

# MICHIGAN DEMOGRAPHIC TRENDS

Consensus Revenue Estimating Conference

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State Demographer



MICHIGAN  
Center for Data  
and Analytics

STATE OF MICHIGAN

Michigan Center for Data and Analytics

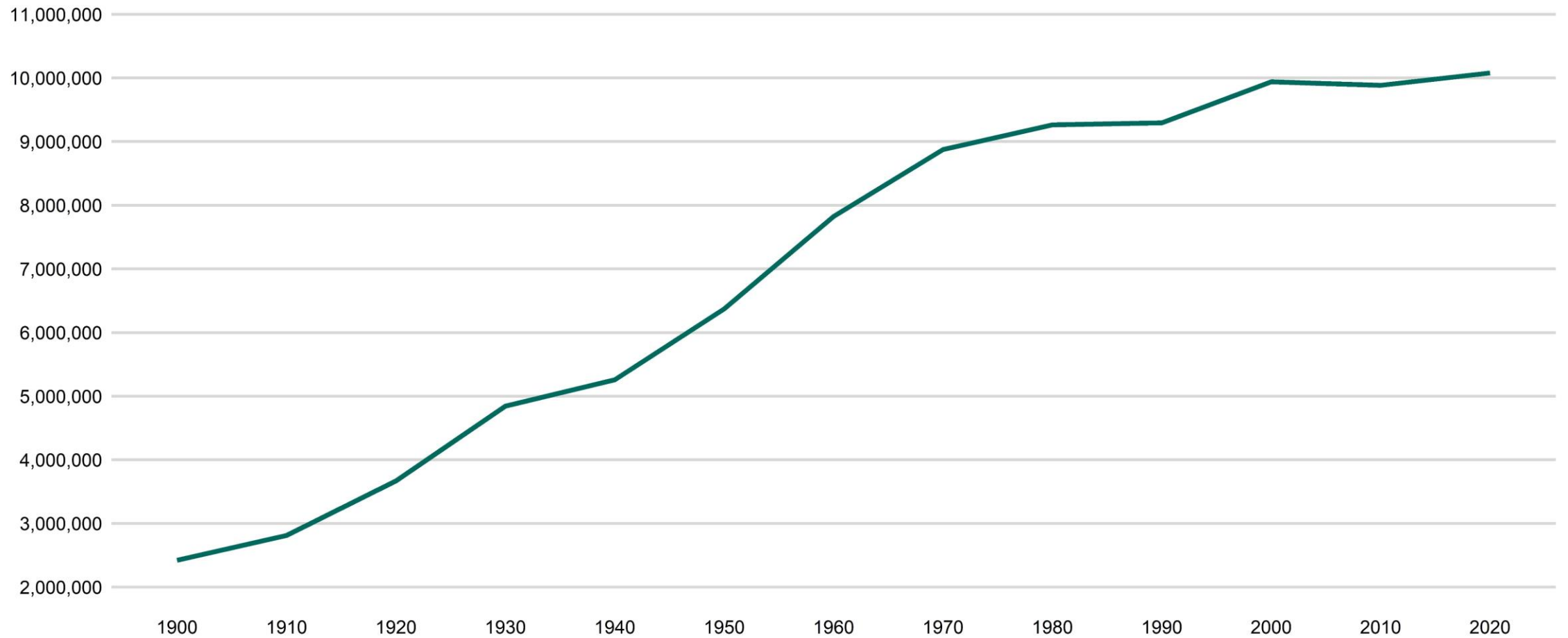
# Functions of the Demography Team at the Michigan Center for Data and Analytics

- Analysis of Michigan's changing population size and demographic composition
- Lead for the State Data Center and the Federal-State Cooperative
- Michigan's liaison with the U.S. Census Bureau for most programs, including population estimates and data dissemination
- Advisors to state and local leaders, nonprofits, the media, and the general public on population and demographic data

**MICHIGAN STATEWIDE**

**POPULATION TRENDS**

# Michigan's Total Population, 1900 to 2020



Source: Decennial counts extracted from IPUMS NHGIS, University of Minnesota, [www.nhgis.org](http://www.nhgis.org)

# Slow Growth and Population Decline in Michigan

Michigan's population grew by 2.0 percent from 2010 to 2020.

- The United States population increased by 7.5 percent in this period.
- Michigan had the 46th slowest population growth rate among the 47 states that experienced population growth from 2010 to 2020.

Michigan was among 19 states that experienced population decline from 2020 to 2022.

- The United States experienced a low rate of population growth from 2020 to 2022.
- Michigan ranked 43rd among states in terms of its rate of population change from 2020 to 2022.

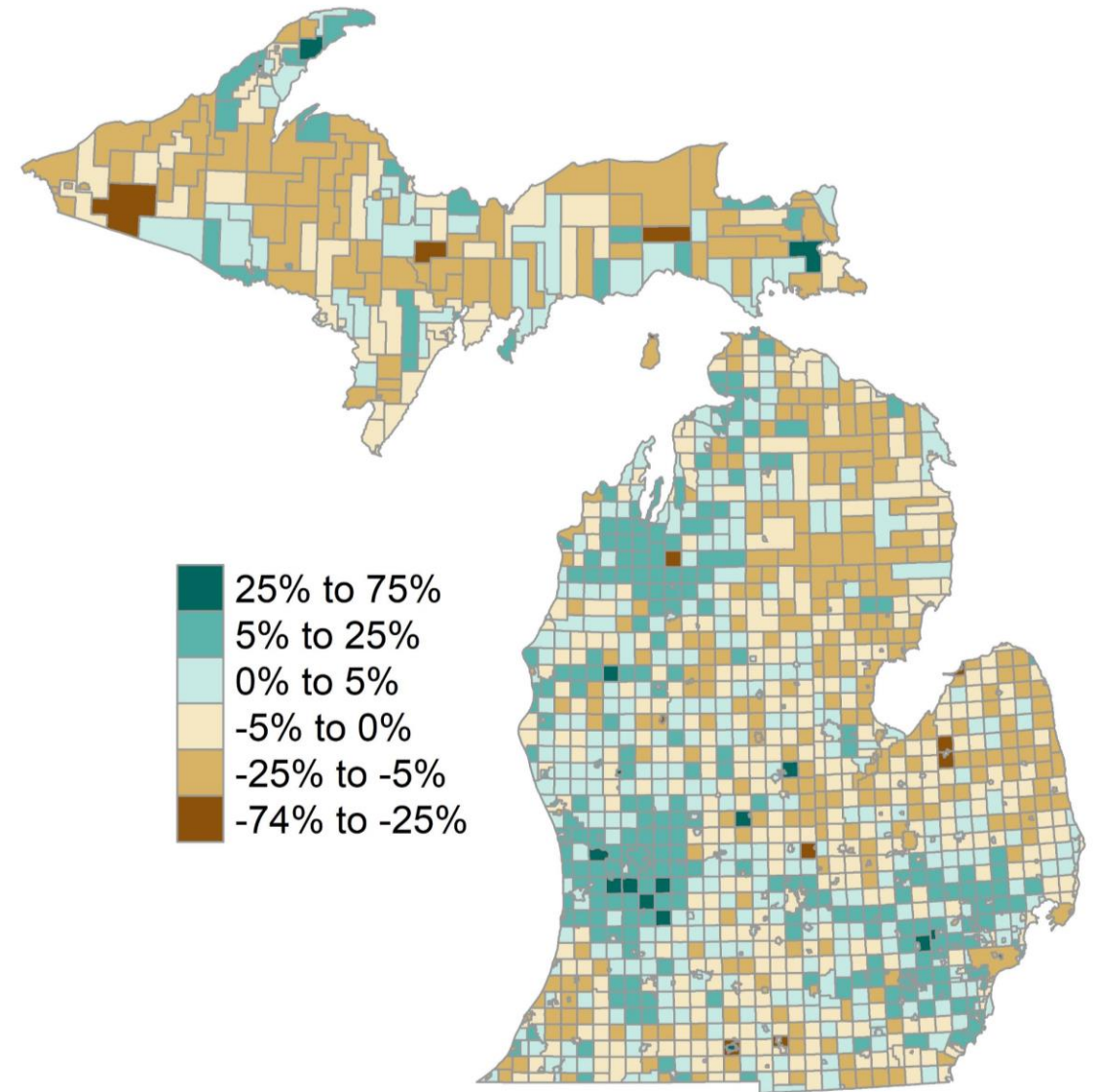
**MICHIGAN REGIONAL**

**POPULATION TRENDS**

# Population change across Michigan, 2010 to 2020

- Growth in this ten-year period was concentrated in Southeastern Michigan, Grand Rapids, and Traverse City.
- Decline was concentrated in the Thumb, Northeastern Lower and much of the Upper Peninsula.

## Percent Change in Population of Michigan's Cities and Townships, 2010–2020



Source: 2010 and 2020 PL File, U.S. Census Bureau

**THE DYNAMICS OF**

**POPULATION CHANGE**

What demographic dynamics have contributed to historic and contemporary patterns of population change in Michigan?



# What are the dynamics of population change?

There are only three components to population change:

- Births
- Deaths
- Migration

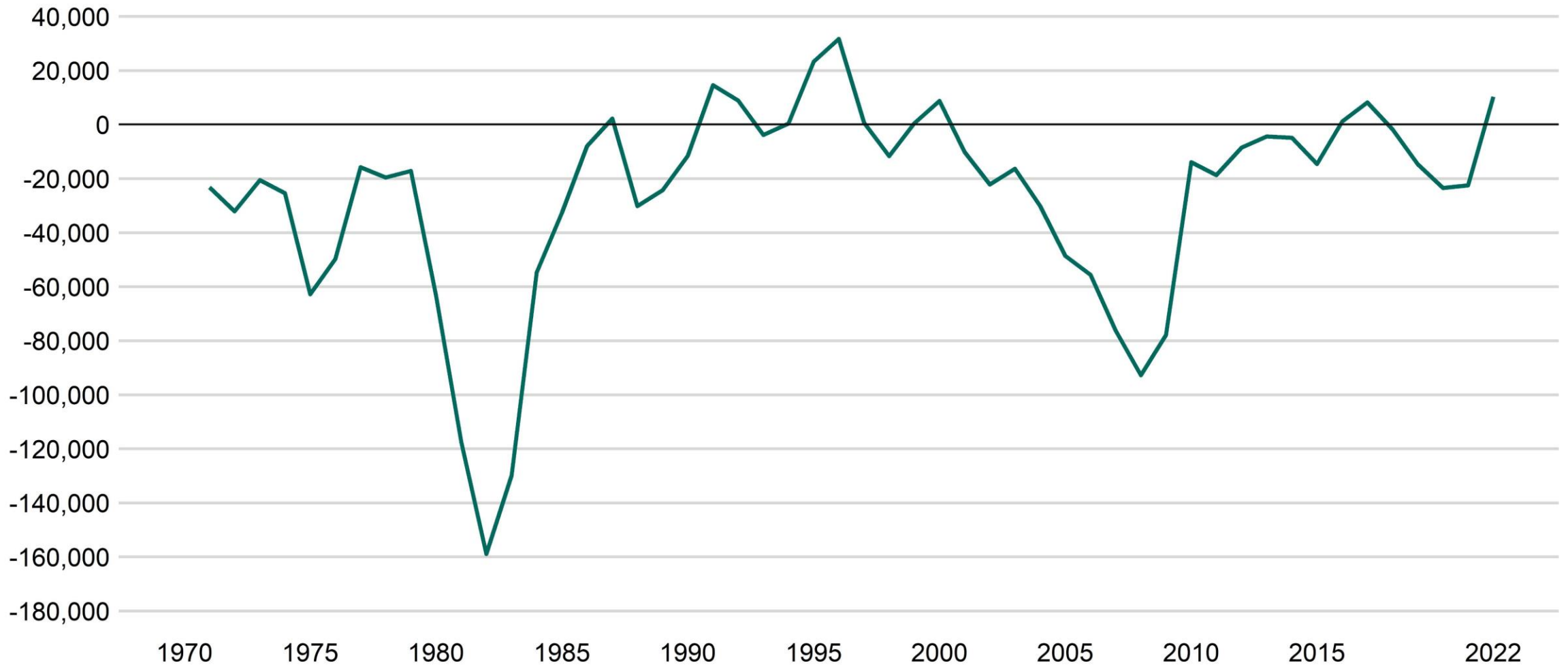
$$\begin{array}{ccccccc} \text{Population} & = & \text{Population} & + & \text{Natural Change} & + & \text{Net Migration} \\ \text{in Time 2} & & \text{in Time 1} & & \text{(Births - Deaths)} & & \text{(In-Migration - Out-Migration)} \end{array}$$

- When there are more births than deaths, this is natural increase.
- When there are more deaths than births, this is natural decrease.
- Migration consists of domestic (state to state) and international components.

# MIGRATION

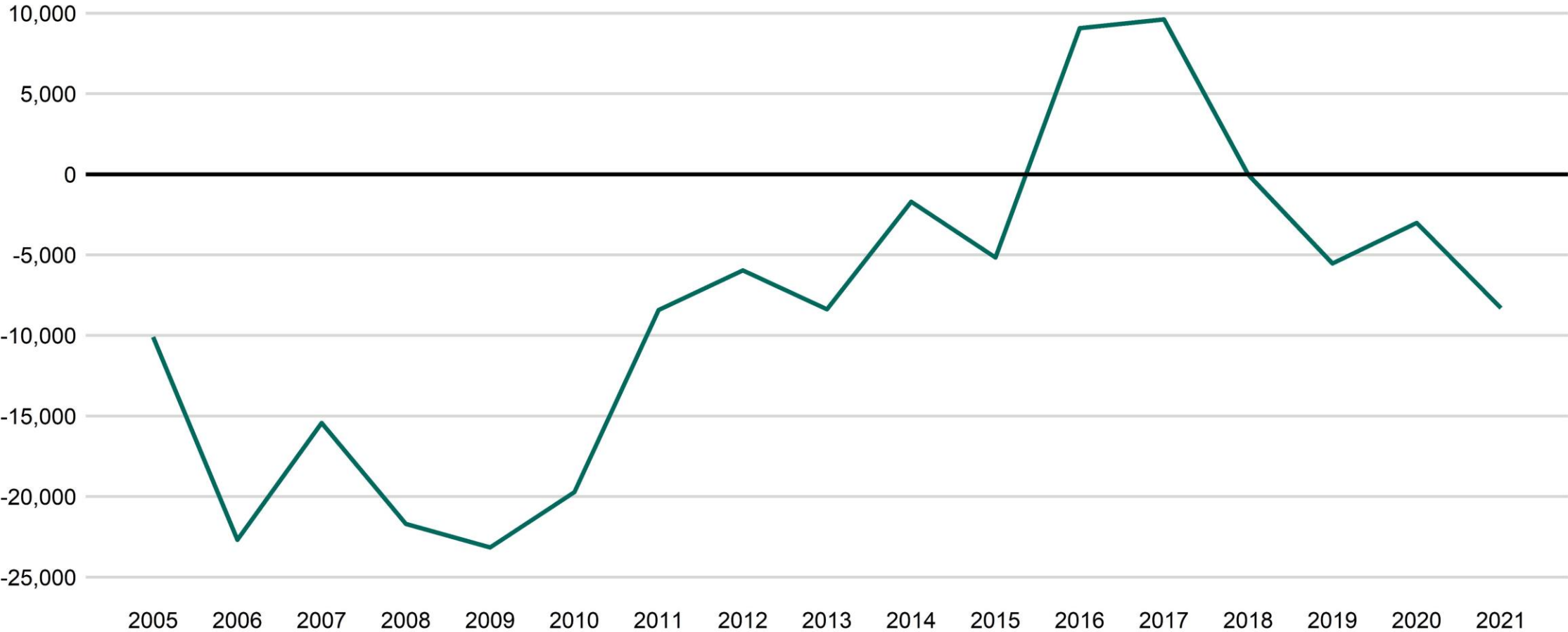
$$\text{Population in Time 2} = \text{Population in Time 1} + \text{Natural Change (Births - Deaths)} + \text{Net Migration (In-Migration - Out-Migration)}$$

# Michigan's Net Migrants, 1970 to 2022



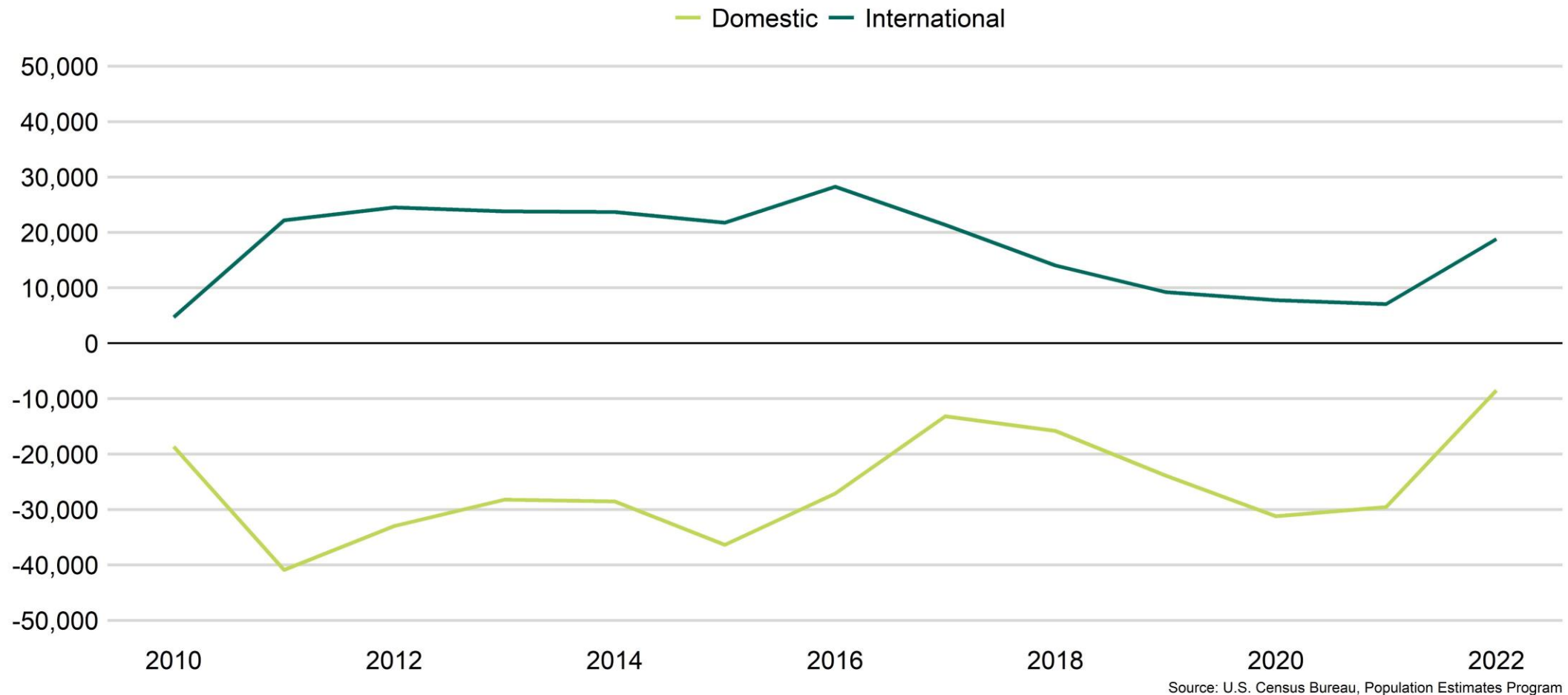
Source: MCDA and U.S. Census Bureau, Population Estimates Program

# Michigan's Net Migration of Prime-Working Age Adults, Ages 25–54 (2005 to 2021)



Source: American Community Survey (ACS) public-use microdata, U.S. Census Bureau

# International migration in Michigan partially offsets domestic out-migration.

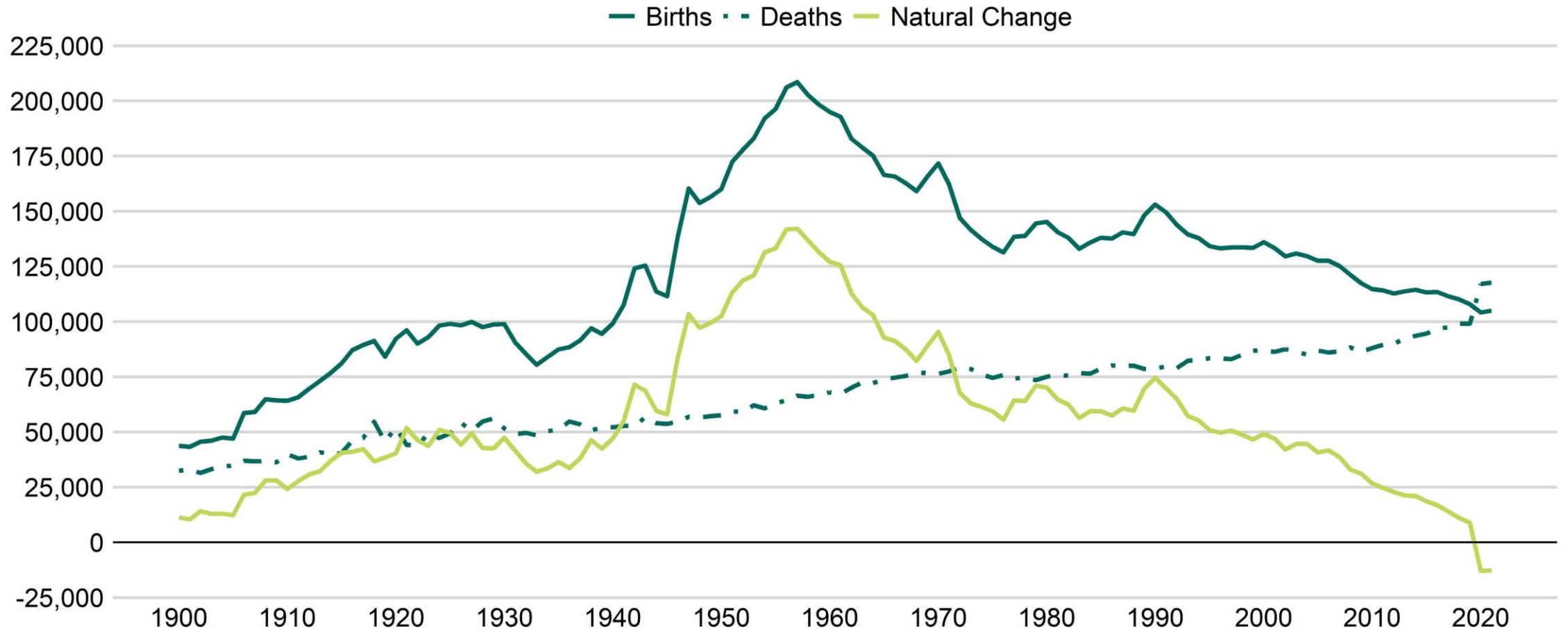


# NATURAL CHANGE

$$\text{Population in Time 2} = \text{Population in Time 1} + \text{Natural Change (Births - Deaths)} + \text{Net Migration (In-Migration - Out-Migration)}$$

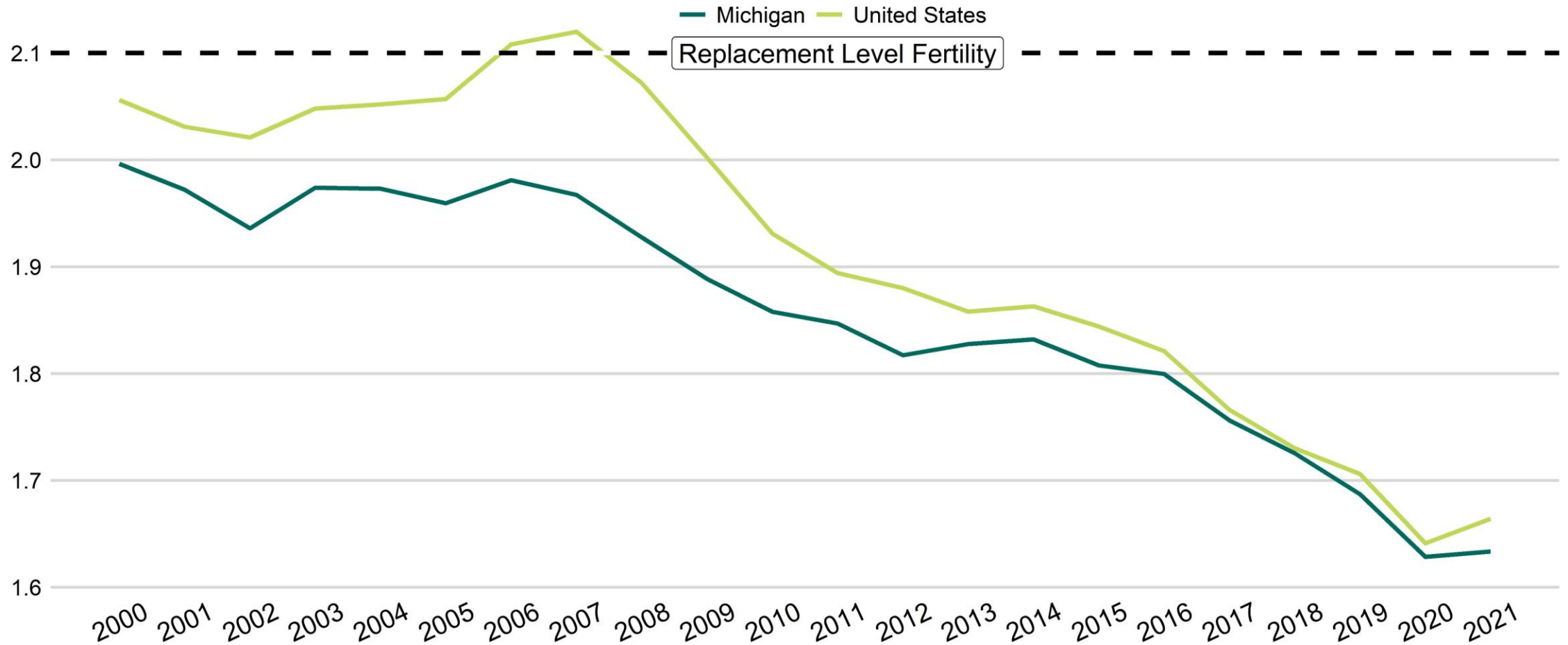
# Historical Natural Change in Michigan, 1900–2021

(Births and Deaths)



# Total Fertility Rate, 2000–2021

## Average Number of Children Per Woman



Source: U.S. Census Bureau; Michigan Department of Health and Human Services Microdata



# Slow Growth and Decline in Michigan, 1970s Onward

Historical and contemporary dynamics of population change:

- Persistent net out-migration and declining birth rates since the 1970s
- Recent increases in mortality due to the aging of the baby boomer generation and the impact of the COVID-19 pandemic
- Population decline in 2021 and 2022 due to persistent net domestic out-migration and natural decrease

$$\begin{array}{ccccccc} \text{Population} & & & & & & \\ \text{in Time 2} & = & \text{Population} & + & \text{Natural Change} & + & \text{Net Migration} \\ & & \text{in Time 1} & & (\text{Births} - \text{Deaths}) & & (\text{In-Migration} - \text{Out-Migration}) \end{array}$$

# Sources of Population Growth in Michigan

Sources of growth:

- Increases in the Hispanic/Latino population and non-Hispanic Asian populations from 2010 to 2020
- Net positive international migration

Since population momentum (natural increase) has slowed in Michigan, future population growth will be increasingly dependent on net positive domestic and/or international migration.

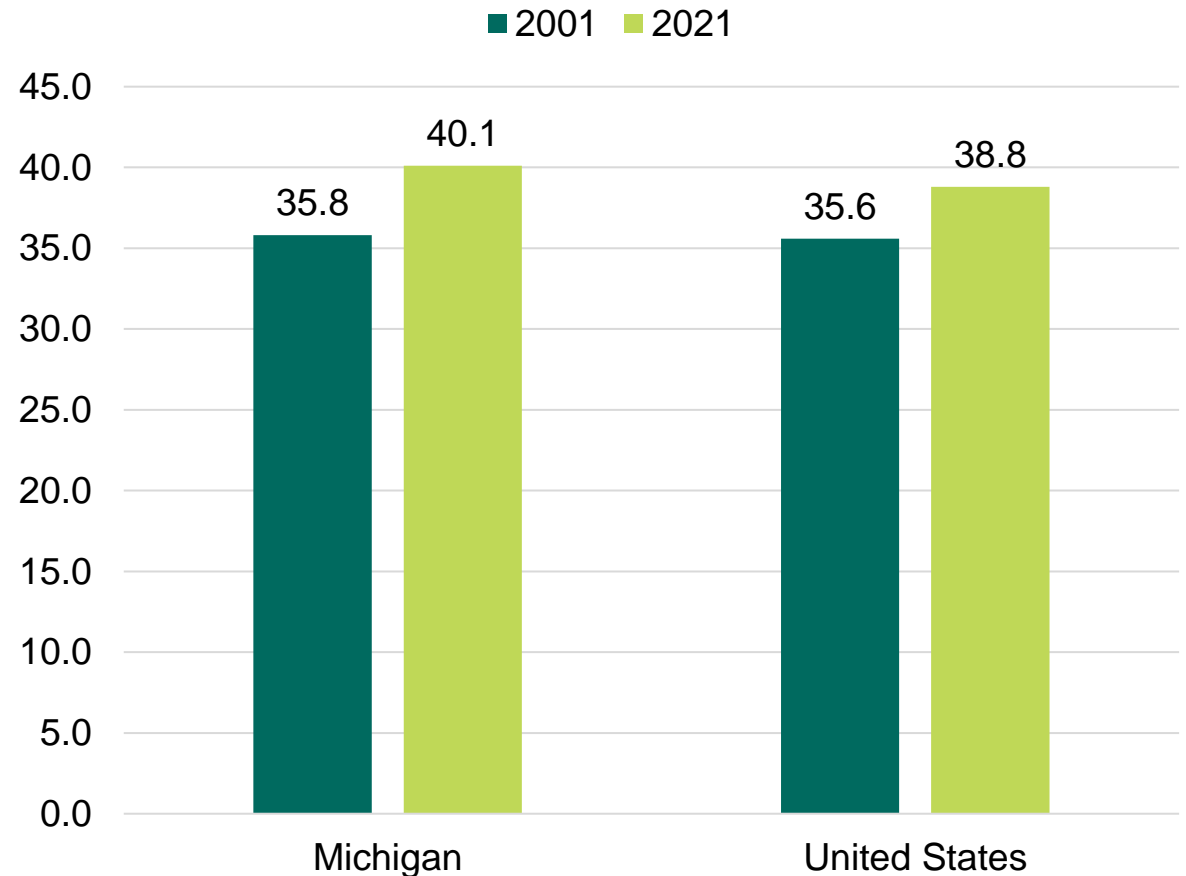
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**MICHIGAN'S AGING POPULATION**

**AND THE LABOR FORCE**

# Michigan's population is aging at a faster rate than the nation.

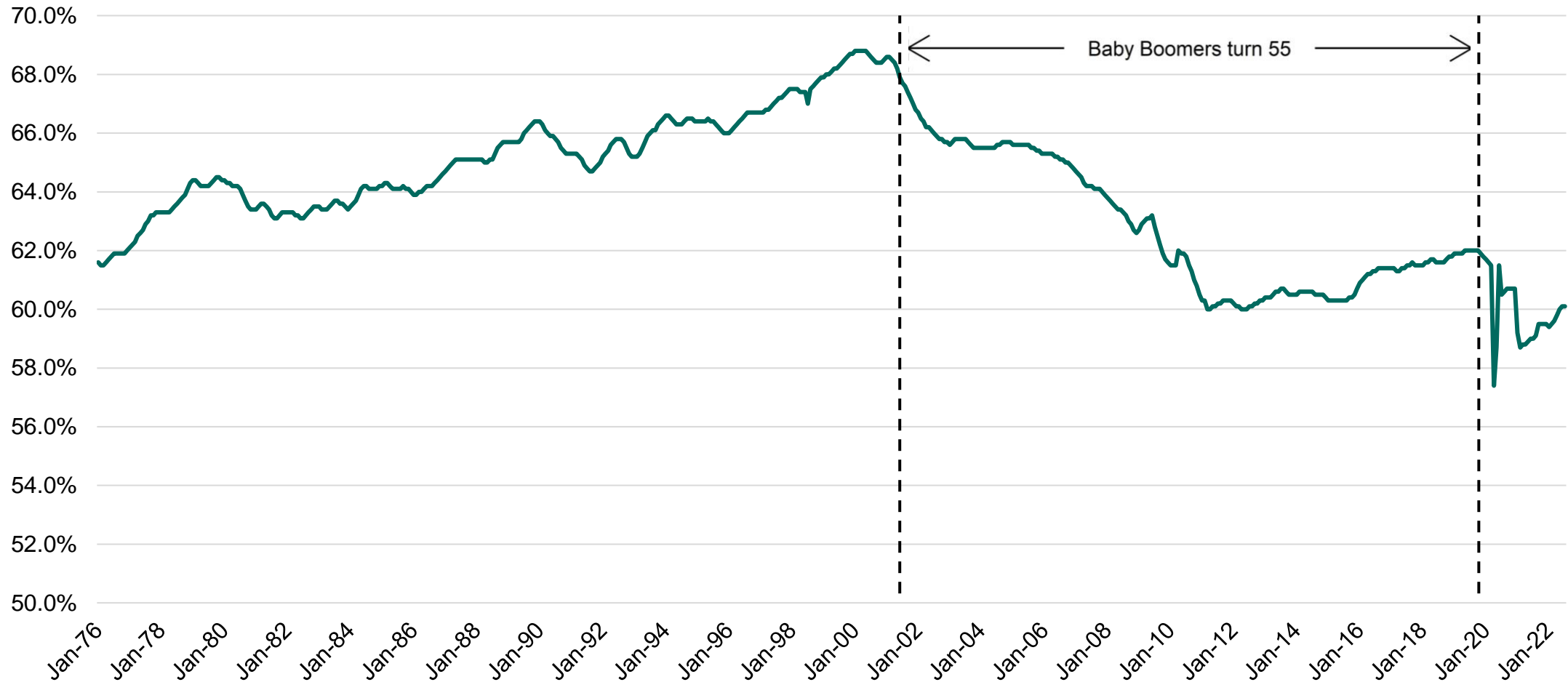
- The median age in Michigan increased by 4.3 years between 2001 and 2021.
- Michigan was the 29<sup>th</sup> oldest state in 2001 but was now the 14<sup>th</sup> oldest state in 2021.
- Michigan had the largest increase in median age among Midwestern states over the period.



Source: Population and Intercensal Estimates, U.S. Census Bureau

# Michigan's Total Labor Force Participation Rate

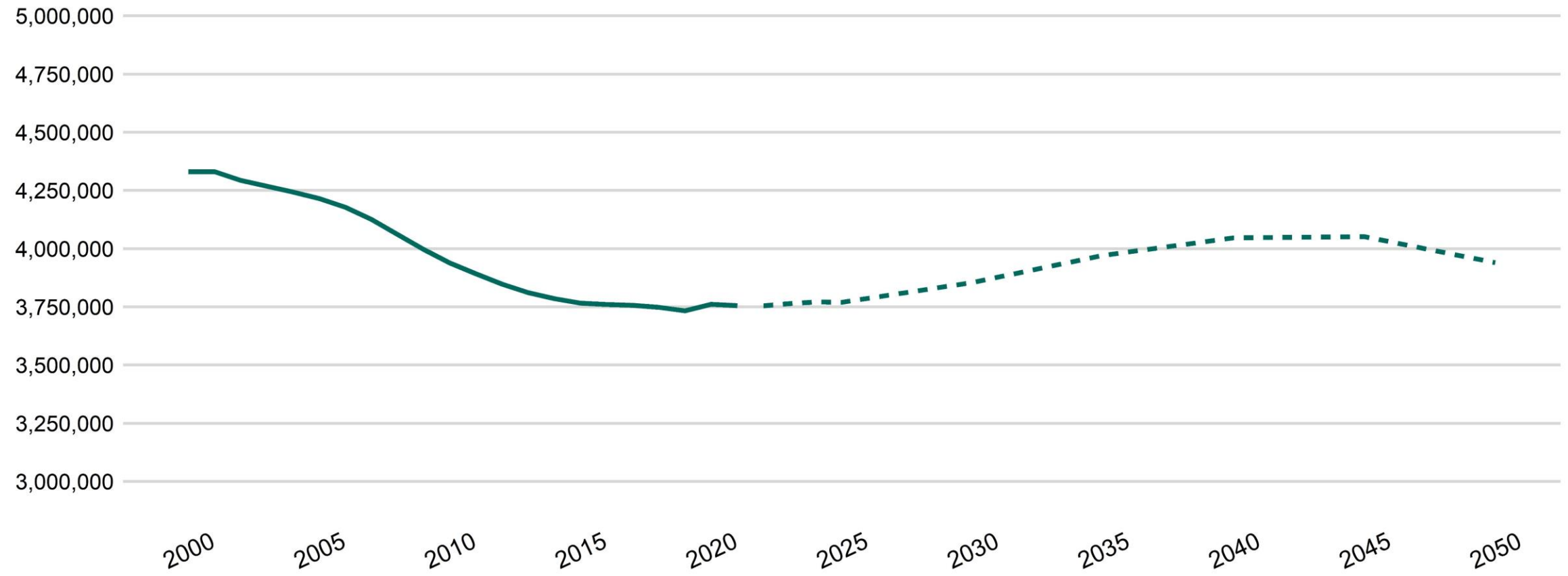
(1976 through 2022)



# Prime-Working Age Population, 2000-2050

(Forecasted Net Positive Migration, 2022-2050)

— Historical - - - Projected



Source: U.S. Census Bureau; MDOT-Statewide & Urban Travel Analysis Section and U-M Research Seminar in Quantitative Economics

# Projected Change by Age Group, 2021–2050

The *share* of prime-working age adults (ages 25-54) is projected to remain flat even in a net positive migration forecast, remaining at 37 percent of the total population in 2021 and 2050.

However, there are likely to be substantial shifts in the younger and older parts of the age distribution through 2050.

- The share of the younger population (ages 0-24) is projected to decrease by 5 percent from 2021 to 2050.
- The share of the older population (ages 55+) is projected to increase by 14 percent from 2021 to 2050.

# Key Takeaways on Population Aging and the Labor Force

- Historically, Michigan has had net negative migration among the prime-working age adults, meaning the state loses more prime-working age adults than it gains.
- Even in a population forecast with a net positive migration scenario, the share of people in prime working-age years is projected to remain flat from 2021 to 2050. The share of the younger population (ages 0-24) is projected to decrease while the share of the older population (ages 55+) is projected to increase.
- The dynamics of population aging and declining labor force participation rates can contribute to labor shortages.



# How to Stay Up-to-Date on Michigan Population and Labor Market Information

Website:

**[www.Michigan.gov/LMI](http://www.Michigan.gov/LMI)**

Research products:

**[www.MILMI.org/research](http://www.MILMI.org/research)**

Twitter:

**[www.Twitter.com/MiDataAnalytics](http://www.Twitter.com/MiDataAnalytics)**

Email updates:

**[www.Michigan.gov/LMIsubscribe](http://www.Michigan.gov/LMIsubscribe)**

# Thank you!

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[www.MILMI.org/Contact-Us](http://www.MILMI.org/Contact-Us)