

Michigan's K-12 Population

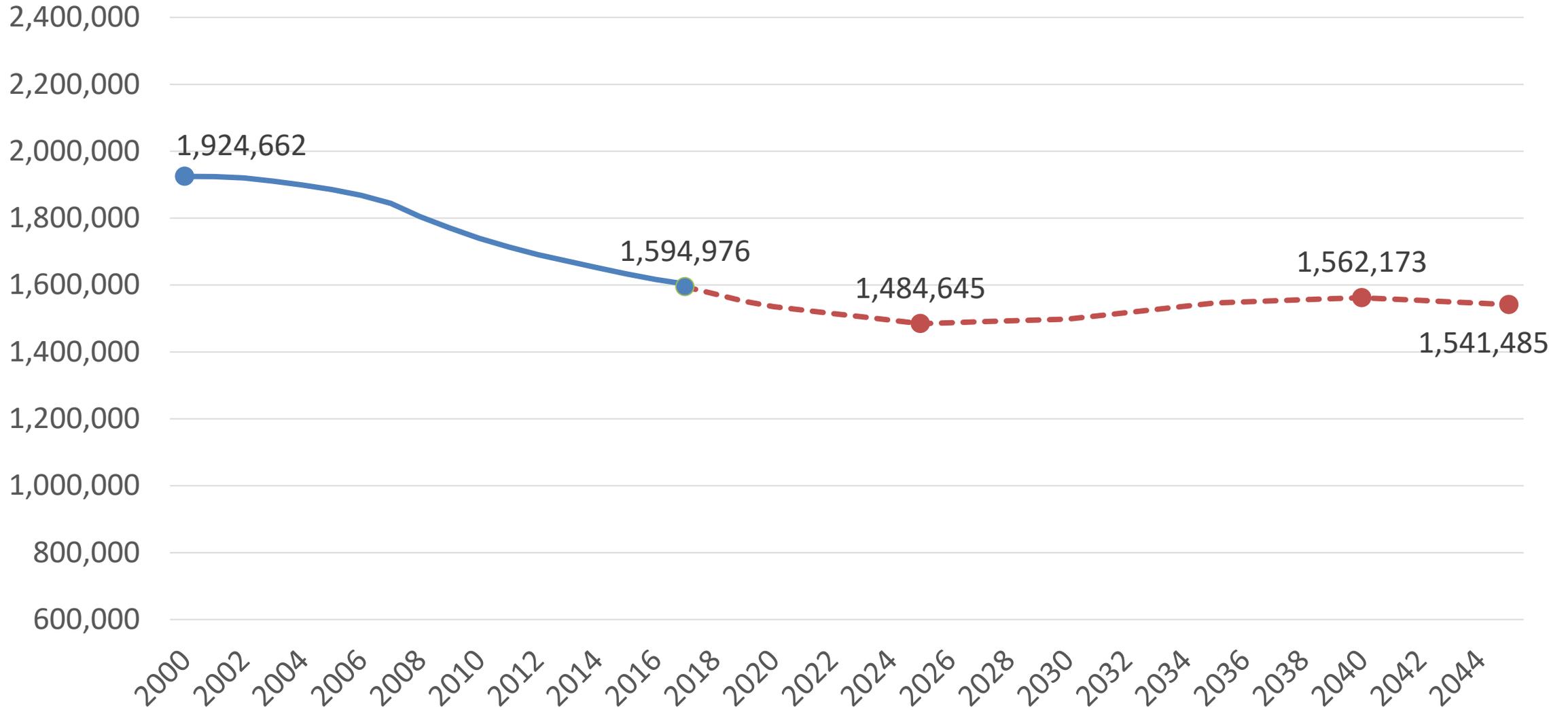
Eric A. Guthrie, PhD

February 6, 2019

- Michigan's liaison with the U.S. Census Bureau for most programs including population estimates, projections, data dissemination and the decennial census
- Advisor to state leaders, businesses, non-profits, the media, and the general public on issues related to population and the Census
- Lead for the State Data Center (SDC)

- Michigan's K-12 Population
- How Populations Change
- State Level Population
- K-12 Migration
- Fertility Rates and Births
- K-12 Change at the County Level 2020 to 2030

Estimated and Projected K-12 Age (5-17) Population



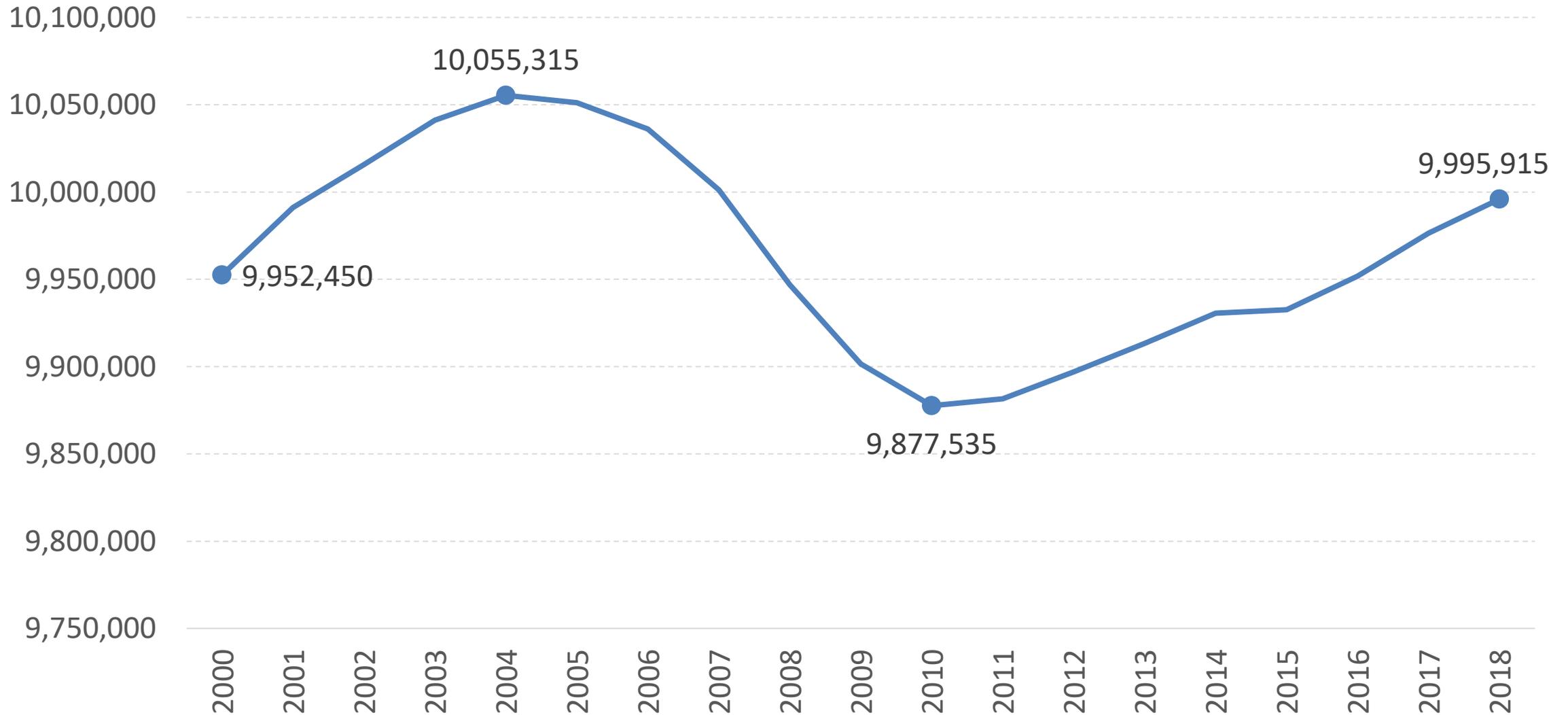
Source: U.S. Census Bureau, Population Estimates Program; MDOT and U-M's Institute for Research on Labor, Employment, and the Economy (IRLEE)

How Populations Change

- There are only three things that affect a population size over time:
 - Births
 - Deaths
 - Migration

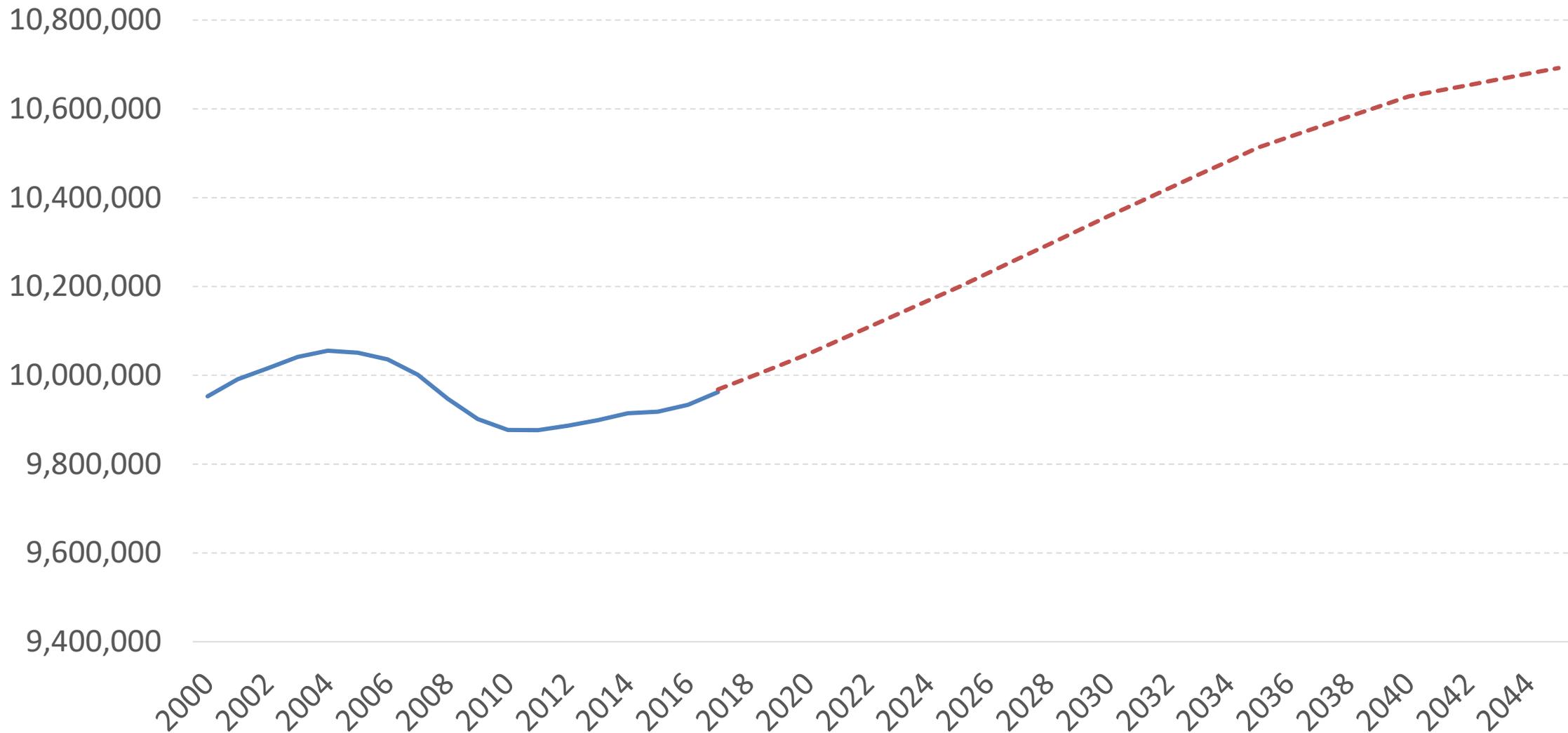
$$\text{Population}_2 = \text{Population}_1 + \underbrace{\text{Births} - \text{Deaths}}_{\text{Natural Change}} + \underbrace{(\text{In-migrations} - \text{Out-migration})}_{\text{Net Migration}}$$

Michigan Population



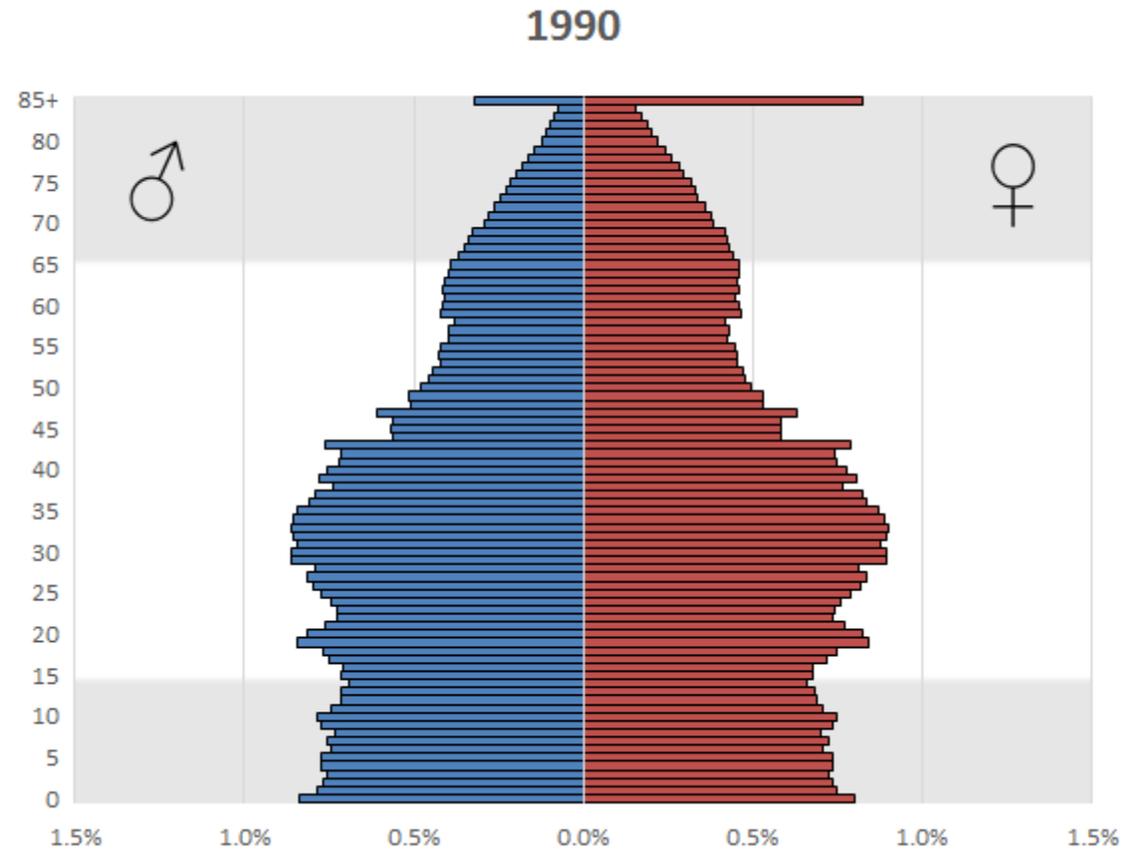
Source: U.S. Census Bureau, Population Estimates Program

Michigan Projected Population



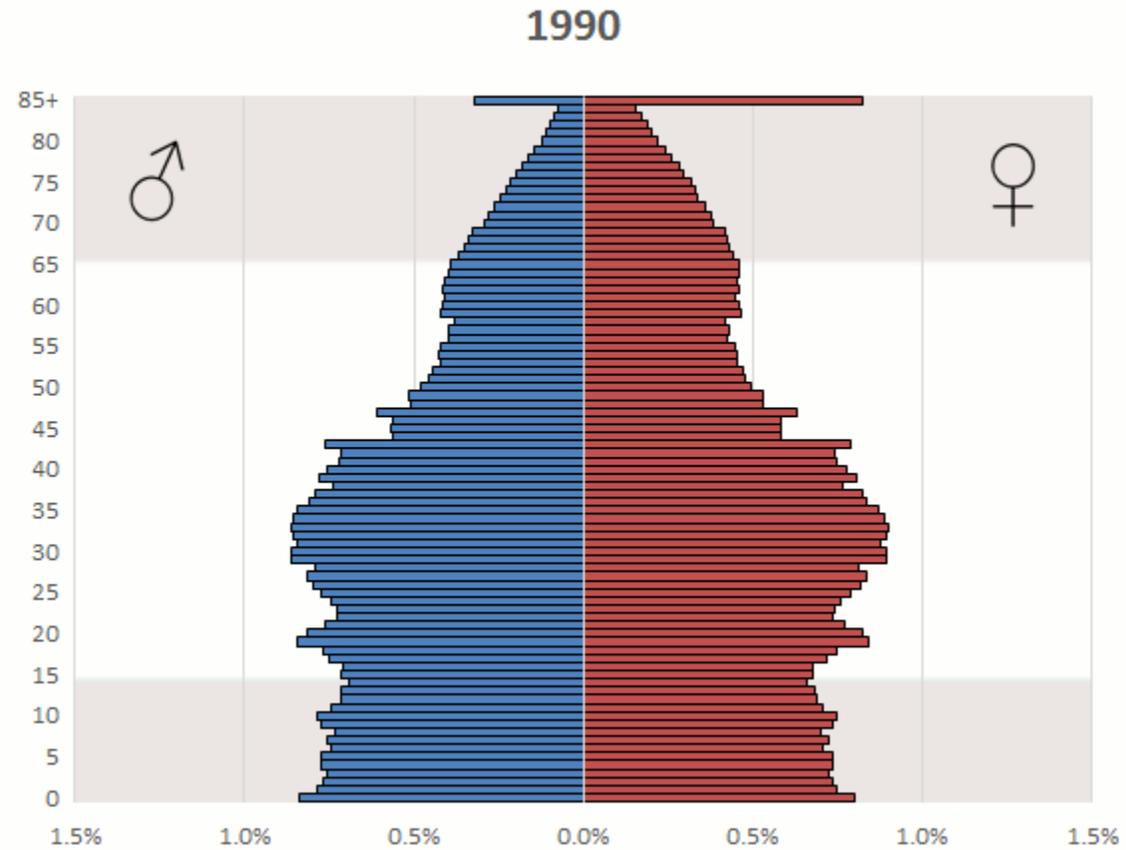
Source: U.S. Census Bureau, Population Estimates Program; MDOT and U-M's Institute for Research on Labor, Employment, and the Economy (IRLEE)

Michigan Age Structure



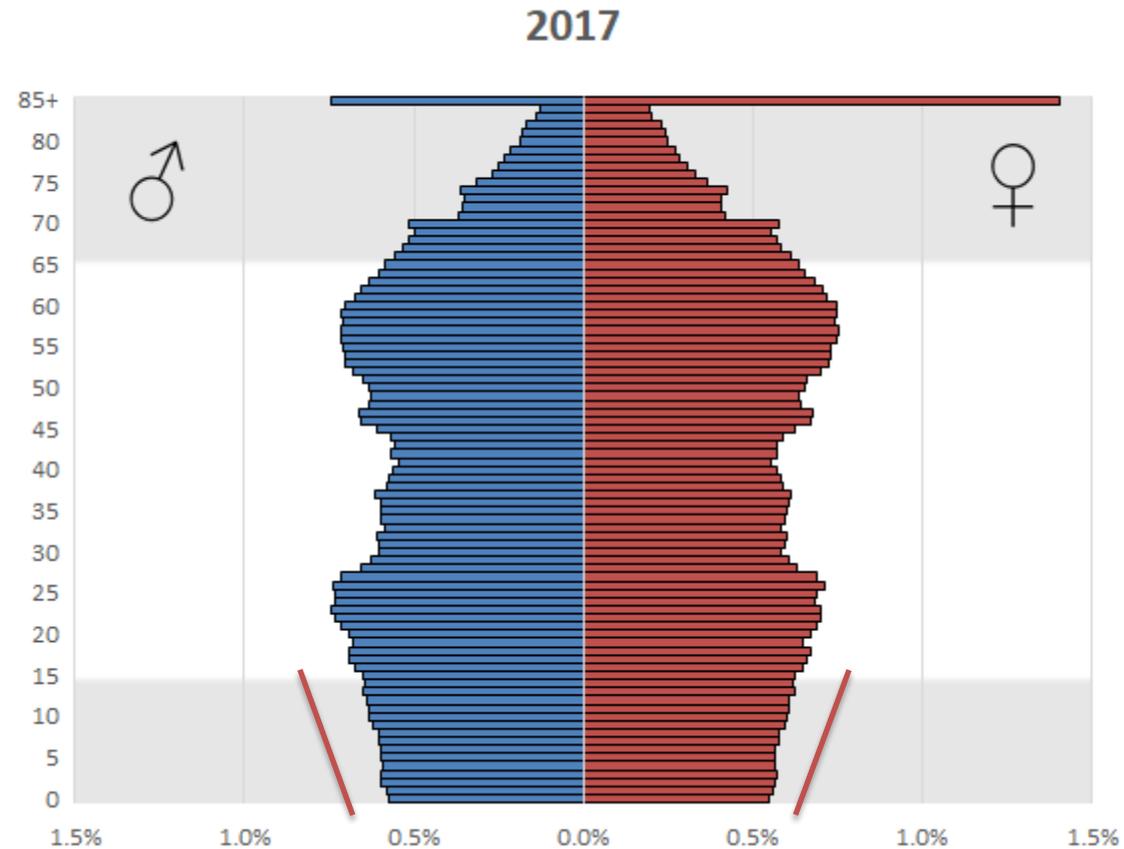
Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS)

Michigan Age Structure



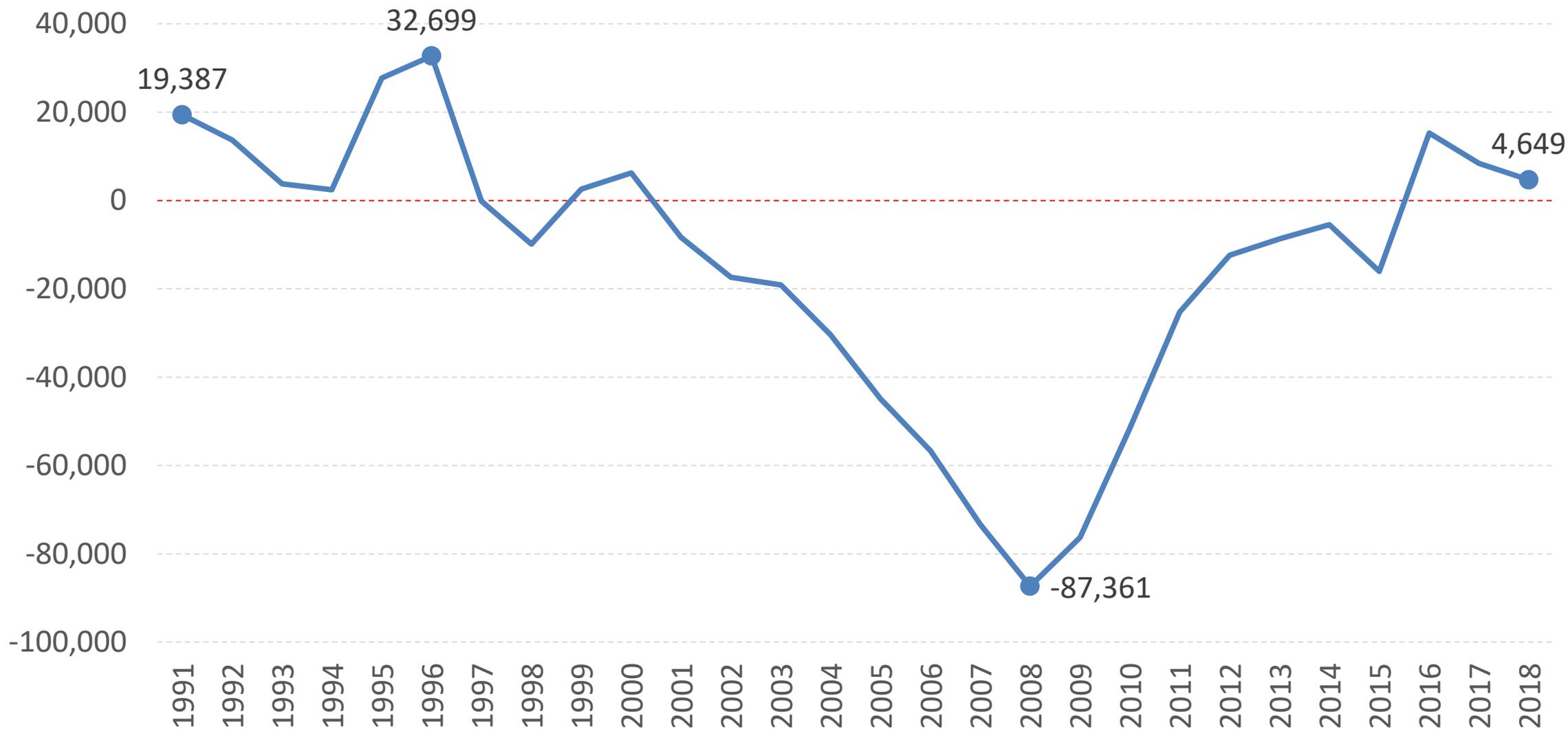
Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS)

Michigan Age Structure



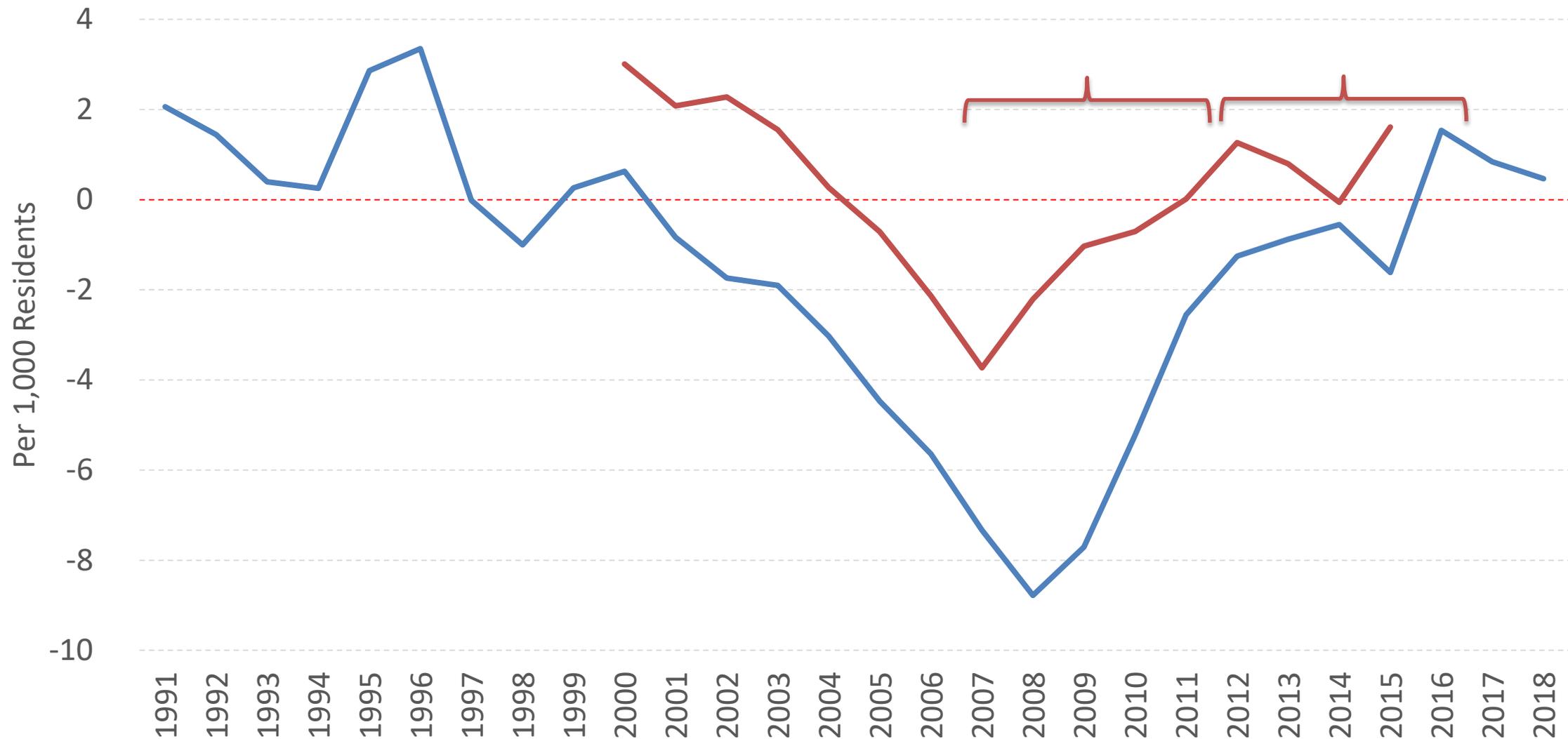
Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS)

Michigan Net Migration (Total Population)



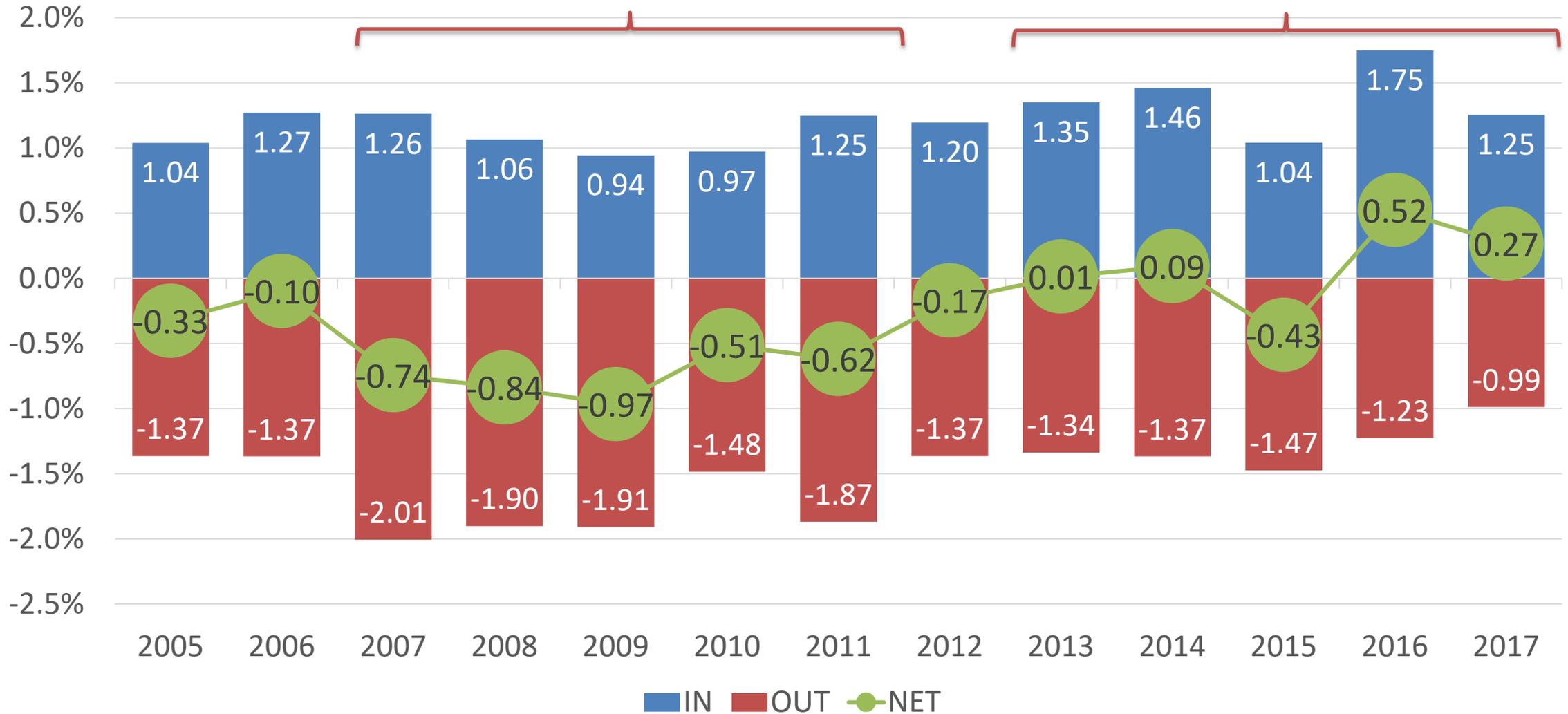
Source: U.S. Census Bureau, Population Estimates Program; MI DTMB, Bureau of Labor Market Information & Strategic Initiatives; MI DHHS Vital Statistics

Michigan Net Migration (Total Population & K-12)



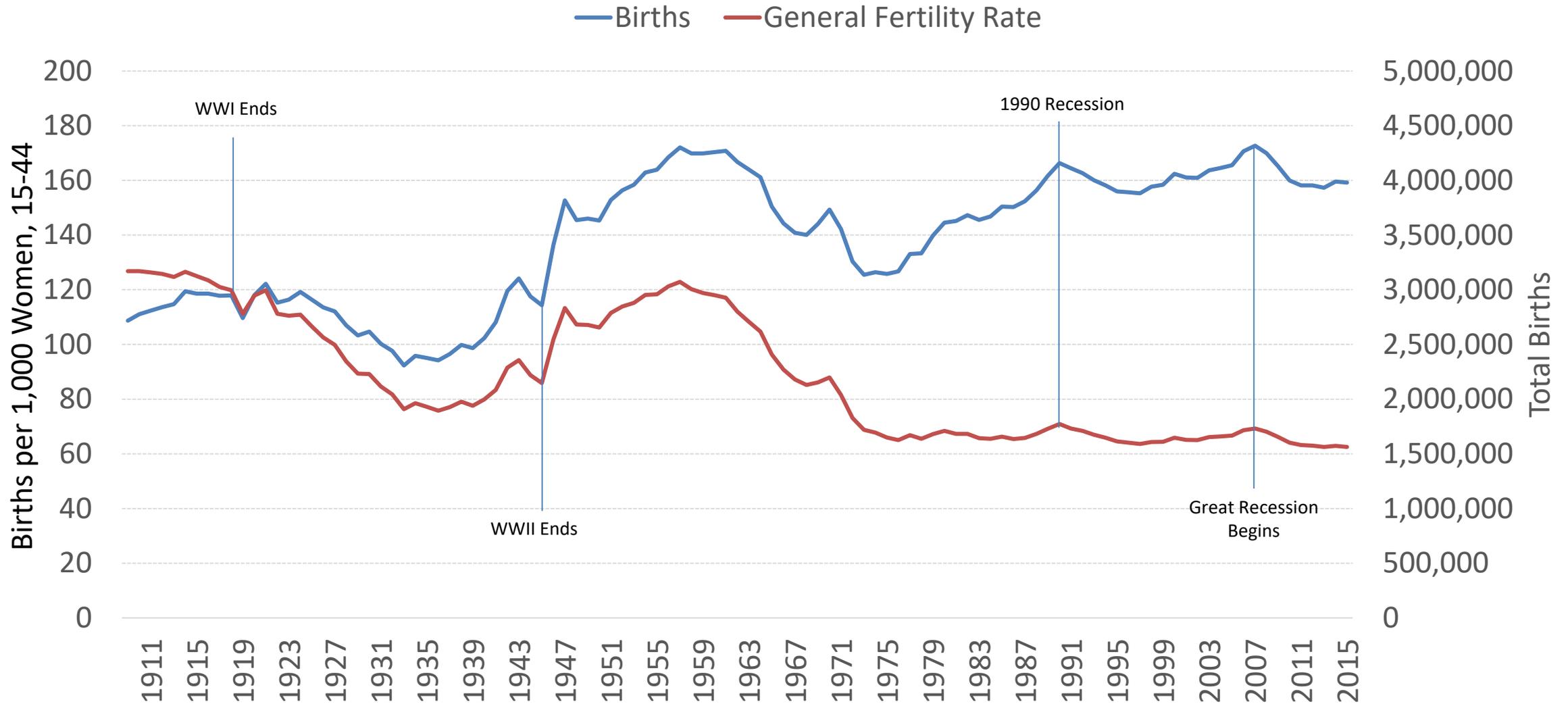
Source: U.S. Census Bureau, Population Estimates Program; MI DTMB, Bureau of Labor Market Information & Strategic Initiatives; MI DHHS Vital Statistics

Domestic Migration of K-12 (5-17) Age Population



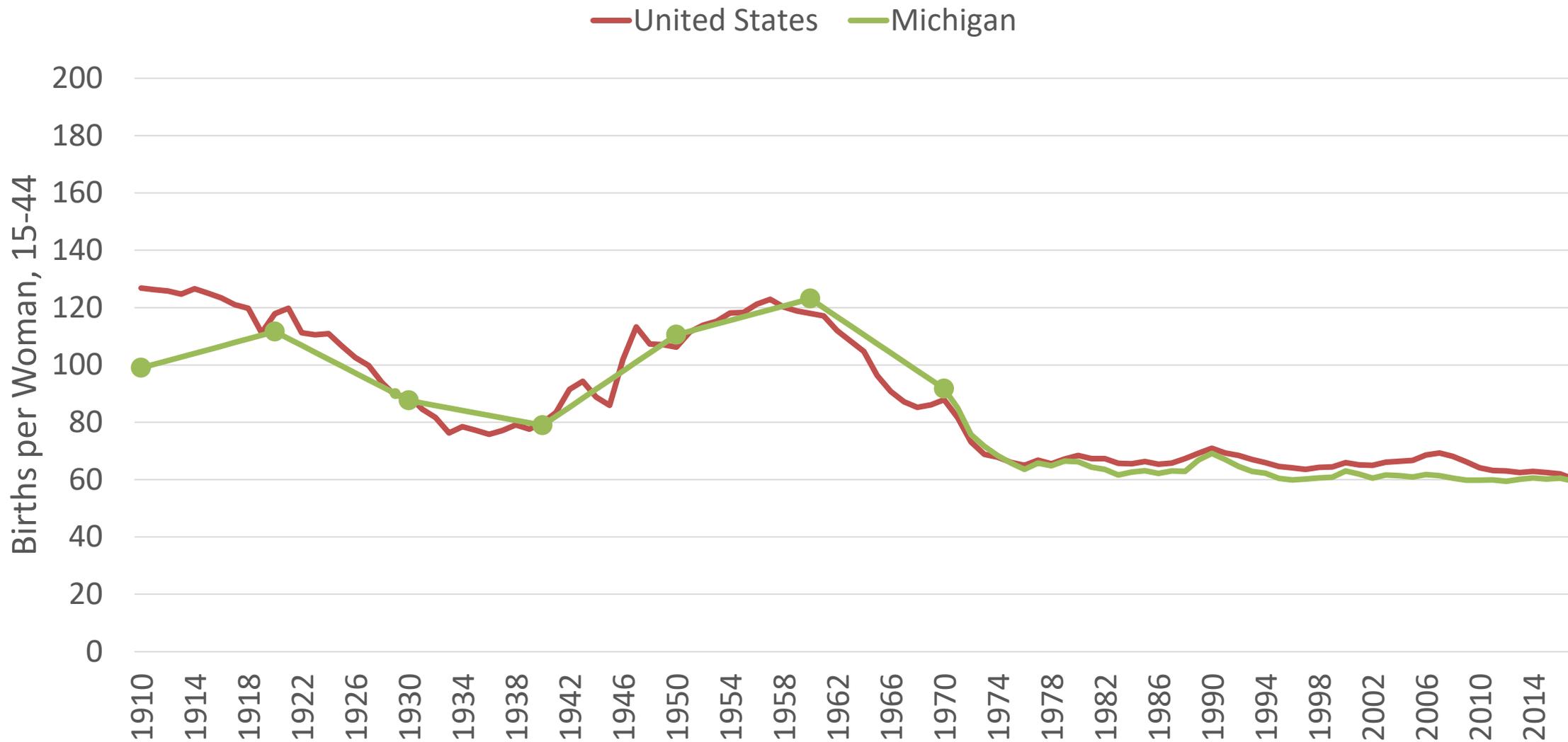
Source: U.S. Census Bureau, 2005 – 2017 American Community Survey 1-year Public Use Microdata Samples

National Fertility Rates and Births



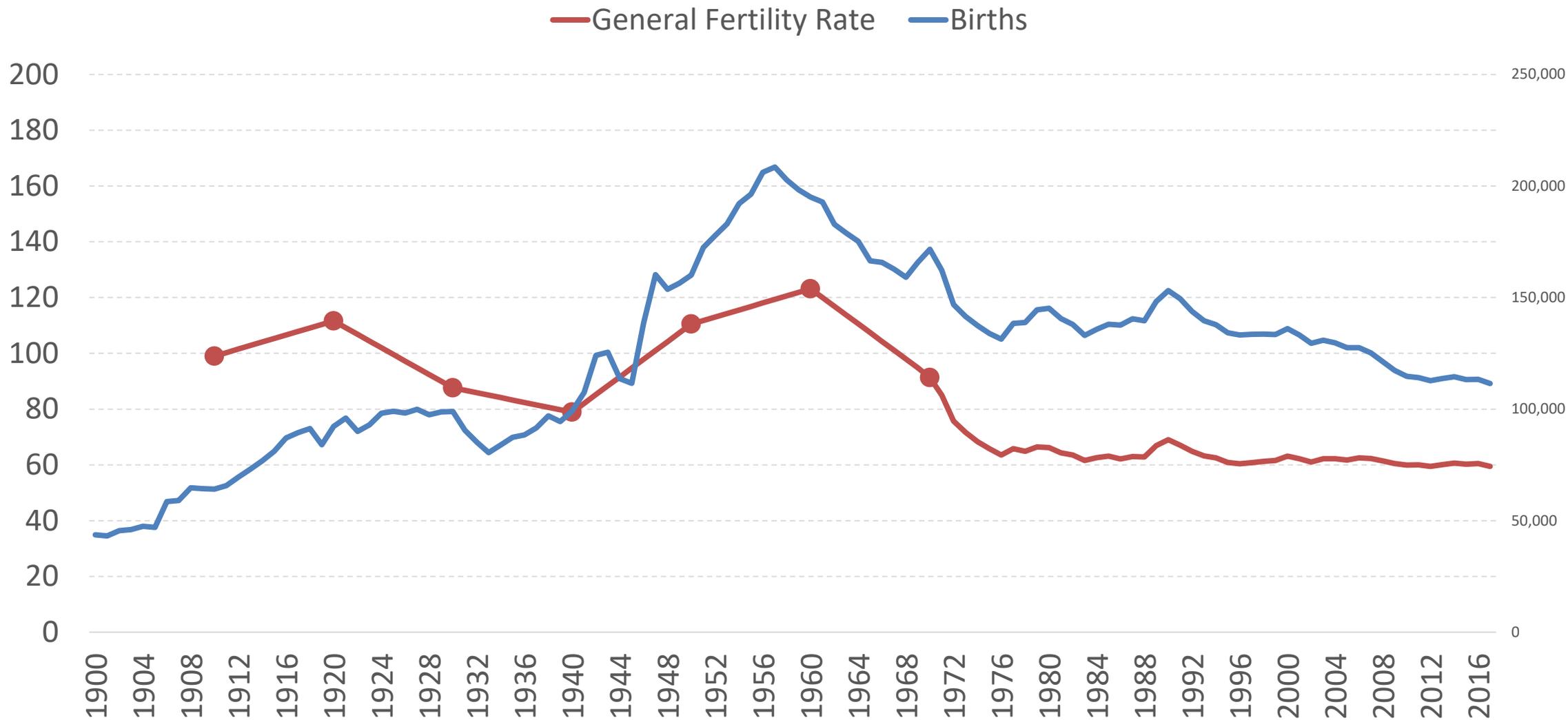
Source: NCHS Data Visualization Gallery, <https://www.cdc.gov/nchs/data-visualization/nativity-trends/>

Michigan and U.S. Fertility Rates



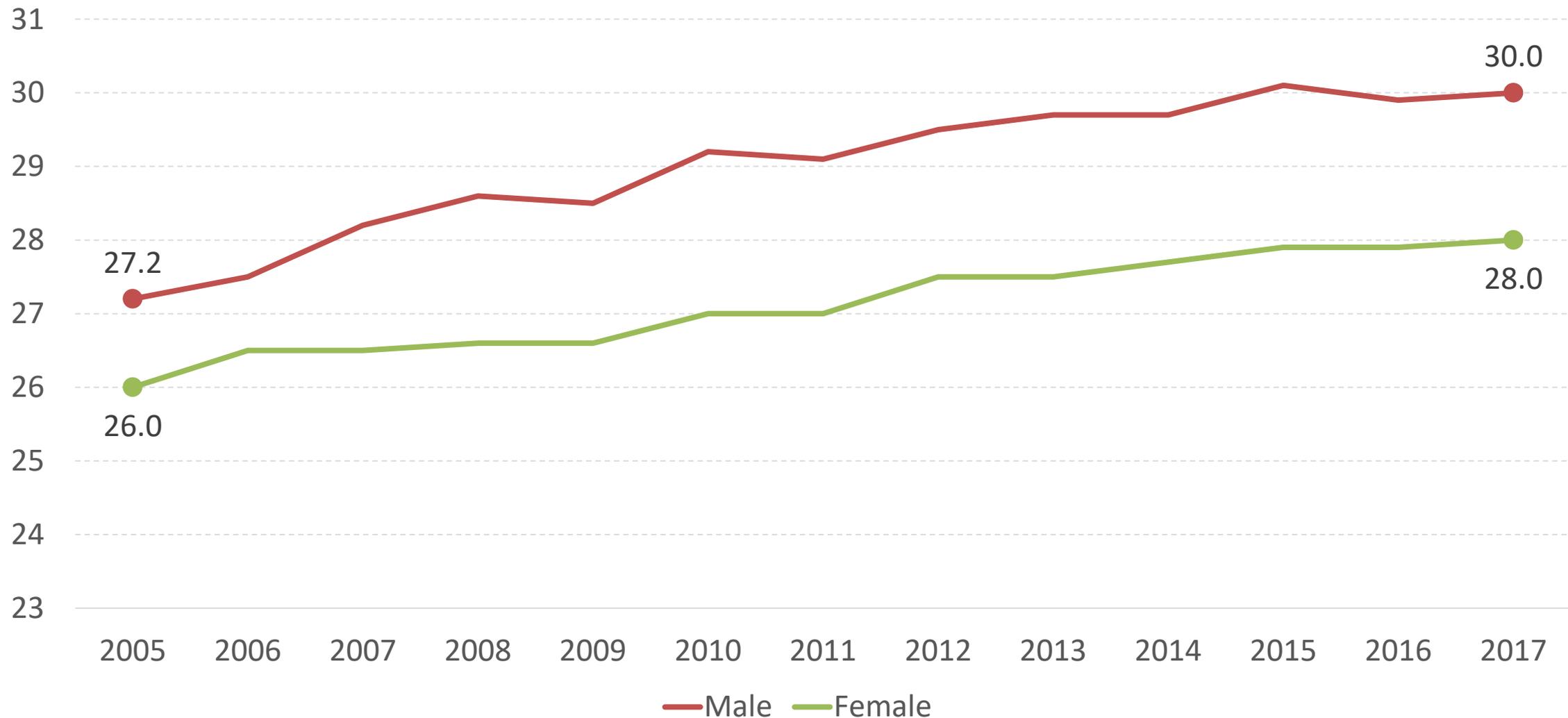
Source: NCHS Data Visualization Gallery, <https://www.cdc.gov/nchs/data-visualization/natality-trends/>; MI DHHS

Michigan Fertility Rates and Births



Source: MI DHHS

Median Age at First Marriage in Michigan



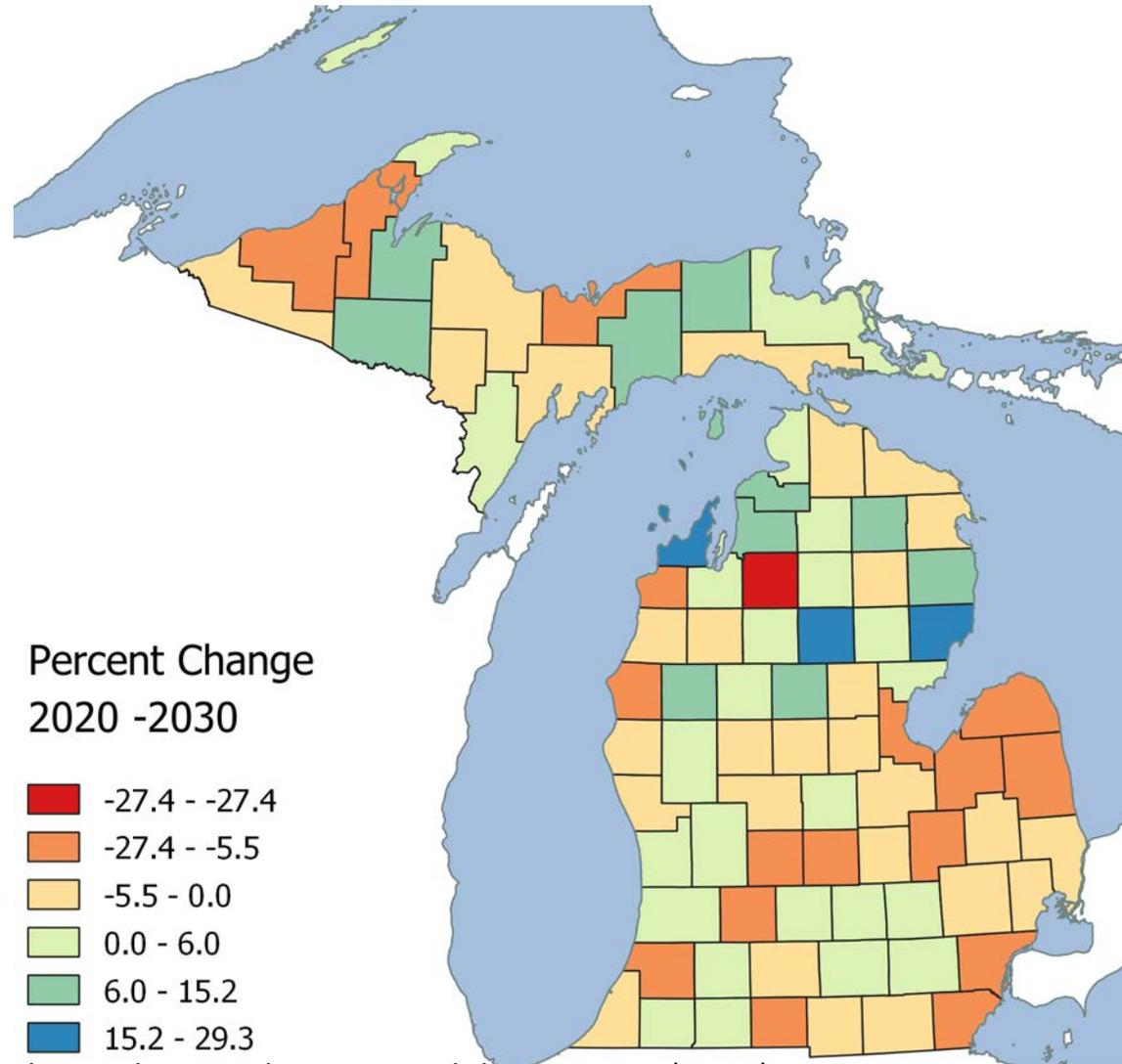
Source: U.S. Census Bureau, 2005 – 2017 American Community Survey 1-year Estimates

Increasing Median Ages for Mothers

- Between 2003 and 2017 :
 - Median age for mothers having a first child increased from 25 to 26.
 - Median age for all mothers increased from 27 to 28 years

Source: U.S. Census Bureau, 2017 American Community Survey 1-year Estimates; United States Department of Health and Human Services

Change in the K-12 Population 2020 - 2030



Source: MDOT and U-M's Institute for Research on Labor, Employment, and the Economy (IRLEE)

- Changes in the K-12 population are affected by the changes in the general population
 - Migration patterns track
 - Long-term declines in fertility have significant effects on the K-12 population
- The K-12 population will continue to see losses for the next five to six years until projected migration and millennial fertility lead to moderate population increases
- Projected population changes will be realized differently across the state just as historical population changes have varied regionally

Thank you

Questions?

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State Demographer

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