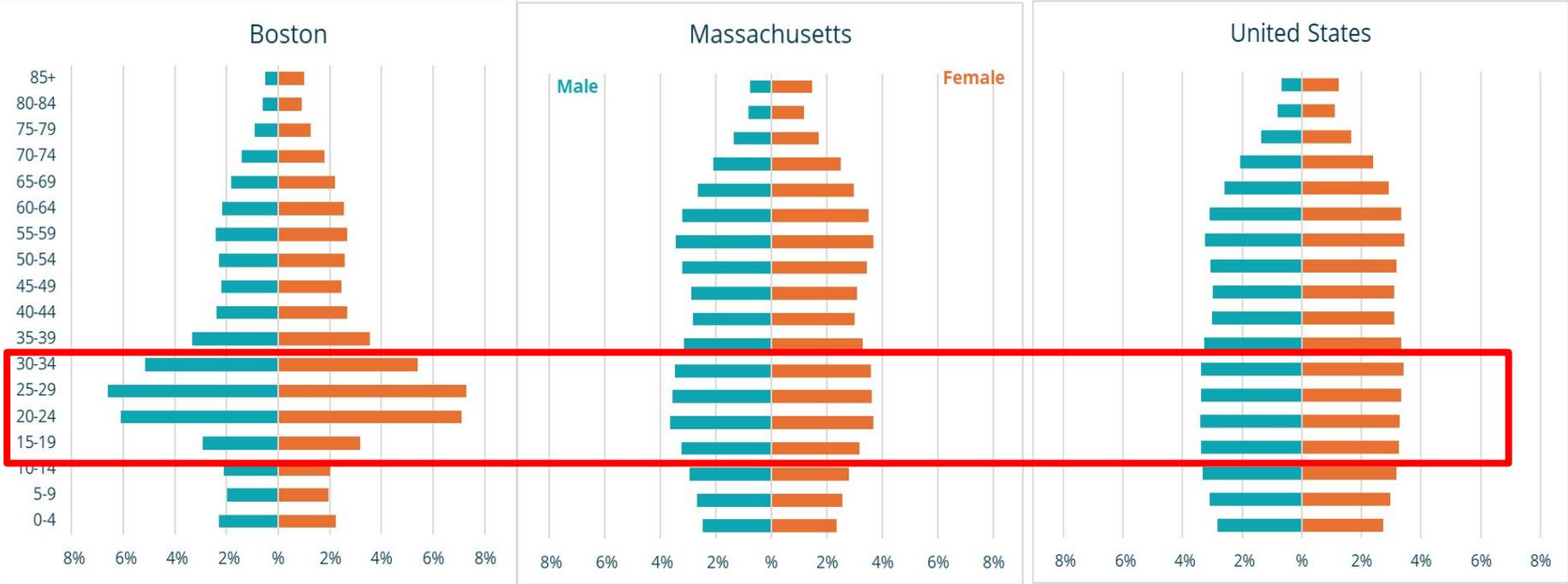
**2023 Census population estimate comes out in May**

Source: U.S. Census Bureau, BPDA Research Division Analysis

Source: U.S. Census Bureau, 2020 Decennial Census, BPDA Research Division Analysis



# As these population trends hit 20 year olds, these demographic trends may disproportionately influence Boston's population



Source: 2020 Decennial Census: BPDA Research Division Analysis

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# Global and national population trends are important to Boston's future

- Births are in decline in most of the countries of the world, especially in more economically developed countries
- Life expectancy appears to have peaked
- Global population growth peaked in the 1960s and slowing population growth may continue
- The United States population may start declining over the next 50 years
- These trends can shape Boston's population growth mainly through domestic and international migration

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# Revised Boston Population Projections

- The most recent BPDA population projections used the 2017 vintage U.S. projected population
  - **The newer 2022 vintage with 13% fewer 20-to-29 year olds in the United States in 2050 will be used to revise the BPDA projections**
- We are updating these U.S. data and Boston's migration rates to revise Boston 2025-2050 population projections by age cohort. **Presentation on Friday, April 5th**