ALASKA ECONOMIC TRENDS

MARCH 2018

MIGRATION in ALASKA

ALSO INSIDE
Population estimates for 2017

ALASKA DEPARTMENT OF LABOR
& WORKFORCE DEVELOPMENT

ALASKA ECONOMIC TRENDS

MARCH 2018
Volume 38 Number 3
ISSN 0160-3345

MIGRATION in ALASKA

How migration has shaped us and how we compare to other states

By ERIC SANDBERG

PAGE 4

POPULATION ESTIMATES for 2017

Small decline is the first since the late 1980s

By EDDIE HUNSINGER

PAGE 14

GAUGING ALASKA'S ECONOMY

PAGE 18

To sign up for a free electronic subscription, read past issues online, or purchase a print subscription, visit ***labor.alaska.gov/trends***. Contact the editor at (907) 465-6561 or *sara.whitney@alaska.gov*.

ON THE COVER: Alaska Marine Highway voyage, photo by Flickr user Mr Hicks46. https://creativecommons.org/licenses/by-nc-sa/4.0/legalcode

ON PAGE 4: Origami birds, https://www.freevector.com/paper-birds

Alaska Economic Trends is a monthly publication meant to objectively inform the public about a variety of economic issues in the state. *Trends* is funded by the Employment and Training Services Division of the Alaska Department of Labor and Workforce Development and is published by the department's Research and Analysis Section.

It's time to boost Alaska Hire in the oil industry

Heidi Drygas
Commissioner

Follow the Alaska Department of Labor and Workforce Development on Facebook (facebook.com/alaskalabor) and Twitter (twitter.com/alaskalabor) for the latest news about jobs, workplace safety, and workforce development.

Last month, the department released the 2016 Nonresidents Working in Alaska report. Overall, 21.5 percent of workers in Alaska are nonresidents, which is a slight drop from the previous year and the first time the rate has decreased since 2009.

Many industries employ large numbers of outside workers over Alaskans. The seafood processing industry again had the highest rate of nonresident employment at just over 75 percent. Other industries, such as mining and tourism, have high percentages of nonresident workers as well. However, nonresident hire in the oil and gas industry represents the largest percentage of lost wages for our state.

In Alaska's oil and gas industry, data show nonresident hire has grown to 37.1 percent. This is particularly troubling because the wages and benefits in this sector are high and Alaska has a ready supply of skilled workers able to perform this work. Oil producers and their support contractors should act now to increase Alaska Hire and invest in the state that has produced billions of dollars of revenue for their shareholders.

It is important to look at this issue with historical perspective. Most oil-rich states and nations have not succeeded in translating oil wealth into wealth for their communities. Venezuela, Nigeria, Mexico, and Louisiana are just a few of the places that have high rates of poverty and inequality despite lucrative oil wealth and are the source of what economists call the "resource curse." In contrast, Norway and Alaska (and certainly the North Slope Borough) have been more successful at keeping some of our oil wealth in our communities, using a range of policies from tax rates to the Permanent Fund. Looking back at the history, one lesson is clear: Without active intervention by policymakers, oil wealth will largely disappear from the state or community in which it is extracted.

Under Governor Walker's direction with Administrative Order 278, the Department of Natural Resources has begun implementing innovative leasing incentives to reward oil companies that use apprenticeship on projects. Apprentices are almost always Alaska residents, and this is a natural way to boost Alaska Hire in the oil industry.

In 2015, Governor Walker and I reinstated the Alaska Hire requirement that Alaska residents hold 90 percent of jobs in public construction projects. While it will take several years to fully realize the results of these policies, they are important steps and should be sustained and expanded by future administrations.

Alaskans should demand that oil companies take leadership on this issue and enact similar policies to increase Alaska Hire. When they profit from Alaska, they should demonstrate loyalty to our state by making every effort to ensure these lucrative jobs go to Alaskans. Unlike the state, oil companies can and should require Alaska Hire when they issue contracts to oilfield service companies. I suggest they implement the same Alaska Hire requirement of 90 percent that the State of Alaska mandates for its own construction projects. As members of the Alaskan community, these companies have a responsibility to not just pay lip service to Alaska Hire but to use their contracting and personnel policies to require Alaska Hire both within their companies and within their service contractors.

History shows that without concerted action, too much of our oil wealth will leave Alaska, including the billions of dollars in wages we're losing to nonresident workers. During a time of rising unemployment, it is unacceptable for oil companies to continue hiring outsiders instead of skilled, experienced Alaskans. Let's make it clear to producers and support contractors that they must do better.

Migration in Alaska

How migration has shaped us and how we compare to other states

By **ERIC SANDBERG**

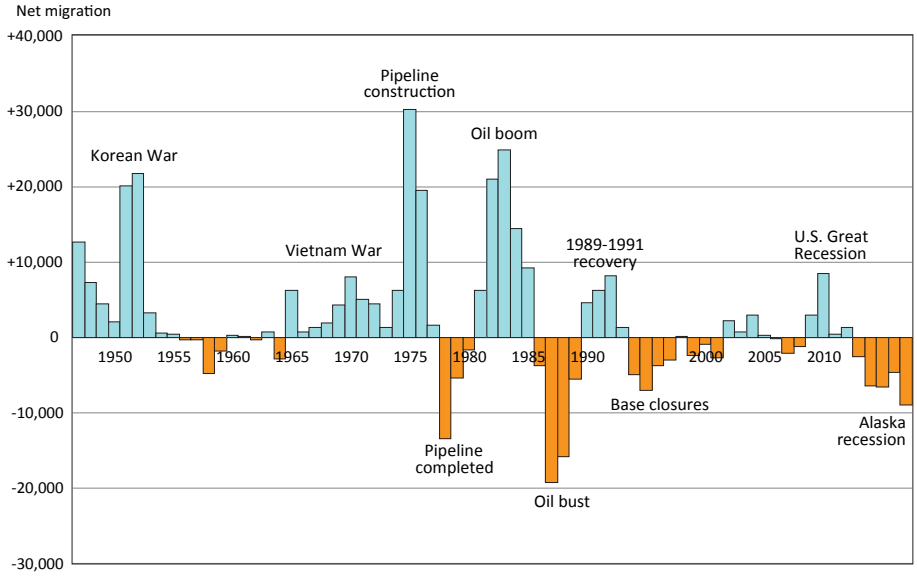
Alaska has the highest population turnover of any state, with large numbers of people moving both in and out each year regardless of economic conditions. Although the percentage of residents born in Alaska has risen over time — 41 percent today versus 32 percent in 1980 — Alaska's population remains highly migratory compared to the rest of the U.S.

Two measures of migration

Migration sounds like a mass of people moving in one direction, but it's more of a two-way street with traffic flowing in both lanes. One lane might have more traffic, but cars are always moving both directions.

1 Alaska's Historical Net Migration

1947 to 2017



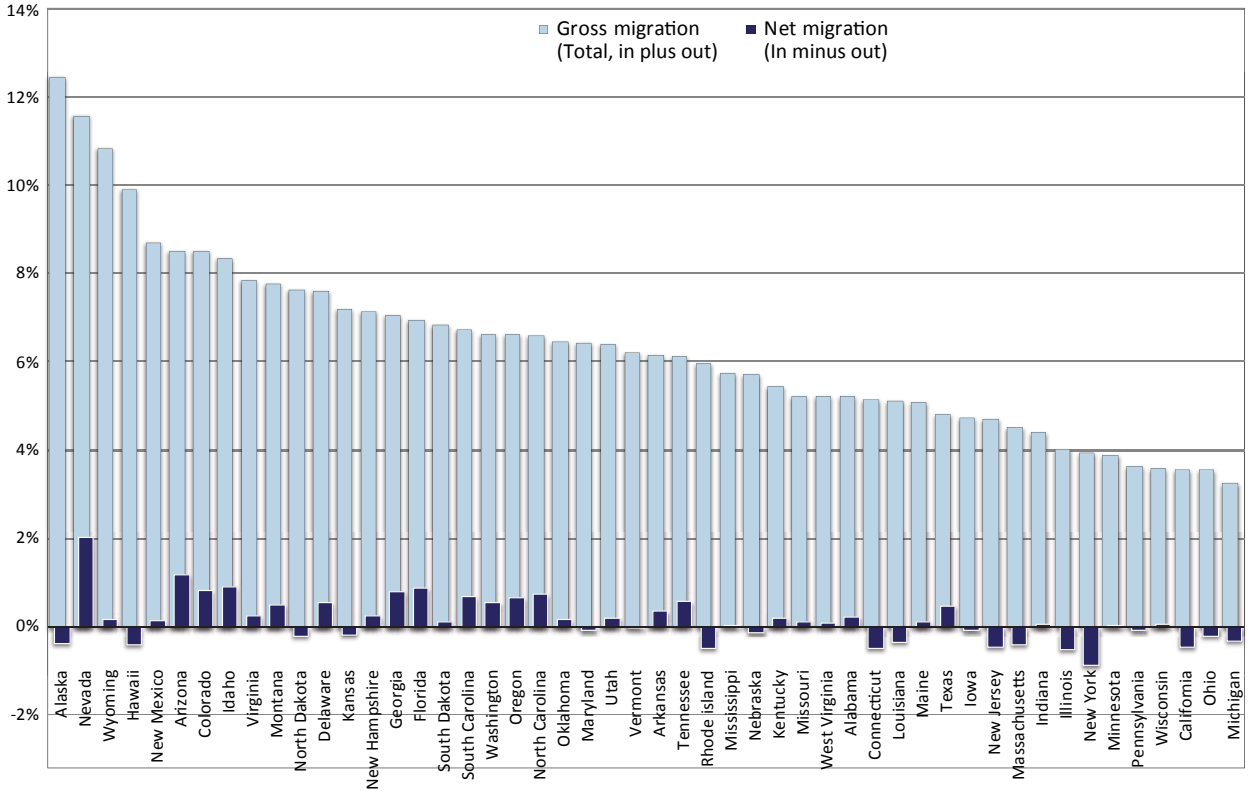
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Gross migration is the sum of a place's in-migration and out-migration. In other words, it's the total number of moves associated with that place in a year, which shows how much of the population turned over due to migration. So if five people left a town in a year and two moved in, that town's gross migration would be seven. The measure is generally consistent for Alaska, at 80,000 to 100,000 total moves each year — typically 40,000 to 50,000 moving in each direction.

Net migration, or in-migration minus out-migration, is the overall number of people a population gained or lost through migration. Positive net migration means more people are moving to a location than leaving it,

2 Average Annual Gross and Net Migration Rates by State

1990 to 2016



Source: Internal Revenue Service Tax Statistics

and negative net migration is the opposite.

Net migration is one of the two ways a place's population count can change. The other is natural increase, or births minus deaths. (For more on natural increase and an overview of Alaska's 2017 population estimates, see page 14.)

While gross migration is fairly consistent, net migration can swing wildly between positive and negative depending on economic conditions in Alaska and outside — although in recent decades the swings have been more moderate than during earlier periods in Alaska history.

For the past five years, Alaska's net migration has been negative. This represents the longest streak of Alaska losing more migrants than it gains since World War II, when yearly numbers first became available. Since 2012, nearly 29,000 more people have left Alaska than arrived. That's a smaller loss than during the oil bust years of the late 1980s, but the sustained net loss is a sure indicator of tough economic times. (See Exhibit 1.)

Migration shaped Alaska history

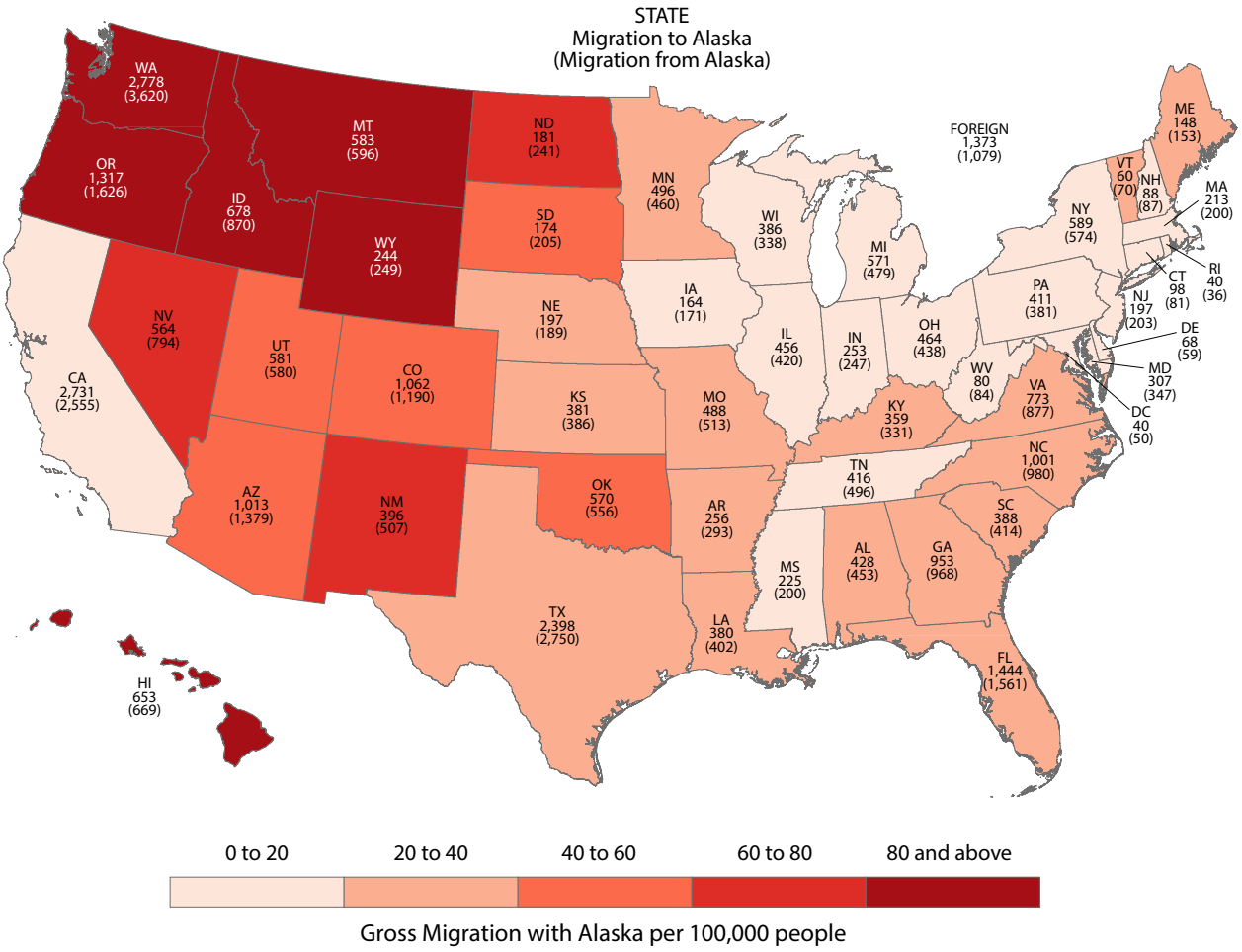
Large migrations have been a major part of Alaska's history, starting with the peopling of the Americas by movement across the Bering Land Bridge from Asia during the last Ice Age. In modern times, warfare and economic booms and busts have spurred the largest flows of movers.

Two particularly large migrations in the first half of the 20th century shaped modern Alaska. The first followed gold strikes on the Klondike and the Seward Peninsula around the turn of the century. For the first time, large numbers of outsiders moved into the territory and Alaska's economic potential came into view. The second was World War II. The influx of military personnel produced a boom in construction of housing, roads, and airfields while realigning Alaska's population geography to make Anchorage and Fairbanks the largest cities. Both events about doubled the state's population over 10 years.

After WWII, it seemed possible that Alaska would return to its pre-war population with troop demobi-

3 Alaska Exchanges Most Movers with Close or Populous States

Yearly gross migration with Alaska by state, 2000 to 2016



Source: Internal Revenue Service Tax Statistics

lization, but the onset of the Cold War and a permanent military population ensured that didn't happen. Between 1945 and 1970, most migration inflows came from military buildups. The two largest were due to the Korean and Vietnam Wars. Military buildup for the Korean War netted more than 40,000 people between 1950 and 1952. Given Alaska's population at the time, this has been the largest post-WWII net increase by percentage. The late-1960s increase from the Vietnam War was smaller.

The arrival of the oil economy in the 1970s and 1980s brought in swaths of newcomers and large swings in net migration. As construction started on the Trans-Alaska Pipeline, Alaska recorded its highest one-year net migration increase of more than 30,000 between 1974 and 1975. The net inflow continued until the pipeline's completion in 1977, when net migration turned negative for the rest of the decade.

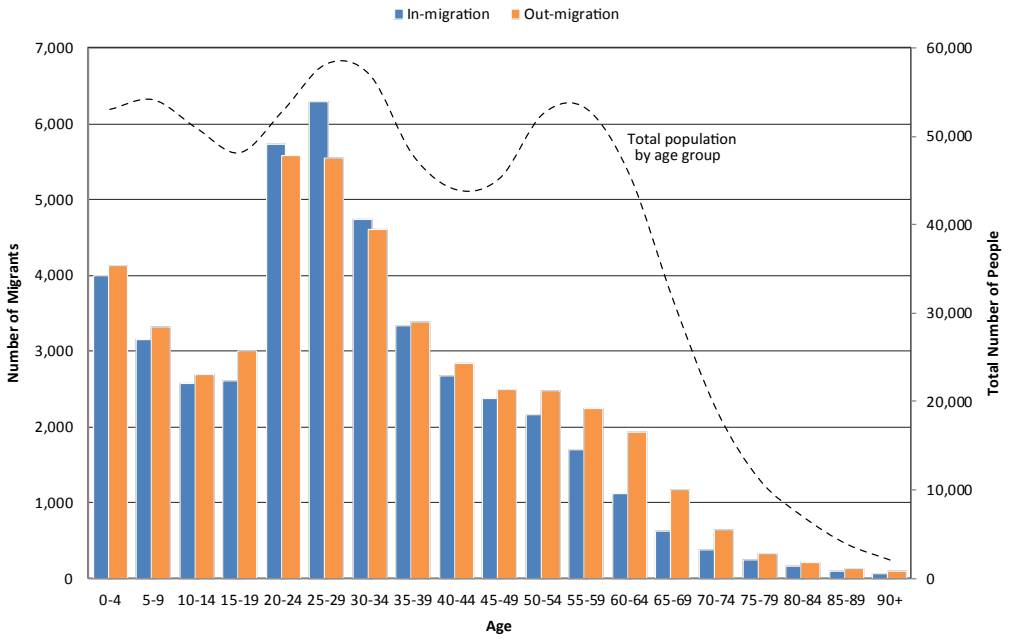
High oil prices, a housing boom, and a recession in the rest of the country spurred Alaska's highest sustained net migration inflow in the early 1980s. Between 1980 and 1985, Alaska netted 75,000 people through migration alone. Then, the subsequent oil bust in the late '80s brought on the state's steepest migration decline: a net outflow of about 44,000 people from 1985 to 1989.

These swings softened between 1990 and 2012, when net migration typically produced less population change than natural increase. Net flow was negative in seven out of eight years starting with base closures in the mid-1990s and lasting until 2001, but natural increase kept Alaska's population growing.

After the quiet 2000s, at least in terms of net migration, the Great Recession in the Lower 48 brought an influx of newcomers to Alaska, where the economy

4 Young to Middle-Age Adults Move the Most

ALASKA'S TOTAL YEARLY MIGRATION BY AGE, 2010 TO 2015



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

largely weathered the national storm. But since 2012, Alaska's net migration has been consistently negative, breaking the past quarter-century's pattern. The losses picked up steam as the state's economy worsened while conditions improved elsewhere in the country.

That steady net outflow first slowed and then ended the state's long streak of total population growth. Through the 1990s and 2000s, Alaska's population grew at a rate above 1 percent, which fell to half a percent during the 2010s. The net loss of 8,900 people in 2017, the largest single-year outflow since 1988, caused Alaska's total population to decline for the first time in decades.

Highest turnover among states through migration

Expressing migration as rates — percent of the population turned over in a year for gross migration and percent change from net migration — allows comparisons between places of varying size.

Exhibit 2 shows the average annual gross migration and net migration rates for all 50 states from 1990 to 2016. Alaska's gross migration rate was the highest, with just over 12 percent of the population turning over through migration each year. That was more than twice the average national rate of 5 percent.

Nevada, whose housing boomed for much of that period, ranked second at about 11 percent. Either Alaska or Nevada has ranked first for gross migration every year since 1990. Through the 1990s and early 2000s, the two states often traded places for the top slot. Nevada fell several spots below Alaska after the 2008 housing collapse, but remains in second for the entire period.

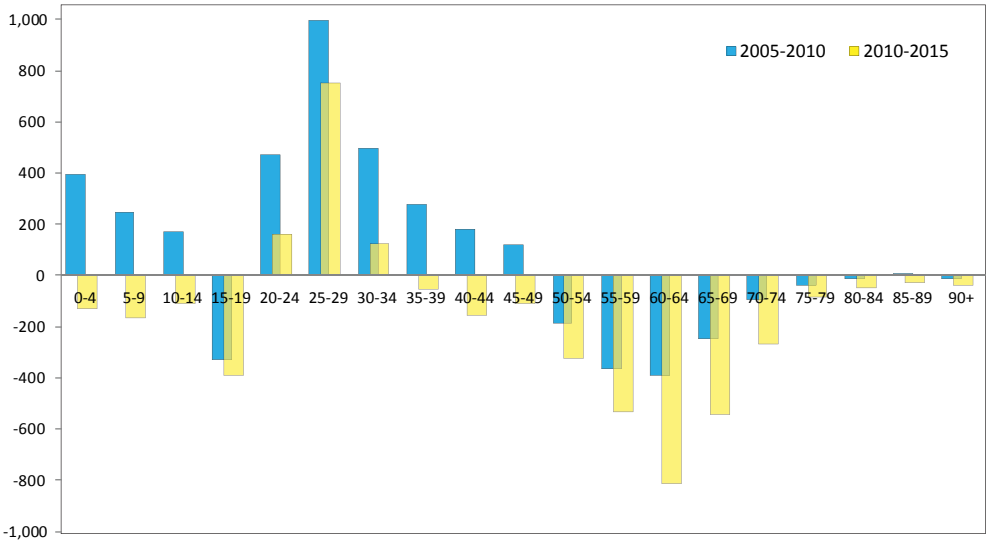
While Alaska is still the top state for population turnover through migration, the gap has steadily narrowed. In the early 1990s, Alaska's gross migration rate was over 16 percent a year, a 10 percentage point gap over the national average of 6 percent. The national rate has stayed about the same, dropping just one percentage point in 2016, while Alaska's fell to 11 percent the same year.

Average annual net migration rates across all states tend to be between -1 percent and 1 percent. Just two states, Nevada and Arizona, have averaged above 1 percent since 1990.

States with high turnover tend to also gain population through migration while low turnover states usually see losses, but Alaska and Hawaii have high gross migration without high net migration. Of the 10 states with the highest average annual gross migration rates since 1990, Alaska and Hawaii are the only states with negative net migration rates.

5 Net Migration Has Dropped Across All Ages

ALASKA YEARLY NET MIGRATION BY AGE, 2005 TO 2010 VERSUS 2010 TO 2015



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

Washington top source, destination

Proximity and large populations largely explain where people leaving Alaska go, and vice versa. Exhibit 3 shows Alaska's average yearly migration exchanges with the rest of the country and abroad from 2000 through 2016. Average yearly inflow to Alaska is under each state's initials, and outflow from Alaska to that state is in parentheses. Color coding shows each state's yearly gross migration exchanges with Alaska per 100,000 people.

In addition to proximity, Washington and Alaska share historical, cultural, and transportation links. Washington is the largest source of Alaska's incoming migrants by a small margin, and it's by far the most common destination for people leaving Alaska. About one in nine people who leave Alaska move to Washington.

After Washington are some of the most populous states. California is close behind Washington as a source of in-migrants, followed by Texas and Florida. For people leaving Alaska, Texas is the second largest destination, followed by California.

Average yearly gross migration each state has with Alaska, adjusted for population, shows a strong geographic component. States in the Northwest, along with Hawaii, have the largest adjusted migrant flows with Alaska. Montana's gross migration rate with Alaska is the highest (155 people per 100,000), followed by Idaho (131), Hawaii (125), and Washington (122). Other western states also rank higher than average in gross migration with Alaska. The exception is California, which has a gross migration rate much lower than surrounding states despite ranking high in total number of migrants to and from Alaska. This is because California has such a large population that even big numbers of movers each year are low in percent terms.

The states with the lowest migration with Alaska, both in terms of numbers and gross migration rate, are primarily in the Northeast. Less populous states in the region and the District of Columbia send few people to Alaska and few Alaskans move there. New Jersey has the lowest rate at 5.6 people exchanged per 100,000, followed by Connecticut (6.3) and New York (7.8).

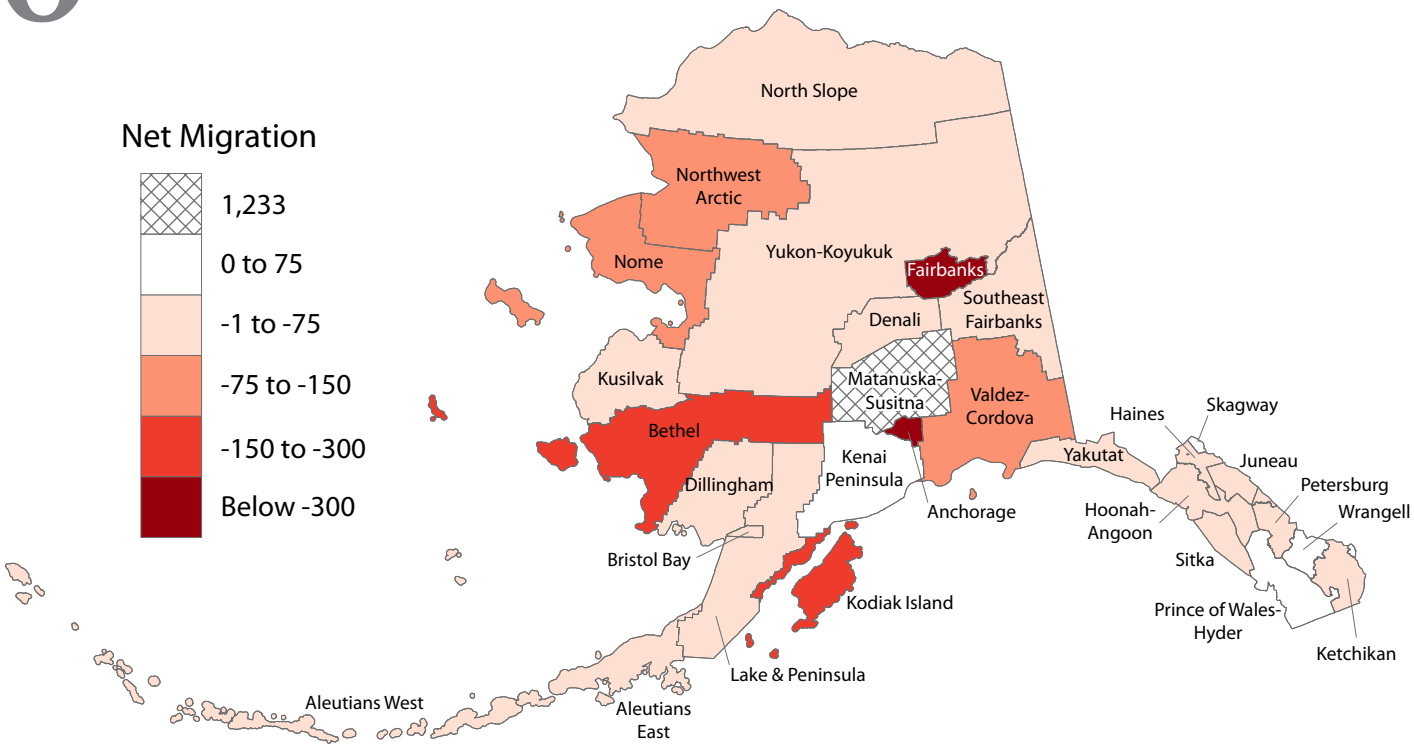
Younger adults, men tend to move more often

Exhibit 4 shows Alaska's average yearly in-migration and out-migration by five-year age groups for 2010 through 2015. For reference, the total number of Alaskans by age is the dotted line, with corresponding numbers on the right axis.

Young people move far more often than older people. This pattern is not unique to Alaska but it's more pronounced because the state's population is young. Migration peaks among people in their 20s and falls off quick-

6 Yearly Net Migration Mostly Negative Except Mat-Su

ALASKA, 2010 TO 2017



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

ly after that. Over half of total migrants are under 30.

Migration's large age differences show in the comparison between Alaska's two largest generations, the millennials (roughly ages 15 to 34 in 2015) and baby boomers (about 50 to 69 in 2015). Millennials make up about 30 percent of Alaska's population but account for over 40 percent of movers, on average. Boomers are a quarter of the state's population and just 15 percent of movers.

Men move slightly more than women nationwide, but the gap is larger in Alaska. The state's male-to-female ratio is about 107 to 100, and for movers in either direction the ratio is about 123 to 100. The age pattern for both sexes is roughly the same, though, with peaks in the 20s followed by a decline. Women do not become the majority of movers until after age 75, which is also when they become the majority in their age group.

Young move in, older people leave

While total net migration is a volatile statistic, net migration patterns by age in Alaska are consistent.

Exhibit 5 shows average annual net migration by age for two consecutive five-year periods. These particular times reflect different conditions, as statewide net migration was positive from 2005 to 2010 and negative from 2010 to 2015.

Migration among children is driven by adults in the prime parenting ages. The 2000s brought a net inflow of children into Alaska, but that switched to a net outflow after 2010 as more adults left the state.

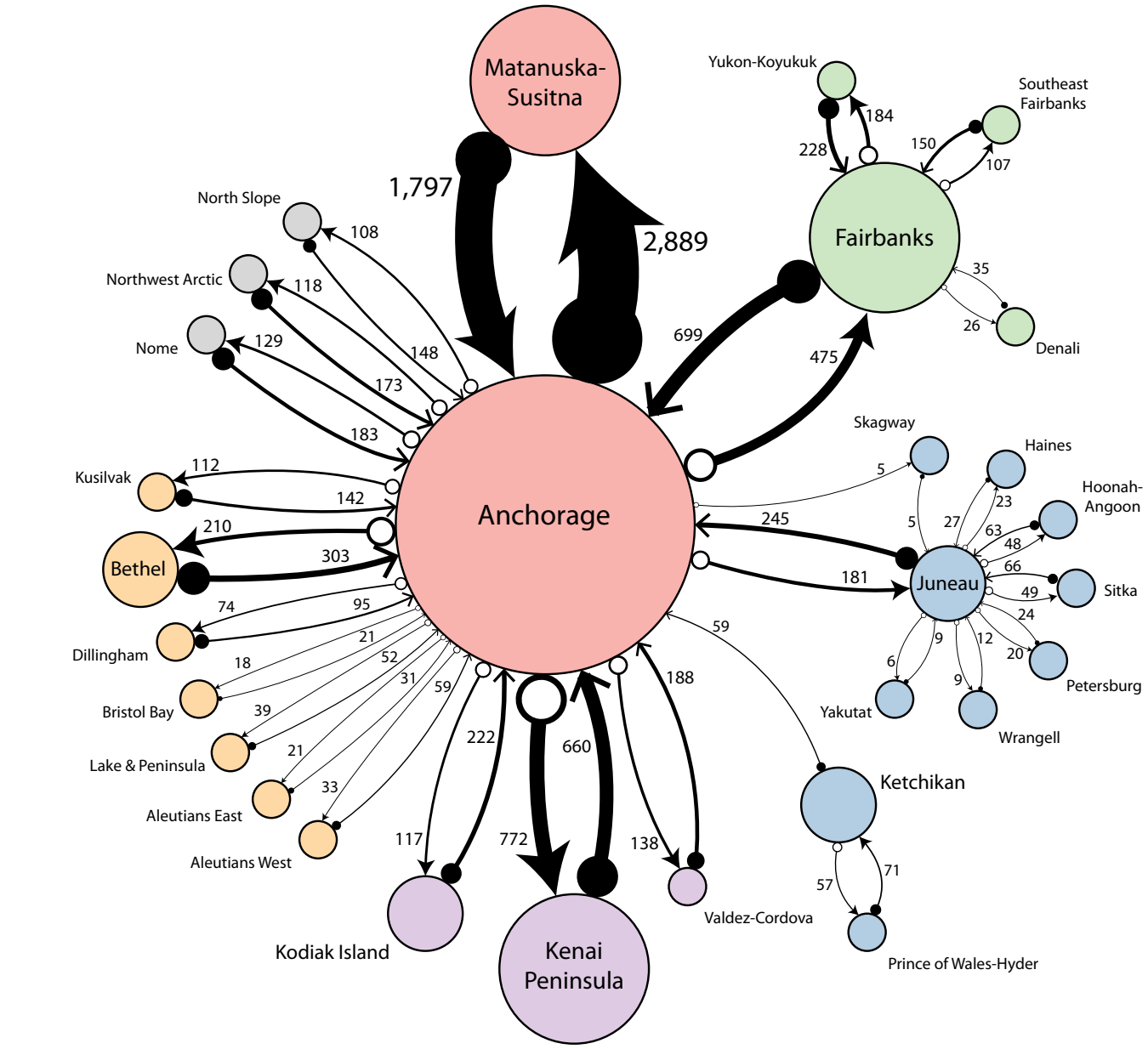
Out-migration of older teens is a constant for Alaska, as the number of youth leaving for college, jobs, or the military is always higher than the number moving in. For single ages, net outflows of 18-and-19-year-olds are the highest.

Alaska tends to gain the most migrants between ages 20 and 40, with a peak in the late 20s. (See Exhibit 5.) The age when net migration turned negative varies by time period, though. In the positive net migration era of the late 2000s, adult migration didn't turn negative until the early 50s. Since 2010, with higher out-migration, net migration has turned negative in the late 30s.

Text continues on page 12

7 Most In-State Moves Involve Anchorage

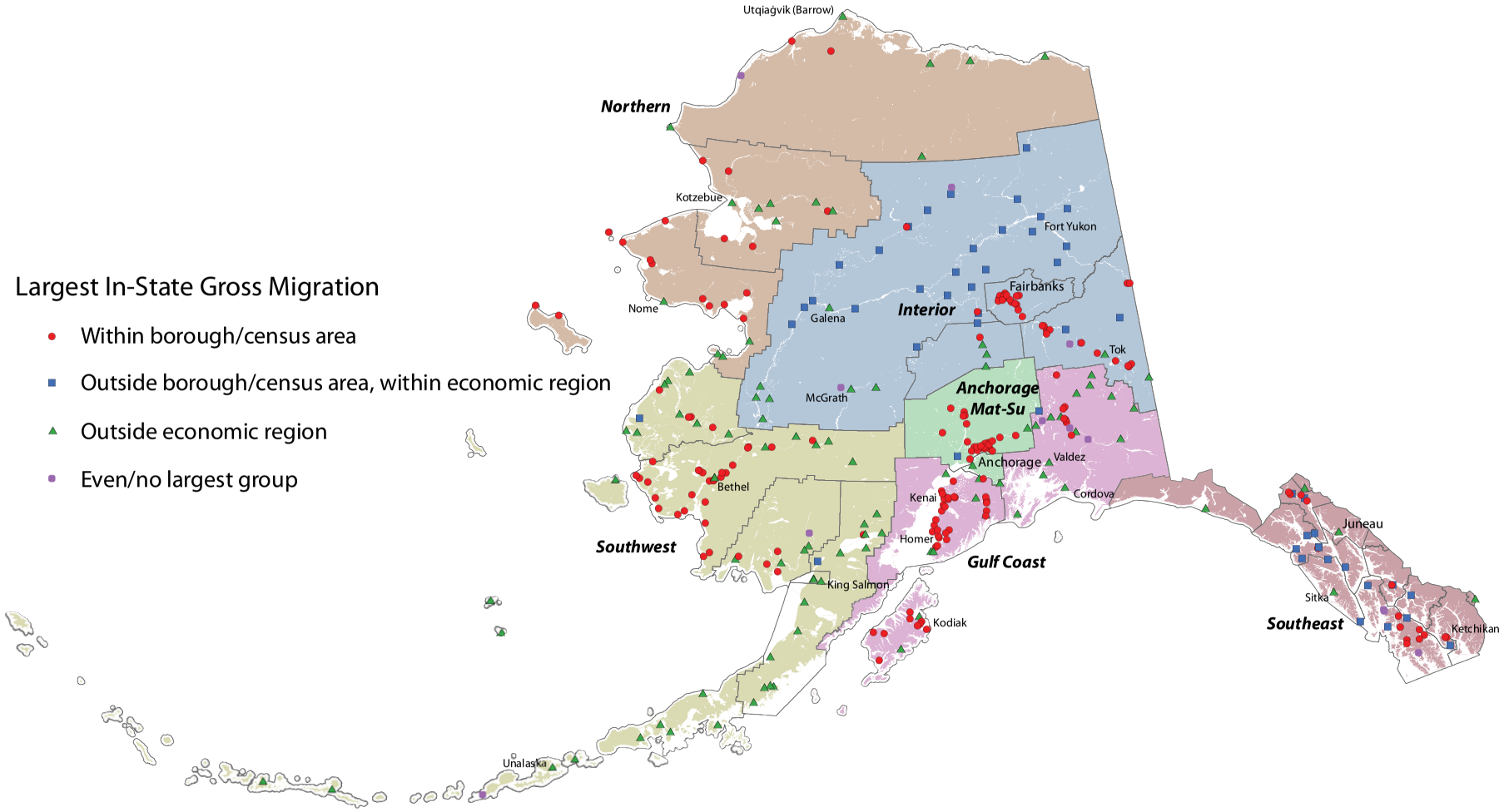
Alaska, largest inflows and outflows by borough or census area, 2010 to 2017



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

8 In-State Movements for Cities and Villages

YEARLY MIGRATIONS BY PLACE, 2010 TO 2017



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

Every age group above 50 has more out-migration from Alaska, with both periods showing out-migration peaks in the early 60s. From 2010 to 2015, an average of 800 more people between 60 and 64 left the state than moved in, more than twice the average from 2005 to 2010 and a reflection of the downward shift across all age groups. The negative shift for people under 30 was bigger in both periods than for those over 50, however.

Mat-Su has big net gains while most other areas are negative

Most boroughs and census areas have sustained net migration losses in recent years, losing people to other places in the state as well as outside. Exhibit 6 shows average annual net migration between 2010 and 2017, which was positive for just five of the 29 boroughs and census areas. Three in Southeast averaged a migration gain of less than 10 people per year. The Kenai Peninsula's gain was around 50 per year.

The Matanuska-Susitna Borough stands out for its large net inflows, averaging more than 1,200 people per year, even in a decade when most of the state's net migration has been negative. (For more on Mat-Su's population patterns, see page 16.)

Anchorage's and Fairbanks' net losses have been sharpest, averaging -2,200 and -1,200 a year, respectively.

Of the 24 areas with net migration losses since 2010, half still grew overall through natural increase. Seven of these are in Western and Northern Alaska, where birth rates are high (North Slope, Northwest Arctic, Nome, Kusilvak, Bethel, Dillingham, and Lake and Peninsula), while most of the others have larger populations (Anchorage, Fairbanks, Juneau, Ketchikan, and Denali).

Anchorage is involved in most in-state moves

Alaskans often move within the state as well as leave it. Exhibit 7 shows average yearly in-state migration patterns for 2010 to 2017. The lines represent either the largest source of in-migrants or the largest destination for out-migrants for each borough and census area. For out-migration, filled circles indicate the largest outflow while open circles mean that outflow isn't the area's largest. For in-migration, a large black arrowhead denotes the area's largest inflow and a simpler arrow marks a smaller inflow. The lines in Exhibit 7 represent around 70 percent of all in-state migration. (For complete numbers, see Exhibit 9.)

Tracking requires several sources

There is no complete system for tracking migration within Alaska or the United States, so this article uses a variety of data sources as migration indicators, each with different strengths and weaknesses.

Permanent Fund Dividend applications: We compared the physical address applicants used one year to the year before, which provided a broad look at in-state migration trends as well as age and sex data. One drawback is that someone who moves to Alaska isn't eligible to apply until living here a full calendar year, and another is this source requires adjustments for births and deaths.

Internal Revenue Service migration data: IRS migration data come from address changes reported on federal income tax returns. The IRS creates counts by borough or census area and for the state by tabulating exemptions (filers and their dependents) on the return and checking for a change in address from the previous year. This provides data on movement between states and county equivalents, but it covers only those who are included in returns.

American Community Survey: The U.S. Census Bureau conducts an ongoing survey of American households that gives more extensive demographic information on movers than other sources. However, the survey sample is small and has large margins of error, and for most parts of Alaska, data are only available in five-year averages.

Most in-state migration that crosses borough and census area boundaries involves Anchorage. The state's largest city, which has around 40 percent of Alaska's population, is either the source or destination for 64 percent of cross-borough moves.

Gross migration with Anchorage is the largest for every area in the Gulf Coast, Northern, and Southwest regions. But despite Anchorage's net gain from all areas in these regions except Kenai Peninsula, its in-state net migration is usually negative because of its massive outflow to Mat-Su.

The situation differs in the Interior and Southeast, as Fairbanks and Juneau serve as regional migration hubs for most of their smaller boroughs and census areas but share their own largest migration movements with Anchorage. The exception is Prince of Wales-Hyder, at the southern end of the panhandle, which interacts most with Ketchikan.

Continued on page 22

9 Average Annual In-State Migration by Borough or Census Area

ALASKA, 2010 TO 2017

FROM → Source Borough/Census Area

TO ↓ Destination Borough/Census Area

Destination Borough/Census Area	Aleutians East	Aleutians West	Anchorage	Bethel	Bristol Bay	Denali	Dillingham	Fairbanks North Star	Haines	Hoonah-Angoon	Juneau	Kenai Peninsula	Ketchikan Gateway	Kodiak Island	Kusilvak	Lake and Peninsula	Matanuska-Susitna	Nome	North Slope	Northwest Arctic	Petersburg	Prince of Wales-Hyder	Sitka	Skagway	SE Fairbanks	Valdez-Cordova	Wrangell	Yakutat	Yukon-Koyukuk
Aleutians East	—	1	21	0	1	0	0	1	0	0	1	2	1	2	0	2	6	2	0	0	0	1	0	0	1	2	0	0	1
Aleutians West	1	—	33	1	1	0	0	2	0	1	4	3	1	2	1	0	5	1	1	0	0	0	0	0	0	2	0	0	0
Anchorage	31	59	—	303	21	15	95	699	12	11	245	660	59	222	142	52	1,797	183	148	173	11	23	53	3	54	188	6	9	64
Bethel	0	0	210	—	0	0	22	26	1	0	4	23	2	6	89	1	42	9	2	3	0	0	1	0	2	3	0	1	4
Bristol Bay	1	1	18	1	—	0	2	2	0	0	0	2	0	1	0	8	5	1	0	1	0	1	0	0	0	1	0	0	0
Denali	0	0	17	0	0	—	0	26	0	1	2	4	1	1	0	0	12	2	0	1	0	1	0	0	2	0	0	0	5
Dillingham	0	1	74	16	3	0	—	5	0	0	2	9	0	2	5	12	14	3	2	3	1	1	1	0	1	2	0	0	2
Fairbanks North Star	3	6	475	40	1	35	10	—	7	4	51	101	12	24	16	1	182	32	59	32	4	7	13	1	150	46	1	3	228
Haines	0	0	11	1	0	0	0	4	—	7	23	2	2	1	0	0	7	0	1	0	1	2	2	2	1	1	1	1	0
Hoonah-Angoon	1	0	11	1	0	1	0	7	4	—	48	2	3	1	1	0	4	1	0	2	1	2	7	1	0	1	0	0	0
Juneau	1	4	181	8	1	0	3	59	27	63	—	24	53	14	1	0	45	5	5	2	24	35	66	5	3	9	12	9	1
Kenai Peninsula	6	10	722	43	7	8	13	120	4	2	29	—	14	48	15	14	254	23	11	13	2	9	12	1	12	42	3	1	15
Ketchikan Gateway	1	3	40	2	0	0	0	12	3	3	47	12	—	4	0	0	14	2	2	1	5	71	12	2	2	5	10	1	1
Kodiak Island	2	6	117	6	1	1	4	11	0	0	8	27	6	—	4	2	26	2	1	1	0	2	8	0	1	6	0	1	0
Kusilvak	0	2	112	87	0	0	4	14	0	0	2	8	0	3	—	2	16	14	2	2	0	2	1	0	1	0	0	0	2
Lake and Peninsula	3	0	39	2	6	0	9	2	0	0	0	8	0	5	2	—	8	1	0	0	0	0	0	0	0	1	0	0	1
Matanuska-Susitna	3	20	2,889	68	10	13	23	249	7	4	68	254	24	51	24	11	—	38	28	42	3	6	13	2	52	92	6	3	21
Nome	1	1	129	12	1	0	3	20	0	0	3	18	0	1	16	1	24	—	5	19	0	1	3	0	1	1	0	1	3
North Slope	0	0	108	4	0	0	4	39	0	1	2	6	1	1	3	1	12	4	—	14	0	1	2	0	1	3	0	0	4
Northwest Arctic	0	1	118	7	0	0	2	22	0	1	3	8	0	1	4	0	26	16	10	—	0	0	2	0	1	2	0	0	3
Petersburg	1	0	9	1	0	0	0	4	3	1	20	3	6	0	0	0	4	1	0	0	—	6	4	0	0	2	3	0	0
Prince of Wales-Hyder	0	1	27	2	0	0	3	6	1	4	34	7	57	2	2	0	9	1	1	3	6	—	14	0	0	2	7	0	1
Sitka	1	1	38	5	0	1	1	12	4	7	49	9	12	8	2	0	11	3	1	2	5	18	—	0	1	3	3	3	1
Skagway	0	0	5	0	0	0	0	2	2	0	4	1	1	0	0	0	2	1	1	0	0	0	0	—	1	0	0	0	0
Southeast Fairbanks	0	0	44	4	0	1	0	107	1	1	9	14	2	1	1	0	36	1	1	2	1	0	1	0	—	9	1	0	6
Valdez-Cordova	3	2	138	3	1	1	1	41	0	1	7	28	5	10	3	1	57	3	2	4	1	4	4	1	13	—	2	2	7
Wrangell	0	0	7	0	1	0	0	2	1	1	9	3	8	1	0	0	6	0	1	1	5	6	6	0	0	2	—	0	0
Yakutat	0	0	5	0	0	0	0	2	0	1	6	1	0	0	0	0	2	1	0	0	0	0	1	0	0	0	0	—	0
Yukon-Koyukuk	1	0	52	6	1	4	0	184	2	1	2	9	1	1	4	1	14	5	5	3	0	2	1	0	4	3	1	0	—

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

Population Estimates for 2017

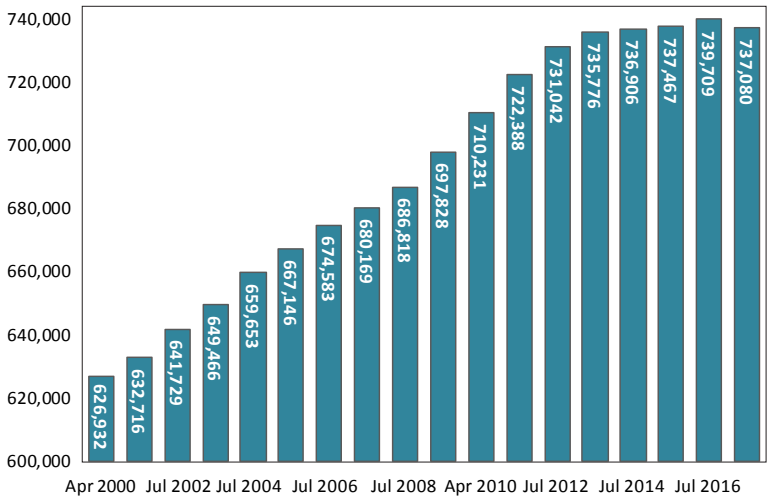
Small decline is the first since the late 1980s

By **EDDIE HUNSINGER**

Alaska's total population declined in 2017 for the first time since the late 1980s. The decline was small, however, at 0.4 percent, and the total population estimate hasn't changed much over the last four years. (See Exhibit 1.) Even with a steady total count, though, major changes in age structure and regional distribution are always happening beneath the surface.

1 Total Population Declines in 2017

ALASKA, 2000 TO 2017



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

Births, deaths, and migration

The population changes through births, deaths, and migration — and all three have shifted in recent years. Alaska had 10,786 births from July 2016 to July 2017, and the number of births has declined slightly in the last few years. (See Exhibit 2.) Deaths increased some, as expected, to 4,530 and will continue to rise with the aging of the population. Because births have gone down and deaths have gone up, natural increase (births minus deaths) is declining. Until 2017, natural increase more than offset migration losses, keeping the total population growing.

This was the fifth year in a row of net migration losses (in-migration minus out-migration), the longest on record for Alaska and capped off by a particularly large net drop of 8,885. (See Exhibit 3.) That loss was big because out-migration rose and in-migration fell. The number of people who move away hasn't changed much over the past few years, staying around 45,000 to 50,000 annually. The number moving into the state has changed more, down to about 40,000 from its peak of nearly 50,000 in 2013.

Since 1990, Alaska's net migration has usually hovered around zero, plus or minus 8,000, which means the characteristically large flows in and out have been

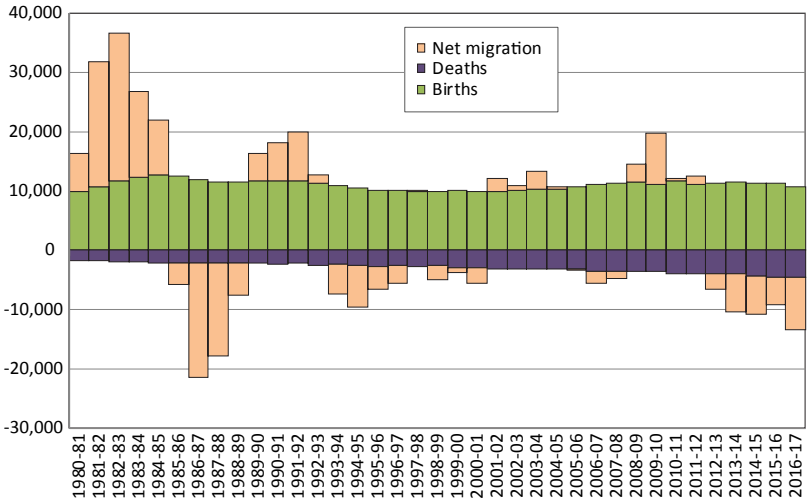
roughly equal. A few other years stand out besides 2017 — our losses were much larger in the 1980s, and between 2009 and 2010, Alaska had a net migration gain of more than 8,500.

Note that net migration around zero isn't always typical for states. For some it's consistently positive (Nevada, Arizona, Washington, and Colorado), while others sustain long periods of net loss (such as Michigan and Illinois).

Alaska has one of the highest rates of population turnover from migration in the country due to our young population, unique mix of industries, and large military presence. For an in-depth look at migration and its history in Alaska, see page 4.

2 Components of Population Change

ALASKA, 1980 TO 2017



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

Shift to an older Alaska

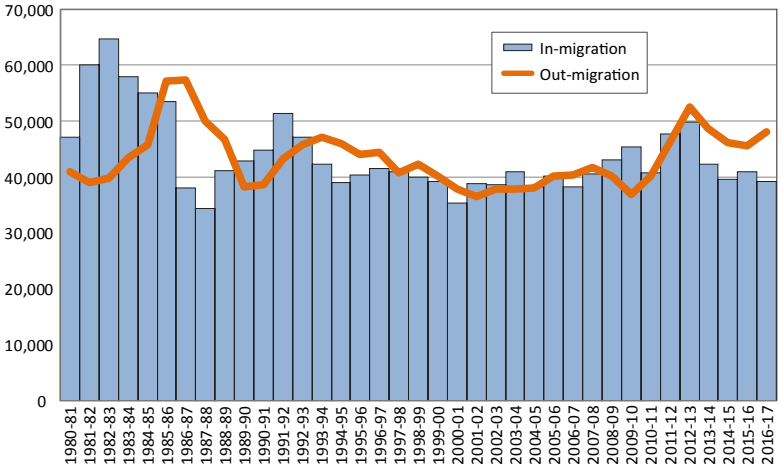
Although births, deaths, and migration all affect the population's age structure, most of the shift to an older population is simply people aging into the next age group.

Alaska's working-age population — ages 18 to 64 — declined for a fifth consecutive year in 2017 due to net migration losses and the large baby boomer cohort reaching retirement age. The working-age population peaked in 2012, at 478,157, and declined to 465,687 by 2017, a nearly 3 percent drop.

Many baby boomers, those born between 1946 and 1964, moved to Alaska in the 1970s and 1980s with construction of the Trans-Alaska Pipeline and the state's resulting economic growth. The state's senior citizen population has increased rapidly as boomers reach 65. (See Exhibit 4.) Alaska's 65-plus population increased by more than 3,500 from 2016 to 2017, to 82,686 people.

3 Five Years of Negative Net Migration

ALASKA, 1980 TO 2017



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

Current data for other states aren't available yet, but Alaska had the fastest-growing senior population in the United States from 2010 to 2016, and its 44 percent growth was twice the national average. Seniors still make up a smaller share of Alaska than any other state, though, at 10.4 percent in 2016 compared to 15 percent nationwide. Utah was a close second at 10.5 percent.

Alaska's 20-to-39 year old population — ages when many people start careers and families — increased markedly between 2010 and 2015, from 203,377 to 215,897. That growth ended after 2015, partly because of aging, and the young adult population fell slightly in 2016, to 215,761. In 2017, it dropped to 214,328.

The number of children in Alaska has remained fairly steady for the past two decades, declining slightly in 2017. Alaska had 188,707 children from newborn to age 17 in 2017, down by just 692 from the year before.

Most places lost population

By area, the Matanuska-Susitna Borough remains the fastest-growing in the state, adding 1,612 people over the year to reach 104,166 in 2017. (See Exhibit 5.) Of that growth, 854 came from natural increase (1,436 births minus 582 deaths). Mat-Su was also one of the few areas to gain population through net migration, and its net migration increase of 758 would have been even higher without the closure of Palmer Correctional Center, which housed about 400 inmates.

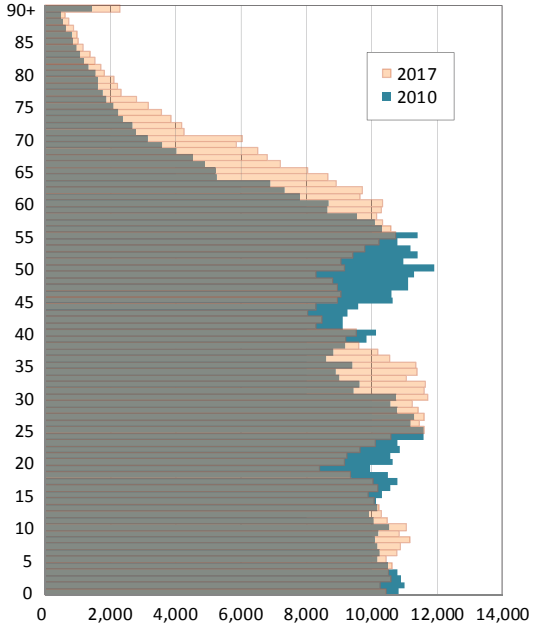
Otherwise, population decreases spanned most of the state. Anchorage's total population fell by 1,454, to 297,483. The city peaked at 300,880 people in 2013. While Anchorage's 65-and-older population continued to increase, topping 30,000, its 18-to-64 year old population — working ages — was down for the fourth year in a row. That age group peaked at 198,666 in 2013, then declined to 192,164 by 2017.

The Fairbanks North Star Borough's net migration loss was 2,334 and its natural increase was 1,118, bringing the total population down to 97,738 in 2017. That remains slightly higher than its population at the 2010 Census (97,581). Fairbanks has a relatively young population due to its military bases and university, though, and economists also expect growth in coming years from two new F-35 squadrons at Eielson Air Force Base.

Juneau's population also remains above its 2010 Census count, but 2017 was the capital city's fourth consecutive year of net migration losses and its second year of total population decline. Juneau's population decreased by 454, and the Southeast Region as a whole declined by 912.

4 Shift to An Older Population

ALASKA, 2010 AND 2017



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

After net migration gains in 2015 and 2016, the Kenai Peninsula's net migration turned negative (-283) in 2017 and its population dropped by 25 people, to 58,024. Kodiak Island Borough's population also declined a bit, from 13,560 in 2016 to 13,287 in 2017. Kodiak had 13,592 people in the 2010 Census.

The Prince William Sound and Copper River Basin areas that make up the Valdez-Cordova Census Area decreased by 112 people, to a total of 9,387 — this was also lower than in 2010, when the area had 9,639 people.

Remote Western and Northern Alaska's population levels remained fairly steady, with their modest migration losses nearly balanced by natural increase. The Northern Region — including the North Slope Borough, Northwest Arctic Borough, and Nome Census Area — lost 103 people between 2016 and 2017, for a total population of 27,705. In all, Southwest Alaska's population decreased by 71 people over the year, to 42,202 — up from 40,649 in 2010.

Eddie Hunsinger is state demographer for Research and Analysis in Anchorage. Reach him at (907) 269-4960 or eddie.hunsinger@alaska.gov.

5 Population of Alaska by Region, Borough and Census Area

2010 to 2017

Area	Census April 2010	Estimate July 2011	Estimate July 2012	Estimate July 2013	Estimate July 2014	Estimate July 2015	Estimate July 2016	Estimate July 2017	Natural Increase* 2010-17	Natural Increase* 2016-17	Net Migration* 2010-17	Net Migration* 2016-17	Pop Change 2010-17	Pop Change 2016-17	Growth Rate (%) 2010-17	Growth Rate (%) 2016-17
Alaska	**710,231**	**722,388**	**731,042**	**735,776**	**736,906**	**737,467**	**739,709**	**737,080**	**51,949**	**6,256**	**-25,100**	**-8,885**	**26,849**	**-2,629**	**0.51**	**-0.36**
Anchorage/Mat-Su	**380,821**	**387,399**	**391,986**	**396,689**	**398,351**	**398,768**	**401,491**	**401,649**	**28,196**	**3,359**	**-7,368**	**-3,201**	**20,828**	**158**	**0.73**	**0.04**
Anchorage	291,826	295,719	298,334	300,880	300,197	298,799	298,937	297,483	21,964	2,505	-16,307	-3,959	5,657	-1,454	0.26	-0.49
Matanuska-Susitna	88,995	91,680	93,652	95,809	98,154	99,969	102,554	104,166	6,232	854	8,939	758	15,171	1,612	2.17	1.56
Gulf Coast	**78,631**	**80,216**	**80,576**	**80,479**	**80,863**	**81,038**	**81,108**	**80,698**	**3,878**	**457**	**-1,811**	**-867**	**2,067**	**-410**	**0.36**	**-0.51**
Kenai Peninsula	55,400	56,530	56,633	56,850	57,431	57,707	58,049	58,024	2,245	258	379	-283	2,624	-25	0.64	-0.04
Kodiak Island	13,592	13,848	13,993	13,810	13,827	13,795	13,560	13,287	1,144	134	-1,449	-407	-305	-273	-0.31	-2.03
Valdez-Cordova	9,639	9,838	9,950	9,819	9,605	9,536	9,499	9,387	489	65	-741	-177	-252	-112	-0.37	-1.19
Interior	**112,021**	**112,835**	**115,397**	**114,515**	**113,067**	**112,905**	**113,202**	**111,911**	**9,624**	**1,191**	**-9,734**	**-2,482**	**-110**	**-1,291**	**-0.01**	**-1.15**
Denali	1,826	1,836	1,856	1,798	1,789	1,790	1,883	1,849	82	4	-59	-38	23	-34	0.17	-1.82
Fairbanks N Star	97,581	98,234	100,664	99,985	98,779	98,727	98,954	97,738	8,868	1,118	-8,711	-2,334	157	-1,216	0.02	-1.24
SE Fairbanks	7,026	7,107	7,200	7,085	6,983	6,897	6,921	6,973	472	50	-525	2	-53	52	-0.10	0.75
Yukon-Koyukuk	5,588	5,658	5,677	5,647	5,516	5,491	5,444	5,351	202	19	-439	-112	-237	-93	-0.60	-1.72
Northern	**26,445**	**26,930**	**27,274**	**27,541**	**27,528**	**27,828**	**27,808**	**27,705**	**3,046**	**386**	**-1,786**	**-489**	**1,260**	**-103**	**0.64**	**-0.37**
Nome	9,492	9,718	9,852	9,869	9,986	10,058	10,070	10,006	1,157	149	-643	-213	514	-64	0.73	-0.64
North Slope	9,430	9,575	9,710	9,864	9,732	9,887	9,801	9,849	879	100	-460	-52	419	48	0.60	0.49
Northwest Arctic	7,523	7,637	7,712	7,808	7,810	7,883	7,937	7,850	1,010	137	-683	-224	327	-87	0.59	-1.10
Southeast	**71,664**	**73,582**	**74,168**	**74,297**	**74,518**	**74,371**	**73,827**	**72,915**	**2,788**	**276**	**-1,537**	**-1,188**	**1,251**	**-912**	**0.24**	**-1.24**
Haines	2,508	2,610	2,607	2,534	2,550	2,493	2,466	2,459	7	4	-56	-11	-49	-7	-0.27	-0.28
Hoonah-Angoon	2,149	2,149	2,200	2,179	2,141	2,177	2,188	2,122	53	12	-80	-78	-27	-66	-0.17	-3.06
Juneau	31,275	32,328	32,689	32,915	33,020	33,145	32,723	32,269	1,495	170	-501	-624	994	-454	0.43	-1.40
Ketchikan Gateway	13,477	13,720	13,878	13,826	13,872	13,813	13,749	13,754	554	35	-277	-30	277	5	0.28	0.04
Petersburg	3,203	3,290	3,251	3,198	3,207	3,185	3,177	3,147	134	17	-190	-47	-56	-30	-0.24	-0.95
P of Wales-Hyder	6,172	6,449	6,456	6,540	6,558	6,536	6,491	6,390	215	4	3	-105	218	-101	0.48	-1.57
Sitka	8,881	9,023	9,065	9,051	9,085	8,922	8,914	8,748	228	22	-361	-188	-133	-166	-0.21	-1.88
Skagway	968	964	957	981	1,038	1,045	1,069	1,087	51	10	68	8	119	18	1.60	1.67
Wrangell	2,369	2,408	2,444	2,455	2,415	2,445	2,456	2,387	13	-4	5	-65	18	-69	0.10	-2.85
Yakutat	662	641	621	618	632	610	594	552	38	6	-148	-48	-110	-42	-2.50	-7.33
Southwest	**40,649**	**41,426**	**41,641**	**42,255**	**42,579**	**42,557**	**42,273**	**42,202**	**4,417**	**587**	**-2,864**	**-658**	**1,553**	**-71**	**0.52**	**-0.17**
Aleutians East	3,141	3,146	3,146	3,148	3,093	3,047	2,999	2,977	55	6	-219	-28	-164	-22	-0.74	-0.74
Aleutians West	5,561	5,529	5,622	5,645	5,616	5,534	5,481	5,357	136	17	-340	-141	-204	-124	-0.52	-2.29
Bethel	17,013	17,442	17,560	17,865	18,084	18,198	18,121	18,127	2,336	306	-1,222	-300	1,114	6	0.87	0.03
Bristol Bay	997	1,024	984	933	944	887	876	887	24	1	-134	10	-110	11	-1.61	1.25
Dillingham	4,847	4,933	4,974	5,022	5,070	5,010	4,954	4,925	492	70	-414	-99	78	-29	0.22	-0.59
Kusilvak	7,459	7,675	7,675	7,942	8,085	8,204	8,200	8,208	1,242	165	-493	-157	749	8	1.32	0.10
Lake and Peninsula	1,631	1,677	1,680	1,700	1,687	1,677	1,642	1,721	132	22	-42	57	90	79	0.74	4.70

Note: Vintage 2017. All numbers are based on 2017 geography.

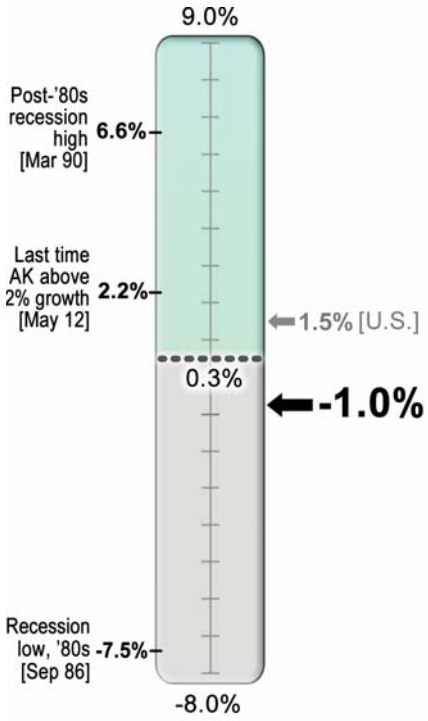
*Natural increase equals births minus deaths, and net migration equals in-migrants minus out-migrants.

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

Gauging Alaska's Economy

Job Growth

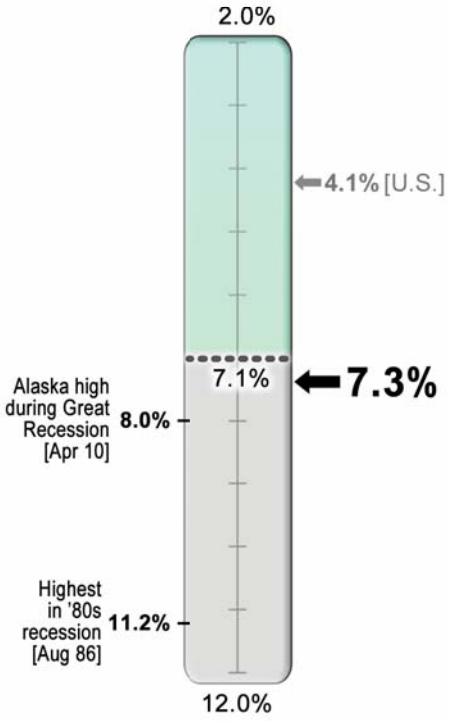
December 2017
Over-the-year percent change



- December was the 27th consecutive month Alaska has recorded job losses.
- Alaska had 25 consecutive months of job losses during the state's 1980s recession, although the magnitude of the losses in the '80s was much larger as a percentage of total jobs.
- Job losses during the current recession were at their worst in September 2016 (-2.6 percent).

Unemployment Rate

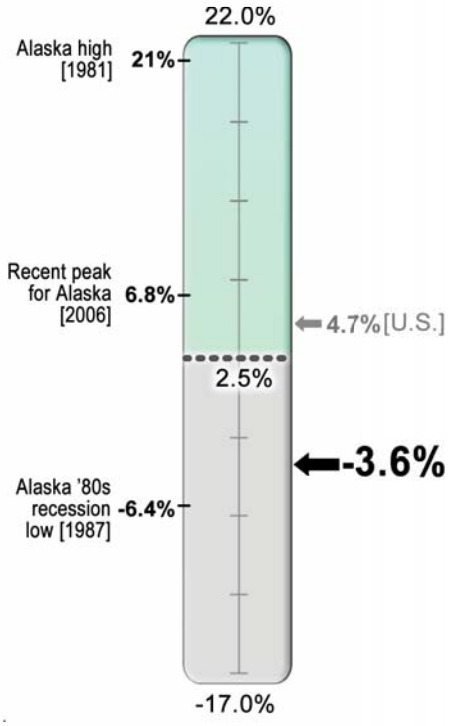
December 2017
Seasonally adjusted



- Alaska's unemployment rate is the highest in the nation, but is only two-tenths of a percentage point above its 10-year average.
- Unemployment rates are more complicated as an economic indicator than job growth, although most of the time high rates signal economic weakness.
- In the short term, unemployment rates can rise because a state is especially attractive to job seekers (a positive) or fall because people have given up on looking for work (a negative).

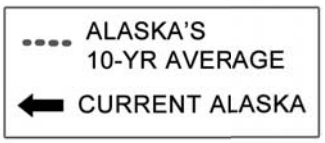
Wage Growth

3rd Quarter 2017
Over-the-year percent change



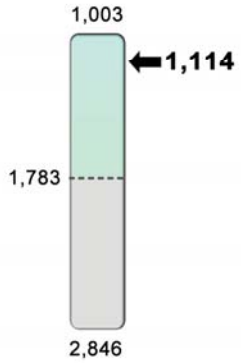
- The decline in wages was larger than in the previous quarter and the largest since 4th quarter 2016's 7% drop.
- Resumed and sustained wage growth, when it occurs, will be one of the best indicators that Alaska's recession has ended.
- The U.S. number is from 2nd quarter 2017, the most current available.

Gauging Alaska's Economy



Initial Claims

Unemployment, week ending Feb. 10, 2018†

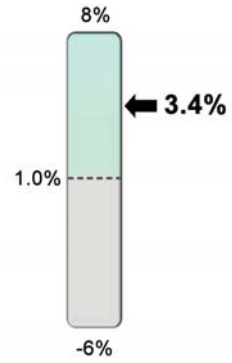


➤ For a variety of reasons, initial claims are well below the 10-year average despite job losses.

†Four-week moving average ending with the specified week

GDP Growth

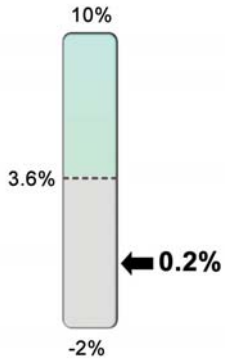
3rd Quarter 2017
Over-the-year percent change



➤ It's promising for economic recovery that gross domestic product growth has been positive for three consecutive quarters after declining for the previous 17 consecutive quarters.

Personal Income Growth

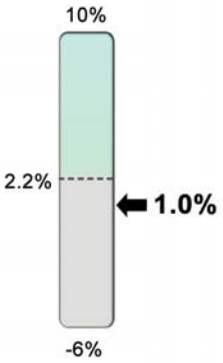
3rd Quarter 2017
Over-the-year percent change



➤ Personal income includes wages as well as government transfer payments (such as Social Security, Medicaid, and the PFD) and investment income. Declines during the current recession have been small so far.

Change in Home Prices

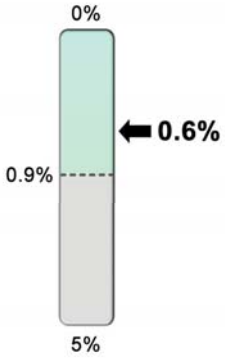
3rd Quarter 2017
Over-the-year percent change



➤ Home prices include only those for which a commercial loan is used. This indicator tends to be volatile from quarter to quarter.

Foreclosure Rate

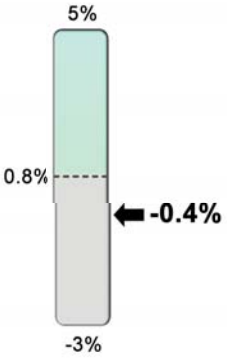
2nd Quarter 2017



➤ Foreclosure rates remain very low, highlighting how different the current recession is from the '80s recession when foreclosure rates exceeded 10 percent.

Population Growth

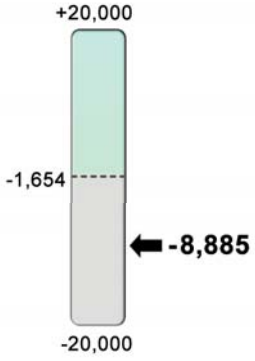
2016 to 2017



➤ The state's population has remained remarkably stable during the state's recession, although 2017 was the first year of population decline since 1988.

Net Migration

2016 to 2017

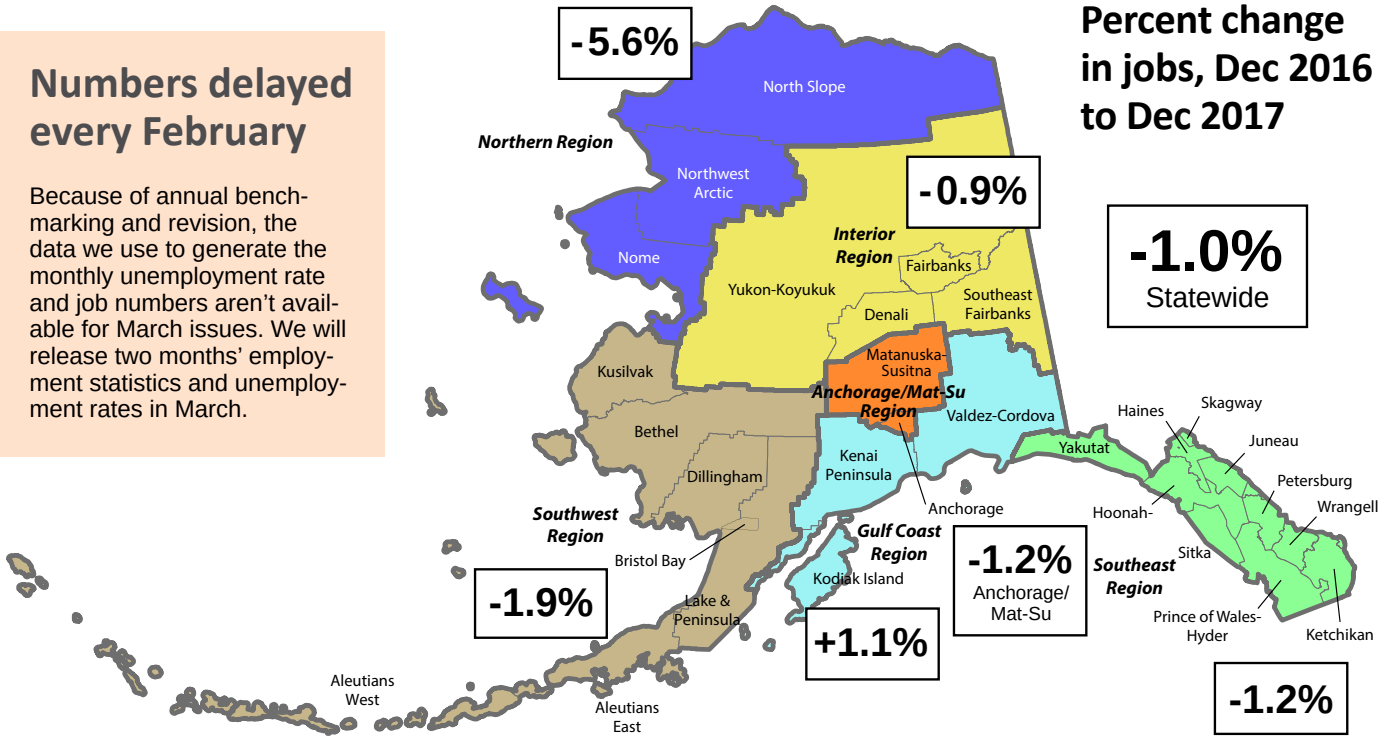


➤ The state had net migration losses for the fifth consecutive year in 2017, although natural increase (births minus deaths) offset those losses each year until 2017.

Employment by Region

Numbers delayed every February

Because of annual benchmarking and revision, the data we use to generate the monthly unemployment rate and job numbers aren't available for March issues. We will release two months' employment statistics and unemployment rates in March.



Unemployment Rates

Seasonally adjusted

	Prelim.	Revised	
	12/17	11/17	12/16
United States	**4.1**	**4.1**	**4.7**
Alaska	**7.3**	**7.2**	**6.6**

Not seasonally adjusted

	Prelim.	Revised	
	12/17	11/17	12/16
United States	**3.9**	**3.9**	**4.5**
Alaska	**7.3**	**7.1**	**6.6**

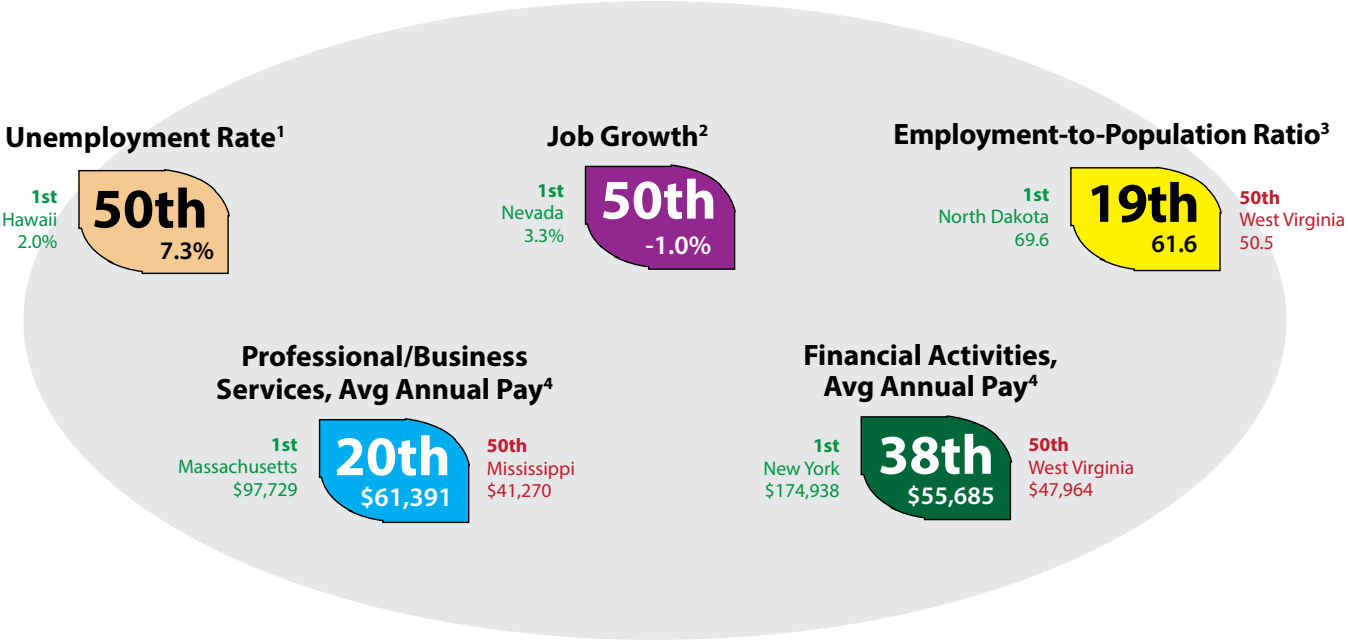
Regional, not seasonally adjusted

	Prelim.	Revised	
	12/17	11/17	12/16
Interior Region	**7.5**	**7.3**	**6.6**
Denali Borough	20.6	20.2	18.2
Fairbanks N Star Borough	6.6	6.3	5.7
Southeast Fairbanks Census Area	10.8	10.9	9.8
Yukon-Koyukuk Census Area	18.0	17.6	16.8
Northern Region	**10.8**	**11.2**	**10.4**
Nome Census Area	12.2	12.0	11.4
North Slope Borough	6.3	7.0	5.9
Northwest Arctic Borough	14.5	15.6	15.5
Anchorage/Mat-Su Region	**6.4**	**6.3**	**5.7**
Anchorage, Municipality	5.7	5.7	5.1
Mat-Su Borough	8.7	8.3	8.0

	Prelim.	Revised	
	12/17	11/17	12/16
Southwest Region	**12.3**	**11.4**	**11.2**
Aleutians East Borough	5.9	4.3	4.7
Aleutians West Census Area	5.4	4.4	4.6
Bethel Census Area	13.2	13.0	12.2
Bristol Bay Borough	14.3	11.4	13.3
Dillingham Census Area	11.1	10.4	11.4
Kusilvak Census Area	19.8	19.4	18.0
Lake and Peninsula Borough	15.4	15.1	12.7
Gulf Coast Region	**8.8**	**8.2**	**8.0**
Kenai Peninsula Borough	8.9	8.7	8.0
Kodiak Island Borough	7.3	4.8	6.7
Valdez-Cordova Census Area	9.9	9.5	9.3

	Prelim.	Revised	
	12/17	11/17	12/16
Southeast Region	**7.2**	**6.9**	**6.4**
Haines Borough	13.4	12.7	11.1
Hoonah-Angoon Census Area	18.7	16.6	14.0
Juneau, City and Borough	5.1	4.9	4.5
Ketchikan Gateway Borough	7.0	7.0	6.4
Petersburg Borough	10.1	9.2	9.8
Prince of Wales-Hyder Census Area	12.3	11.7	11.6
Sitka, City and Borough	5.0	4.7	4.2
Skagway, Municipality	20.0	21.2	20.6
Wrangell, City and Borough	8.8	8.6	7.7
Yakutat, City and Borough	11.0	11.4	9.0

How Alaska Ranks



[1]December seasonally adjusted unemployment rates
[2]December employment, over-the-year percent change. Alaska numbers are sourced only from Alaska Department of Labor and Workforce Development, Research and Analysis Section.
[3]Employment-to-population ratio represents the percentage of the state's population 16 or older who were working; data are 2017 annual averages.
[4]Current Employment Statistics, 2016
Sources are U.S. Bureau of Labor Statistics and Alaska Department of Labor and Workforce Development, Research and Analysis Section, unless otherwise noted.

Other Economic Indicators

	Current		Year ago	Change
Anchorage Consumer Price Index (CPI-U, base yr 1982=100)	219.131	2nd half 2017	218.660	+0.9%
Commodity prices				
Crude oil, Alaska North Slope,* per barrel	$69.15	Jan 2018	$53.90	+28.29%
Natural gas, residential, per thousand cubic ft	$10.26	Nov 2017	$10.77	-4.74%
Gold, per oz. COMEX	$1,333.40	2/22/2018	$1,233.30	+8.12%
Silver, per oz. COMEX	$16.65	2/22/2018	$18.02	-7.60%
Copper, per lb. COMEX	$325.40	2/22/2018	$274.60	+18.50%
Zinc, per MT	$3,541.00	2/21/2018	$2,829.00	+25.17%
Lead, per lb.	$1.16	2/21/2018	$1.06	+9.43%
Bankruptcies	116	Q4 2017	109	+6.4%
Business	4	Q4 2017	10	-60.0%
Personal	112	Q4 2017	99	+13.1%
Unemployment insurance claims				
Initial filings	6,849	Jan 2018	7,808	-12.28%
Continued filings	58,086	Jan 2018	69,603	-16.55%
Claimant count	14,409	Jan 2018	16,468	-12.50%

*Department of Revenue estimate

Sources for pages 18 through 21 include Alaska Department of Labor and Workforce Development, Research and Analysis Section; U.S. Bureau of Labor Statistics; U.S. Bureau of Economic Analysis; U.S. Census Bureau; COMEX; Bloomberg; Infomine; Alaska Department of Revenue; and U.S. Courts, 9th Circuit

MIGRATION

Continued from page 12

Place-level migration reveals regional hubs

Migration data for communities are limited, as they don't show place-to-place movements but rather how many of a place's moves were within the same area, the same region, or the state. (See Exhibit 8 on page 11.)

Most places send and receive the most migrants within the same borough/census area. (This category doesn't include unified city-boroughs such as Anchorage and Juneau.) This applies not just to large boroughs like Mat-Su and Fairbanks, but also to villages in Western Alaska that surround larger hubs such as Bethel, Nome, and Kotzebue.

Fairbanks and Juneau's primacy within their regions, shown in Exhibit 7, is also clear in place-level migration. Fairbanks is center for much of the Interior's migration. Nearly all villages in the Upper Yukon Basin and along the Koyukuk River share their highest gross migration within the region, and presumably with Fairbanks. Juneau serves a similar function for most of Southeast.

Places whose primary in-state migration is outside their regions are spread across the state, and they interact mostly with Anchorage. This category includes most large hub cities in Western and Northern Alaska, such as Bethel and Utqiagvik, as well as larger places on the road system, such as Valdez and Tok.

Many smaller villages' primary in-state migration is outside their region instead of with a nearby hub. This category includes nearly all of the Alaska Peninsula and the Aleutians as well as villages in the Lower Yukon and Arctic.

Eric Sandberg is a demographer for Research and Analysis in Juneau. Reach him at (907) 465-2437 or eric.sandberg@alaska.gov.

Employer Resources

Business Employment Services Team

Employment First Job Fair

Register online for the fair using Eventbrite.com:

University Center Mall
Friday, March 30
10 a.m. to 2 p.m.

- Open to all employers and the public
- Free employer booths
- Meet hundreds of job seekers
- Federal contractors can find qualified veterans and individuals with disabilities

Employers, let BEST help you find excellent employees at the Employment First Job Fair. For more information, contact the Anchorage Midtown Business Connection at (907) 269-4777 or anchorage.employers@alaska.gov.

Safety Minute

Safety and health conference scheduled for April 3-4

The Alaska Safety Advisory Council will hold the 37th Annual Governors Safety and Health Conference on April 3 and 4. This year's conference will be at the Egan Center in downtown Anchorage.

The Safety and Health Conference gives employers and safety and health professionals the opportunity to hear about what has changed in occupational safety and health and to learn about potential solutions and new products.

For more information about the ASAC and the conference, please visit http://labor.alaska.gov/lss/asac.htm.

Safety Minute is written by the Labor Standards and Safety Division of the Alaska Department of Labor and Workforce Development.