

Population Trends in Gogebic County and the Upper Peninsula

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Jaclyn Butler, State Demographer



MICHIGAN
**Center for Data
and Analytics**

Functions of the demography team at MCDA



- Analysis of Michigan's population size and demographic composition
- Michigan's liaison with the U.S. Census Bureau for most programs, including population estimates and projections
- Advisors to state and local leaders, businesses, nonprofits, the media, and the public on population trends and Census data

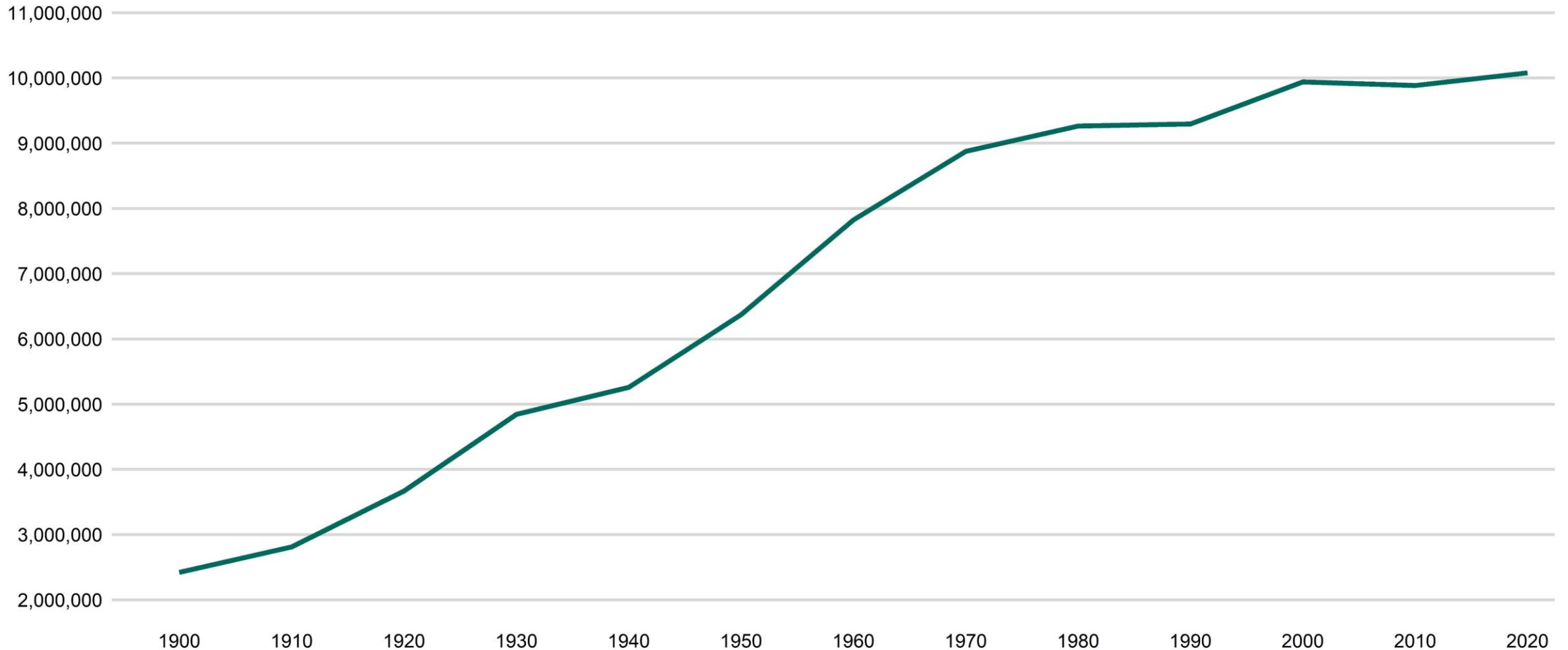
Agenda

- National and statewide trends
- Gogebic County and U.P. trends
 - Historical trends through 2020
 - Recent trends from 2020 to 2023

National and Statewide Population Trends

Michigan's population trajectory has been flat from 2000 to 2020.

Michigan Decennial Total Population



Dynamics of Population Change

- There are three components of population change:
 - Births
 - Deaths
 - Migration

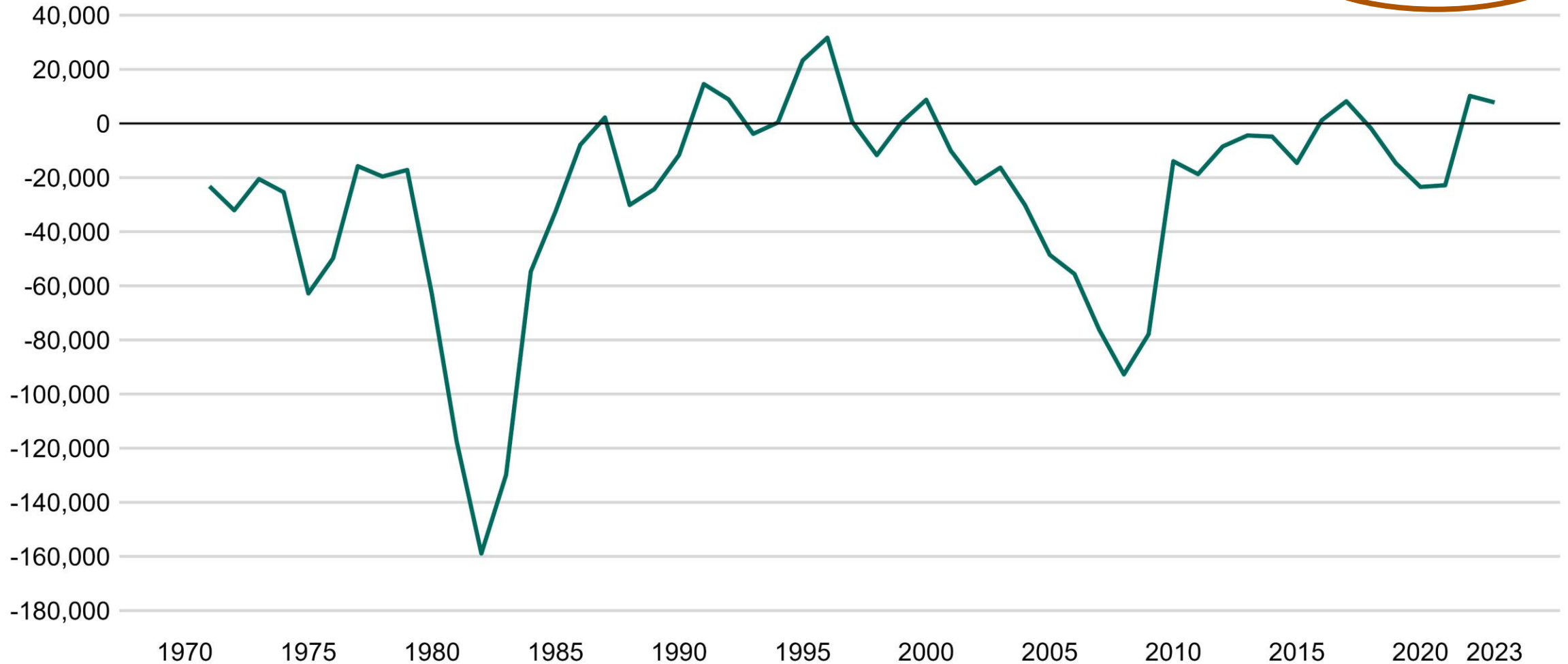
$$\text{Population in Time 2} = \text{Population in Time 1} + \text{Natural Change (Births - Deaths)} + \text{Net Migration (In-Migration - Out-Migration)}$$

- More births than deaths = natural increase
- More deaths than births = natural decrease
- Migration consists of domestic (state to state) and international components.

Michigan's population declined from 2000 to 2010 since there were not enough births to offset migration loss.

Michigan Annual Total Net Migration

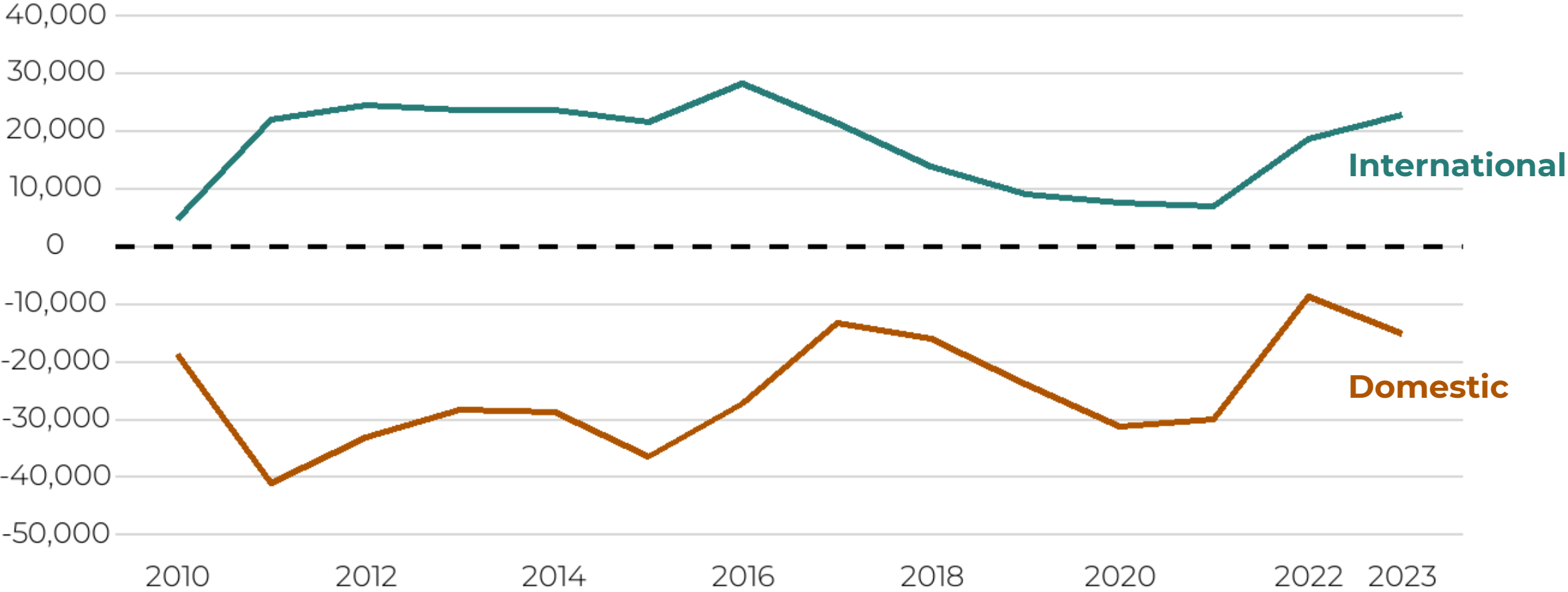
$$\text{Population in Time 2} = \text{Population in Time 1} + \text{Natural Change (Births - Deaths)} + \text{Net Migration (In-Migration - Out-Migration)}$$



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

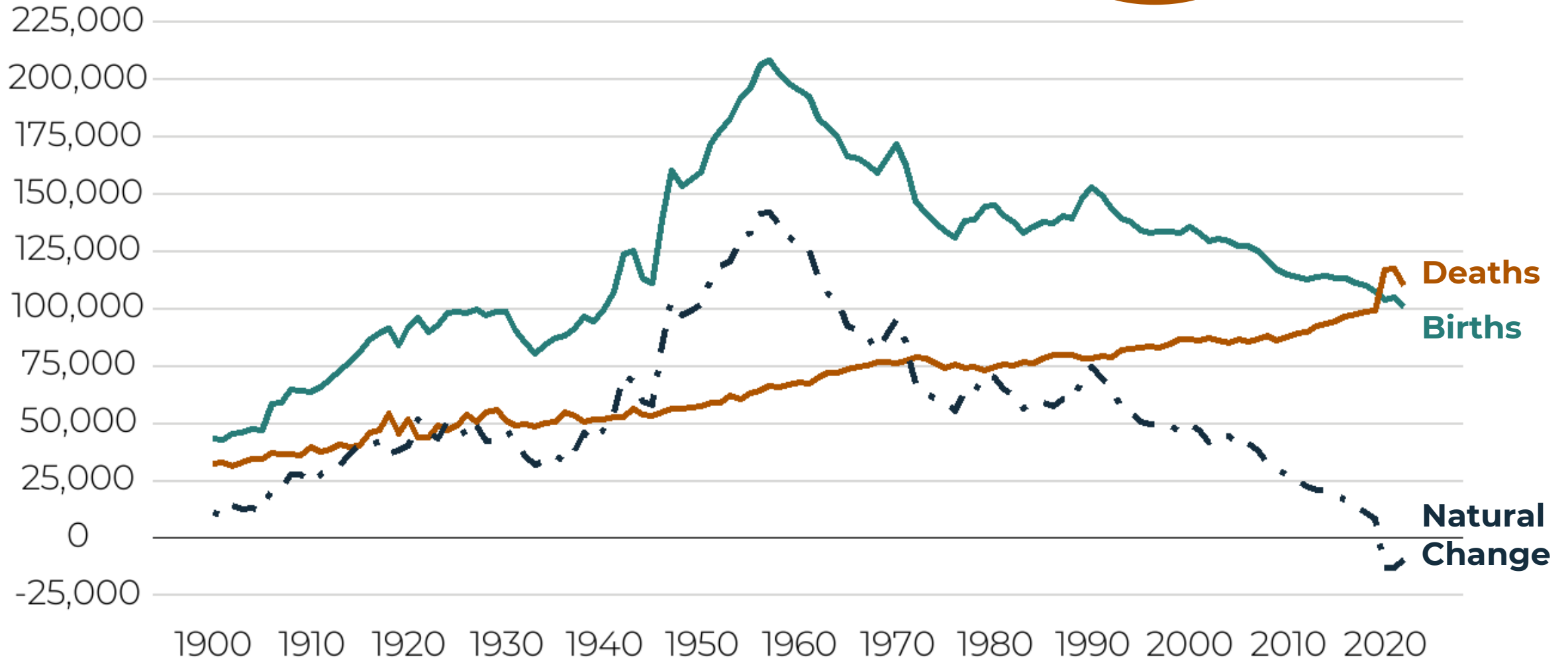
International migration in Michigan mitigates or offsets domestic out-migration.

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



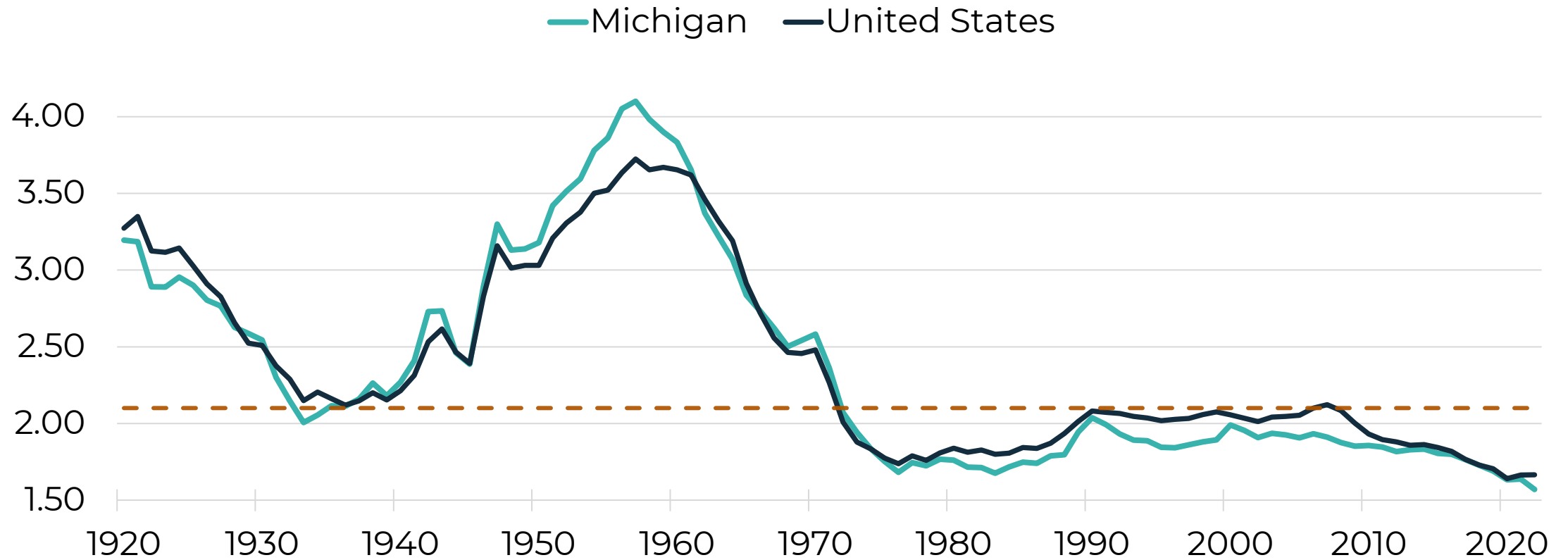
Michigan was trending toward natural decrease (more deaths than births) prior to COVID-19.

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



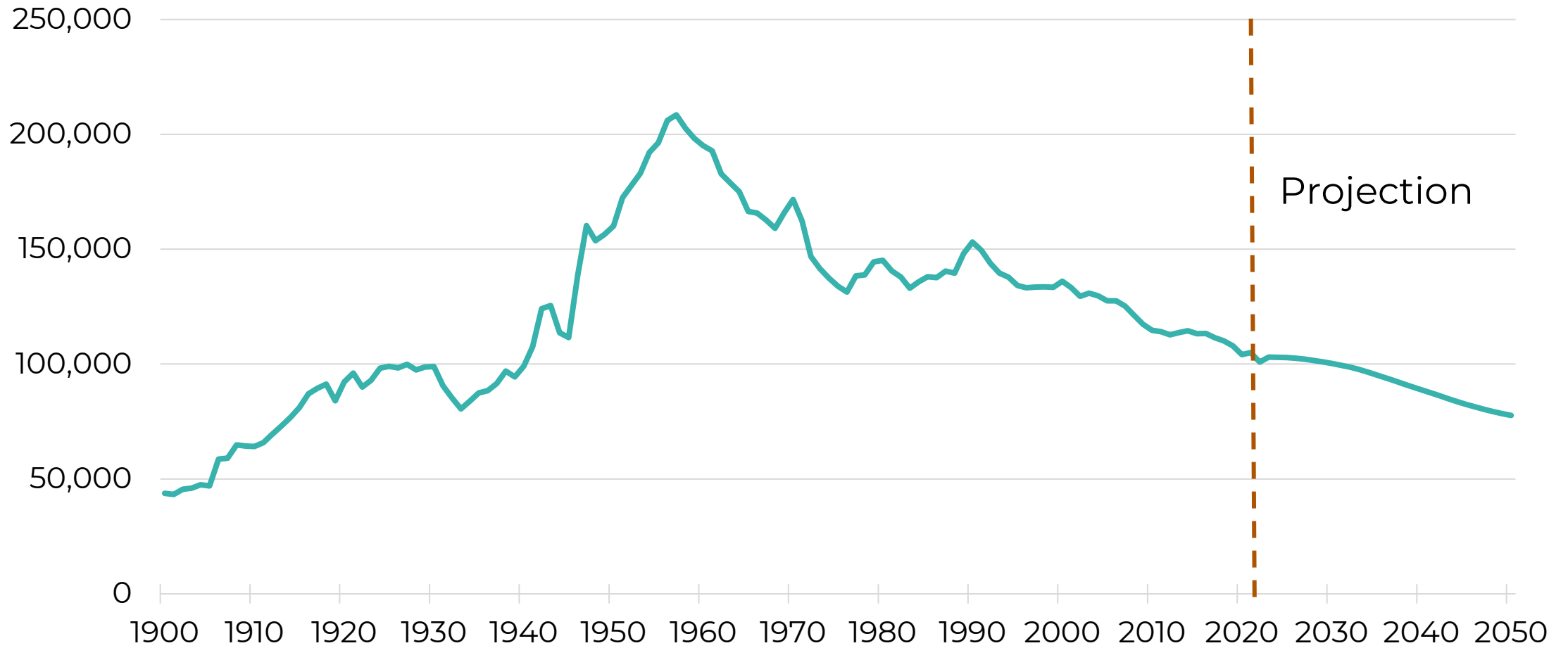
Relative to the nation, Michigan had greater fertility increases during the baby boom and pronounced fertility decline since the 1970s.

Total Fertility Rate (Average Number of Children Per Woman), 1920-2022



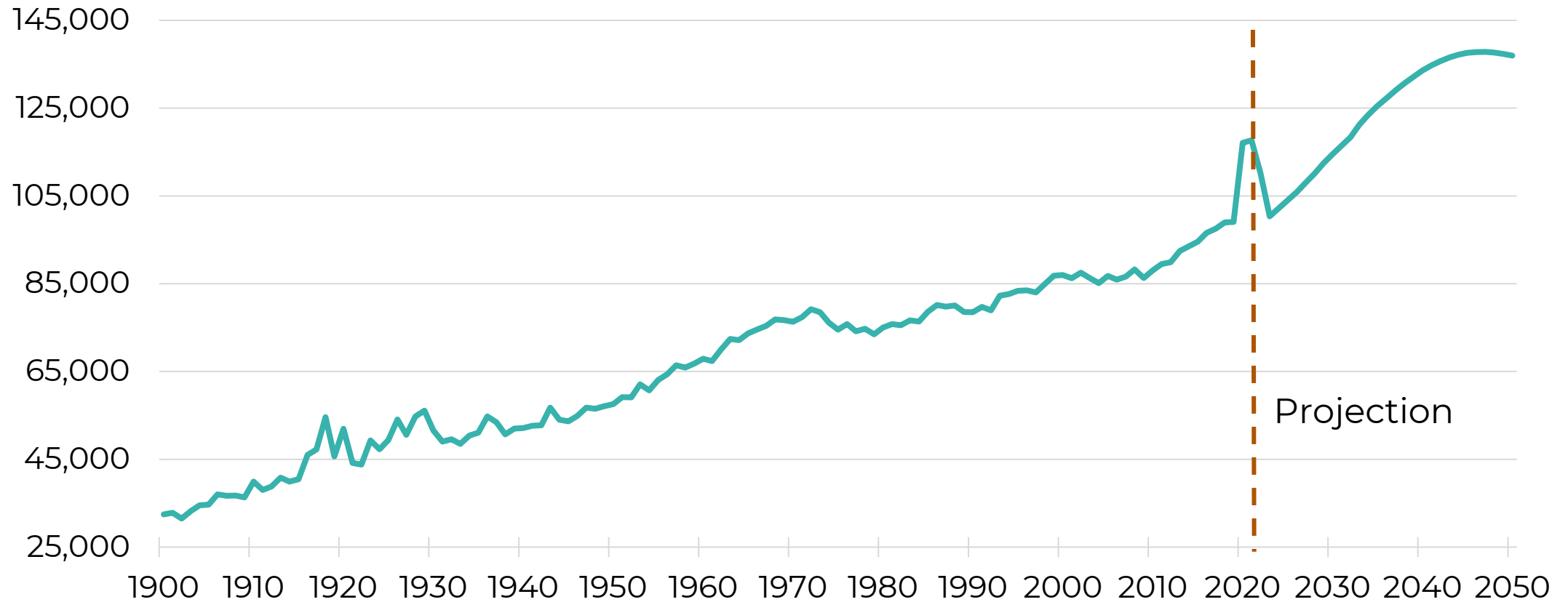
Births are projected to continue declining through 2050.

Michigan Annual Births

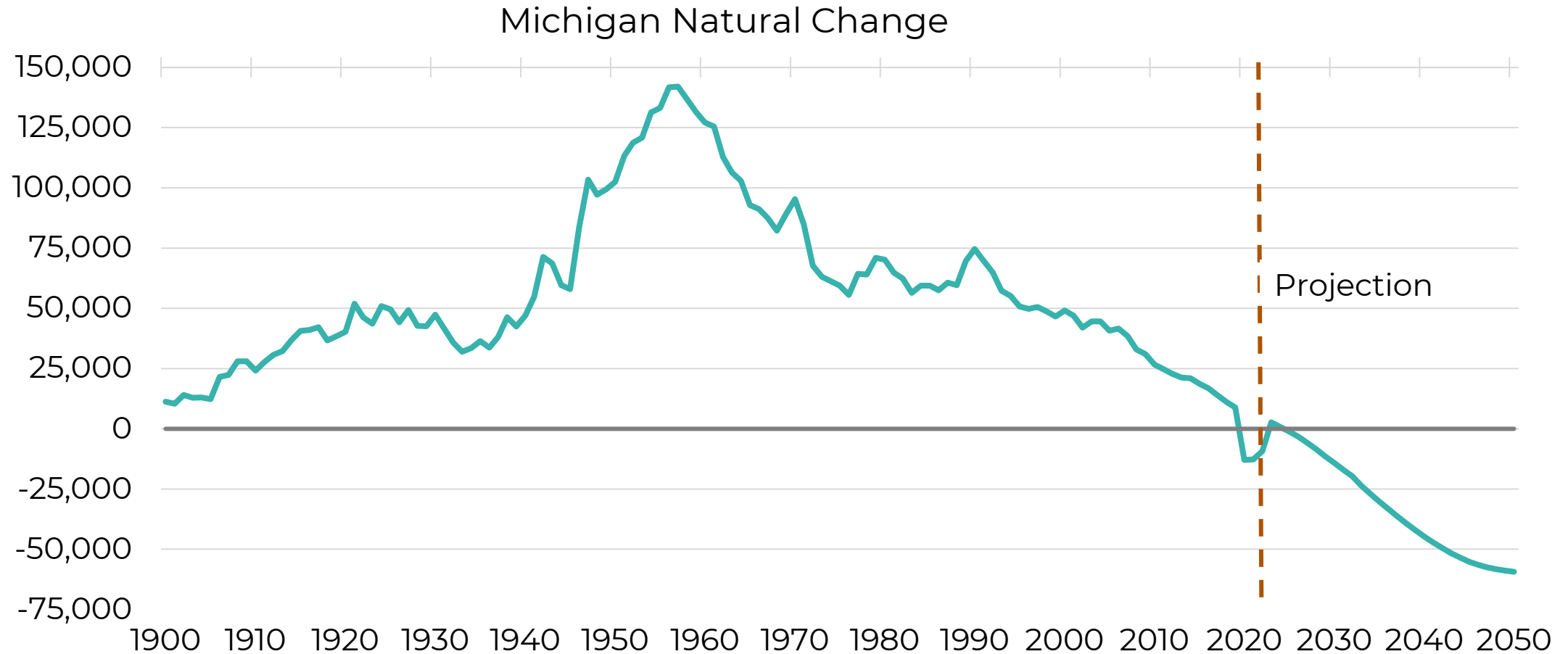


Deaths are projected to increase in Michigan through 2050 as baby boomers continue aging into high mortality years.

Michigan Annual Deaths

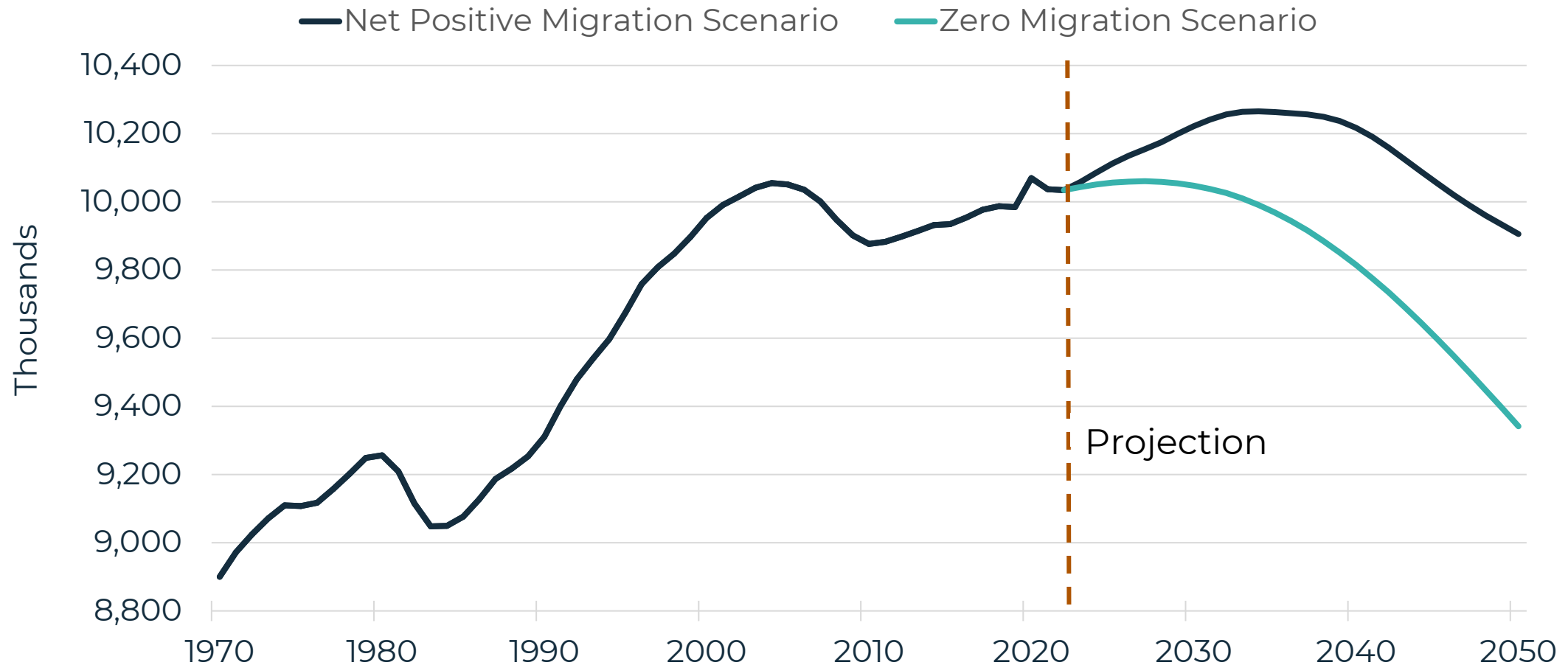


As births likely decline and deaths increase, Michigan is projected to experience sustained and steepening natural decrease through 2050.



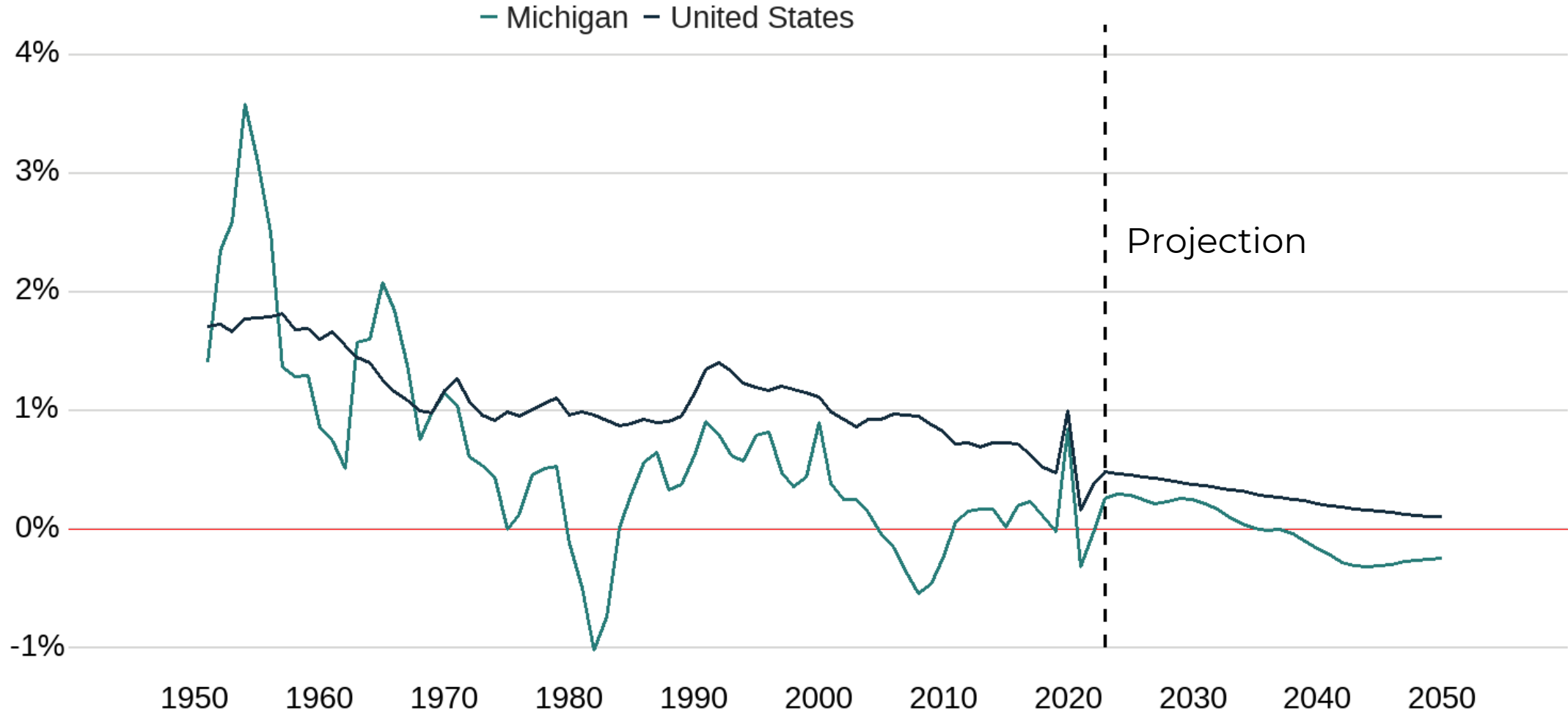
Michigan is projected to experience population decrease by 2034 even in a projected net positive migration scenario.

Michigan Total Population, Historical and Projected

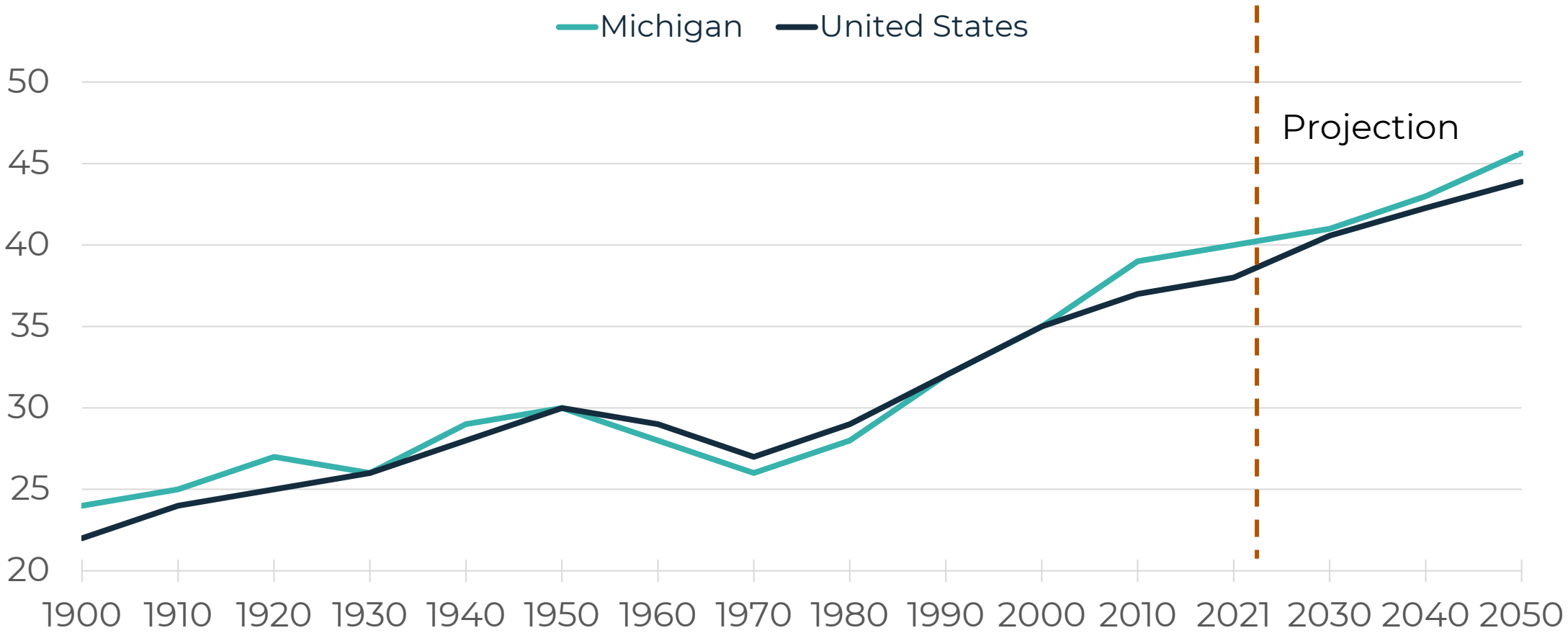


National growth rates have also been slowing since the 1990s and are projected to continue slowing through 2050.

Annual Change



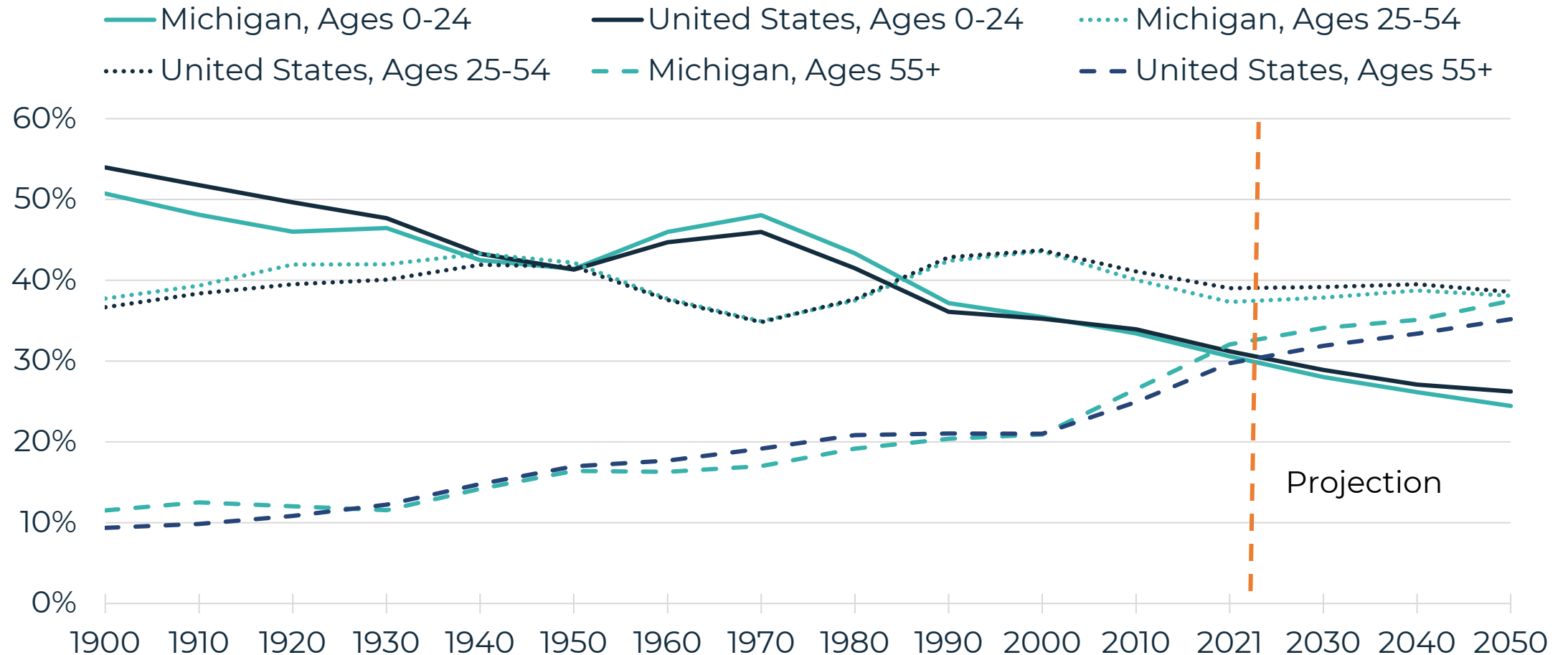
The median age is projected to continue increasing in Michigan and the United States.



Source: 1900-2000 Decennial Censuses, 2010 and 2021 One-Year American Community Survey, Population Estimates Program, 2023, U.S. Census Bureau sourced from IPUMS USA; National Population Projections, U.S. Census Bureau; 2024 Vintage Population Projections, Net Positive Migration Scenario, Michigan Center for Data and Analytics

The share of the working-age group is projected to remain flat in Michigan and the United States. The oldest age group is projected to increase, and the youngest age group is projected to decrease.

Percentage of Population by Age Group



Source: Source: 1900-2000 Decennial Censuses, 2010 and 2021 One-Year American Community Survey, Population Estimates Program, 2023, U.S. Census Bureau sourced from IPUMS USA; National Population Projections, U.S. Census Bureau; 2024 Vintage Population Projections, Net Positive Migration Scenario, Michigan Center for Data and Analytics

Slow growth and population aging are pronounced in Michigan, but not unique to Michigan.

- Over the past century, Michigan has transitioned from a young population with relatively high fertility rates to a much older population with low fertility rates.
- Relative to the nation, Michigan had a large baby boom, pronounced fertility bust since the 1970s, and sustained out-migration since the 1970s.
- Michigan's underlying age structure and components of change present more challenging conditions for growth moving forward.

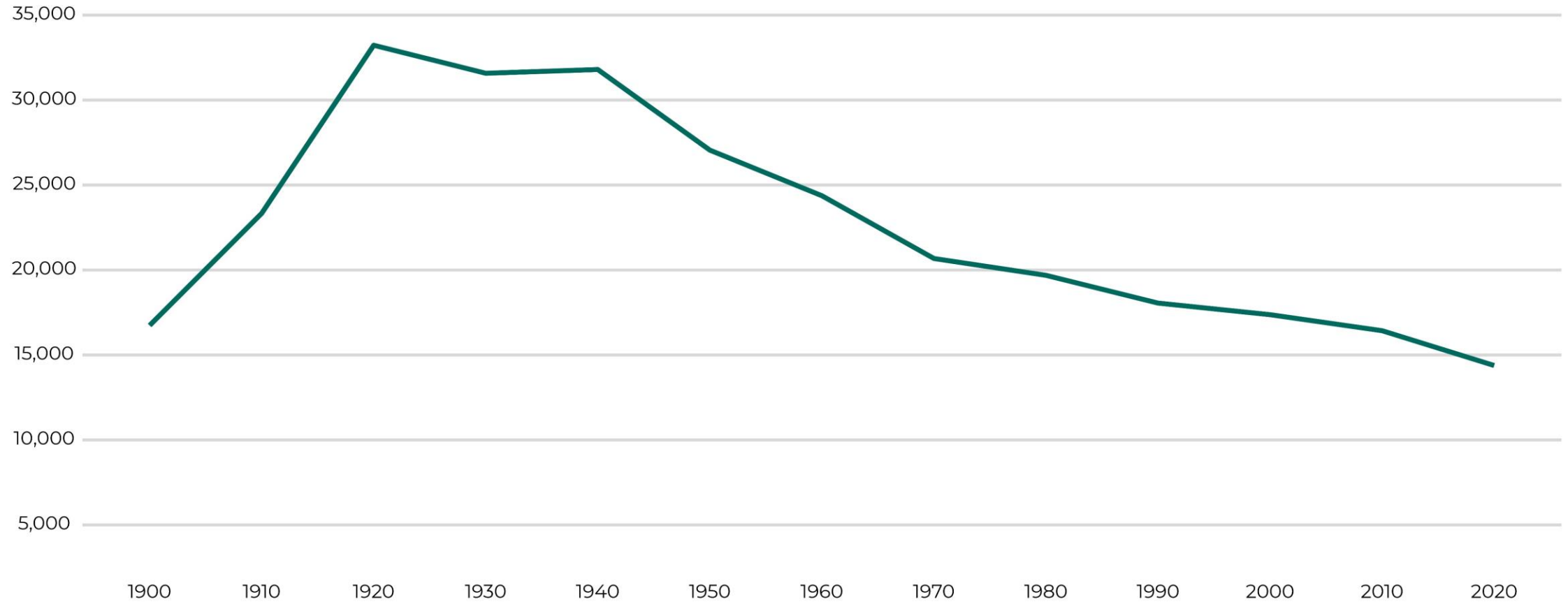
Slow growth and decline are expected to continue.

- As births decrease and deaths increase, future growth in Michigan is increasingly dependent on net positive migration.
- However, Michigan is projected to experience population decrease by 2034 even in a projected net positive migration scenario.
- Growth has been slowing nationwide since the 1990s. The nation entered a period of historically low population growth in the 2020s.

Gogebic County Historical Population and Components of Change

Gogebic County has experienced population decline every census since 1940.

Gogebic County Decennial Total Population

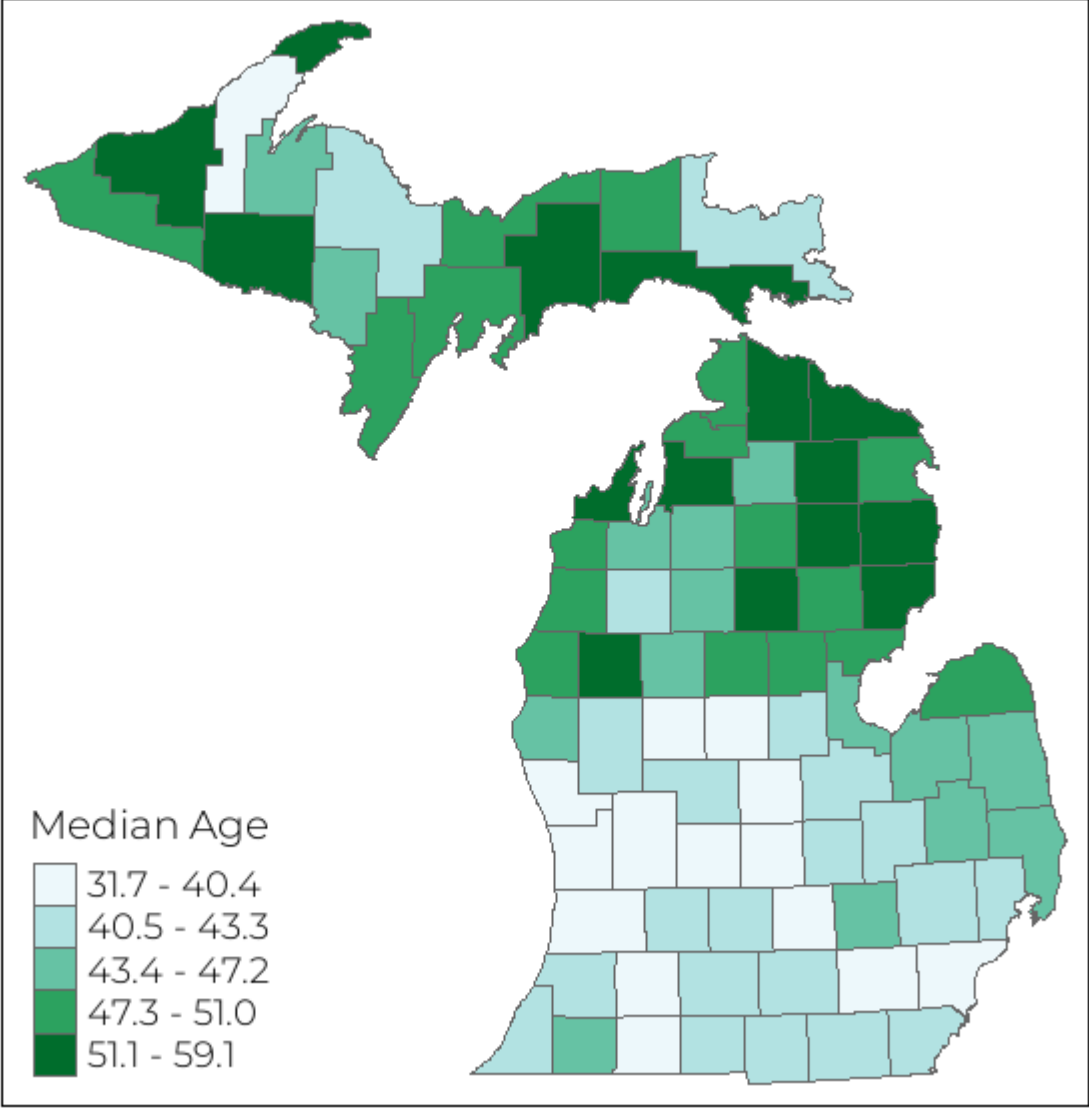


Gogebic County has experienced natural decrease and net out-migration from the 1970s through 2020.

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

- Gogebic County had natural decrease (more deaths than births) every year since at least 1970.
- Gogebic County has experienced net out-migration most years from the 1970s through year 2020.

Median Age by County in Michigan



In 2020, the median age was 40.1 for the state and 51.0 for Gogebic County.

Gogebic County had the 16th highest median age among Michigan's 83 counties in 2020.

The average median age was 45.6 for U.P. counties.

Source: U.S. Census Bureau, 2020 Decennial Census

Population Trends in the 2010s and 2020s

Gogebic County's population decreased throughout the 2010s and from 2020 to 2023.

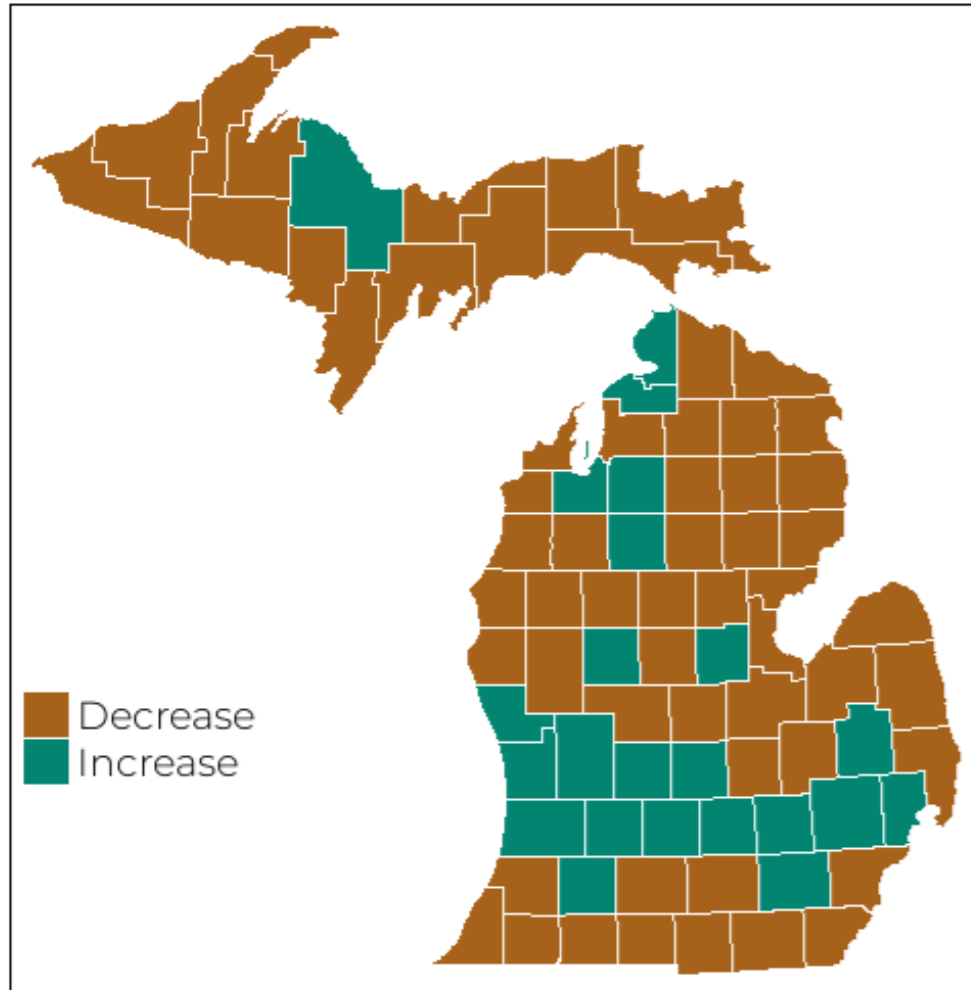
- Gogebic County's population dropped below 15,000 after the 2018 prison closure and has remained below 15,000 since.
- The county had an estimated population of 14,224 in July 2023.
- Gogebic County's population declined by 122 people (-0.9 percent) from July 2020 to July 2023.

Population decline was less severe in Gogebic County from 2020-2023 compared to 2010-2017.

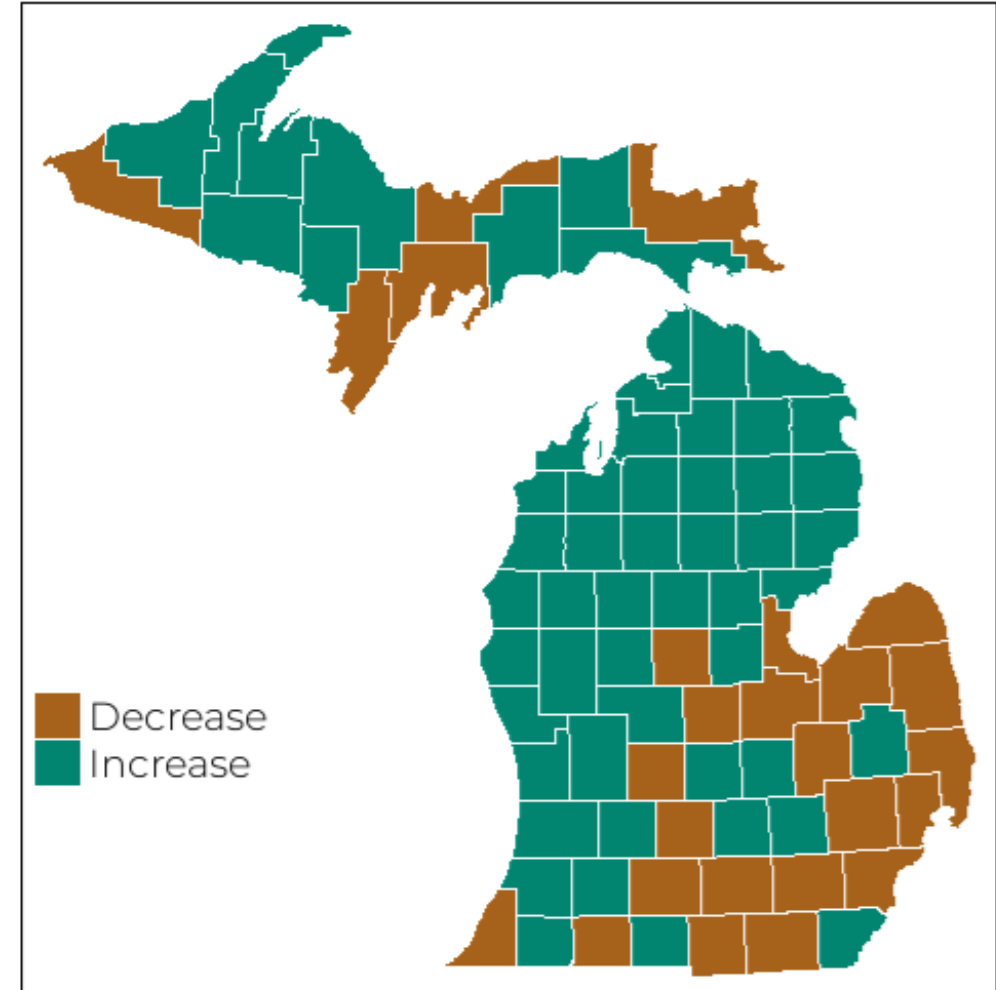
1. The county's decrease from **July 2020-2023 (-0.9 percent)** was less severe than its decrease from **July 2010-2013 (-3.0 percent)** and **July 2014-2017 (-2.7 percent)**.
2. In contrast to Gogebic County, the state experienced slight gains each year from 2010 to 2019.
3. The state's population also decreased from July 2020 to 2023. However, the **statewide decrease (-0.4 percent)** was less severe than Gogebic County's in that three-year period.

Many counties in northern Michigan and the U.P. pivoted to slight population growth in 2020-2023. However, Houghton and Keweenaw were the only U.P. counties with more people in 2023 than 2010.

Population Change, 2010-2013



Population Change, 2020-2023



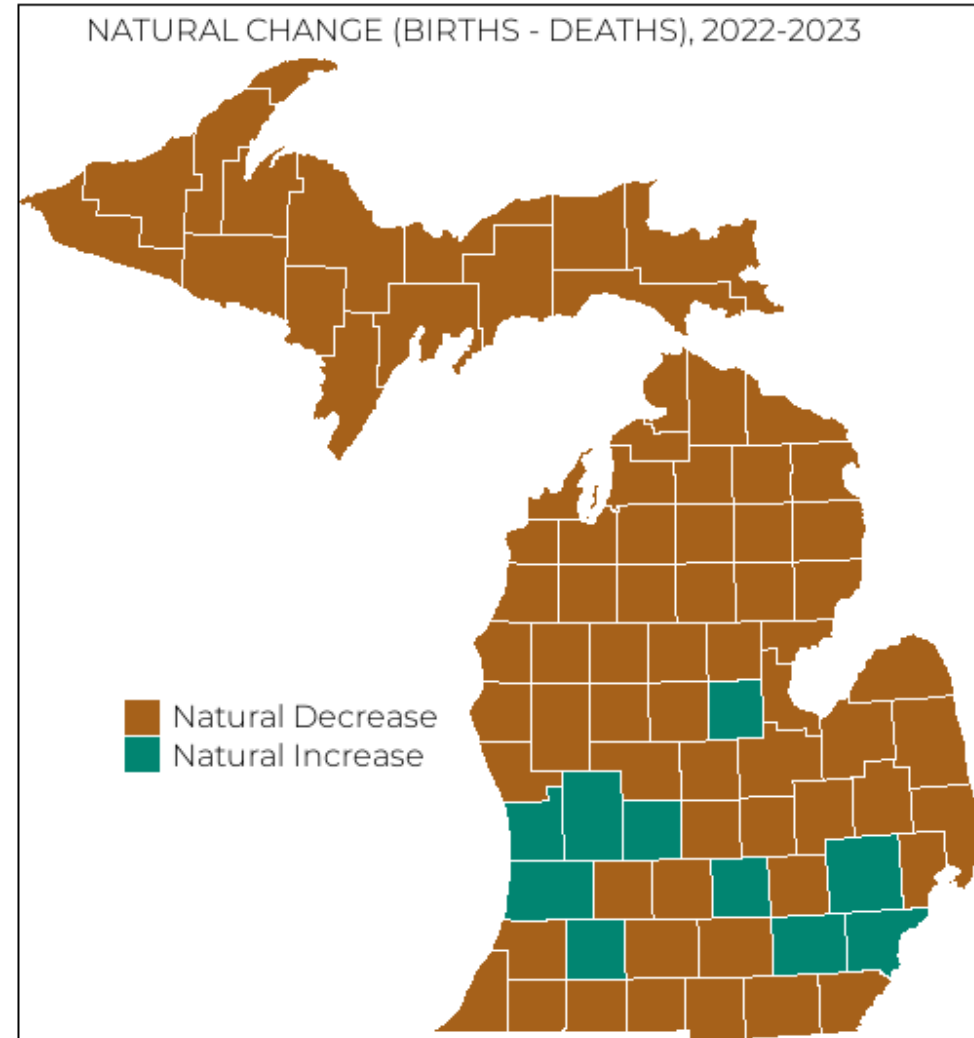
Natural Change

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

73 Michigan counties (88 percent) experienced natural decrease from 2022 to 2023, including every U.P. county.

Natural decrease is becoming more prevalent in Michigan and the nation.

Nationwide, there was a 71 percent increase in the number of counties experiencing natural decrease from 2013 to 2023.



Net Migration

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

In contrast to the 2010s, Gogebic County had net positive migration from 2020 to 2023.

- The county's net migration rate was **18.8 per 1,000 persons from July 2020 to 2023**.
- Gogebic County had net negative migration rate of **-10.6 from July 2010-2013** and **-19.9 from 2014-2017**.
- Gogebic County was among 14 U.P. counties who had net positive migration from 2020 to 2023.
- Gogebic County's total net migration from 2020 to 2023 was almost entirely comprised of domestic migration.

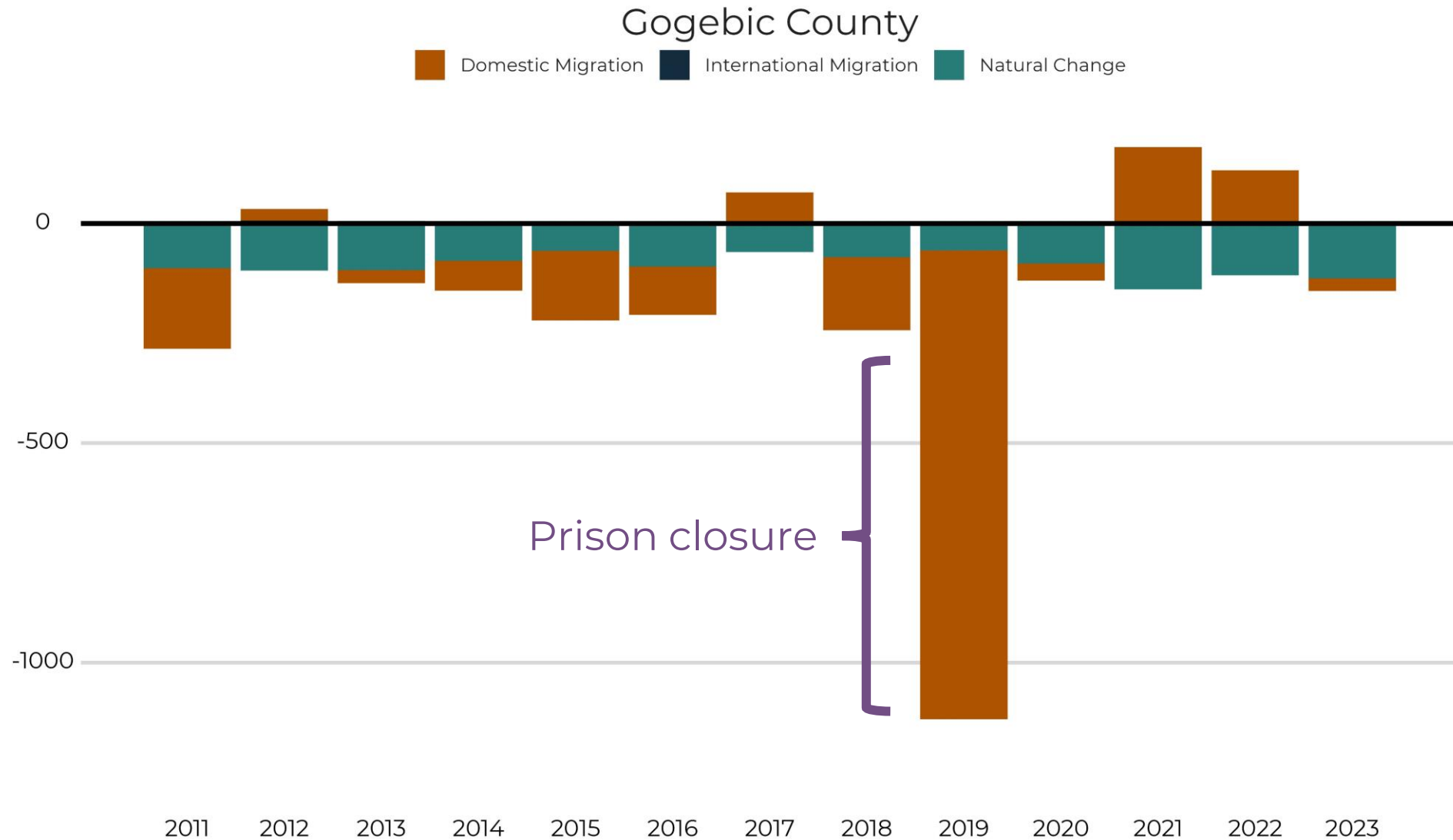
Most of Gogebic County's migration gains from 2021 to 2022 are from other states.

- In 2021-2022, Gogebic County had a net gain of 126 migrants from other states.
 - In 2012-2013, Gogebic County lost slightly more migrants to other states than what it gained (net loss of -14).
- Gogebic County's net gain from other Michigan counties was slightly smaller in 2021-2022 than 2012-2013 (22 compared to 33 in 2012-2013).

Migration gains in 2023 have slowed or reversed in Gogebic County and the U.P. compared to 2021 and 2022.

- After two years of net gains, Gogebic County is estimated to have had slightly net negative migration from 2022 to 2023.
- There are 12 other U.P. counties where the annual net migration rate in 2023 is lower than 2022.
- Nationally, the highest rates of rural growth were also front-stacked the first two years of the pandemic.

Net migration in Gogebic County from 2020 to 2023 was not high enough to offset natural decrease in that period.



Factors limiting long-term population growth in the U.P. and Michigan

- Natural decrease will continue steepening as births likely continue declining and baby boomers continue aging into high mortality years.
- Continuous and higher levels of net positive migration would be required to offset this steepening natural decrease and to maintain population growth.
- Even if there is minimal change to the total population, there can still be important change in the underlying components (net migration versus natural change).

Factors facilitating rural population recovery in the early 2020s

- 1. Nationally, rising home prices likely contributed to rural population growth in the 2020s.**
 - Gogebic County had the lowest median home value (\$87,800) among Michigan counties.
- 2. Increased remote work opportunities also likely contributed to rural population growth.**
 - One third of U.S. workers were completely remote in February 2023.
 - In Gogebic County, the percentage of employees working from home increased from 3.0 percent to 6.5 percent in the most recent annual estimate that is available (ACS 2018-2022).
- 3. Many of the fastest growing areas in the nation were in areas with abundant natural amenities and outdoor recreation, including the Great Lakes region.**
 - Many growing areas were near large bodies of water.
 - Michigan and the U.P. especially have a unique abundance of natural amenities.

Thank you!

Jaclyn Butler
State Demographer



Additional Resources



Michigan Statewide Population Projections through 2050

April 2024



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