

An aerial photograph of a river valley with terraced hillsides. The hillsides are covered in dense, horizontal ridges, creating a textured, layered appearance. The river flows through the center of the valley, winding between the terraces. The overall color palette is dominated by earthy browns, tans, and greys, with a touch of blue from the river.

ALASKA ECONOMIC **TRENDS**

FEBRUARY 2019

4 THINGS TO KNOW
in 2019

FROM THE COMMISSIONER

First jobs a valuable part of career, personal development

By Dr. Tamika L. Ledbetter, Commissioner

During a recent meeting with the department's division directors, we were asked, "What were your first three jobs?" As we each described the memories of our earliest work experiences, it became increasingly clear that early exposure to industry and the working world is an important first step for young people in carving a path to gainful employment as adults.

My three first jobs were as a park cleaner, a shoe store salesperson, and a fast food restaurant crew member. These service jobs gave me opportunities I wouldn't realize until much later in life. As a teenager, I was unknowingly building a disciplined work ethic as well as communication and leadership skills that would become the foundation of my future success. Specifically, my initial work experiences helped me build customer service skills and learn a suggestive selling technique known as "upselling."

Young people and their parents sometimes fail to recognize the value of these early service jobs for personal development as well as career development. Although minimum wage, service jobs for youth are a big part of their future success, not just for building experience but for learning discipline, sacrifice, and people skills. These jobs can also be the catalyst for teens to determine early on what they want — and don't want — in their adult careers. All successful people had to start somewhere.

All teens should have the opportunity to learn about the myriad of career, education, and training options available to them, and this begins by educating the adults in their lives on how to



change the way they communicate with teens about service jobs. Adults can convey the importance of these early work experiences by talking about their own first jobs and how these positions were valuable to their development.

Young people also need to know that parents and teachers are invested in their future, and adults can demonstrate that investment by steering teens toward the many paths that can lead to a viable career. Part of fostering teens' awareness of these options is letting them know it's appropriate to try several options before settling on one path.

To demonstrate my commitment to youth in Alaska and their early engagement in career awareness and opportunities, I have asked each division director to consider hiring a few high school and college interns. We encourage the business community and industry leaders in Alaska to do the same.

The Department of Labor and Workforce Development puts special emphasis on outreach to young Alaskans between 14 and 24 through a range of training and work opportunities. To learn more about our youth-centered training programs, internships, industry options, or apprenticeships, visit jobs.alaska.gov/youth/, or see jobs.alaska.gov/offices/ to connect with your local job center.

Contact Dr. Tamika L. Ledbetter, Commissioner, at (907) 465-2700 or commissioner.labor@alaska.gov.



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ON THE COVER:

Ogives on the Gates Glacier, photo by Neal Herbert, National Park Service. Ogives are alternating bands of light and dark ice that form on some glaciers just below icefalls.

ALASKA
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and WORKFORCE
DEVELOPMENT

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ALASKA ECONOMIC TRENDS

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Trends is a nonpartisan, data-driven magazine that covers a range of economic topics in Alaska.

ON THIS PAGE: The background image for 2019 is an aerial photo of rivers near Circle by Dr. Travis Nelson, who teaches at the Center for Pediatric Dentistry in Seattle. Nelson visited Alaska in May 2010 to provide dental care to children in Venetie, Circle, and Fort Yukon.

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4 Things to Know in 2019

Understanding Alaska's big picture three years into recession

By **DAN ROBINSON**

Two months into 2019, here are a few basic things to understand about Alaska's economy and job market as we teeter between resumed growth and a lingering recession.

ONE: Alaska has been losing jobs for 39 months

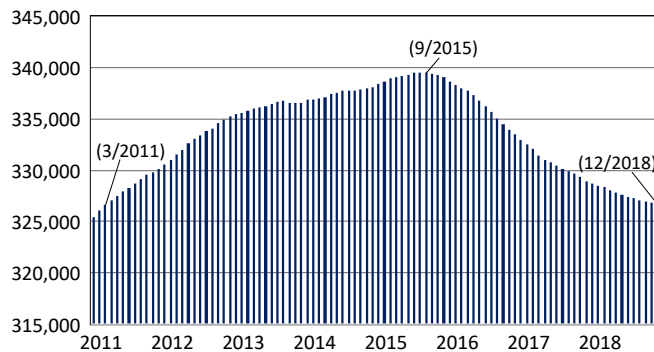
Alaska has been losing jobs since October 2015: 39 months and counting. (See Exhibit 1.) A steep drop in oil prices from above \$100 a barrel to below \$30 caused big oil and gas job losses, which reverberated through the broader economy.

Cumulative loss is now 12,700 jobs

Alaska has lost a cumulative 12,700 jobs so far. This means the state's job count is back down around its

2 Job Loss Nears 13,000

TOTAL ALASKA EMPLOYMENT,* 2011-2018



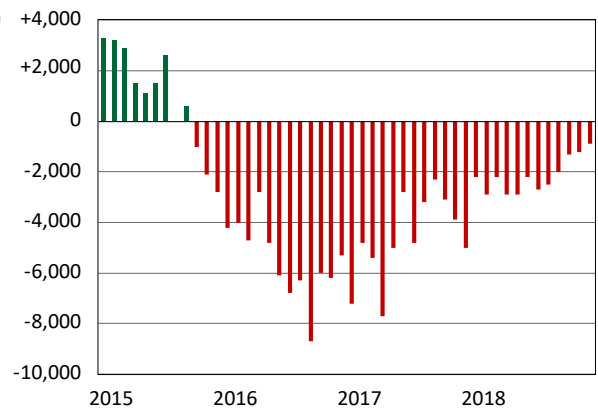
*12-month moving average

Note: Excludes self-employment and the military.

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

1 Alaska Job Losses Slowing

CHANGE FROM PRIOR YEAR, 2015 TO 2018



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

March 2011 level. (See Exhibit 2.)

The biggest losses have been in areas of the state with relatively high concentrations of oil and gas activity, professional and business services firms, state government, and construction companies. (See Exhibit 3.) The North Slope Borough has been hit hardest, but Anchorage, Juneau, and Fairbanks have also recorded substantial losses.

Some areas added jobs from 2015 to 2018

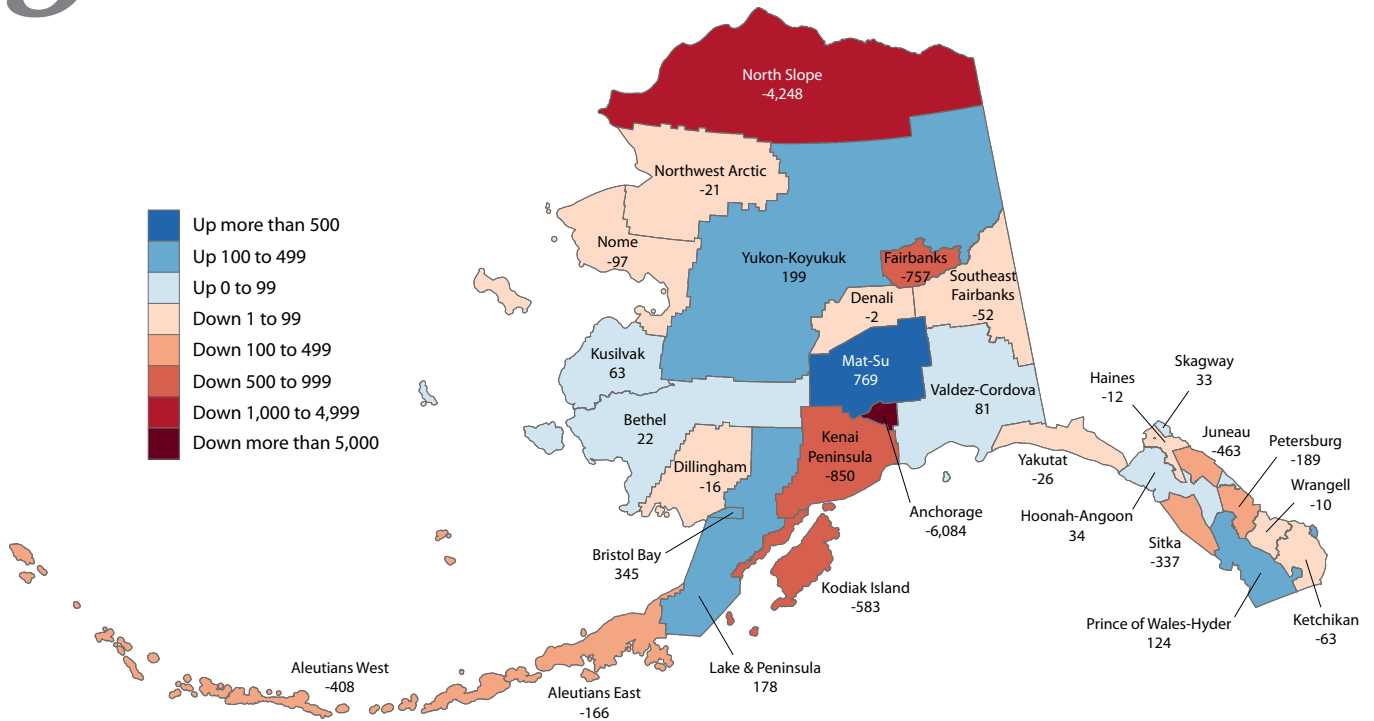
Other parts of the state lost jobs just briefly and recorded higher employment in 2018 than they had in 2015. The Matanuska-Susitna Borough's job count rose 3.4 percent over that period, for example, and much of interior Alaska had at least mild job growth. Most of those gains can be traced back to health care. Of Mat-Su's total growth of 750 jobs, 450 were in health care and social assistance, for example.

The Mat-Su Borough also benefitted from strong, continued population growth. From 2013 to 2018, the borough added about 10,000 people — a distinctly different pattern from the state as a whole, which

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Total Job Loss or Gain by Alaska Area Since 2015

BOROUGHES AND CENSUS AREAS, BASED ON THE FIRST THREE QUARTERS OF EACH YEAR, 2015 TO 2018



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

There's been no 'mass exodus' with this recession. In fact, the migration loss has mainly come from a decrease in the number of people moving here.

had almost no population growth over that period.

... But all Alaskans have felt some impact

The downturn has affected all areas of the state, even those that didn't lose local jobs. North Slope workers who lost their jobs live scattered throughout the state, which means the loss of income from those high-wage jobs also rippled into their home communities.

Further, all Alaskans are affected to some degree by state government's struggles. Permanent Fund Dividend amounts have changed, state-funded services and operations have an uncertain future, and big changes appear necessary in either the size of state government, the types and amounts of revenues collected, or both.

4

Ongoing Net Migration Loss

ALASKA, 2009 TO 2018

Year	In-migrants	Out-migrants	Net migration
2009	43,147	40,138	3,009
2010	45,363	36,873	8,490
2011	40,651	40,247	404
2012	47,478	46,281	1,197
2013	50,626	52,490	-1,864
2014	41,500	48,619	-7,119
2015	39,695	46,134	-6,439
2016	41,415	45,597	-4,182
2017	40,084	48,249	-8,165
2018	38,630	46,207	-7,577

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

TWO: More people have left Alaska than arrived for six straight years

Starting in 2013 and for six years straight, more people have left Alaska than have moved in. (See Exhibit 4.) Gains from natural increase — births minus deaths — were large enough to more than compensate for

migration losses until 2017. The state's total population declined in 2017 and 2018 by less than 2,000 each year.

The cumulative net migration loss of about 35,000 people over those six years is not particularly large — the state lost almost that much in just two years from 1986 to 1988 — but it's the first time since at least 1945 that we've lost more people than we've gained for so many consecutive years.

The biggest change has been to in-migration

Although some speculated people would flee Alaska in droves with this recession — perhaps because they did during the 1980s recession — the losses from migration have been due less to an increase in people leaving than to a decrease in people coming.

The number who left Alaska in 2018, 46,000, was relatively large compared to pre-2012 levels, but it was 6,000 people fewer than the 52,000 who left in 2013. However, the number of people moving to Alaska has fallen by about 12,000 since peaking above 50,000 in-migrants in 2013.

What's driving Alaska's migration-related losses?

People move for a variety of reasons, but they fall into a handful of recognizable categories. A long-running United Van Lines National Movers Study, which doesn't include Alaska or Hawaii but is still relevant for identifying why people move, sorts the primary reasons into five groups: jobs, retirement, family, lifestyle, and health.

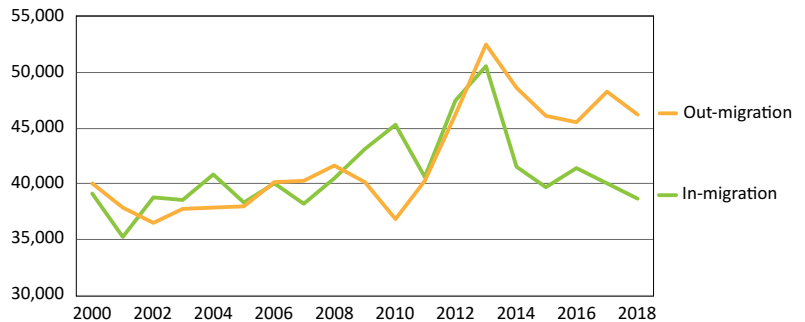
Jobs are the most frequently cited primary reason people move, followed in different years and states by retirement, family, and lifestyle. Health is the least cited of the five.

Relationship between Alaska, U.S. economies affects migration

As we've written about before in *Alaska Economic*

5 Fewer Leaving, But Also Fewer Arriving

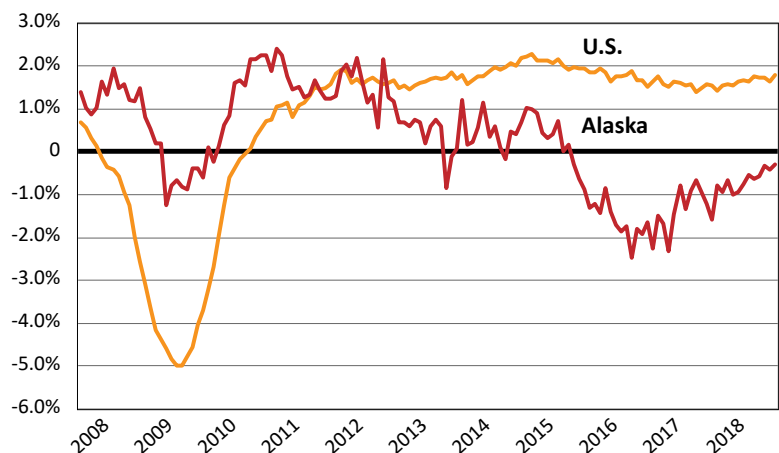
ALASKA'S MIGRATION FLOWS IN AND OUT, 2000 TO 2018



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

6 Alaska, U.S. Job Growth Patterns Diverge

YEAR-OVER-YEAR CHANGE, 2008 TO 2018



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

Trends, net migration tends to be positive in Alaska when the U.S. unemployment rate is high, and it's almost always negative in Alaska when the U.S. unemployment rate is low. (See the October 2015 article "Alaska Migration and U.S. Recessions.")

Alaska last had strong positive net migration in 2010, when the U.S. economy was emerging from its deepest recession since the Great Depression. Out-migration from Alaska that year was the lowest it had been since 2002.

An Alaskan would have had difficulty finding work outside the state during those years, and similarly, job

seekers from elsewhere considering a move to Alaska in the last few years would have had good reason to wait for a more favorable economy here.

In contrast, during the state's 1980s recession, people really did leave the state in droves, even as fewer people moved here. The number of out-migrants soared from 40,000 in 1983 to 57,000-plus in 1986 and 1987, and the number of in-migrants fell from all-time highs of nearly 65,000 in 1983 to about 34,000 in 1988. The combination created an unusually large single-year net migration loss of nearly 20,000 people in 1987.

The older, more rooted population in Alaska today has been less likely to leave despite the extended period of job loss, which is one reason the state's housing market has been remarkably stable in stark contrast to the '80s recession when it crashed. (See the August 2018 article "Why Home Prices Haven't Dropped During Recession.")

Alaska has larger migration flows than other states, both in and out

Large numbers moving in and out each year is normal for Alaska. Over at least the last 25 years, no state has had larger migration flows than we have, which means migration is especially relevant in defining the size and characteristics of Alaska's population.

From 1990 to 2016, Alaska had average gross migration rates (the combined total of in and out migration divided by the total population) of more than 12 percent. Nevada ranked second, followed by Wyoming and Hawaii. At the low end were Michigan and Ohio, where gross migration rates averaged below 4 percent.

Why the negative migration trend matters

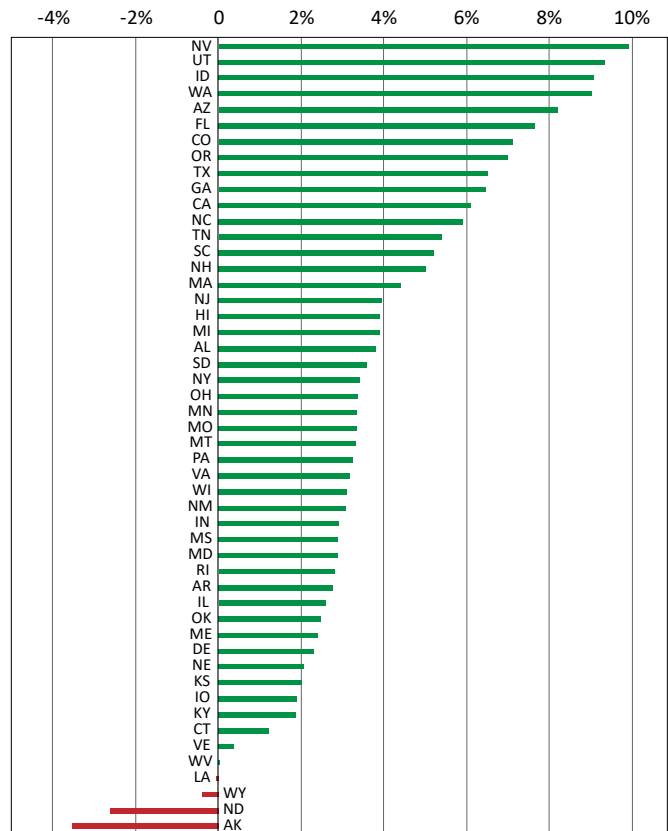
Because we're in new territory with extended negative net migration, it's not yet clear what it means. One possibility is we'll soon return to the normal pattern of intermittent gains and losses from migration, although we'll likely have at least one more year of net migration loss.

Another more concerning possibility is net migration will stay negative for an extended period due to negative perceptions about the vitality of our job market, the quality of our schools, the level of crime, and the overall quality of life here. That possibility raises the stakes on some of the decisions we're in the process of making as a state when it comes to the size of state government and the way we pay for it as well as the future of the Alaska Permanent Fund and Permanent Fund Dividend.

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Job Gain or Loss by State

NOVEMBER 2015 TO NOVEMBER 2018



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

THREE: Alaska's economy ranked last in U.S. from 2015 to 2018

From 2008 to about 2012, Alaska's economy was noticeably stronger than the U.S. economy. (See Exhibit 6.) But Alaska started to underperform relative to the U.S. economy, well before the state started to lose jobs in late 2015.

Although Alaska's losses moderated in 2017 and 2018, our economy remains far weaker as measured by job growth than the country overall.

Nevada ranks first for job growth since 2015

Over the past three years, no state has lost a larger percentage of its jobs than Alaska, and the vast majority of states grew. (See Exhibit 7.) Nevada was strongest over that period, adding 10 percent to its job count, followed by four other western states: Utah, Idaho, Washington, and Arizona.

At the other end of the spectrum, the only two states with noticeable losses besides Alaska were North Dakota and Wyoming, suggesting that sparsely populated states that depend heavily on oil were especially vulnerable to the oil price shock.

Alaska's oil production now ranks sixth among states

Although Texas produces the most oil among states by far (see Exhibit 8), its economy and population of 28 million were large enough to absorb the oil price drop without losing jobs overall.

The same is true of most other states with high oil production and larger populations. Oklahoma, for example, which produces about as much oil as Alaska, lost overall employment for a brief period and then quickly recovered.

Downturns in North Dakota and Wyoming were deeper but shorter

More relevant to Alaska are states like North Dakota, which has a population of about 755,000 (close to Alaska's 736,000), and Wyoming, the least populous state at about 580,000. Those states also depend heavily on oil-related jobs and revenue, and their economies dipped well into the red when prices fell. (See Exhibit 9.)

All three states started losing jobs in 2015, and the losses in North Dakota and Wyoming were much worse in 2015 and 2016 than they were in Alaska. There are a variety of possible reasons, and one is that those states didn't have the level of savings Alaska had to cushion the blow from the loss of oil revenue. However, the more relevant point is that Wyoming's economy was growing again by mid-2017 and North Dakota's growth resumed by mid-2018.

Why is Alaska's recession lingering?

In a study of extended periods of state job losses — loosely defined as recessions — from 1961 to 2016, we found that 93 percent of the time, states didn't lose jobs for more than three years. (See the April 2017 article "When Recessions Linger.")

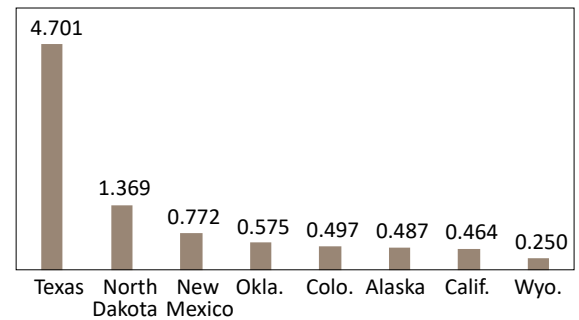
We identified 259 state-level recessions and determined that when a recession lingered beyond three years, it was usually due to structural shifts in a state's economy.

One example is Oregon, which shed jobs for more than three years in the early 1980s when it was in the process of losing much of its timber industry. The value of Oregon's lumber and wood products fell from a high of nearly 13 percent of the state's gross do-

8 What Oil States Produce

PER DAY, OCTOBER 2018

Production in millions of barrels per day



Source: Energy Information Administration

mestic product (the market value of all the goods and services produced in that state) to less than 2 percent. Southeast Alaska saw similar declines when pulp mills in Sitka and Ketchikan closed in the 1990s.

Alaska isn't in the process of losing any of its major economic drivers, but we remain in an already long and messy transition away from relying almost entirely on oil-related revenue to pay for state government.

In 2018, the state made the major move of tapping earnings from its \$60 billion Permanent Fund to generate billions of dollars in annual revenue (\$2.7 billion in the first year and an expected \$2.9 billion in the second).

But major work remains, as evidenced by an expected deficit of \$1.6 billion in the coming fiscal year, even with the additional funds from the Permanent Fund investment earnings. The state has been able to delay some of the hardest choices in recent years by spending money from its savings accounts, but accounts that once added up to nearly \$18 billion are now down to around \$2 billion.

Unlike Alaska, North Dakota and Wyoming aren't in the midst of restructuring their state governments. Their economies have largely absorbed the oil-related shock, and although they haven't yet completely recovered, they're growing at healthy rates.

Similar to those states, Alaska's has begun adding oil jobs again and more growth is likely in the near and mid-term future. But until we figure out our state government situation, we'll struggle to grow or we'll grow at restrained rates.

FOUR: We have a rare amount of control over our economic future

Many of the factors that have historically determined

Alaska's economic health are out of our control. We can do little to move oil prices, for example. At various points in our history, Alaska's mineral and seafood production has been a large enough share of the world market to affect prices, but it's far more common for national and international factors to determine prices.

In 2019, however, we have more control than usual over our economic future. If Alaska's current recession is lingering because we haven't yet resolved our state government challenges, which appears to be the case, we can do something about that.

We've made one big change so far

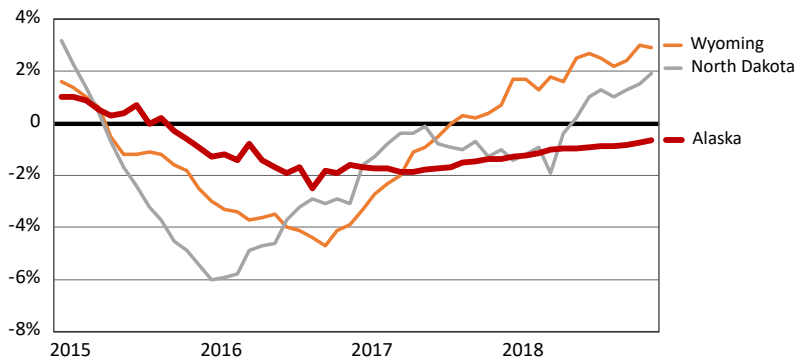
Nearly two years ago, we wrote that this recession could last longer than a state downturn typically would because we'd need to do more than simply absorb the shock from an oil price plunge. We noted that while oil and gas wasn't on its way out as one of the pillars of the state's economy, "a structural change that appears necessary ... is the way we fund state government."

"The options going forward," we said, "include some combination of using investment earnings from the state's Permanent Fund, continuing to reduce the size of state government, implementing new taxes, or reducing the size of Permanent Fund Dividends."

Alaska took the first big step last year when we passed a law that creates a new revenue stream from the Permanent Fund's investment earnings. That revenue stream is forecasted to provide \$2.7 billion in state fiscal year 2019 (July 1, 2018 to June 30, 2019) and \$2.9 billion in fiscal year 2020, according to the Department of Revenue's Fall 2018 Revenue Sources Book.

It's hard to exaggerate the importance of that step. In one fiscal year, the state will go from depending on petroleum revenue for 80 percent of its unrestricted general fund revenue — the funds most available for general state government services and capital budgets — to 40 percent. The Department of Revenue forecasts that by 2020, petroleum revenue will represent just 32 percent of the state's unrestricted general fund revenue.

9 Oil-Producing States' Change in Jobs 2015 TO 2018



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

That change is significant for two reasons. The most obvious is it's a lot of money, and it reduced what had been massive budget deficits that we accommodated only by spending most of our savings. The second and less obvious reason is the investment earnings will be far more consistent and dependable than Alaska's petroleum revenue has been over the years.

Harder choices lie ahead

Even with the influx of nearly \$3 billion from investment earnings, the state expects revenue to fall short by about \$1.6 billion of the preliminary budget for fiscal year 2020. That means major choices remain, and none of the options are painless or universally popular.

Until we act, however, the uncertainty will continue to dampen the state's economy. As just one example of the cost of uncertainty, Mouhcine Guettabi, an economist at the University of Alaska Anchorage's Institute of Social and Economic Research, estimates that the effects of "policy uncertainty" cost the state between \$200 million and \$600 million a year in private investment.

All of our possible choices have pros and cons, and from an economic perspective, none will be cost-free. But until we make those decisions, our economy will struggle.

Dan Robinson is an economist and the chief of Research and Analysis. Reach him in Juneau at (907) 465-6040 or dan.robinson@alaska.gov.

Industry winners and losers

The top and bottom 25 industries for job growth since 1990

By **NEAL FRIED**

While industries' employment can shift dramatically in a short time, such as during a recession, their long-term performance paints a more complete picture of how our modern economy took shape.

National employment grew by 35 percent from 1990 to 2017, and Alaska's total employment grew 39 percent, from 236,179 jobs to 327,963. Over that period, 48 of the state's 188 industry groupings as defined here lost jobs, and 140 grew.

Some of the long-term gains as well as losses are tied to the rise of certain technologies, such as the internet. Other industries are subject to changes in production, such as oil and gas, or changes in demographics, such as health care. Others respond to changes in the state's total population; for example, local government levels adjust to the number of people they serve. Some changes are simply due to changing consumer tastes and habits. Others don't have an obvious cause.

For this article, we narrowed the focus to the 25 biggest job gainers and 25 biggest losers, using 1990 as the starting point because that's when this data series became consistent over time.

THE WINNERS

Nothing comes close to health care

The hands-down winner in Alaska was health care, with its ambulatory health care and hospitals categories in the top two spots.

Ambulatory health care services added nearly 15,000 new jobs on its own over those 27 years, more than tripling in size. (See Exhibit 1.) This category includes all types of outpatient health care providers, such as doctors' and dentists' offices, dialysis centers, medical

laboratories, and home health services.

Adding hospitals, ranked second on the list, and nursing care facilities (ranked 21st) shows health care represented more than 30 percent of all the state's job gains in the top 25 industries over that period.

Restaurants

Restaurants were another long-term winner, adding jobs at nearly twice the rate of the overall economy. Restaurants grew by 77 percent, a gain of 8,053 jobs.

Eating out became an increasingly popular pastime nationally as well as in Alaska, and both added jobs at comparable rates.

Local government

Employment in local governments and K-12 schools combined grew by about 9,000, roughly paralleling the state's overall population growth.

Industries linked to tourism

Alaska's cruise ship passenger count more than doubled between 1995 and 2017. A number of industries benefitted from this long-term growth in tourism in addition to the nudge they received from overall population growth. These included accommodations, amusement and recreation, air transportation, and restaurants.

Mining

Although mining is a big part of Alaska's economic history, the industry became a shadow of its past after World War II. That changed in the late 1980s and early 1990s with the commissioning of the Greens Creek Mine in Juneau and the Red Dog Mine in the Northwest Arctic Borough.

By 2006, Alaska had five large-scale operating metal

Article continues on page 12

1

The Top 25 Industries* for Job Growth Since 1990

ALASKA, 1990 TO 2017

	1990 Jobs	2017 Jobs	1990 to 2017	
			Growth	Percent
1 Ambulatory Health Care Services	5,672	20,645	14,973	264%
2 Hospitals	6,425	14,767	8,343	130%
3 Restaurants and Other Eating Places	10,449	18,502	8,053	77%
4 General Merchandise Stores, including Warehouse Clubs and Supercenters	3,634	10,242	6,608	182%
5 Elementary and Secondary Schools, including Government	16,476	21,183	4,707	29%
6 Local Government, excluding Education and Hospitals	13,053	17,416	4,363	33%
7 Specialty Trade Contractors	4,382	7,335	2,953	67%
8 Traveler Accommodation, including Rooming and Boarding Houses	5,101	7,810	2,709	53%
9 Business, Tech, Trade and Other Schools, incl Gov (exc Elem/Secondary)	6,353	8,853	2,500	39%
10 Services for the Elderly and Persons with Disabilities	299	2,592	2,293	766%
11 Engineering and Drafting Services	1,425	3,448	2,023	142%
12 Other Amusement and Recreation Industries	1,145	3,092	1,946	170%
13 Building Material and Garden Equipment and Supplies Dealers	1,769	3,559	1,790	101%
14 Management of Companies and Enterprises	978	2,660	1,682	172%
15 Metal Ore Mining	933	2,465	1,532	164%
16 Scheduled Air Transportation	3,989	5,464	1,475	37%
17 Wired Telecommunications Carriers	2,015	3,483	1,468	73%
18 Couriers and Express Delivery Services	957	2,265	1,308	137%
19 Services to Buildings and Dwellings	2,007	3,246	1,239	62%
20 Residential Mental Retardation, Mental Health, and Substance Abuse Facilities	864	2,040	1,175	136%
21 Nursing Care Facilities and Community Care Facilities for the Elderly	651	1,773	1,123	173%
22 Sporting Goods, Hobby, and Musical Instrument Stores	926	1,896	970	105%
23 Vocational Rehabilitation Services	538	1,474	936	174%
24 Computer Systems Design and Related Services	320	1,250	931	291%
25 Miscellaneous Store Retailers	1,692	2,612	920	54%
Total Alaska employment	236,179	327,963	91,784	39%

2

The 25 Industries* With the Most Job Loss Since 1990

ALASKA, 1990 TO 2017

	1990 Jobs	2017 Jobs	1990 to 2017	
			Decline	Percent
1 Federal Government, excluding U.S. Postal Service (see #4)	15,569	13,115	-2,454	-16%
2 Forestry and Logging	2,307	220	-2,087	-90%
3 Food and Beverage Stores	7,108	5,241	-1,867	-26%
4 Newspaper, Periodical, Book, and Directory Publishers	1,449	532	-917	-63%
5 Legal Services	1,994	1,224	-770	-39%
6 Postal Service	2,177	1,569	-607	-28%
7 Sawmills and Wood Preservation	604	85	-519	-86%
8 Broadcasting (except Internet)	1,172	757	-416	-35%
9 Wholesale Electronic Markets and Agents and Brokers	773	369	-404	-52%
10 Drilling Oil and Gas Wells	999	635	-363	-36%
11 Oil and Gas Pipeline and Related Structures Construction	1,065	718	-347	-33%
12 Consumer Goods Rental	561	252	-309	-55%
13 Nonscheduled Air Transportation	1,253	948	-305	-24%
14 Employment Services	1,062	761	-301	-28%
15 Seafood Product Preparation and Packaging	9,637	9,398	-239	-2%
16 Freight Transportation Arrangement	492	275	-218	-44%
17 Drinking Places (Alcoholic Beverages)	1,619	1,414	-205	-13%
18 Drycleaning and Laundry Services	582	385	-197	-34%
19 Other Heavy and Civil Engineering Construction	429	243	-186	-43%
20 Funds, Trusts, and Other Financial Vehicles	200	20	-181	-90%
21 Department Stores	873	700	-173	-20%
22 All Geophysical Surveying and Mapping Services	567	416	-151	-27%
23 Travel Arrangement and Reservation Services	884	739	-145	-16%
24 Business Support Services	528	385	-143	-27%
25 Direct Insurance and Reinsurance Carriers	605	470	-134	-22%

Note: Industry employment produced at the three-digit North American Industry Classification System level

*These lists exclude a few industry categories due to disclosure restrictions and other limitations. The industry categories used here are not necessarily comparable to the industry categories we typically publish, which come from the Quarterly Census of Employment and Wages.

Source for exhibits 1 and 2: Alaska Department of Labor and Workforce Development, Research and Analysis Section

mines, nearly tripling mining employment. Metal ore mining grew from 933 jobs in 1990 to 2,465 in 2017.

International cargo

Because of the dramatic rise in global trade, the Anchorage International Airport has become the second busiest airport in the country by landed cargo weight, which increased from 1.1 billion tons in 1990 to 5.8 billion tons in 2017.

As a result, cargo carriers such as UPS and FedEx grew their workforces from a combined 957 jobs in 1990 to 2,265 in 2017. These carriers are part of “couriers and express delivery services,” which ranked 18th.

Other industry winners

A number of other industries made major gains during that 27-year period. For example, jobs providing services to the elderly grew from 299 to 2,592 as Alaska’s 65-plus population nearly quadrupled. Computer systems design also made the cut at 24th, which was not surprising given the rise of computers and the internet.

Other industries, such as specialty trade contractors, were hit recently by the recession but still grew overall in the long term.

Another 114 industries also grew, just not enough to make the top 25.

THE LOSERS

Federal government down the most

The list of overall job losers is much shorter than the list of winners, but the 25 industries that lost the most also played a major role in shaping today’s economy. (See Exhibit 2.)

Civilian federal government tops the list, losing 16 percent of its employment over 27 years (-2,500 jobs). Alaska’s federal employment peaked at 20,000 in 1993 and has declined steadily since. Over the same period, national federal employment also lost some ground (less than 5 percent), but then recovered most of that loss.

Because federal government is one of the highest-paying industries in Alaska, these declines represent a disproportionate hit to the state’s economy.

While not all of the causes are clear, the “reinvention of government” initiative in Alaska, largely aimed at reducing government’s size, started the federal employment decline in the mid-1990s. Another component was privatization of federal services, such as the transformation of the Alaska Native health care system from a largely federally run organization to nonprofit establishments run by Alaska Natives.

These numbers don’t include the U.S. Postal Service, which also lost 28 percent of its Alaska employment over that period, similar to its losses nationally. Automation, financial strains, and competition are among the likely reasons.

Logging

Forestry and logging, once an industry that provided thousands of high-paying jobs in Alaska and mainly in Southeast, all but disappeared after peaking during the late 1980s and early 1990s. This spurred one of the largest structural changes in Alaska’s modern economy.

Logging employment hit 4,000 in 1989. The following year, Alaska’s two largest pulp mills alone employed 1,580 people. The Ketchikan Pulp Mill was the state’s

10th largest private sector employer in 1990 and the Alaska Pulp Corporation in Sitka was 22nd.

By 2017, just 220 total jobs remained, largely the result of changing federal timber policies and competition.

Some areas in Southeast have never fully recovered from these losses. For example, Ketchikan had 14,764 people in 1995, higher than its 2017 population of 13,782.

Oil-related industries

A number of industries tied to oil made the list, including pipeline transportation, whose losses were exacerbated by automation and lower production.

The oil industry’s “job loser” status is a fairly recent development, however. Oil industry employment peaked in 2015 before turning into the biggest casualty of the current state recession, shedding 4,400 jobs over the two years that followed.

Legal services

Nationally, legal services grew modestly over this 27-year period, but in Alaska the industry ranks fifth for job loss.

From 1990 to 2017, 140 of Alaska’s 188 industries grew overall, and 48 lost jobs.

As with many other industries, automation and other efficiencies were likely factors. Much of the decrease was among legal staff such as paralegals and legal secretaries, and more lawyers began to do their own research and document preparation. Another likely factor is the completion of litigation tied to the 1989 Exxon oil spill, which inflated the 1990 numbers.

Traditional media

With the advent of the internet, the decline of print newspapers became a well-documented phenomenon around the country as media switched to less labor-intensive electronic delivery.

In Alaska, this industry ranked fourth for long-term loss, as by 2017 it had dwindled to about a third of its 1990 size. In addition to newspapers, this category includes other print media such as magazines and phone books.

Broadcasting suffered similar losses in Alaska, ranking eighth, as more programming moved online.

Other industry losers

While restaurants were among the biggest winners, bars lost ground, ranking 17th among Alaska's biggest job losers. These were mainly standalone bars that served little or no food, and they faced stiff competition from places that served food and drinks as well as changing demographics and shifting consumer preferences.

Dry cleaning and laundry services also lost ground in the long term with the growth of informal dress, new fabrics, automation, and more homes installing their own laundry facilities.

Travel arrangement and reservation services came in 23rd for loss. These were another classic casualty of the internet, which made it easier for people to make their own plans.

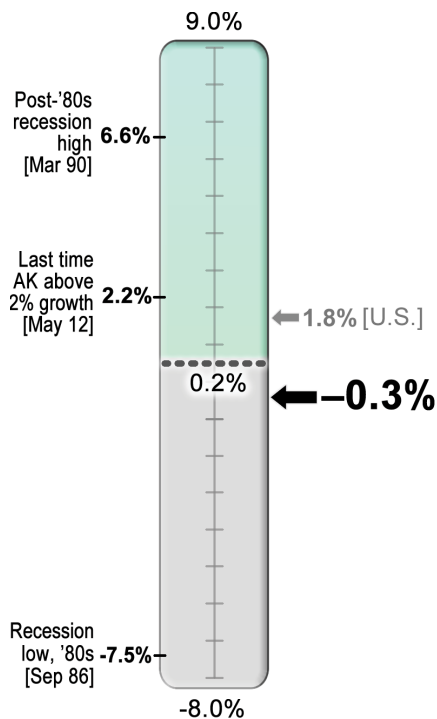
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Gauging Alaska's Economy



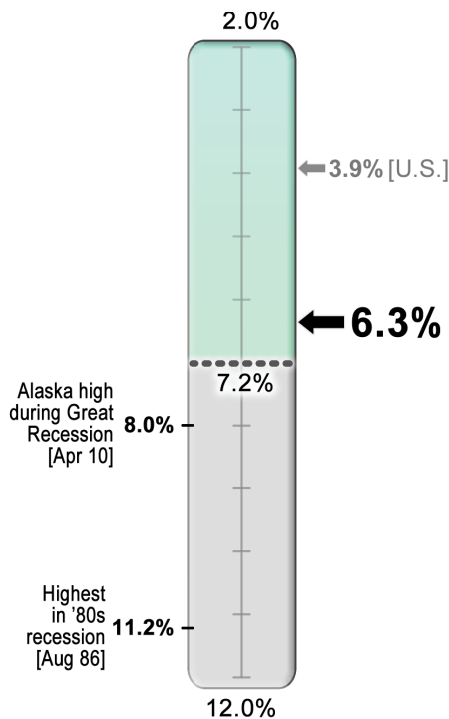
Job Growth

December 2018
Over-the-year percent change



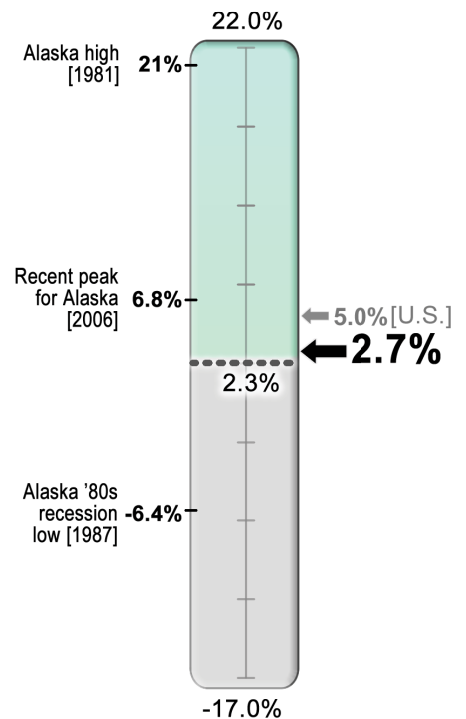
Unemployment Rate

December 2018
Seasonally adjusted



Wage Growth

2nd Quarter 2018
Over-the-year percent change

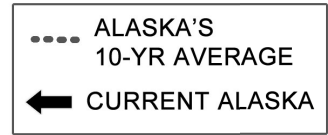


- The state has registered over-the-year job losses for 39 consecutive months, the longest period of job loss in its modern history.
- Job losses are smaller now than at any time since October 2015.
- U.S. job growth remains strong and has been positive since 2010, with the strongest growth in 2015.

- Alaska's rate has fallen noticeably in 2018, but those numbers are preliminary and the revisions will likely show smaller declines.
- The state's unemployment rate is now nine-tenths of a percentage point lower than its 10-year average.
- Unemployment rates are complicated economic measures and generally less telling than job or wage growth as indicators of broad economic health.

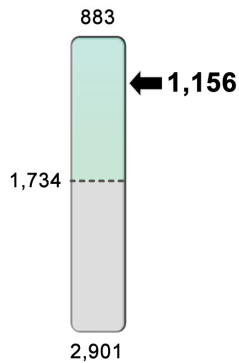
- Wages have been up for three consecutive quarters after being down the prior seven.
- Wage growth accelerated from first quarter 2018 to second quarter, which hints at a strengthening economy.

Gauging Alaska's Economy



Initial Claims

Unemployment, week ending Dec. 29, 2018†

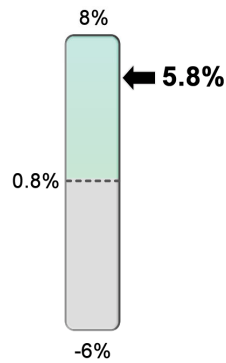


➤ For a variety of reasons, initial claims are well below the 10-year average despite job losses.

† Four-week moving average ending with the specified week

GDP Growth

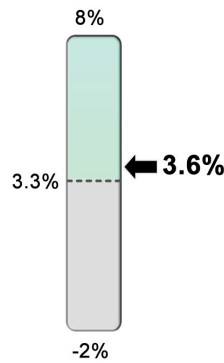
2nd Quarter 2018
Over-the-year percent change



➤ Gross domestic product is the value of the goods and services a state produces. Alaska's GDP has grown for the last seven quarters after declining for the prior 17.

Personal Income Growth

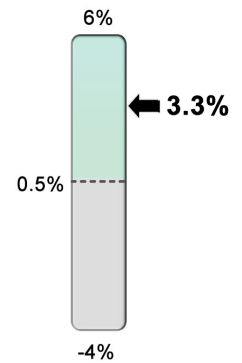
3rd Quarter 2018
Over-the-year percent change



➤ Personal income includes wages as well as government transfer payments (such as Social Security, Medicaid, and the PFD) and investment income. Growth has resumed and is now above the 10-year average.

Change in Home Prices

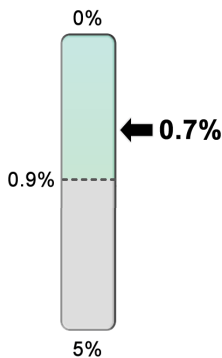
3rd Quarter 2018
Over-the-year percent change



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

Foreclosure Rate

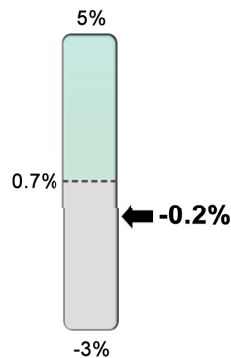
3rd Quarter 2018



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

Population Growth

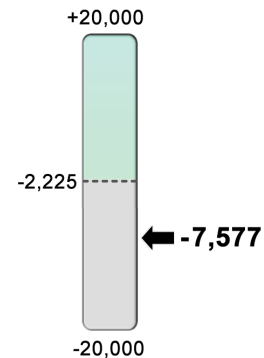
2017 to 2018



➤ The state's population has remained mostly stable during the state's recession, although 2018 was the second year of small population declines since 1988.

Net Migration

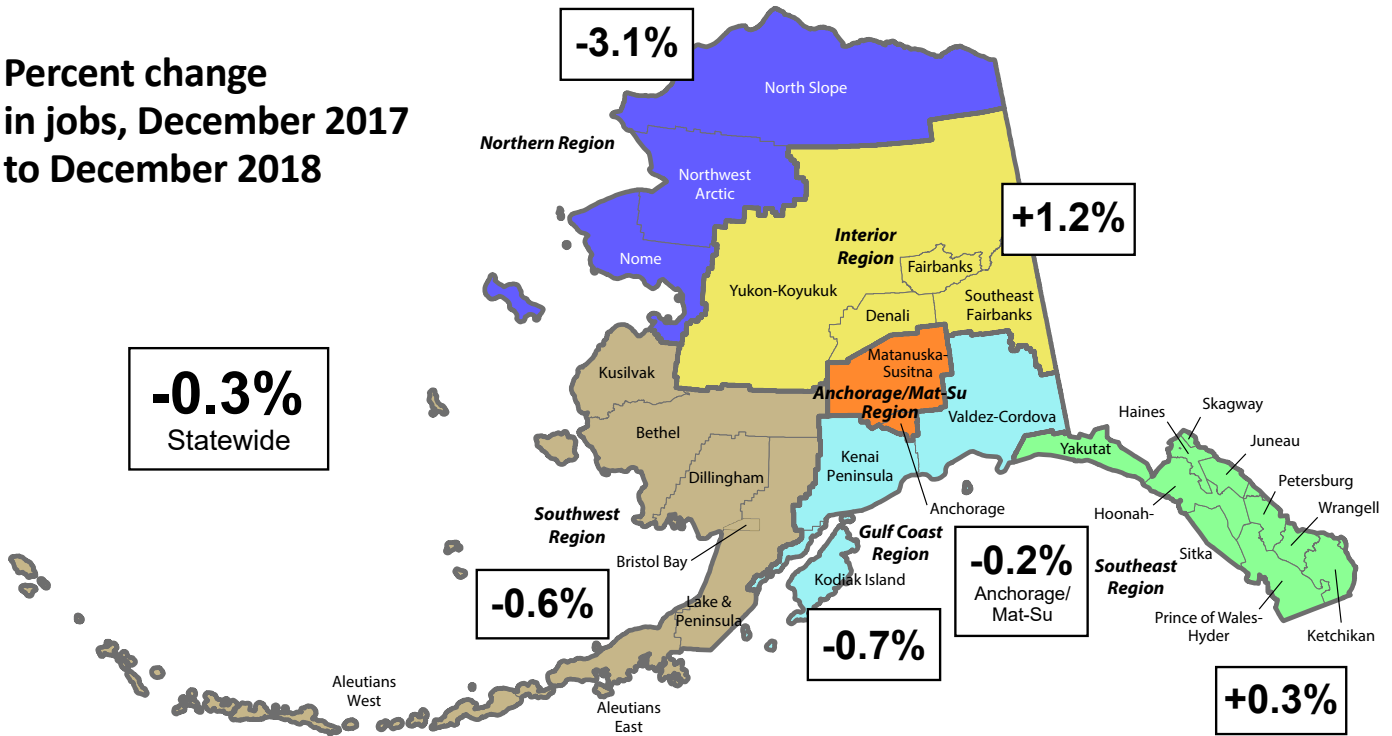
2017 to 2018



➤ The state had net migration losses for the sixth consecutive year in 2018, although natural increase (births minus deaths) was large enough to offset those losses until 2017 and 2018.

Employment by Region

Percent change
in jobs, December 2017
to December 2018



Unemployment Rates

Seasonally adjusted

	Prelim.		Revised
	12/18	11/18	12/17
United States	3.9	3.7	4.1
Alaska	6.3	6.3	7.2

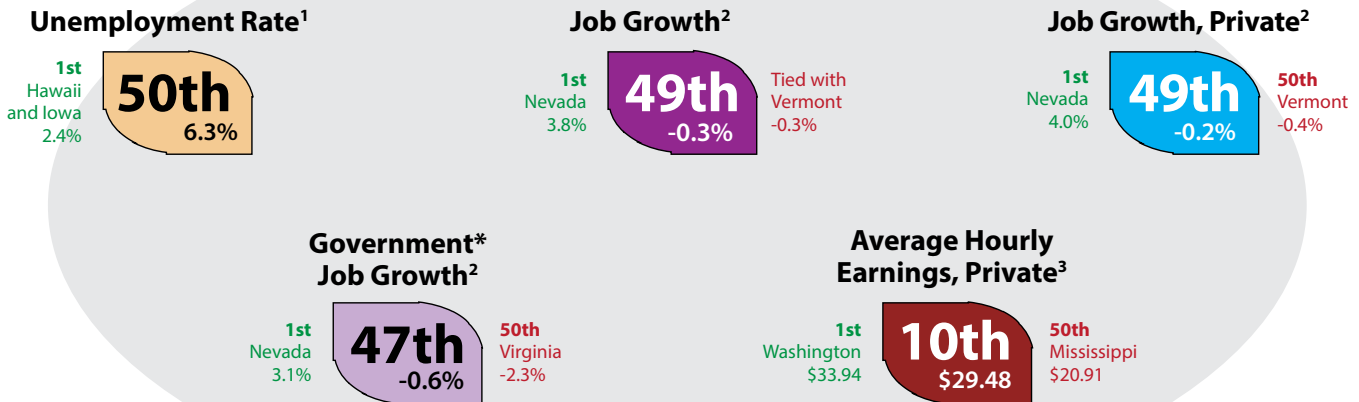
Not seasonally adjusted

	Prelim.		Revised
	12/18	11/18	12/17
United States	3.7	3.5	3.9
Alaska	6.4	6.3	7.3

Regional, not seasonally adjusted

	Prelim.			Revised		
	12/18	11/18	12/17	12/18	11/18	12/17
Interior Region	6.6	6.2	7.5			
Denali Borough	16.2	16.3	20.7			
Fairbanks N Star Borough	5.8	5.5	6.5			
Southeast Fairbanks Census Area	9.7	8.9	10.9			
Yukon-Koyukuk Census Area	14.1	14.1	17.9			
Northern Region	9.0	9.5	10.3			
Nome Census Area	10.1	10.3	11.6			
North Slope Borough	5.9	6.1	5.9			
Northwest Arctic Borough	11.2	12.4	13.9			
Anchorage/Mat-Su Region	5.6	5.5	6.5			
Anchorage, Municipality	5.1	5.1	5.8			
Mat-Su Borough	7.2	7.0	8.6			
Southwest Region	11.0	10.1	11.7			
Aleutians East Borough	7.2	4.9	5.4			
Aleutians West Census Area	5.3	4.5	5.1			
Bethel Census Area	11.3	11.2	12.6			
Bristol Bay Borough	14.0	11.0	13.8			
Dillingham Census Area	8.8	8.0	10.5			
Kusilvak Census Area	18.0	17.0	18.9			
Lake and Peninsula Borough	12.4	12.8	14.7			
Gulf Coast Region	8.0	7.4	8.7			
Kenai Peninsula Borough	7.6	7.5	8.9			
Kodiak Island Borough	8.8	5.7	7.2			
Valdez-Cordova Census Area	8.7	9.2	9.9			
Southeast Region	6.6	6.4	7.0			
Haines Borough	13.0	11.8	13.1			
Hoonah-Angoon Census Area	15.9	16.9	18.5			
Juneau, City and Borough	5.0	4.6	4.9			
Ketchikan Gateway Borough	6.6	6.7	6.8			
Petersburg Borough	9.0	7.9	9.9			
Prince of Wales-Hyder Census Area	10.3	10.4	12.0			
Sitka, City and Borough	4.4	4.0	4.9			
Skagway, Municipality	17.9	19.5	20.7			
Wrangell, City and Borough	8.0	7.3	8.5			
Yakutat, City and Borough	10.7	11.2	10.0			

How Alaska Ranks



*Federal, state, and local

¹December seasonally adjusted unemployment rates

²December employment, over-the-year percent change

³December hours and earnings

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

Other Economic Indicators

	Current		Year ago	Change
Urban Alaska Consumer Price Index (CPI-U, base yr 1982=100)	223.099	1st half 2018	218.660	+0.9%
Commodity prices				
Crude oil, Alaska North Slope,* per barrel	\$58.86	Dec 2018	\$63.79	-7.73%
Natural gas, residential, per thousand cubic feet	\$11.02	Oct 2018	\$11.17	-1.34%
Gold, per oz. COMEX	\$1,282.10	1/22/2019	\$1,336.90	-4.10%
Silver, per oz. COMEX	\$15.32	1/22/2019	\$16.99	-9.83%
Copper, per lb. COMEX	\$2.67	1/22/2019	\$3.20	-16.52%
Zinc, per MT	\$2,588.00	1/21/2019	\$3,414.00	-24.19%
Lead, per lb.	\$0.91	1/22/2019	\$1.19	-23.53%
Bankruptcies				
	130	Q3 2018	97	+34.0%
Business	3	Q3 2018	7	-57.1%
Personal	127	Q3 2018	90	+41.1%
Unemployment insurance claims				
Initial filings	5,709	Dec 2018	6,008	-4.98%
Continued filings	47,820	Dec 2018	56,686	-15.64%
Claimant count	11,796	Dec 2018	14,338	-17.73%

*Department of Revenue estimate

Sources for pages 14 through 17 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

SAFETY MINUTE

How employees can protect workers from cold stress

Winter creates a range of hazards, including slippery roads and surfaces, strong winds, and cold. Employers must control these hazards if a work site is subject to winter weather, as exposure can affect an employee's ability to work in a cold environment and lead to injury, illness, or death.

Cold stress can be brought on by frigid temperatures, wind, or contact with cold water or surfaces, and can lead to hypothermia or frostbite. Frostbite and hypothermia are possible even when the ambient temperature is well above freezing. This is due to wind chill, which is determined by the velocity and dampness of the air in addition to its temperature. For example, if it's 40 degrees outside but the wind is blowing 15 mph, the wind chill is 32 degrees, or the freezing point.

Recognizing hypothermia and frostbite: Hypothermia begins when the body's core temperature drops to 95 degrees. People will shiver or stomp their feet to get warm, and they may slur their speech and fumble with items in their hands. As their temperature continues to decrease, symptoms will worsen to the point that shivering stops. An affected worker may not be able to stand. When the core temperature hits 85 degrees, unconsciousness and death can result.

Frostbite is when skin freezes and loses water, and it usually affects the extremities, especially the hands and feet. Skin will turn red, then purple, then white. In severe cases, the skin can blister and amputation can become necessary.

Use controls and train workers: Train workers to rec-

ognize cold stress and know the steps to take if they or a coworker show symptoms, using the buddy system to monitor each other's condition. Employers can also reduce risk through engineering controls such as heaters or partitions to minimize wind chill.

Dress in proper clothing: Encourage workers to dress in layers, which will allow them to adjust to changing conditions. It's a good idea to have an extra set of clothes in case sweat dampens clothing, which can reduce the body's temperature. Employers aren't required to provide cold weather clothing per OSHA's exception in 29 CFR 1910.132(h)(4)(iii), however, employers typically provide hats, gloves, parkas, jackets, or raincoats in these conditions.

Schedule work for warmer times: This option may not be feasible, but scheduling work for warmer times of the day or moving projects to warmer months can minimize risk. It's also a good idea to provide a place for workers to get out of the cold and warm up throughout the day.

The Department of Labor and Workforce Development's Occupational Safety and Health Section provides free safety consultations for employers. AKOSH consultants visit the workplace to evaluate hazards and recommend corrective measures. To request a consultation, visit labor.alaska.gov/lss/oshhome.htm or call (800) 656-4972. For more information on managing cold stress, visit labor.alaska.gov/lss/pads/cold.htm.

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

EMPLOYER RESOURCES

Contractors and the Vietnam Era Veterans' Readjustment Assistance Act

The Office of Federal Contract Compliance Programs protects workers, promotes diversity, and enforces the law. OFCCP holds federal contractors and subcontractors responsible for complying with affirmative action requirements and avoiding discrimination against protected classes.

The office offers compliance assistance, investigates employee complaints, obtains conciliation agreements, and monitors contractor/subcontractor progress in fulfilling agreements through periodic compliance reports. See www.dol.gov/ofccp/ for compliance assistance and posters.

OFCCP oversees several affirmative action laws and regulations associated with federal contracts. One, the Vietnam Era Veterans' Readjustment Assistance Act, applies to federal contracts of \$150,000 or more. Its provisions include listing recruitments with a state job bank (ALEXsys in Alaska), self-identifying as a federal contractor, requesting targeted recruitment assistance from Alaska Job Center staff, and ensuring the recruitment includes an equal opportunity tag line similar to:

"VEVRAA Federal Contractor: [Company] is an equal opportunity/affirmative action employer. All qualified applicants will

be considered for employment without regard to race, color, religion, sex, national origin, disability, or protected veteran status."

Alaska Job Center staff do not ask how much a federal contract is worth, so employers are responsible for knowing which federal and state recruitment provisions apply to them. That means staff will not know if a contract falls under VEVRAA regulations.

Once the employer has self-identified as a federal contractor, job center staff will assist with lawful and fruitful recruitment, seeking applicants who fit the employer's affirmative action goals. In addition, ALEXsys lets an employer fulfill many VEVRAA notification provisions as a standard business practice, and provides a checkbox to help job center staff identify federal contractors so they know how to assist.

Contact your local Alaska Job Center Business Connection staff at www.jobs.state.ak.us/employer.htm for help with all your employment needs.

Employer Resources is written by the Employment and Training Services Division of the Alaska Department of Labor and Workforce Development.