Decline in working-age Alaskans

The number of people aged 18 to 64 peaked in 2013

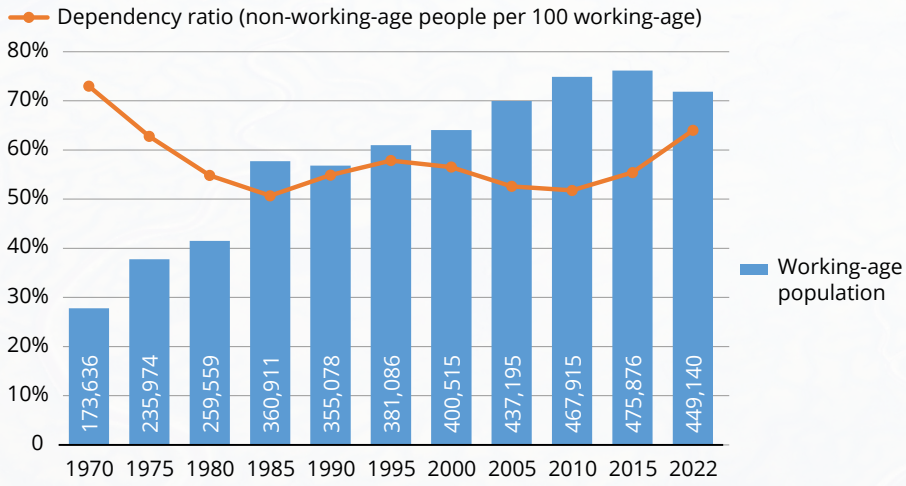
By ERIC SANDBERG

The size of Alaska's working-age population has been declining for nine years in a row. The number of people between 18 and 64 dropped from a high of 479,000 in 2013 to 449,000 in 2022.

The size of this group depends mainly on two factors: the number of Alaskans aging into and out of their working years and migration trends to and from the state. Both shifted over the past decade, reversing the historical growth pattern.

A decline in working-age adults is not uncommon in the developed world, where several generations of declining birth rates are the norm, but it has short-term and long-term economic consequences. Areas with a working-age decline have grappled with labor shortages, slow or stagnant economic growth, less consumer demand, increased dependency ratios, and difficulty funding social programs.

Alaska's dependency ratio has risen since 2010



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

The working-age group and the dependency ratio back to 1970

The chart above shows Alaska's total working-age population from 1970 to 2022 along with the dependency ratio, which is the number of non-working-age Alaskans (children and seniors) per 100 working-age Alaskans. The dependency ratio shows the economic and social burden on those in their working years to support everyone else, based on general assumptions about when people begin working and retire.

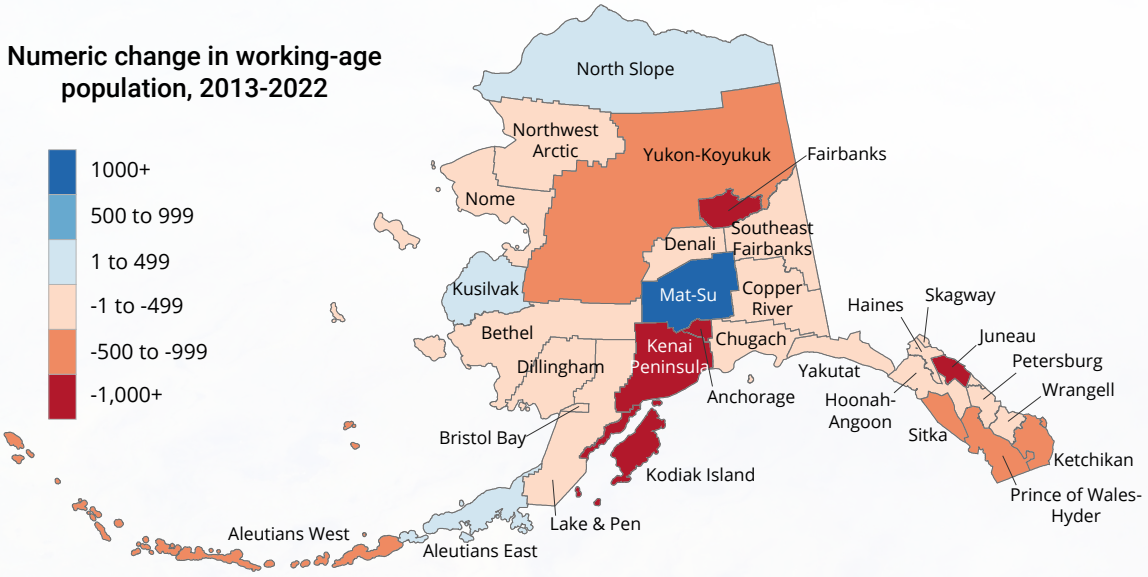
Until 2013, aside from the late 1980s oil bust, the working-age population of Alaska had been on a steady upswing with the arrival of the oil economy. Between 1970 and 1985, the number of 18-to-64-year-olds more than doubled, from 174,000 to 361,000, as migrants rushed in during the Trans-Alaska Pipeline construction and the early '80s oil boom.

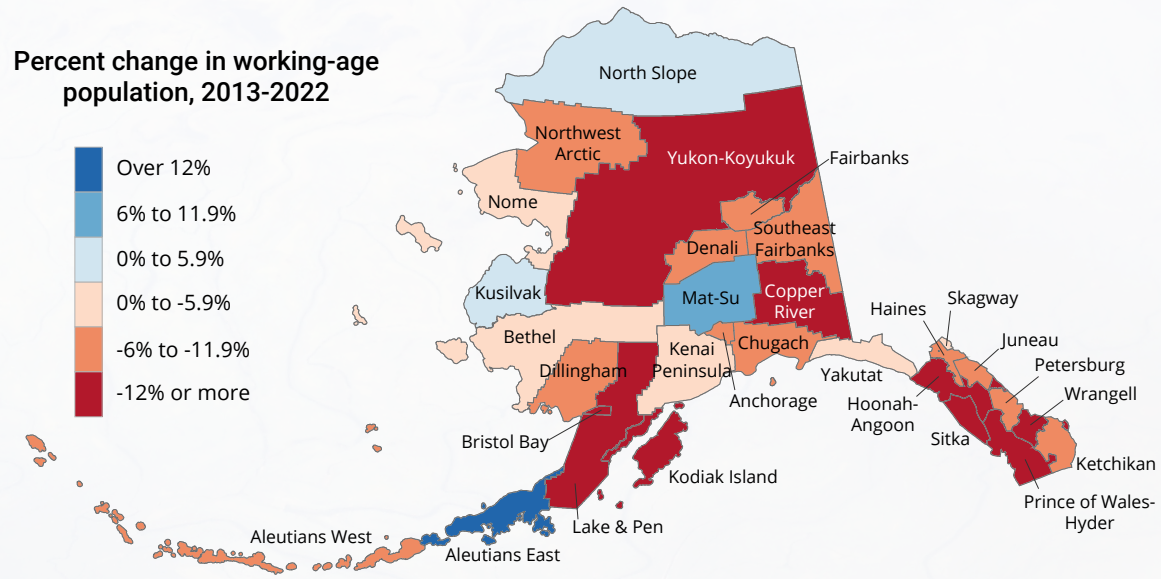
Following the economic crash of the late '80s, growth picked back up. After 1990, working-age population increases tracked with Alaska's age structure rather than migration inflows. Large numbers born in the 1980s drove the totals higher as they entered adulthood. Then, after peaking in 2013, Alaska's working-age population began to decline, falling by around 3,350 people each year since.

Alaska's dependency ratio, meanwhile, has been rising. After starting at 73 per 100 in 1970, the ratio plunged during the pipeline and oil boom years to around 50 per 100. The ratio ticked up to around 57 in the mid-1990s but fell again over the next 15 years as the number of children in Alaska declined.

In 2022, the dependency ratio reached 64:100, a burden of support not seen since the mid-'70s. In

Growth or loss in the working-age population by area from 2013 to 2022





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

1970, however, 95 percent of non-working-age Alaskans were children. It's now 63 percent children and 37 percent senior citizens.

The decline spans the state

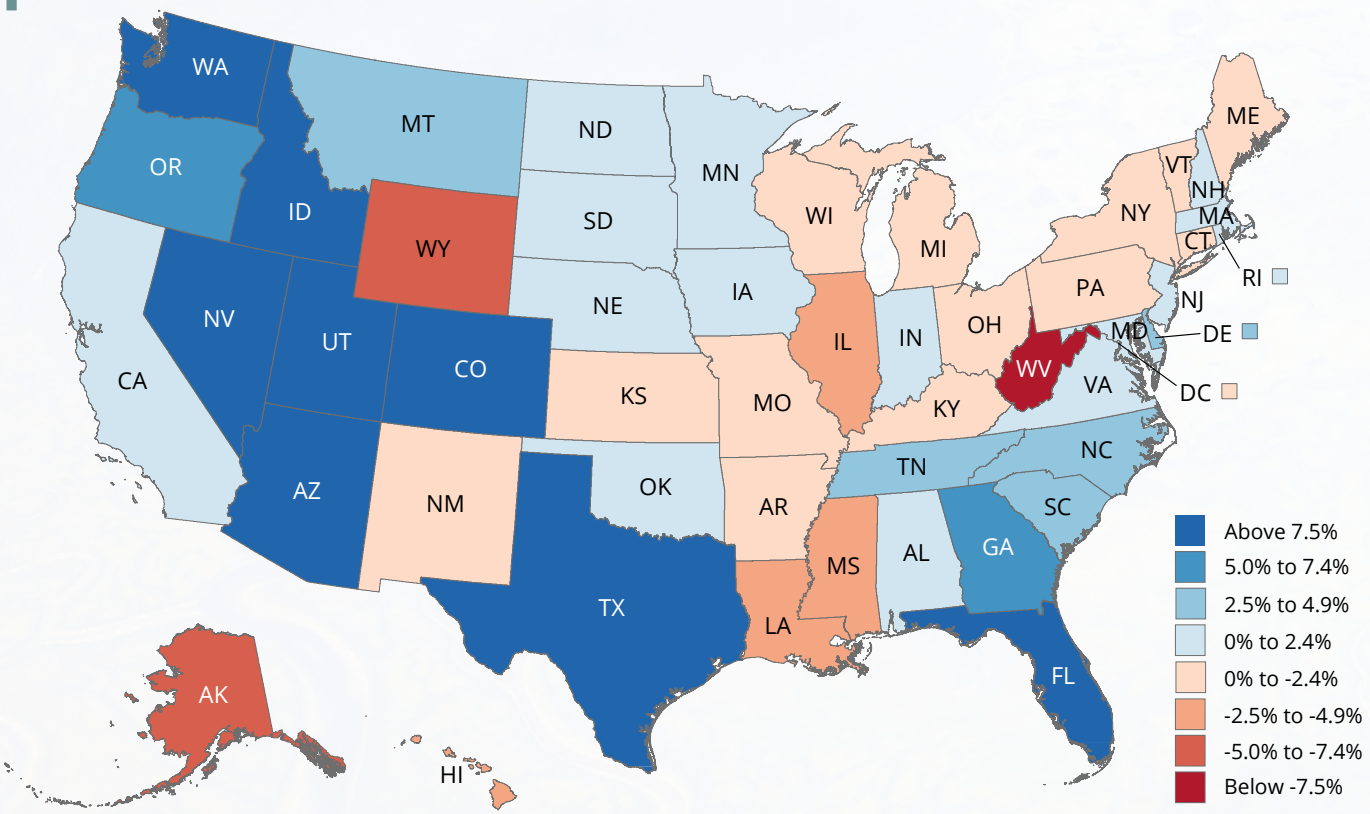
The working-age decline has spanned most of the state, with the 18-64 population down in 26 of the 30 boroughs and census areas between 2013 and 2022. (See the maps above.)

Anchorage's loss accounts for around 60 percent of the drop statewide (nearly -18,000). While some moved to the nearby Matanuska-Susitna Borough, whose 18-to-64 population grew by more than 5,300, the overall working-age population of the Anchorage/Mat-Su Region fell by nearly 12,600.

The three other urban boroughs declined as well: Fairbanks North Star (-6,100), Juneau (-2,100), and Kenai Peninsula (-1,800). One other borough, Kodiak, lost more than 1,000 working-age people while the Prince of Wales-Hyder and Yukon-Koyukuk census areas, Sitka, and Ketchikan lost more than 600 each.

Many of the rural losses stand out when looking at the percent change. Four areas saw their 18-to-64

Growth or loss in the working-age population by state from 2013 to 2021



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

populations decline by over 20 percent (Wrangell, the Lake and Peninsula Borough, the Bristol Bay Borough, and the Yukon-Koyukuk Census Area). The Copper River and Prince of Wales-Hyder census areas lost over 15 percent of their 18-64 populations.

The urban declines were roughly even percentwise, at -9 percent for Anchorage, Fairbanks, and Juneau and -5 percent for the Kenai Peninsula Borough. Mat-Su's working-age group, meanwhile, grew 9 percent.

Regionally, all six lost working-age population. Southeast's loss was largest at -11 percent, followed by the Interior (-10 percent), Gulf Coast (-7 percent), Anchorage/Mat-Su (-5 percent), Southwest (-4 percent), and Northern (-3 percent).

A look at the trend by state

Relative to the 2013 peak, Alaska's 5.4 percent decline in the working-age population through 2021 has been one of the largest among states. (See the map above.) Only two others, West Virginia (-8 percent) and Wyoming (-6 percent), lost relatively more. (Nationwide data are not yet available for 2022.) Over the same period, the national working-age population grew by 2 percent.

West Virginia's decrease is part of a larger drop in the state's total population, and it has suffered from high working-age death rates along with a decline in coal industry employment that led to more out-migration.

Similar to Alaska, Wyoming had declining natural resource industry employment coupled with an aging workforce.

Other states with sizable declines include Illinois, Hawaii, Louisiana, and Mississippi, the result of overall population decline and out-migration. Smaller declines dotted many other states, mostly in the Northeast and Great Lakes regions.

At the opposite end, the Mountain West led for working-age growth. In Idaho, Utah, Nevada, and Arizona, large inflows of migrants from other states supercharged expansion of their working-age populations. In states with slightly lower total net migration rates — such as Washington, Colorado, and Texas — the large numbers of young people

moving in offset any out-migration of older people.

Why Alaska's working-age group is shrinking

Reason 1: Net migration losses

The downward shift in net migration is the main reason Alaska's working-age population has decreased. The difference is clear when comparing average annual net migration since 2013 (in-migrants minus out-migrants) by age group to the 1990-2013 period, shown at right.

Before 2013, Alaska's net migration was slightly positive overall and the state added more than 500 working-age people each year. Net migration dropped sharply after 2013; nearly 5,800 more people left the state each year than arrived. Around half of that net outflow was working-age people (-2,900 per year).

After wild net migration swings in the 1970s and 1980s, migration by age settled into a predictable pattern by the 1990s. High school graduates left in large numbers, but Alaska attracted young adults in their 20s and 30s. In an average year, nearly 2,000 more young adults moved in than left, with especially high net inflows of people in their late 20s.

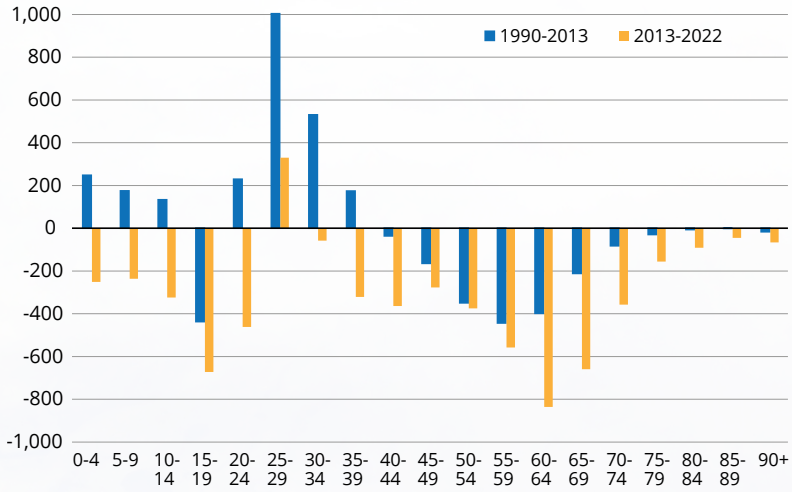
Net migration turned negative after age 40, but the number of older working-age adults leaving was less than the younger adults arriving.

As net migration turned into sharp losses after 2013, every age group's numbers shifted downward. The late 20s are the only remaining age group with more coming to Alaska than leaving. Despite this, the late-20s cohort's annual net inflow has become 670 people smaller each year than it was before 2013, second only to the loss of those in their early 20s (690 fewer per year).

Adults in their 20s and 30s used to be the main source of Alaska's working-age migration gains, but adults in those age groups now constitute a net outflow of more than 500 people per year — a drop of nearly 2,500 since the pre-2013 rise.

The net outflow has continued to increase numerically for working adults 40 and older, too, although their rate of outflow has held steady. That's because this age group has grown larger than it did in previous decades and the net outflow grew with it. But with no more large inflows of young adults, the growing numbers of older out-migrants have also put downward pressure on the working-age numbers.

Yearly net migration declines in all age groups



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

Reason 2: An aging population

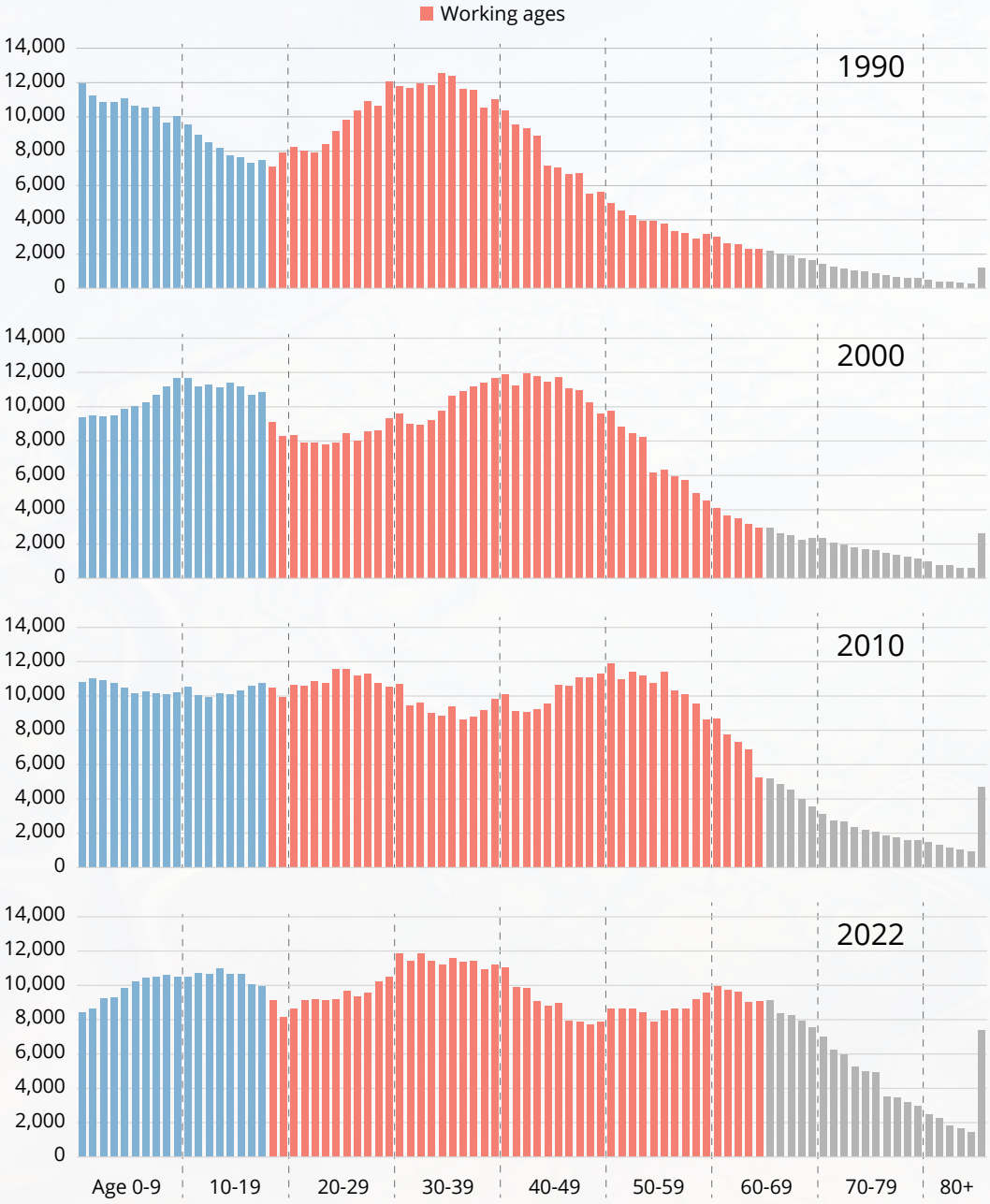
The second reason for Alaska's declining working-age population is aging. The state's 18-64 population kept growing for years because the number of retirement-age people was so much smaller than the number of young adults, but Alaska's age structure has shifted over the last three decades.

The exhibit on the next page shows Alaska's population by age, grouped into decades, for 1990 through 2022. The working-age population is red, children under 18 are blue, and seniors are gray.

Two large generations stand out like the crests of successive waves. Baby boomers, born between the end of World War II and the mid-1960s, were the largest working-age population until recently. Their children, who are now in their 30s and early 40s (millennials born from 1980 to the mid-1990s), entered their working ages starting around 2000 and are now its largest age group.

In 1990, the working-age population was dominated by baby boomers in their 30s and 40s. At the time, Alaska had relatively few elderly or older working-age people. Though the large millennial generation was not yet teenaged, the number of 18-year-olds entering their working years was 3.3 times the number reaching retirement age.

The change in Alaska's age structure since 1990



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

By 2000, when millennials began reaching adulthood, the ratio of working-age people to senior citizens remained 3 to 1, despite the growing number of seniors.

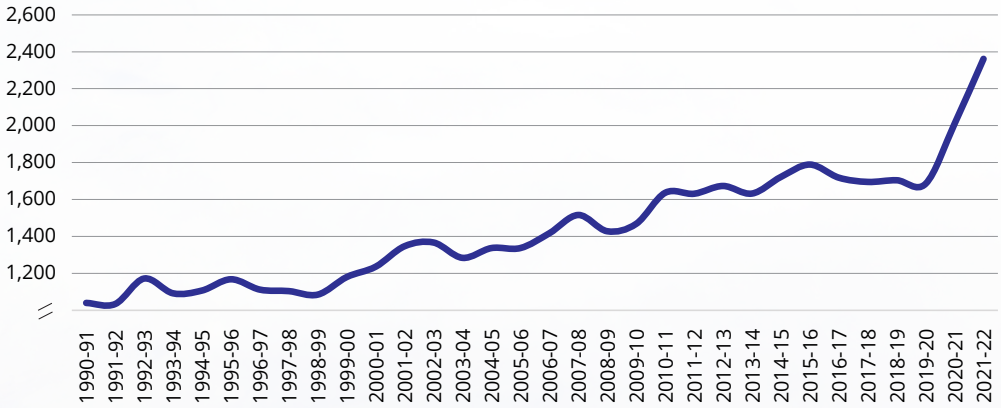
Alaska then enjoyed a brief period in the late 2000s and early 2010s where both of our largest generations were wholly within their working years. This pushed the 18-to-64 number toward its 2013 peak, coupled with a small net migration bump during the Great Recession as the economy in the Lower 48 faltered. As late as 2010, the number of people entering their working years was twice the number exiting, but that was about to shift.

The older half of the baby boomers began to reach 65 in the 2010s, and the growth in the working-age population through aging alone began to narrow because the younger generation tailing millennials was smaller. That shift meant demographics could

no longer counteract the growing net migration losses.

By the mid-2010s, the number reaching adulthood was only a little bigger than the number reaching retirement age (about 1.25 to 1). That ratio continued to narrow as the decade closed, and in 2020, for the first time, Alaska had more 65-year-olds than 18-year-olds. Although the number of 18-year-olds bumped up in 2021 and 2022, the two numbers remain almost even.

Deaths among those 18-64 jumped during the pandemic



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

Given that the peak of the baby boomer wave hasn't yet reached the senior category, a working-age increase through aging alone will be unlikely in the near future.

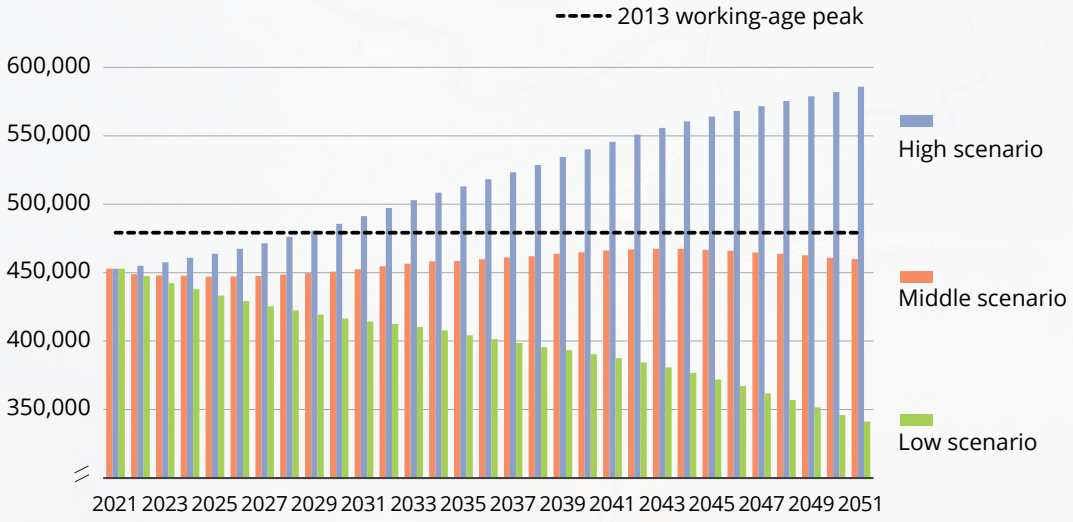
Reason 3: Deaths during the pandemic

While deaths have been a smaller part of Alaska's working-age decline than the previous two factors, they put constant, predictable downward pressure on population totals. If net migration and age demographics produce little to no growth, yearly deaths can be enough to push the balance into the red.

In the 1990s, just over 1,000 working-age Alaskans died each year, but those deaths never slowed growth because five times that number aged into the workforce. The number of deaths among 18-to-64-year-olds climbed above 1,500 per year in the 2000s and early 2010s as the population grew and got older, but net migration inflows and teens reaching adulthood kept the working-age group growing.

As net migration turned negative after 2013, though, and age-related growth narrowed, deaths became a bigger factor and even more so since the pandemic began in 2020. Working-age deaths jumped to around 2,000 in 2021 and 2,400 by 2022, putting deaths in this age group 40 percent above

3 scenarios for the size of the future working-age population



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

pre-pandemic levels. Not all deaths were from COVID-19 specifically, but the pandemic and its ripple effects raised total working-age mortality, at least temporarily.

Because Alaska's 18-to-64-year-old population dropped by nearly 4,300 people just from 2021 to 2022, the high number of deaths over that year became the biggest factor in last year's working-age decline.

What the future holds

Projections can help us understand what the coming years might look like for Alaska's working-age population. Last summer, we created new population projections extending to 2051. (See the September 2022 issue of *Trends*.) We aged Alaska's population forward over three decades, adding projected births and in-migrants and subtracting projected deaths and out-migrants along the way.

We then created three possible scenarios, shown on the previous page, that vary by the long-term yearly net migration rate (in-migrants minus out-migrants divided by total population).

The middle scenario, considered most likely, uses the previous 30 years' rate (-0.2 percent). The high scenario uses 0.5 percent and the low scenario uses -1.0 percent. The high scenario mimics Alaska's pattern from 2008-2012 and the low scenario's rate is roughly what the state's net migration has been since 2013.

The drop in the working-age population appears likely to continue through 2030, or at most, any growth will be slight. The younger and larger half of the baby boomers will leave a demographic gap as they age out of their working years that will need more younger people to fill it.

In the middle scenario, Alaska's working-age decline bottoms out at around 447,000 people in 2025 before climbing back to more than 450,000 in 2030.

In the low scenario, the combined aging out of boomers plus net migration outflow quickly pushes the working-age population down to 416,000 by 2030.

Even the high scenario, with its large inflow of people, doesn't get Alaska's 18-to-64 population back to its 2013 peak until 2029.

After 2030, the scenarios diverge further. In the low and high scenarios, the effects of continuous net migration loss or gain overwhelm the effects of the underlying age structure. This leads the high scenario to a working-age population of 586,000 by 2051 while the low scenario drops it to 341,000 — a difference of 245,000 people.

In the middle scenario, with a slight net migration outflow, age structure plays a bigger role. After 2030, Alaska's working-age population slowly resumes growing through the mid-2040s, peaking at around 467,000. At that point, as the large millennial generation begins to turn 65, the working-age population will begin to shrink again in the middle scenario.

Unless the state's net migration rate is higher in the next 30 years than the previous 30, Alaska will likely struggle in the long term to regain its peak 2013 working-age population.

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