

**2020 Alaska Native
Population Conference
January 30, 2020**

**Population Projections
2017-2045**

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and Workforce Development



Population Projections: What We Provide

- Total population for Alaska, Alaska Natives and boroughs and census areas
- Single year of age and sex for Alaska
- Five year age groups for Alaska Natives and boroughs and census areas

The Balancing Equation

The most basic method of calculating numerical population change over time is the “balancing equation,” shown below.

$$P_1 + (B - D) + (I - E) = P_2$$

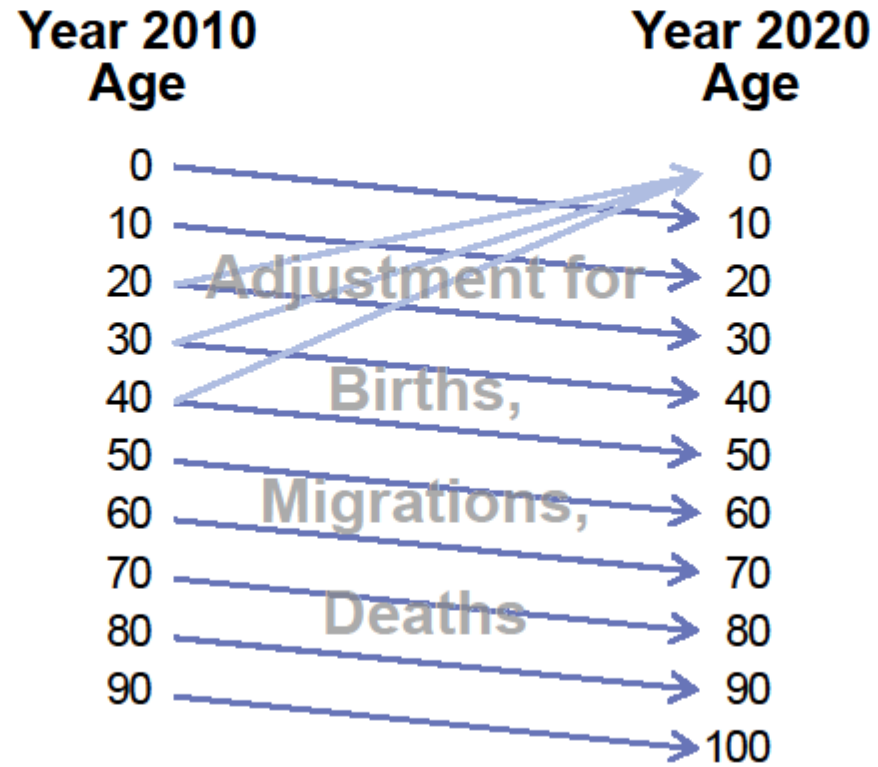
Where P_2 is the population at the later date and P_1 is the population at the earlier date; B is births and D is deaths between the two dates; and I is immigration (or in-migration) and E is emigration (or out-migration) between the two dates.

Jan. 2009					Jan. 2010
population	+	(2009 Births-Deaths)	+	(2009 Immigration-Emigration)	= population of Sweden
9,256,000	+	(111,800 – 90,080)	+	(102,280 – 39,000)	= 9,341,000

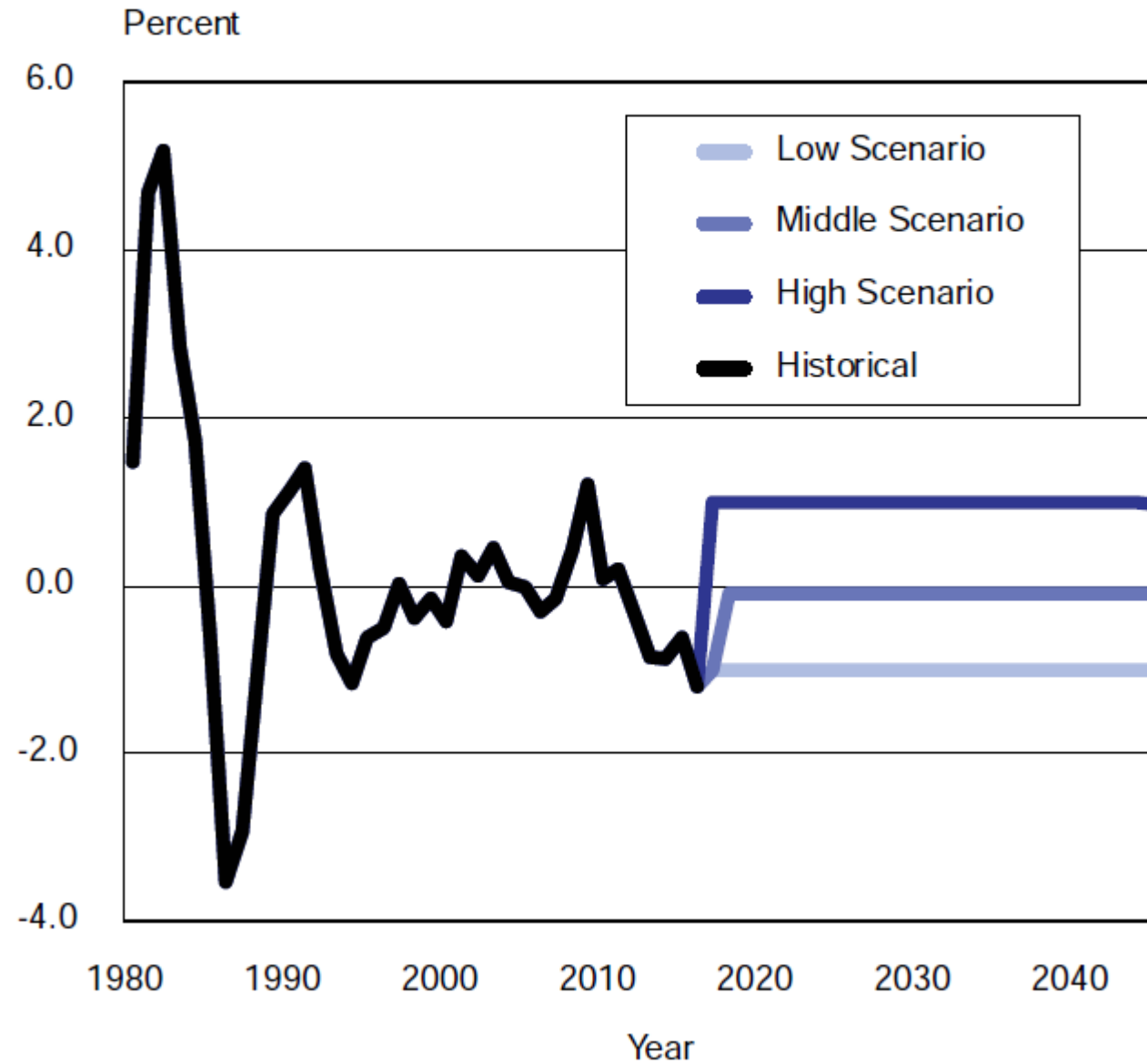
During 2009, the population of Sweden increased by 85,000.

(Population Reference Bureau)

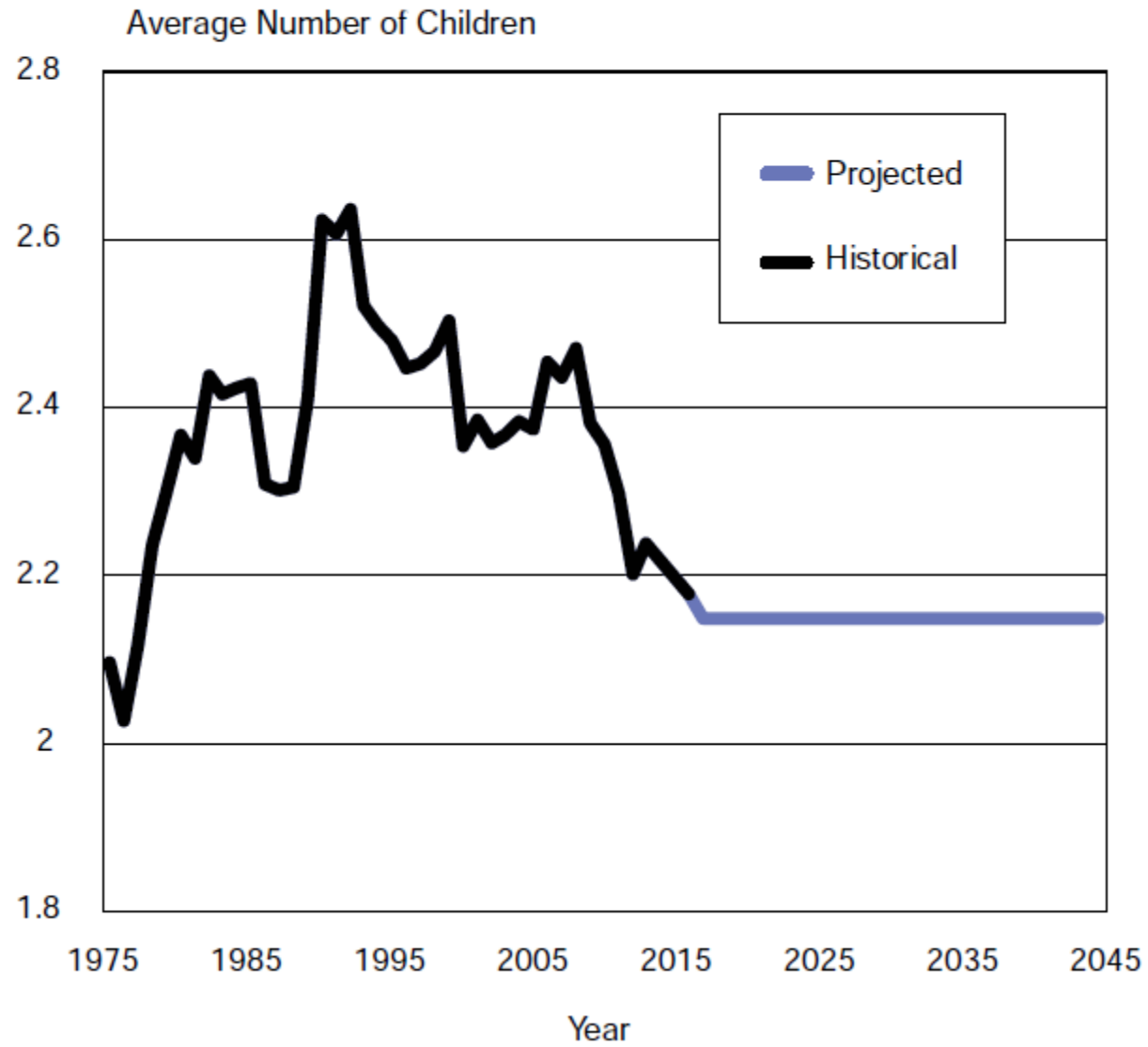
The Cohort-Component Method



Alaska Net Migration Rate, 1980 to 2045



Alaska Total Fertility Rate, 1975 to 2045



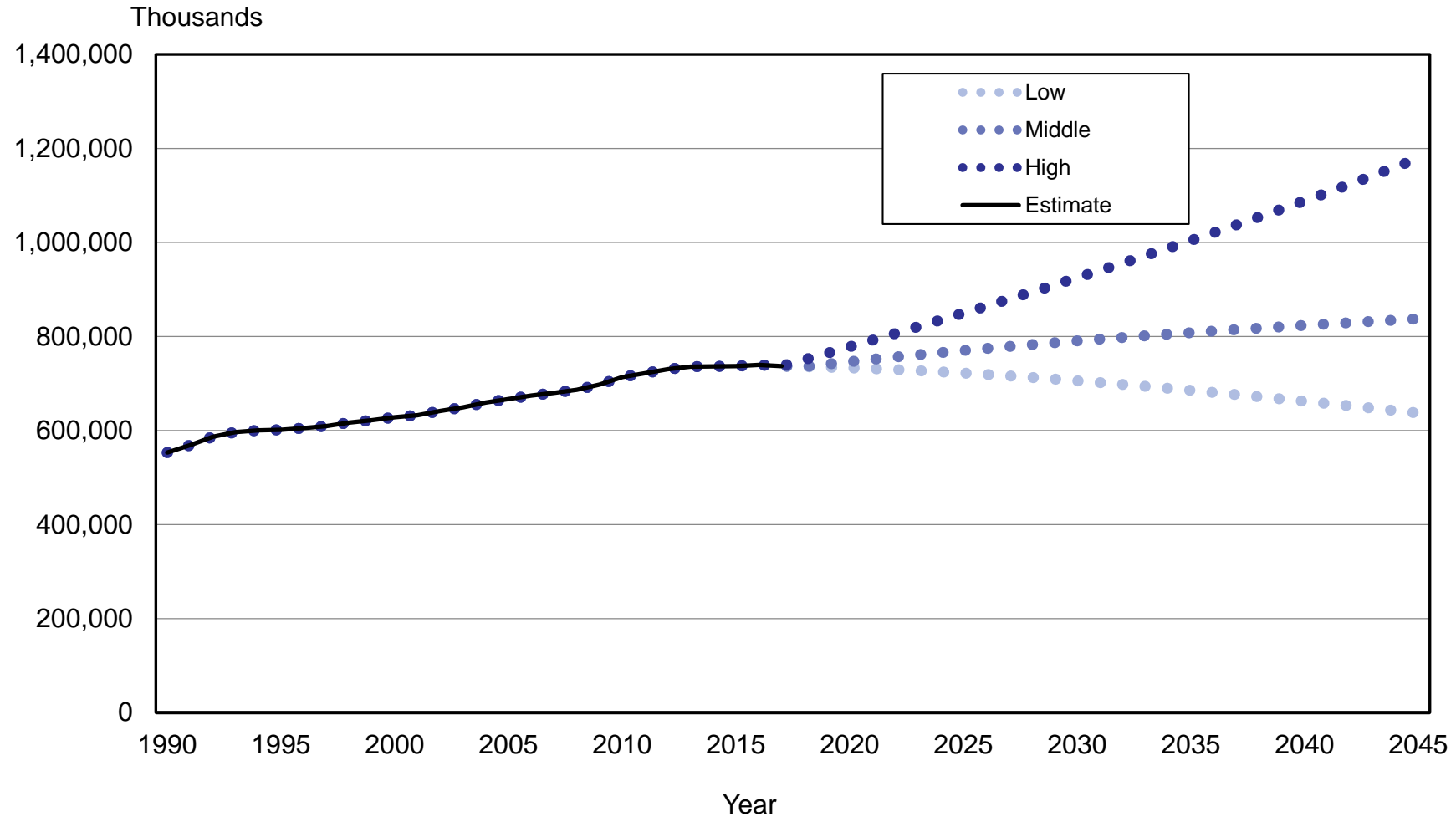
Life Expectancy at Birth, 1970 to 2050

Alaska	Male	Female
1970	66.1	74.0
1980	68.8	76.5
1990	71.6	78.7
2000	74.9	79.7
2010	75.7	80.4
2020*	76.3	81.3
2030*	77.2	81.9
2040*	78.1	82.4
2050*	79.0	83.0

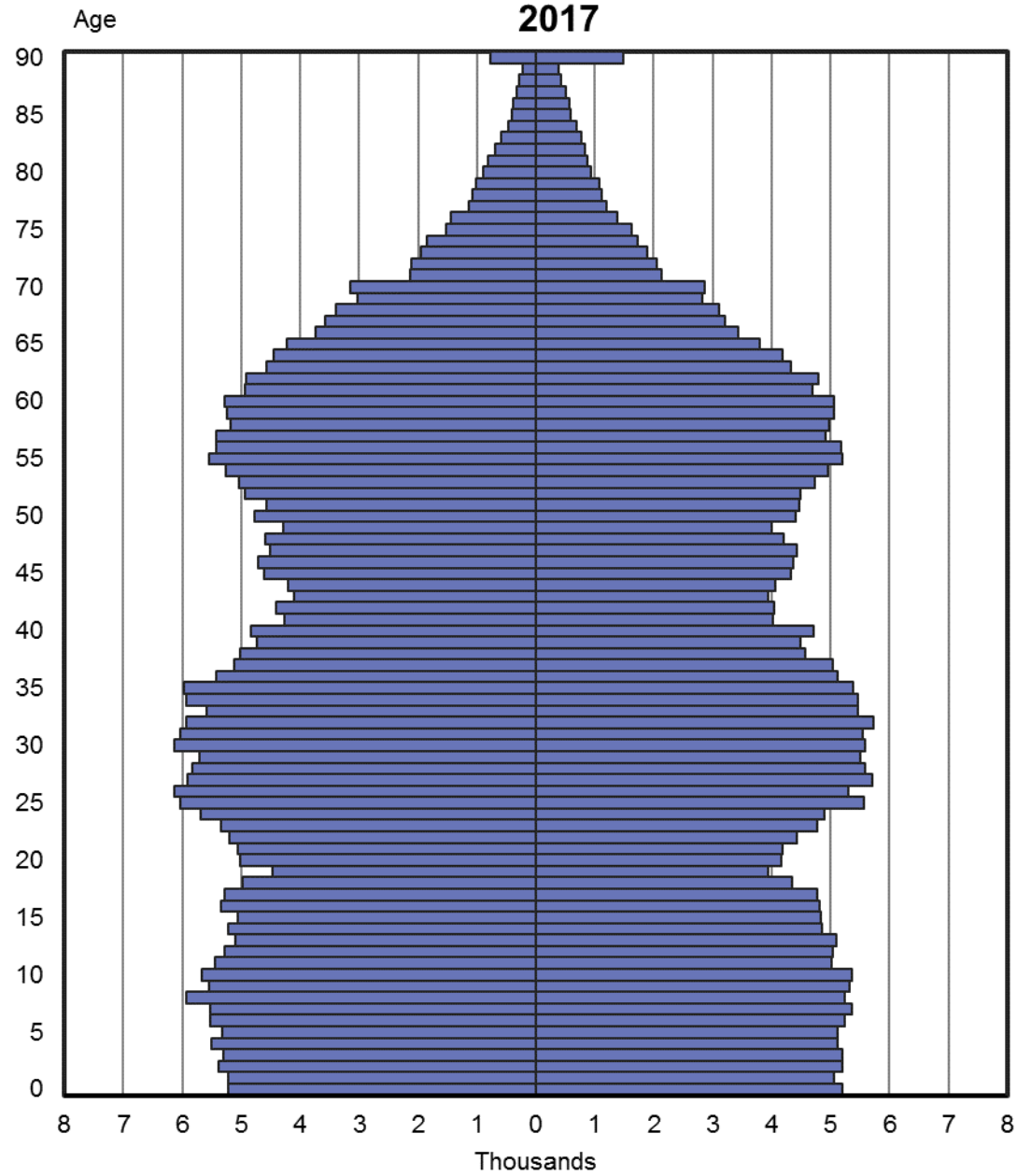
United States	Male	Female
1970	67.2	74.9
1980	69.9	77.5
1990	71.8	78.9
2000	74.0	79.4
2010*	75.4	80.0
2020*	76.5	80.8
2030*	77.5	81.7
2040*	78.5	82.5
2050*	79.4	83.2

*Projected

Total Population, 1990-2045

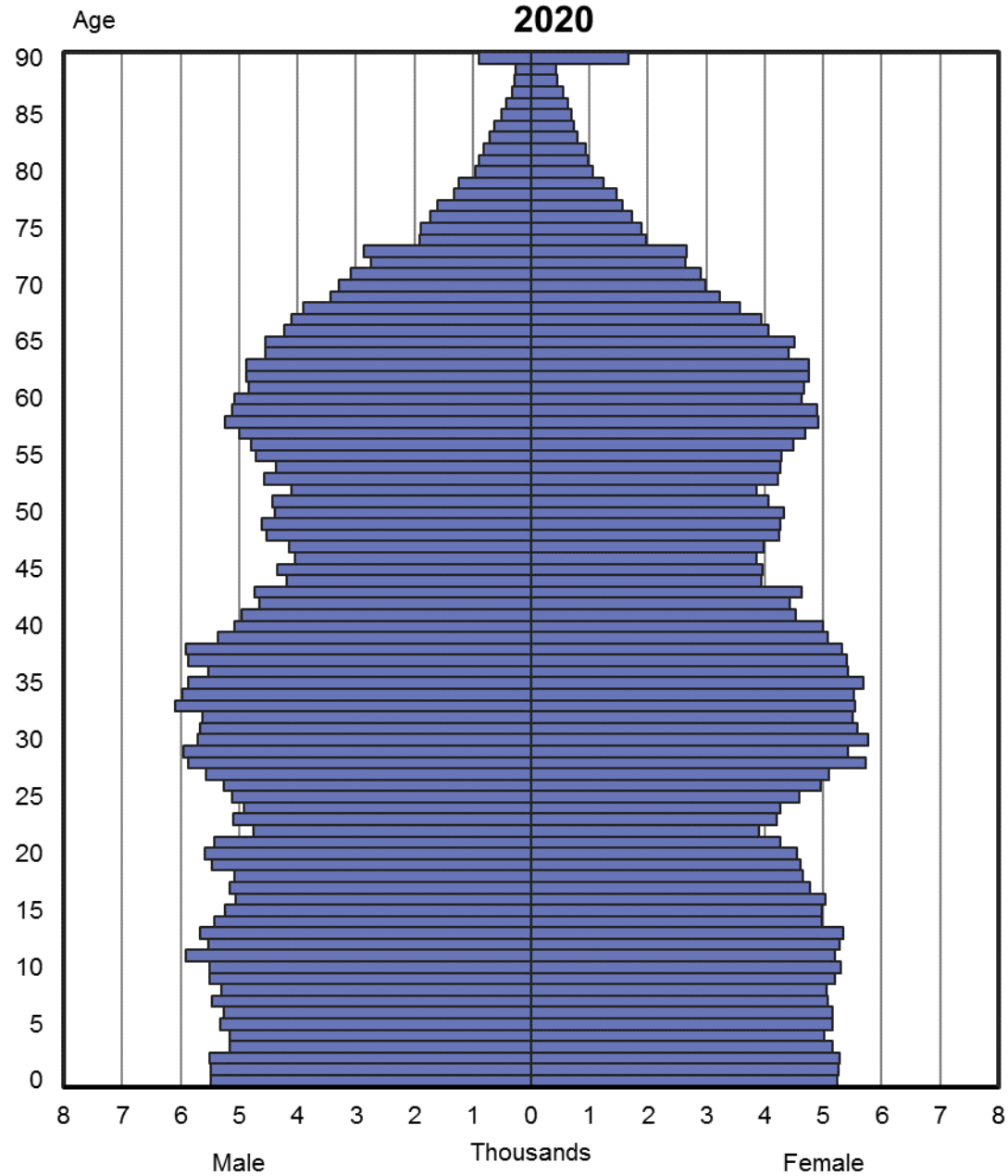


Estimated Alaska Population by Age and Sex 2017

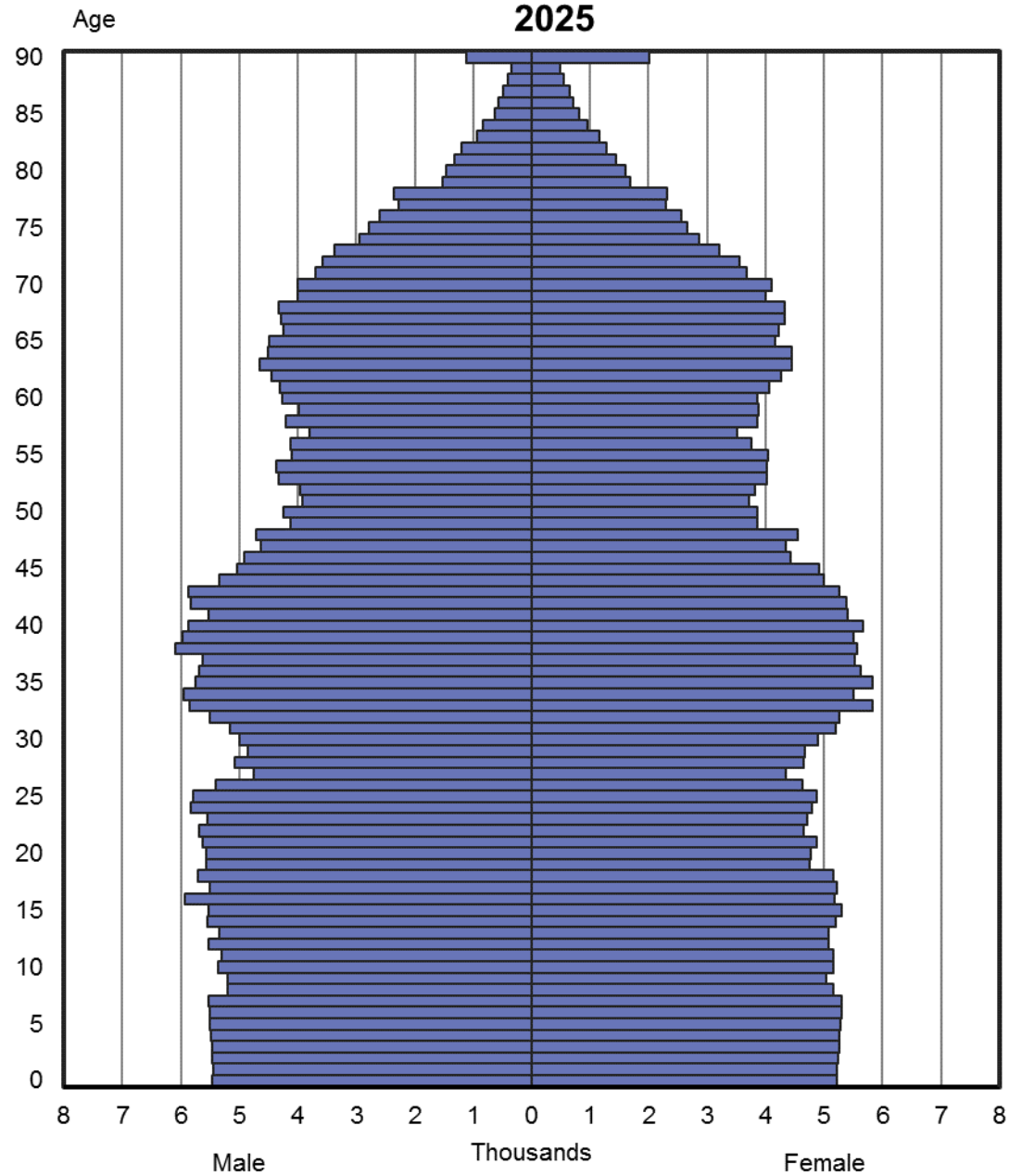


Estimated Alaska Population by Age and Sex

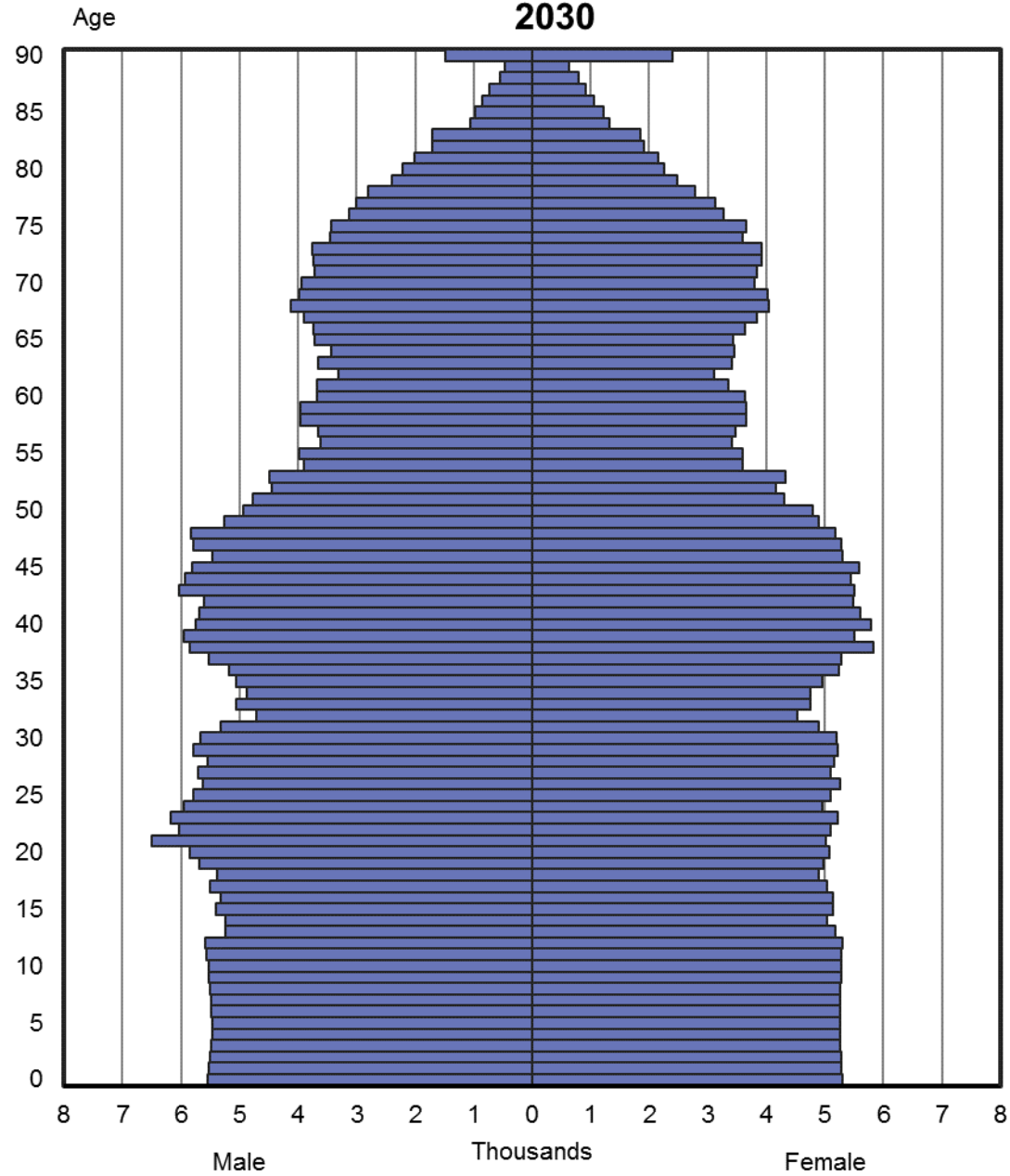
2020



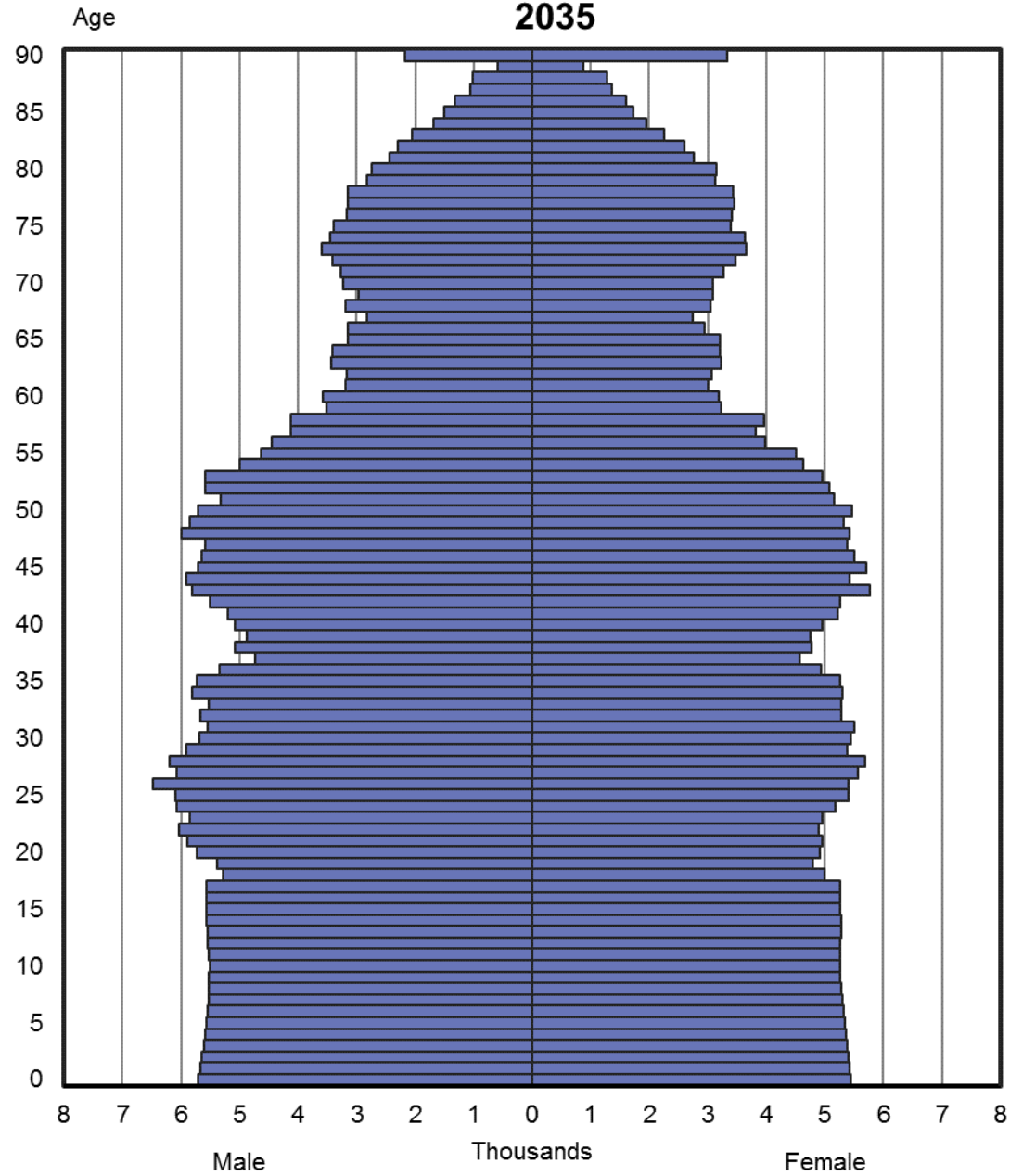
Estimated Alaska Population by Age and Sex 2025



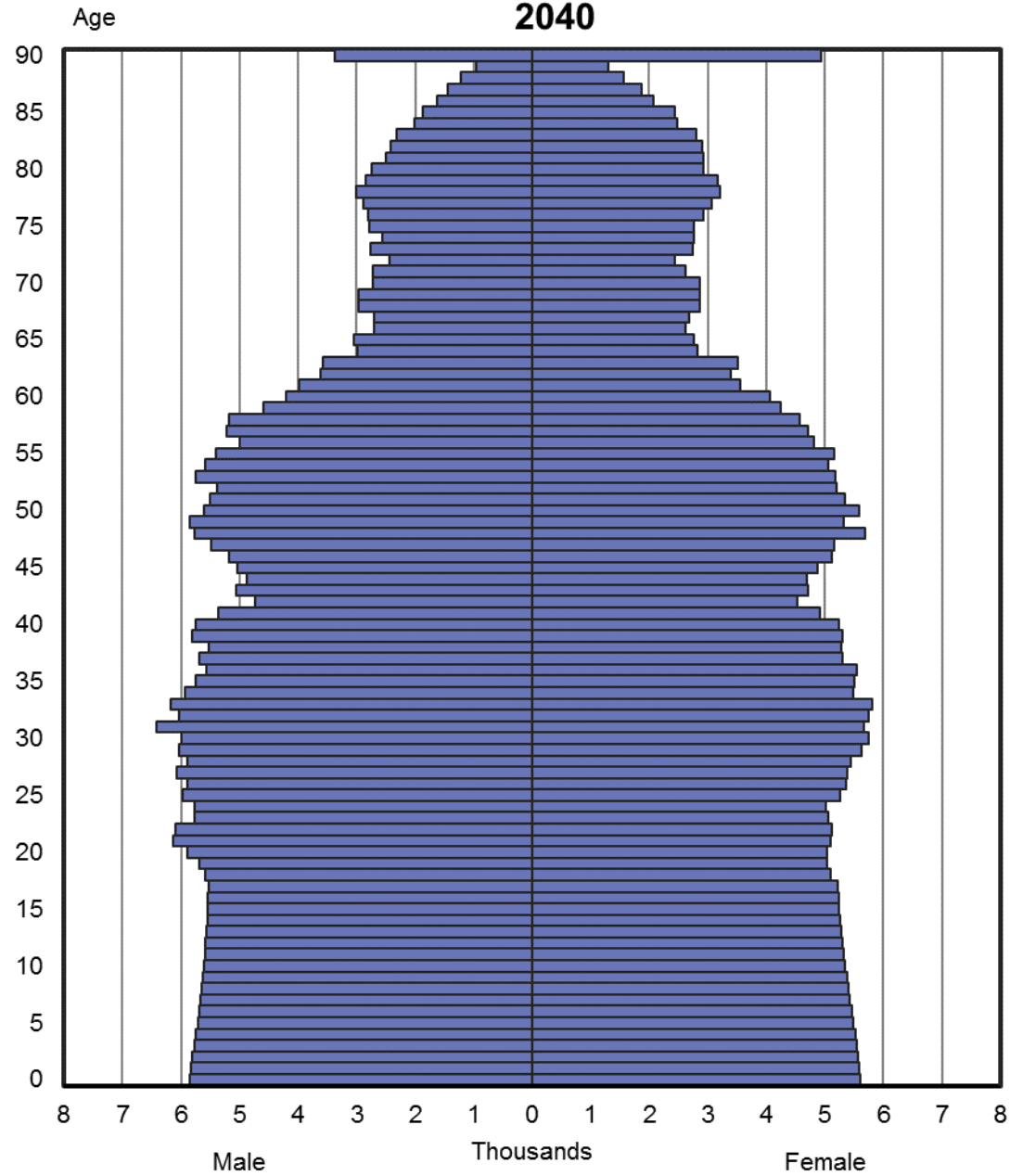
Estimated Alaska Population by Age and Sex 2030



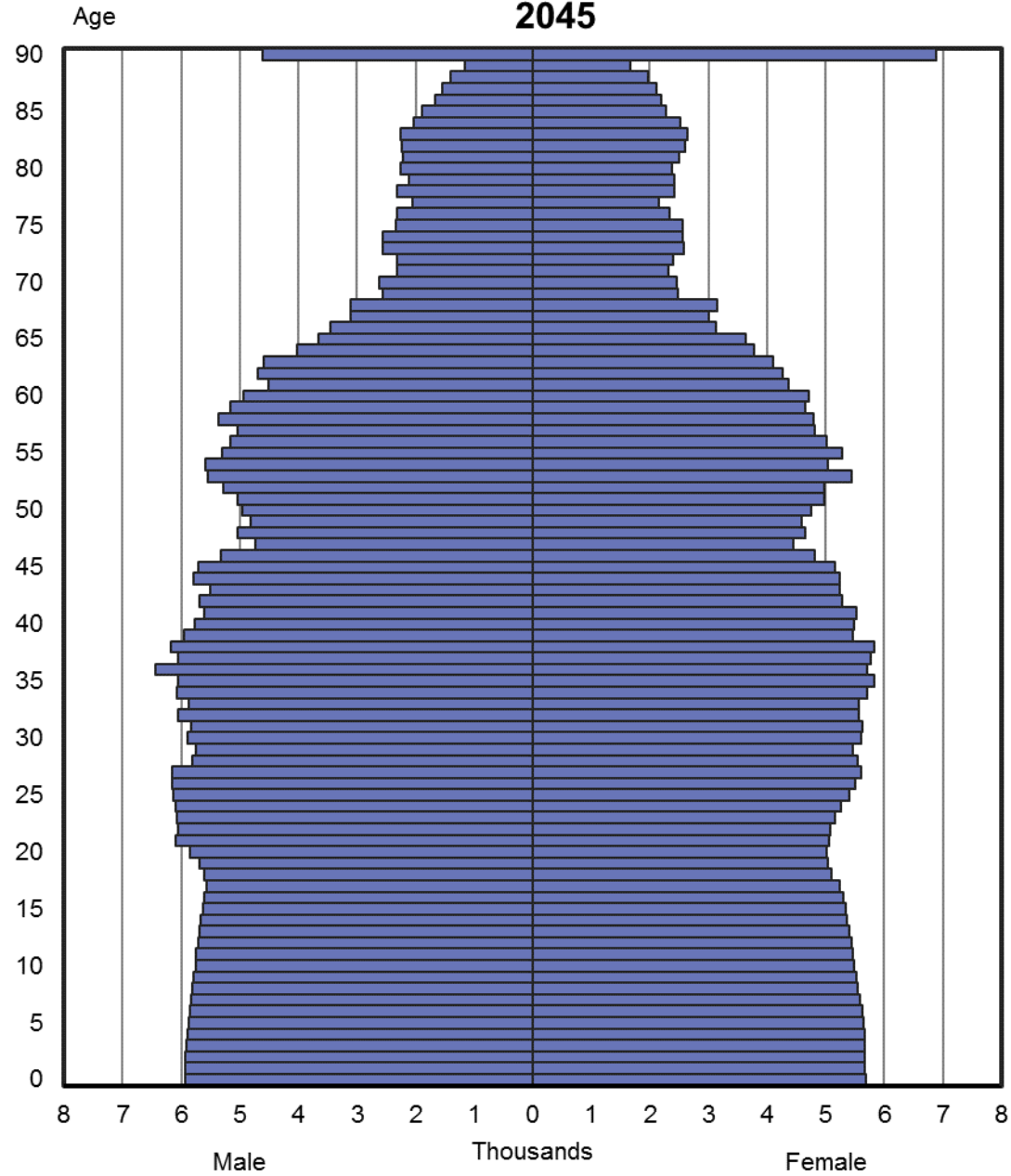
Estimated Alaska Population by Age and Sex 2035



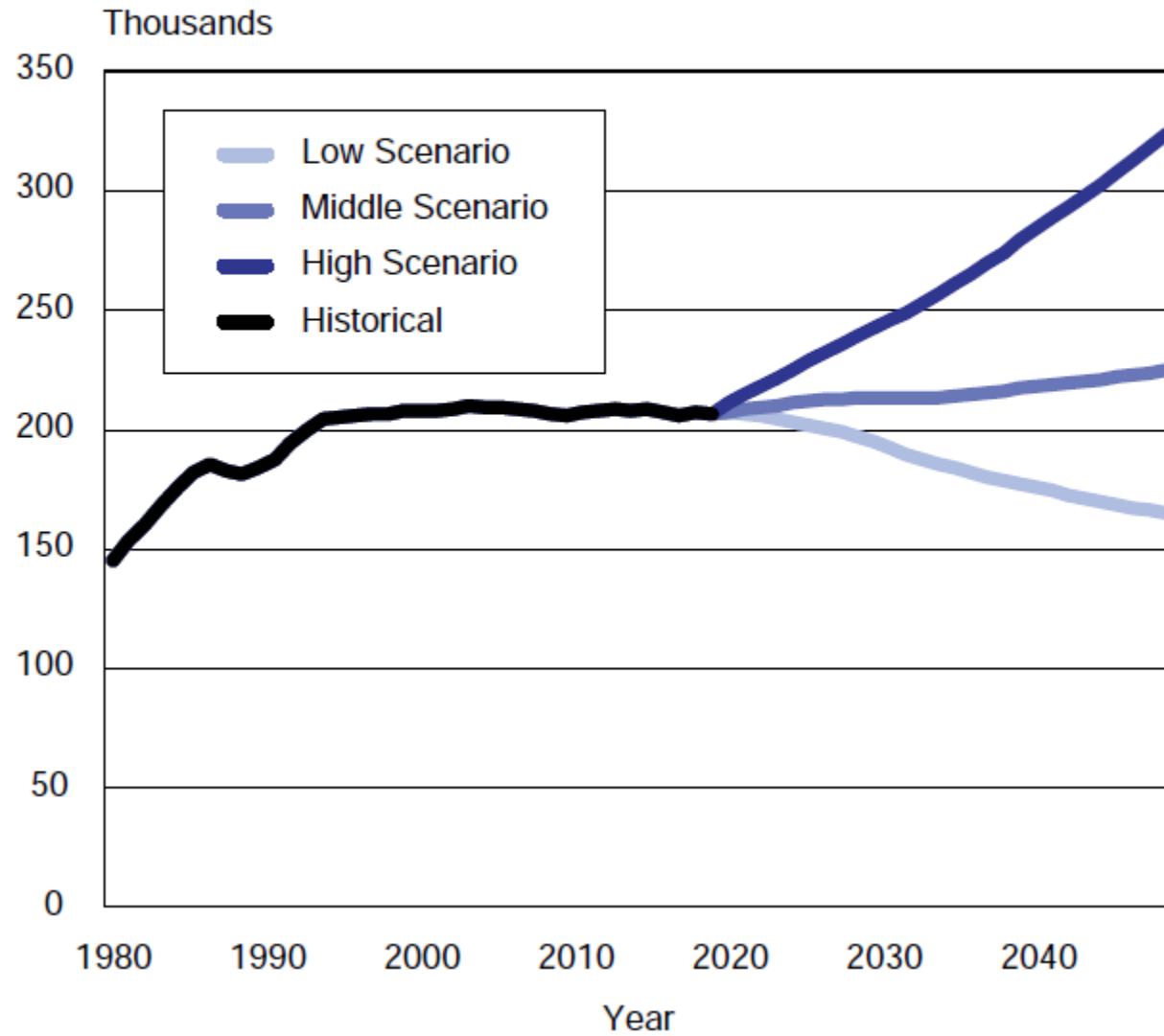
Estimated Alaska Population by Age and Sex 2040



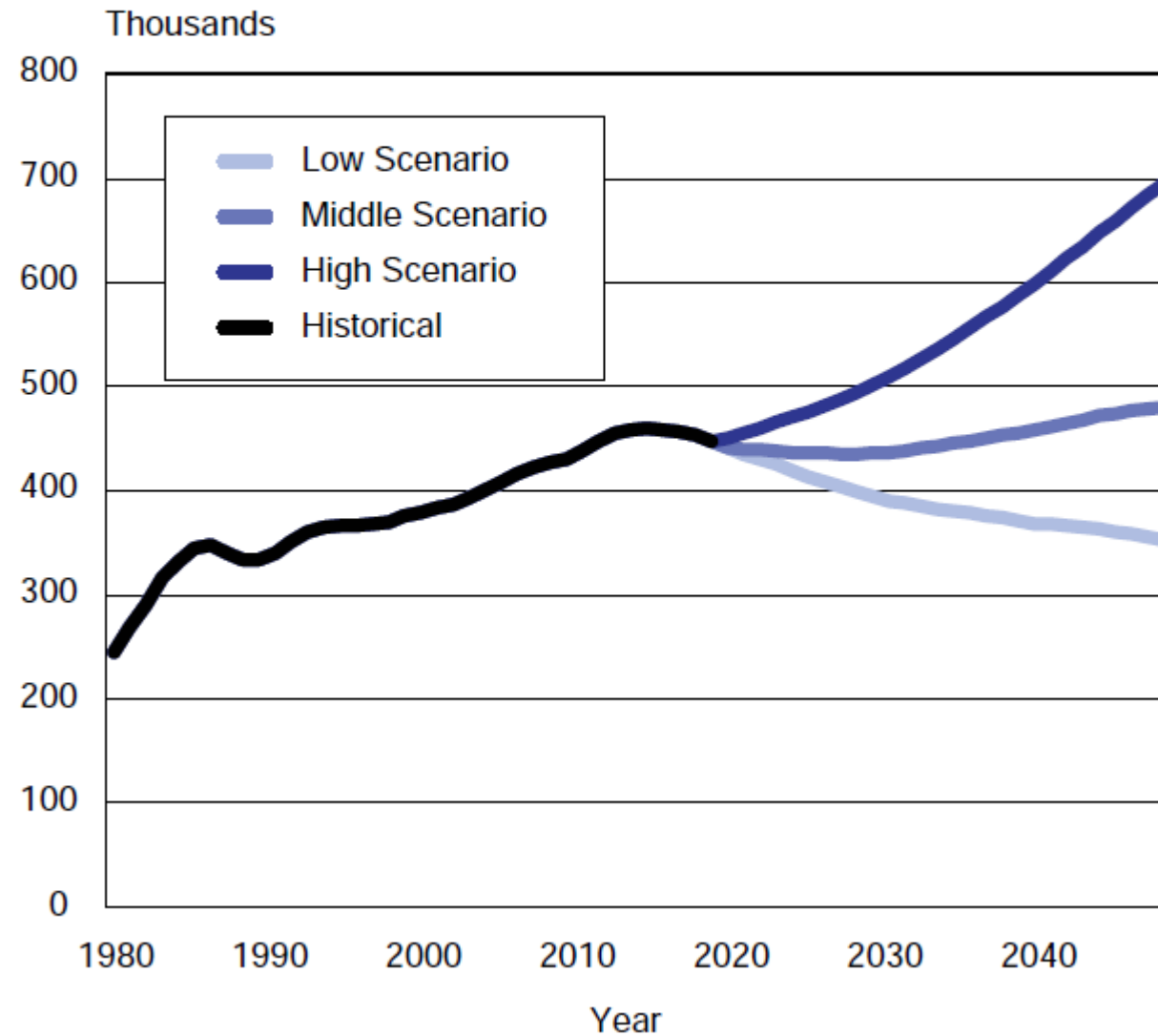
Estimated Alaska Population by Age and Sex 2045



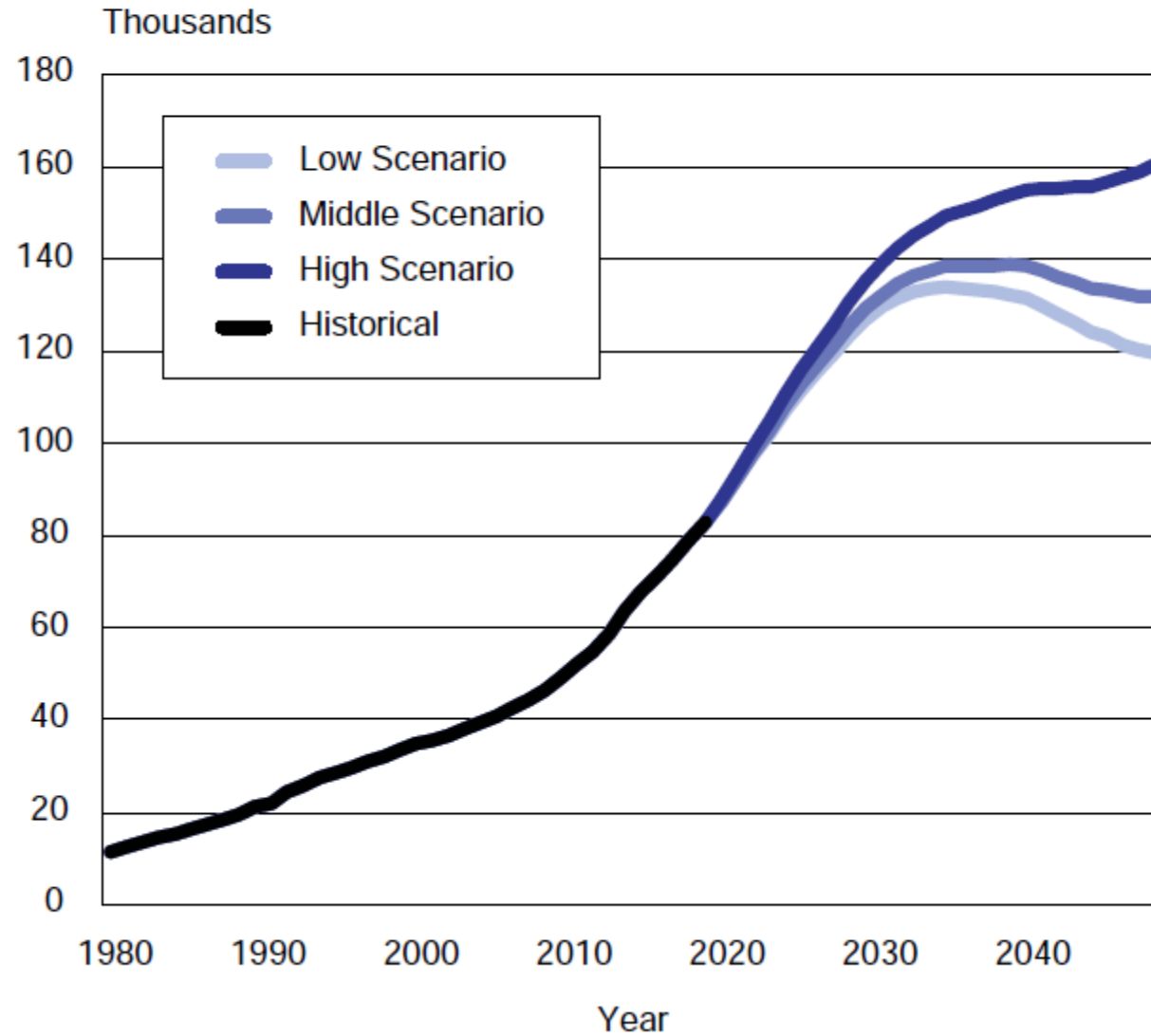
Population Age 0 to 19, Alaska, 1980 to 2045



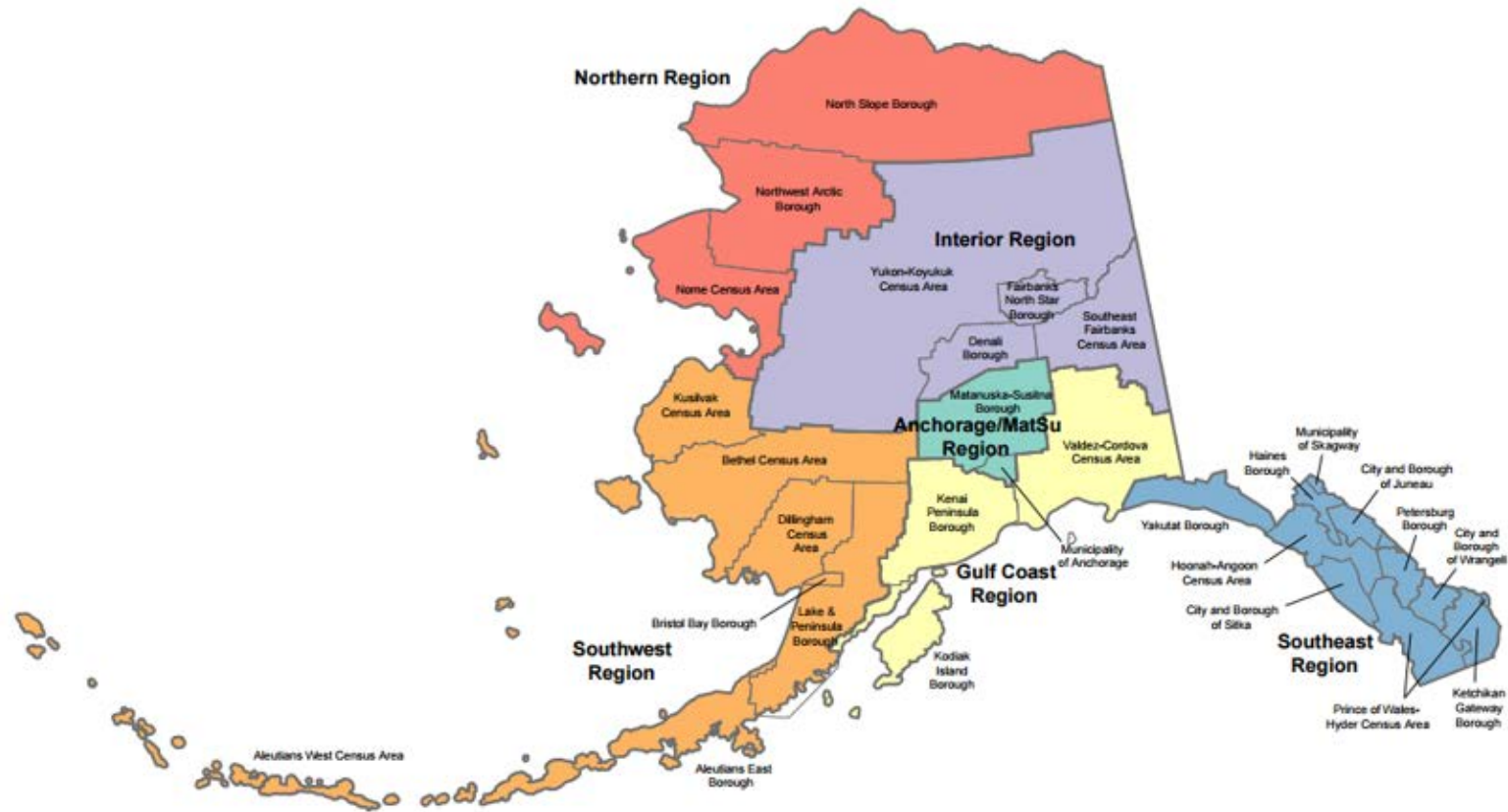
Population Age 20 to 64, Alaska, 1980 to 2045



Population Age 65+, Alaska, 1980 to 2045



Population Projections: Borough and Census Area



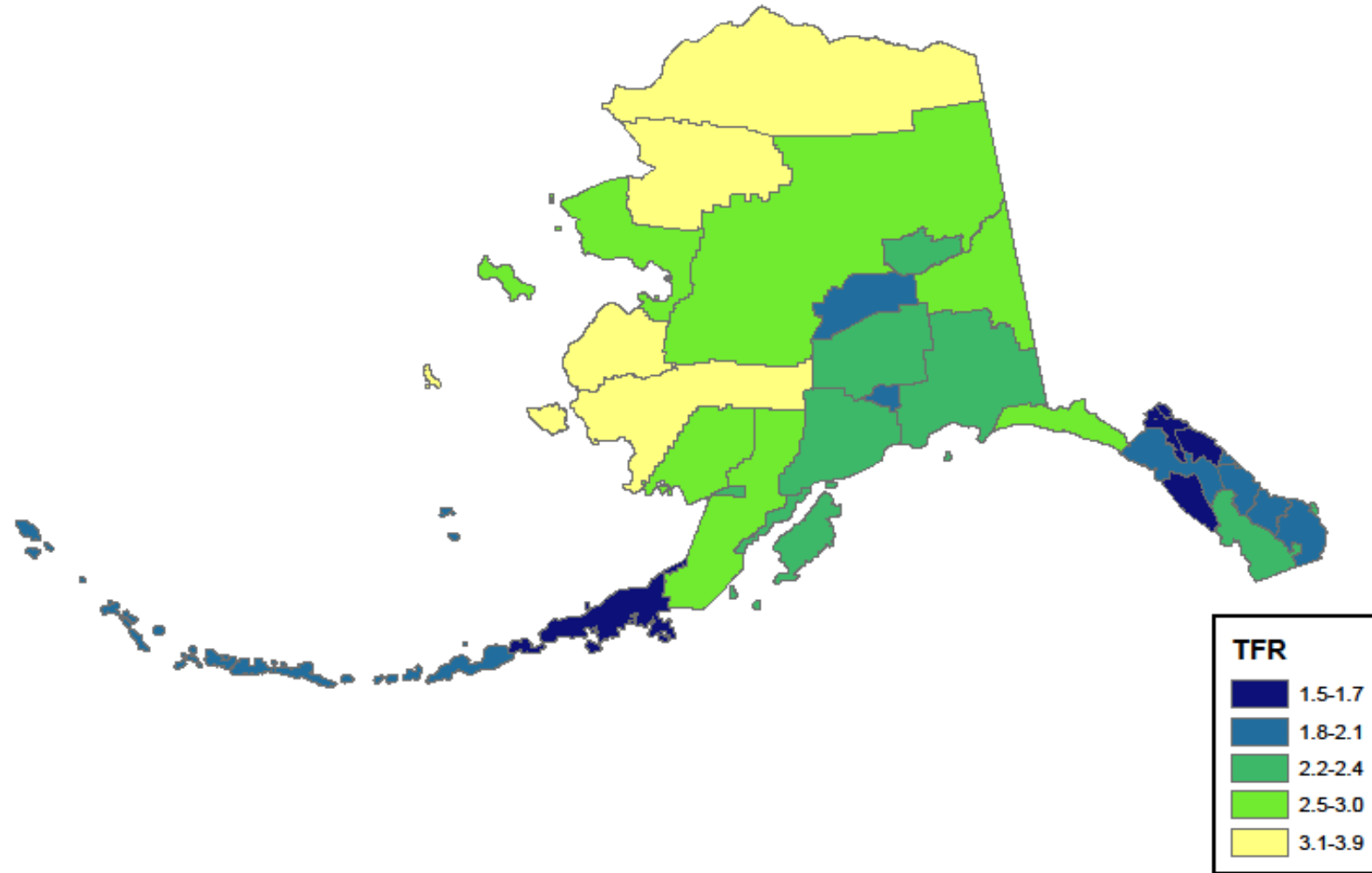
Population Projections: Borough and Census Area Methods

Total Fertility Rates Across the State

Highest in boroughs and census areas with high proportion of Alaska Natives

Lowest (in some cases less than 1.8) in Southeast

Borough and Census Area Total Fertility Rate



Population Projections: Borough and Census Area Methods

Net Migration Across the State

Very unpredictable but very important to projecting future populations

By far the highest is in Mat-Su

Roughly zero or negative in most other places,

But age profile of migration matters a lot

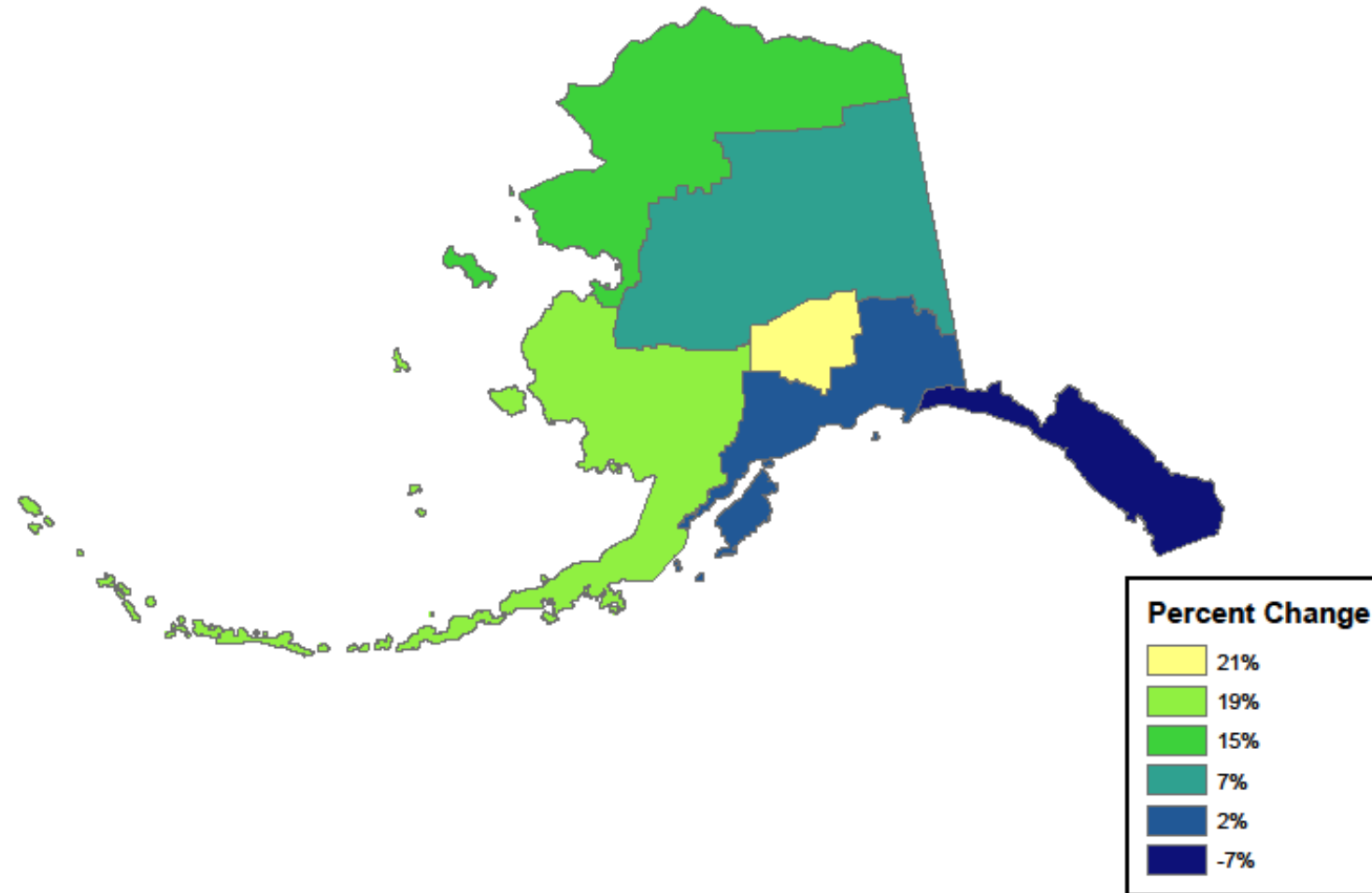
Population Projections: Borough and Census Area Methods

Life Expectancy Across the State

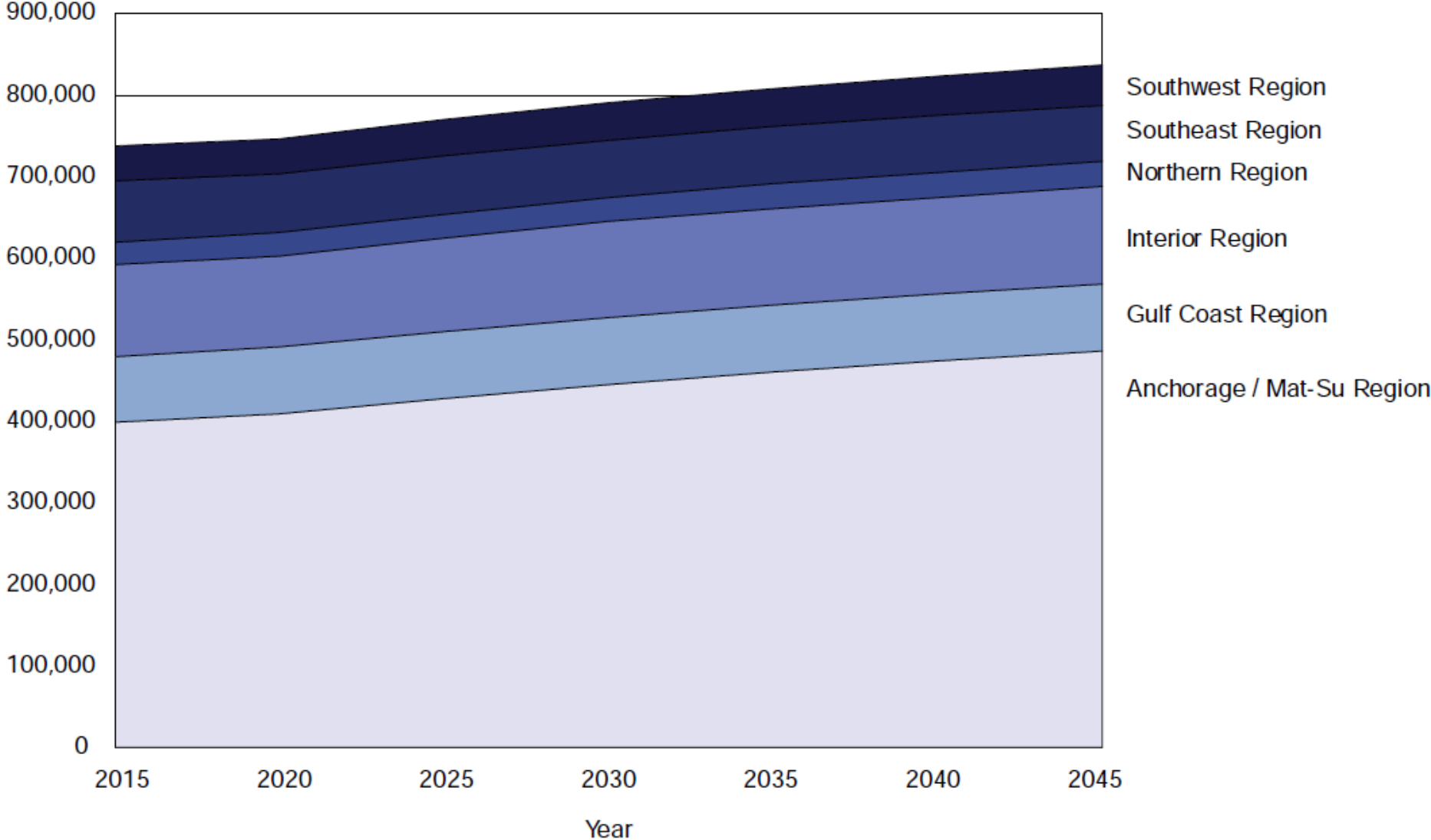
Not possible to determine directly, as data is so limited

Estimated based on the proportion Alaska Native and non-Native in
each borough

Economic Region Growth, 2017-2045



Population by Alaska Region, 2015 to 2045

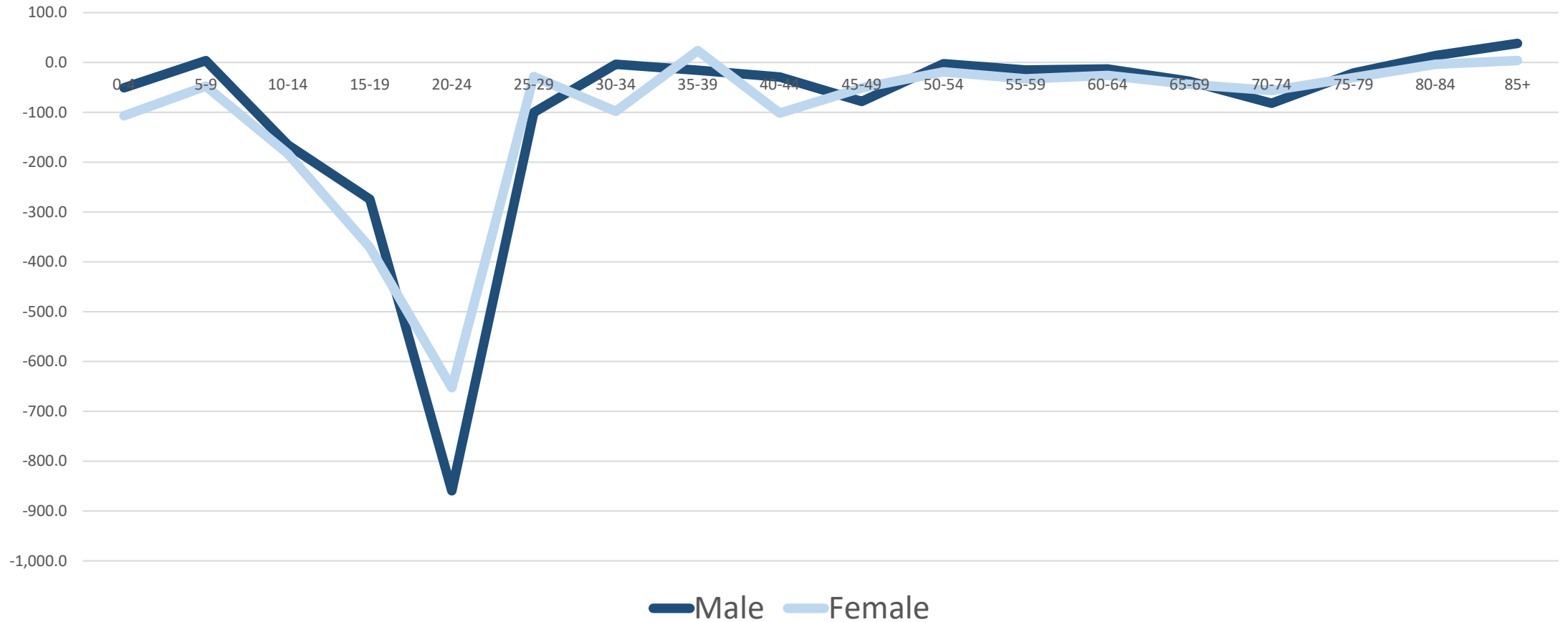


Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

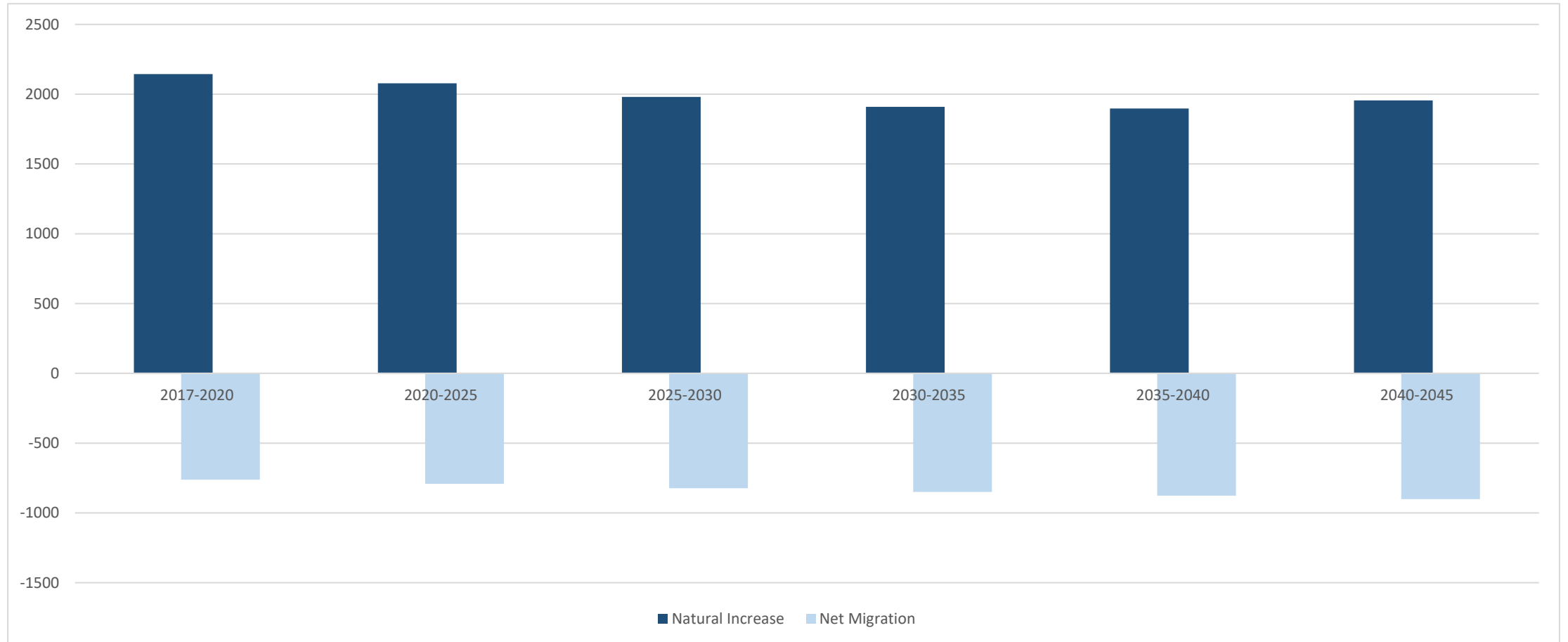
Population Projections: Alaska Native Population

- Projections are for Alaska Native alone or in combination with one or more other races.
- The Alaska Native population is projected to add around 40,000 over the next 30 years.
- There's uncertainty about whether the Alaska Native share of state population will increase.

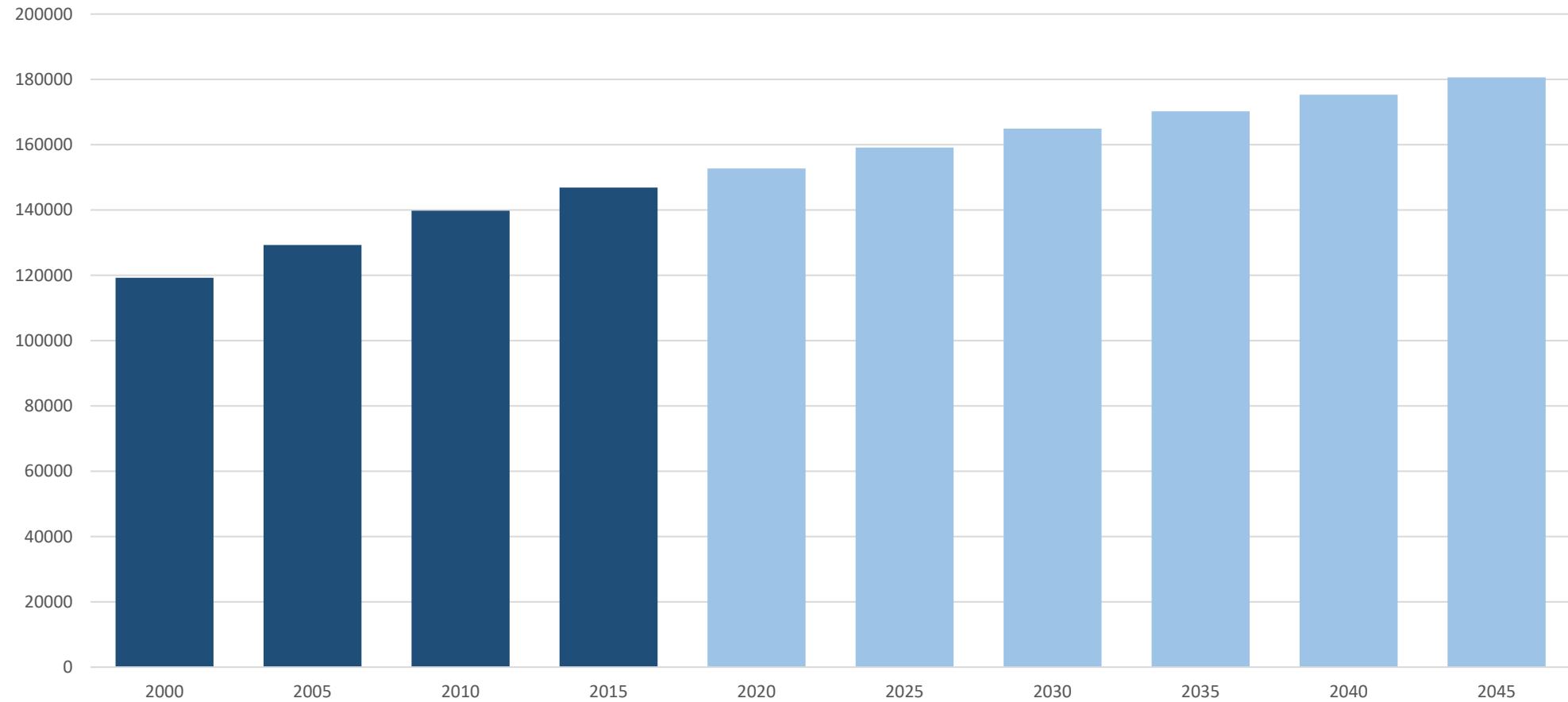
Alaska Native Net Migration, 2010-2015



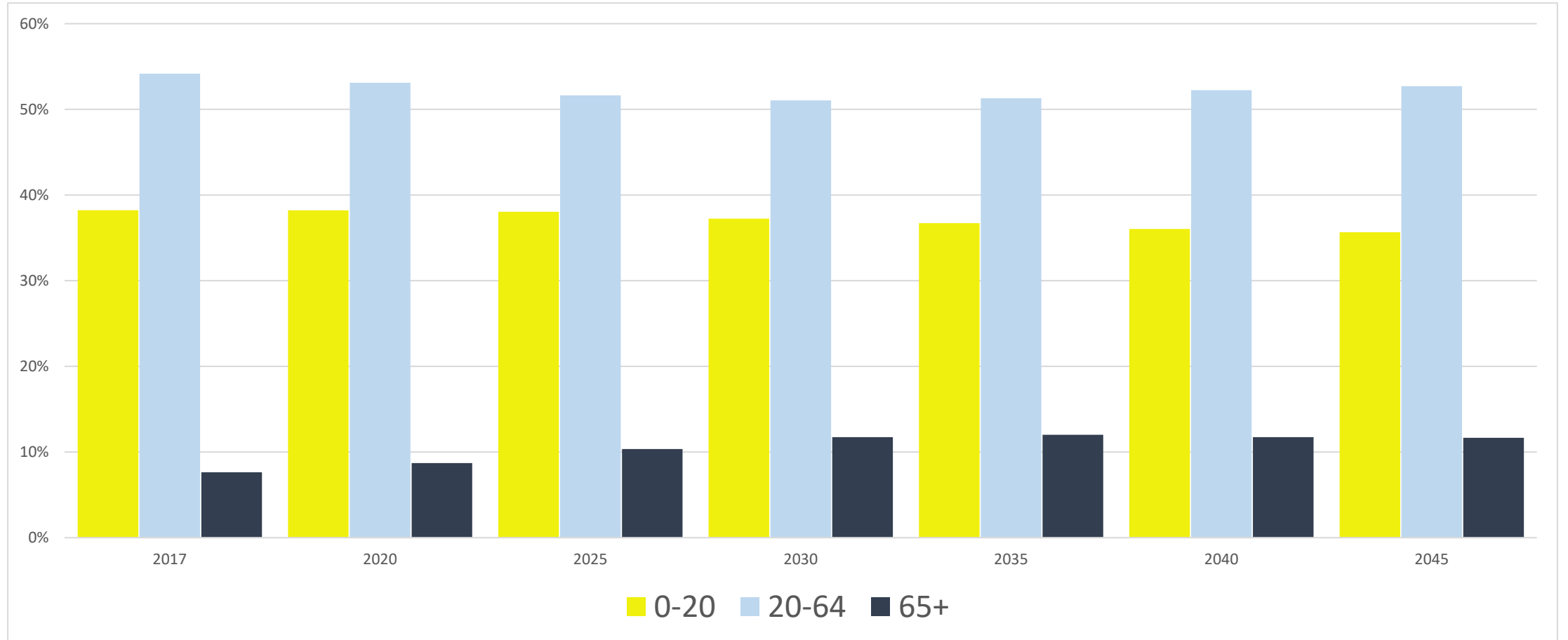
Alaska Native Components of Change



Alaska Native Population, 2000-2045



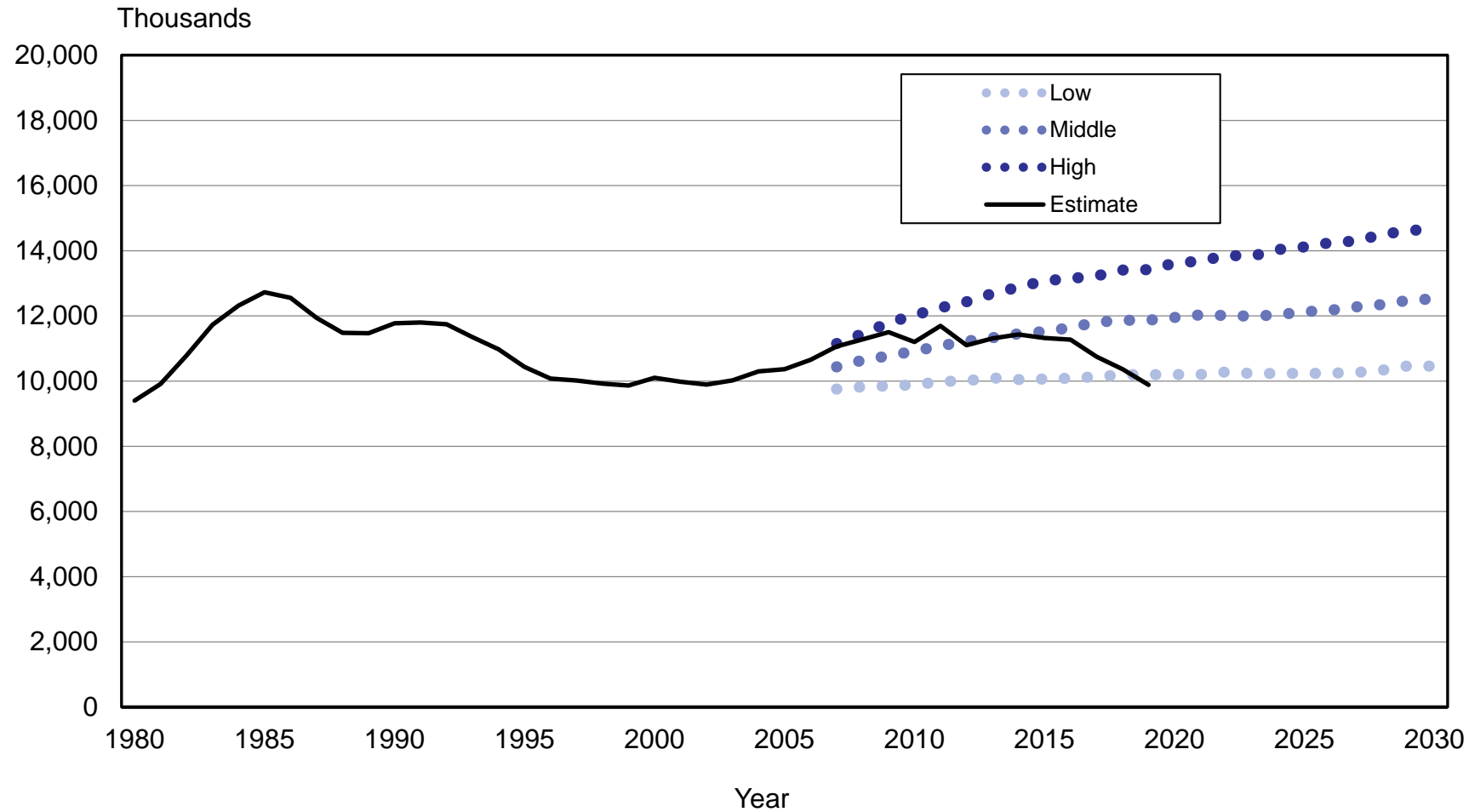
Alaska Native Population by Age Group



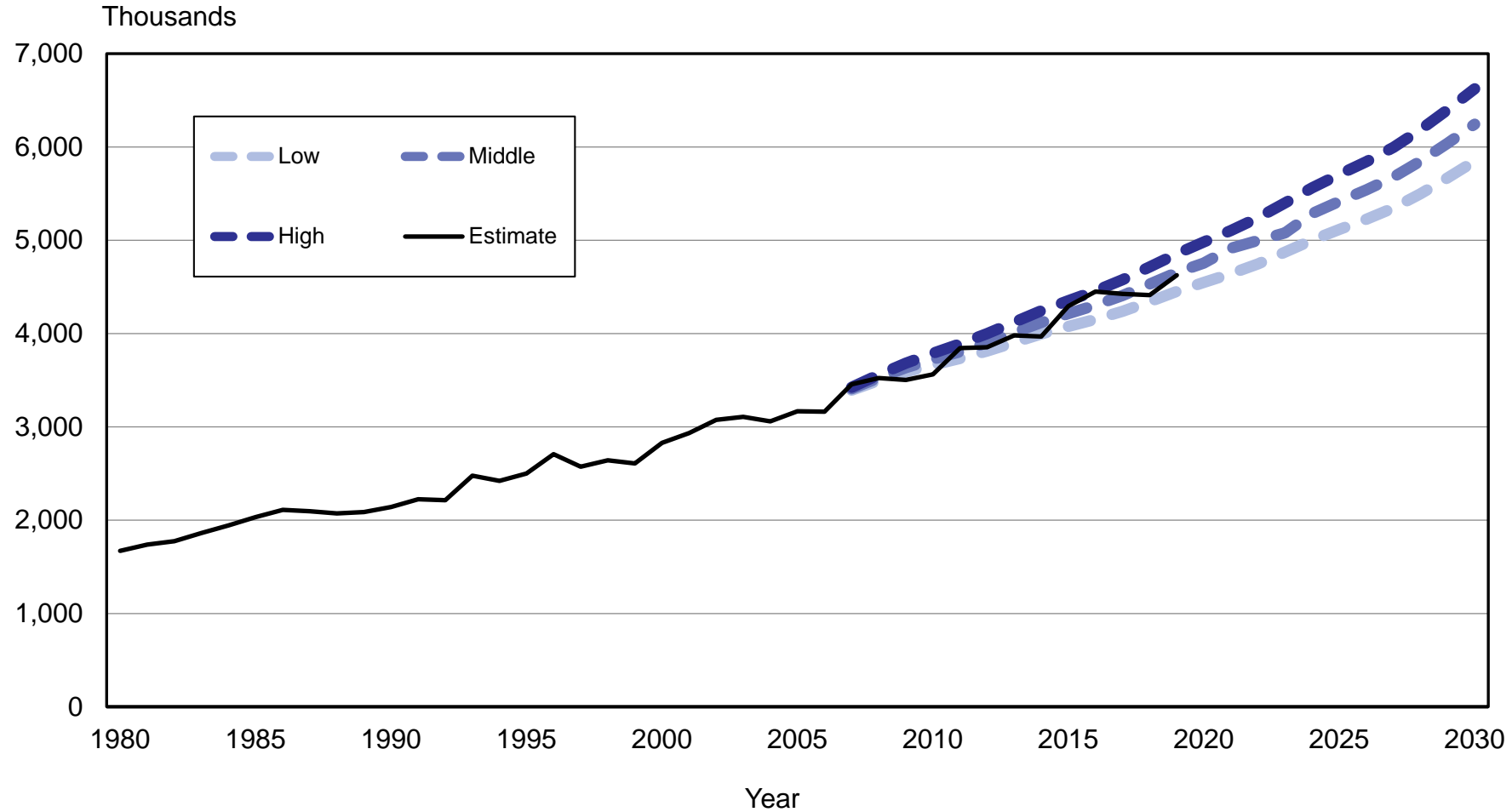
Population Projections: How did we do?

Evaluating Population Projections
2007 – 2030

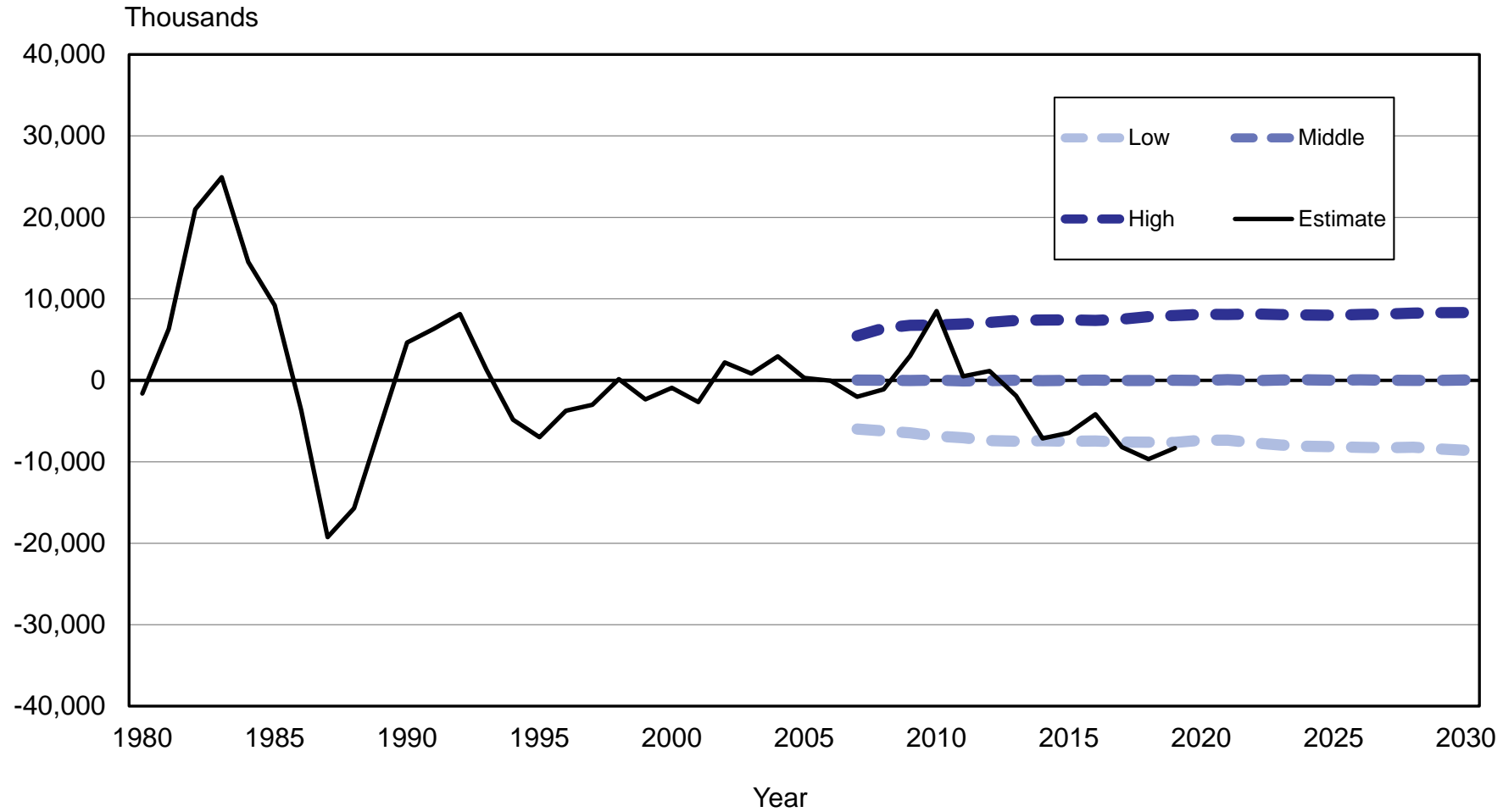
Estimated and Projected Births 1980-2030



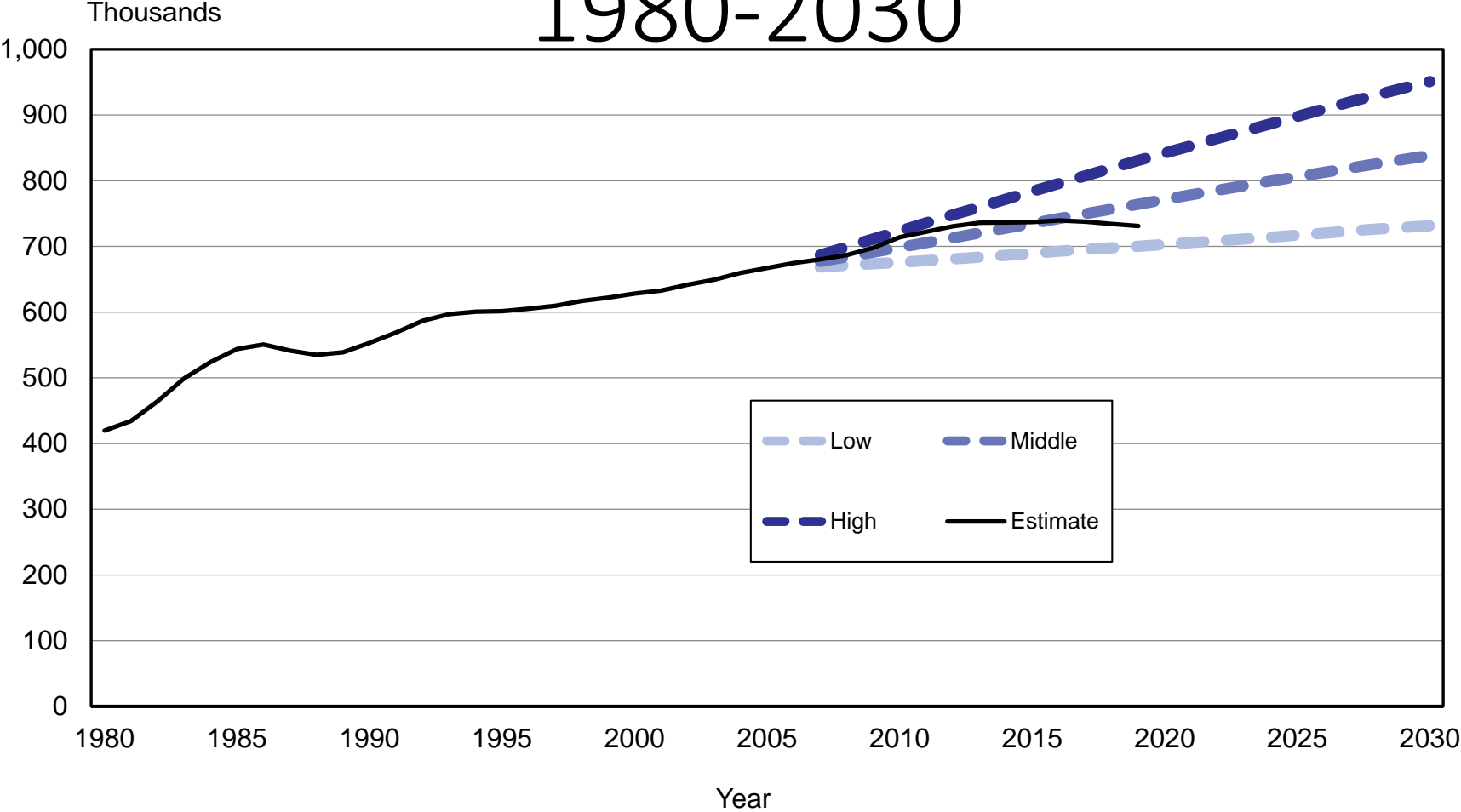
Estimated and Projected Deaths 1980-2030



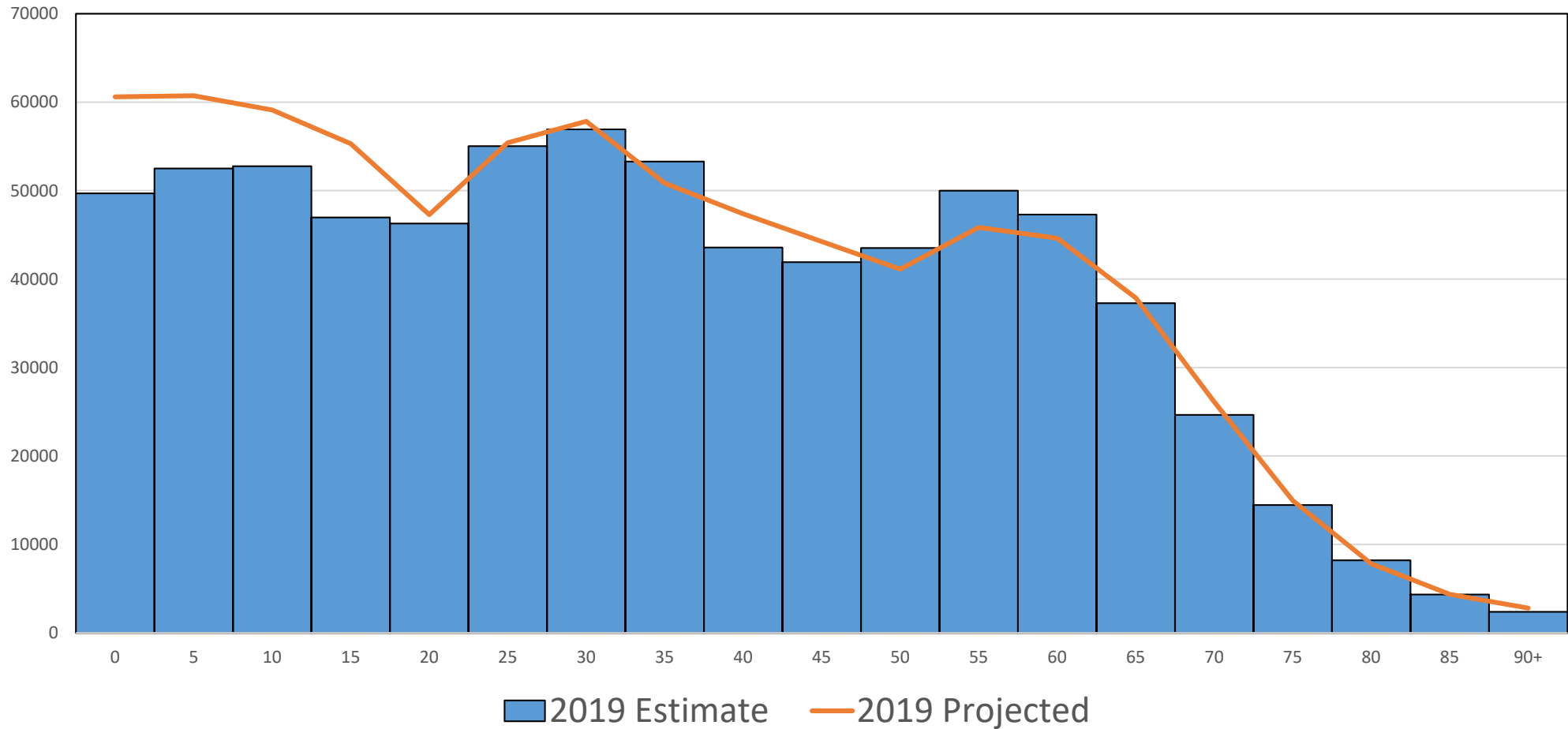
Estimated and Projected Net Migration 1980-2030



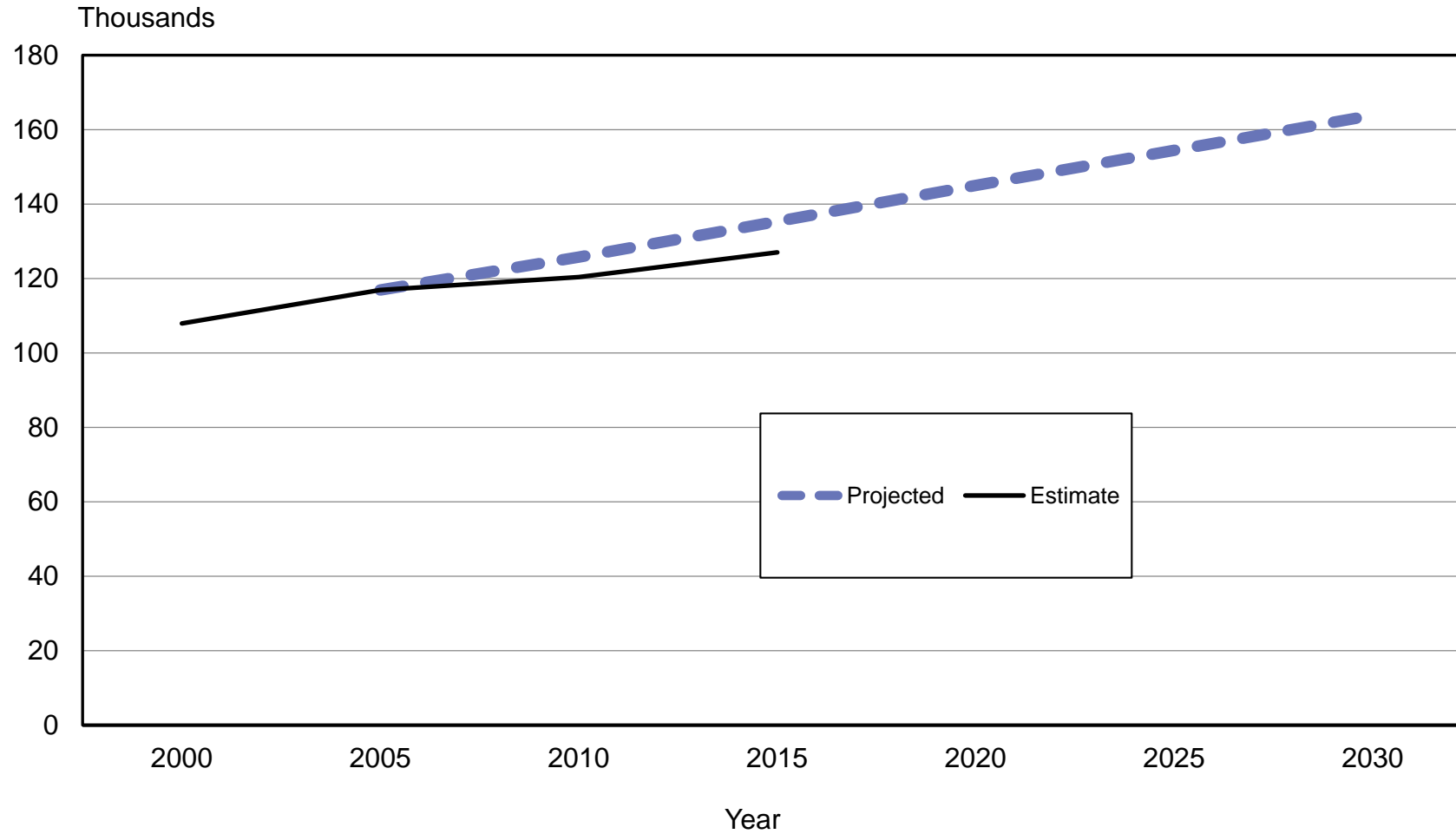
Estimated and Projected Total Population 1980-2030



Estimated and Projected Population by Age 2019



Alaska Native Bridged Race 1980-2030



Population Projections, 2017 to 2045

Thank you!

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More information:

<http://laborstats.alaska.gov/>