OUR CHANGING AGE STRUCTURE

How aging and migration trends could shape the future population

By **EDDIE HUNSINGER**

Alaska's population has continued to grow in recent years, although growth has slowed and the state's age structure has shifted. The state grew from 735,859 people in 2013 to 739,828 in 2016, but the only age group to increase was 65-plus. (See Exhibit 1.)

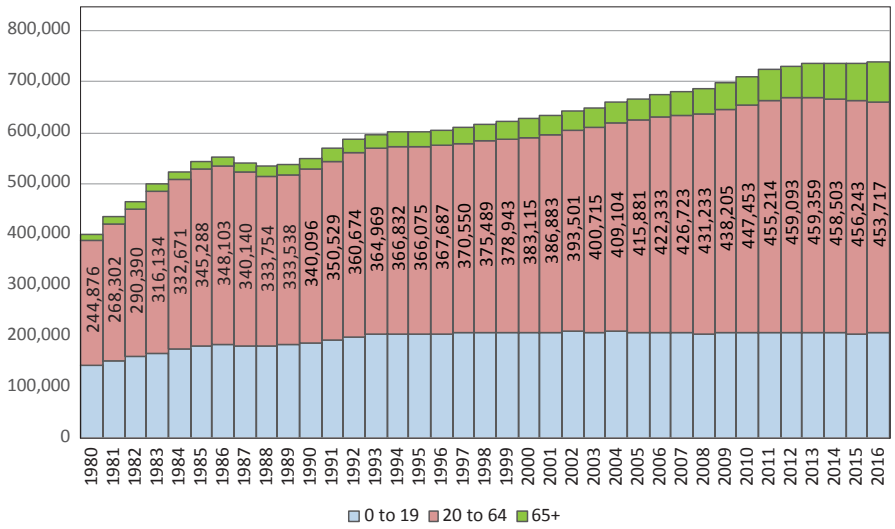
This doesn't mean more senior citizens are moving to Alaska; rather, it's the result of the large cohort of baby boomers, those born between 1946 and 1964, entering retirement age and the resulting subtraction from the 20-to-64 age group.

The increase in Alaskans over 65 has been steady and rapid for several years. The group grew by more than 4,000 people between 2015 and 2016 alone, reaching 78,980, and Alaska's senior population will likely pass the 80,000 mark in 2017 and top 100,000 in the coming years.

The 20-to-64 population, the typical working-age range, declined to 453,717 by 2016 after peaking at 459,359 in 2013. The under-20 population remained essentially unchanged over that period, as it has for more than two decades, hovering between 205,000 and 210,000 since 1994.

1 Alaska's Population by Age Group

1980 TO 2016



Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Census Bureau

A few things we can predict

Many details about Alaska's future population are uncertain, but we do know three things:

1. Unless Alaska's net-migration gains are higher than the historical average over the next decade, the 20-to-64-year-old population will likely remain flat or decline through 2025.

Alaska's annual net-migration — in-migration minus out-migration — has fluctuated around zero over the last 25 years, meaning the number who migrated to Alaska was approximately balanced by the number who left the state over the period.

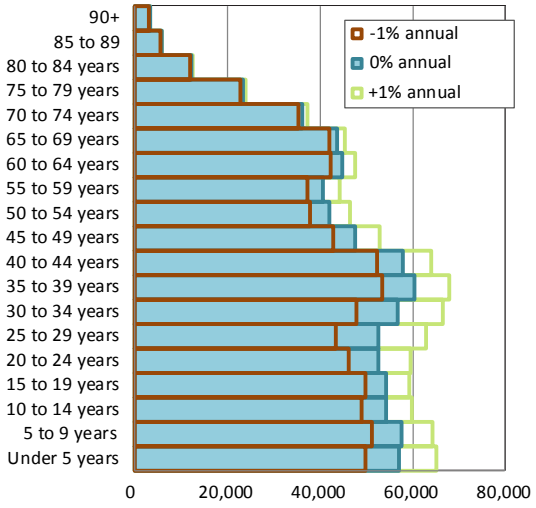
In terms of migration by age, the state typically loses more young people just after high school than it gains, gains more people in their 20s and 30s, and loses more at higher ages.

This pattern plus normal mortality rates and — most importantly — the number aging both into and out of the 20-to-64 group means that group won't grow through 2025 unless the state's overall net-migration gain is higher than the 25-year average.

This is a remarkable shift because before 2012, the state's 20-to-64 population typically grew, even in years the state lost more people to migration than it gained.

3 Three Projected Scenarios Based on Net-Migration

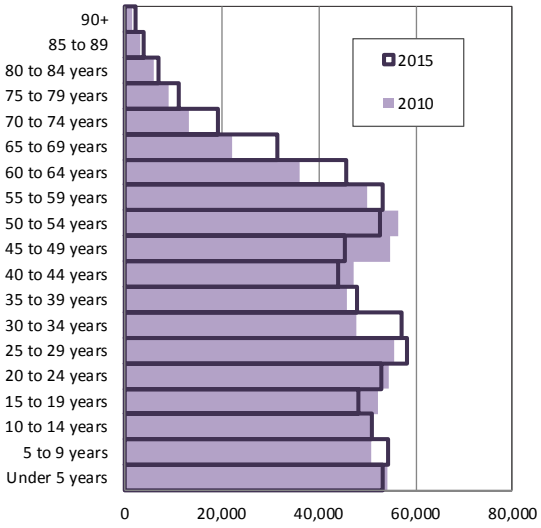
POSSIBLE POPULATION PATTERNS IN 2025



Note: Based on population projections from 2015
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

2 Population in 2010 and 2015

ALASKA, BY AGE GROUP



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

This was primarily due to historical age structure; that is, older generations of Alaskans were much smaller.

2. Alaska's 65-plus population — currently 11 percent of its total population — will increase dramatically through 2025, but it's unlikely to make up more than 20 percent of the total population or surpass projected national percentages.

The future senior population is more predictable than other age groups because migration rates decrease with age — older people are less likely to move — and deaths are relatively predictable.

3. Population aging means bigger increases in deaths than births, which means Alaska's population growth will likely be slower in the future.

Higher death rates caused by aging draw from the population each year. Also, while Alaska has a large share of people in the typical child-bearing ages, the state's total fertility rate is at its lowest since the 1970s. Alaska's total fertility rate, or the average number of children per woman, was 2.2 in 2015, down from a high of about 2.6 in the early 1990s.

A known unknown for the future population

A small shift in the long-term level of net-migration

would have a dramatic effect on total population.

Exhibit 3 shows three possible scenarios for Alaska's total population in 2025 based on zero annual net-migration and a 1 percent annual gain or loss.

As other states' experiences show, small shifts in net-migration can produce big changes in population. In Alaska's case, consistent net-migration gains of more than 1 percent of the state's population per year over 10 years would rapidly bring the state toward 1 million residents, although this scenario is considered unlikely given current economic conditions and historical precedent. Likewise, consistent net-migration losses as small as 1 percent of the total population per year would lead to substantial decline in Alaska's total population over the long term.

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About the data

Even though population projections can have large margins of error due to yearly variation in migration and uncertainty in births and deaths, they provide important information about the most likely future age structure. Recent age trends this article describes were evident in projections before 2013, including the slowdown in working-age population growth as well as the rapid increase in the senior population.

A typical population projections method, and the one we use at the Alaska Department of Labor and Workforce Development, is to divide population into age groups and age them forward in time, adding projected births and in-migrants at each step and subtracting deaths and out-migrants. So, for example, we used the number of 50-year-olds in 2010, along with typical migration and mortality rates for 50-to-55-year-olds, to project the number of 55-year-olds in 2015. (See Exhibit 2.)

Projecting populations this way still carries all of migration's inherent uncertainty, but level and age patterns for each of these components have some predictable characteristics. For instance, annual interstate migration rates are usually between 5 and 7 percent of the state population and have a predictable age makeup, with the highest rates for 18-to-29-year-olds and lowest rates for those 65-plus.

We can also project births and deaths fairly well over the short-term from age structure and from past vital records and population data.