

ALASKA ECONOMIC **TRENDS**

NOVEMBER 2018

A fishing boat is silhouetted against a bright sunset sky over a shimmering sea. The sun is low on the horizon, creating a dense field of bright, sparkling reflections on the water's surface. The boat has a complex rigging system with multiple masts and lines, typical of a commercial fishing vessel.

FISHING JOBS REBOUND in 2017

ALSO INSIDE

Seafood processing injury rate highest among industries
Aleutians East, the processing-centered borough

FROM THE COMMISSIONER

A renewed focus on career and technical education

If I told you there were high school programs that could increase graduation rates, increase the likelihood of a student entering a postsecondary training or education program after graduation, and position students for high wage jobs, you'd likely want all students to take them. Luckily for all of us, such programs already exist — they are career and technical education programs, CTE for short, and they're great for Alaska.



HEIDI DRYGAS
Commissioner

CTE's predecessor, called vocational education or "voc-ed," was high school focused and often viewed as something taken in lieu of academic courses. Many regarded it as afterthought — an ad hoc set of classes in a dusty corner of the high school. We must dispel this outdated concept.

Today's CTE programs are found in middle school, high school, and postsecondary institutions. They are integrated and rigorous, and they provide opportunities for career exploration, investigation, and choice. These classes provide academic, technical, and employability skills, and they support and reinforce academic learning. Simply put, CTE provides Alaskans with real-world experiences to prepare for high-skill, high-demand, and high-wage careers in health care, information technology, engineering, hospitality, construction, and many other industries.

In recent years, we've seen a resurgence of interest in CTE programs. Recognition is growing nationally that CTE can meet anticipated workforce development needs, particularly for the millions of American jobs that require more than a high school diploma but less than a four-year college degree. We also know that the baby boomer generation will retire at a rapid rate in the coming decades, amplifying the current need for highly trained and skilled workers.

When advising any students on educational pathways that lead to a career, it's time to give CTE equal

billing with a traditional four-year college education.

In Alaska, CTE has an increasingly prominent role in workforce planning efforts. Acknowledging this, and in collaboration with the Department of Education and Early Development and the University of Alaska, my department and the Alaska Workforce Investment Board formed a workgroup of board members and CTE professionals to revisit the state's 2010 CTE Plan. The workgroup has spent the last year engaging with stakeholders, revisiting current CTE strategies, and compiling guidance on how best to implement a CTE plan that will ensure accessible, high-quality CTE programs that align with the state's workforce demands. The 2018 addendum to Alaska's CTE Plan is now available as a resource for educators, families, business and industry, and policy makers.

All of this focus on CTE is well timed. The department's recently developed Alaska LNG Project Gasline Workforce Plan identifies the expansion of Alaska's CTE system as a method of meeting anticipated project labor demand. In addition to the Alaska LNG Project, which will require thousands of skilled workers to build and operate the gasline, other significant infrastructure and resource development projects are on the horizon: the military construction build-out in the Interior, the resurgence of activity in our North Slope oil patch, and mining projects such as Donlin Gold.

Given the labor needs of these projects and our state's aging skilled workforce, now is the time to enroll more Alaskans in programs that can give them the technical skills they need to meet industry demand and earn good, family-sustaining wages.

I'm proud of the department's efforts to enhance CTE opportunities, including our support for statewide regional training centers and Alaska's construction academies and our push to expand registered apprenticeship and preapprenticeship opportunities. CTE is great for Alaskans, great for employers, and great for our economy.

Contact the office of Commissioner Heidi Drygas at (907) 465-2700 or commissioner.labor@alaska.gov.



Follow the Alaska Department of Labor and Workforce Development on Twitter (twitter.com/alaskalabor) and Facebook (facebook.com/alaskalabor).

NOVEMBER
2018

Volume 38 Number 11
ISSN 0160-3345

SARA WHITNEY
Editor

SAM DAPCEVICH
Cover Artist

DAN ROBINSON
Chief, Research
and Analysis

ON THE COVER:

Salmon troller in Sitka. Photo
courtesy of sitkaphotos.com.

PAGE 11: Unga Island is adjacent to
Popof Island, home to Sand Point,
in the Aleutians. Photo courtesy of
Flickr user Albert SH.

ALASKA
DEPARTMENT of LABOR
and WORKFORCE
DEVELOPMENT

Governor Bill Walker
Commissioner Heidi Drygas

ALASKA ECONOMIC TRENDS

4 FISHING JOBS REBOUND

Most regions, species see growth
in 2017 after a dismal 2016

8 THE HIGHEST INJURY RATES

Among Alaska industries,
seafood processing tops the list

11 ALEUTIANS EAST

Processing-centered borough
stands out in nearly every way

14 GAUGING ALASKA'S ECONOMY

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

This material is public information, and with appropriate credit it may be reproduced without permission.
To sign up for a free electronic subscription, read past issues online, or purchase a print subscription, visit labor.alaska.gov/trends.

Fishing Jobs Rebound

Most regions, species see growth in 2017 after a dismal 2016

By **JOSH WARREN**

After a steep drop in 2016, seafood harvesting employment rebounded in 2017, growing 8.3 percent and hitting a record of 8,509 average monthly jobs.

The employment growth was widespread, covering most species and regions, which was a departure from previous years when certain fisheries' or regions' growth tended to offset losses elsewhere.

The 8.3 percent growth for seafood harvesting in 2017 was the largest in percent terms among Alaska industries. Health care, which has been marked by strong job growth for decades and has been one of the few industries to grow throughout the state recession, grew by just 2.3 percent. (For more on how we generate fish harvesting employment estimates, which differ from other industries' data but are useful for general comparison, see the sidebar on page 7.)

Biggest gains were in summer, which easily offset early losses

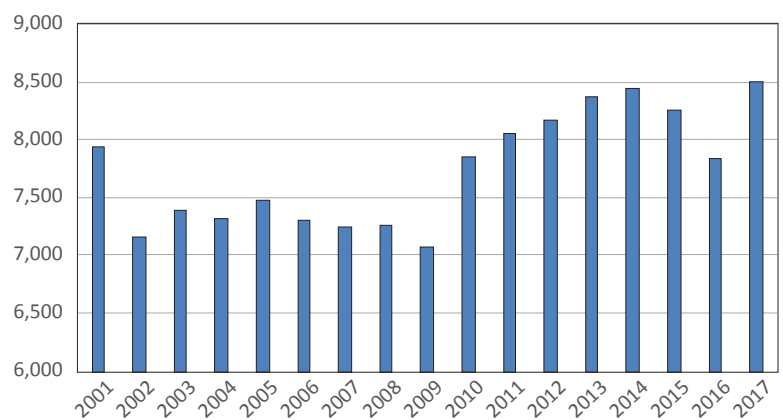
Summer and fall brought impressive growth in harvesting jobs after a weak start to the year. Most of the year's growth came during the summer. July has always been the seafood harvesting peak, and in 2017 it went up by another 634 jobs, bringing the July total to 24,459. (See Exhibit 2.)

The biggest jumps came on the edges of the summer, however. June, September, and October each gained more than 1,000 jobs from 2016's levels. June's employment grew the most, up 1,877 jobs from June 2016.

1

A Big Jump in 2017

ALASKA FISH HARVESTING JOBS, 2001 TO 2017



Sources: Commercial Fisheries Entry Commission; National Marine Fisheries Service; and Alaska Department of Labor and Workforce Development, Research and Analysis Section

The year's few losses came in the early months. January, February, and March levels were all down from the year before. Those months are more important for crab fisheries than other species, which is why crab harvesting was one of the few fisheries that lost jobs in 2017.

Even with the poor harvests and lower job counts early in the year, however, the strong growth later in 2017 was more than enough to offset losses and break job records.

Salmon jobs grew overall, but varied considerably by region

Some regions lost salmon harvesting jobs in 2017, and levels fluctuated considerably by region, but the fishery's employment still grew overall.

The Yukon Delta was hardest hit, with every month's job levels down from 2016 and a loss of 12.7 percent

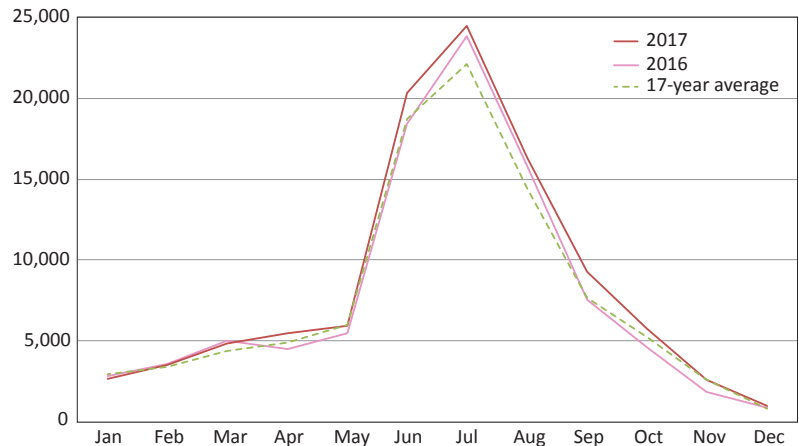
overall. Salmon harvesting jobs alone fell 11.6 percent.

Southeast also sustained some job loss in salmon harvesting, with some months down more than 200 jobs from 2016, but strong growth in April and September partially offset those losses.

Alaska's most dramatic seafood harvesting job growth still came from salmon fishing, despite those regional declines. Bristol Bay's job counts grew most. They were up more than 900 in June as the fishery started. Even some of the smaller salmon fisheries, such as those in Kodiak and the Northern Region, gained jobs.

2 Jobs Consistently Spike In the Summer

SEAFOOD HARVESTING JOBS BY MONTH, 2016 AND 2017



Sources: Commercial Fisheries Entry Commission; National Marine Fisheries Service; and Alaska Department of Labor and Workforce Development, Research and Analysis Section

Groundfish jobs up because of Aleutians

Groundfish is a grouping of species (primarily walleye pollock and Pacific cod) that's reported mainly out of ports in the Aleutians, so its employment is tied to that region.

Groundfish harvesting employment in the Aleutians was up by an average of 264 per month in 2017, with growth during all months. At least some of that growth was due to new entrants to the fisheries, as reflected by new permit numbers.

All other regions' groundfish harvesting employment

declined, however, and the Northern Region's disappeared. Kodiak's losses were steepest, at 81 lost jobs each month on average.

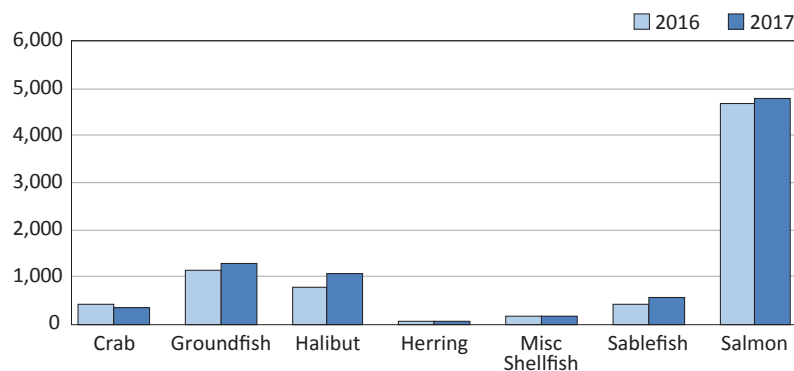
Similar to salmon harvesting, groundfish employment grew overall because the regional groundfish losses were much smaller than the growth in other areas.

Sablefish employment grew everywhere but Bristol Bay

While technically a type of groundfish, we report sablefish as a separate category. Employment harvesting sa-

3 Harvesters Up For Most Species in 2017

ALASKA SEAFOOD HARVESTING, 2016 AND 2017



Sources: Commercial Fisheries Entry Commission; National Marine Fisheries Service; and Alaska Department of Labor and Workforce Development, Research and Analysis Section

blefish, also known as black cod, is spread wider across regions than other groundfish, with the largest regional workforce in Southeast. Southeast gained 88 sablefish harvesting jobs per month on average in 2017.

Bristol Bay lost its sablefish employment, but had just one job to begin with. Other than Bristol Bay, all regions' sablefish harvesting grew,¹ resulting in total growth of 166 monthly jobs from 2016.

Modest growth in smaller fisheries

A number of smaller fisheries gained a modest number of jobs in 2017. Herring harvesting employment was up by five jobs per month, the result of a sharp increase in Bristol Bay herring harvesting (up seven jobs, or 118 percent) making up for minor losses elsewhere in the state. Miscellaneous shellfish harvesting employment was up by 17 per month, mainly in Southeast.

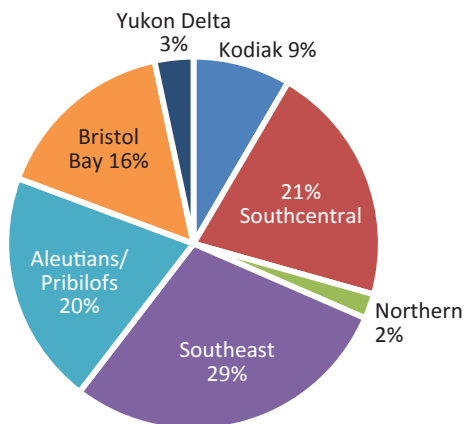
Crab fisheries had the only employment loss by species

By species, only crab fisheries lost jobs overall. Most crab is harvested in Southeast and in the Aleutians, and those regions sustained the most loss. The Aleutians lost 56 jobs and Southeast lost 47. Statewide, crab harvesting monthly employment was down by 96 from the same months in 2016.

¹Exceptions were the Northern Region and Yukon Delta, which have no sablefish harvesting.

5 Fishing Jobs by Region

SOUTHEAST HAS LARGEST SHARE, 2017

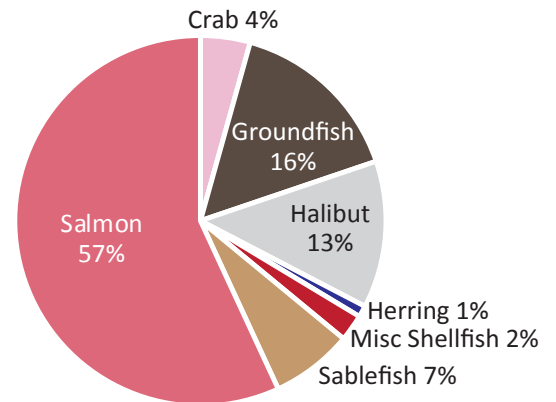


Sources: Commercial Fisheries Entry Commission; National Marine Fisheries Service; and Alaska Department of Labor and Workforce Development, Research and Analysis Section

4

Most Jobs Are in Salmon

EMPLOYMENT BY SPECIES, 2017



Sources: Commercial Fisheries Entry Commission; National Marine Fisheries Service; and Alaska Department of Labor and Workforce Development, Research and Analysis Section

The employment picture by region

Aleutians

The Aleutians' total harvesting employment jumped by nearly 20 percent, or 286 monthly jobs, mostly through growth in groundfish harvesting but also via small gains in halibut, sablefish, and salmon harvesting.

Groundfish represents more than half the area's harvesting employment. While that growth easily made up for crab harvesting losses, the drop in crab harvesting put a small damper on total gains. Regional crab harvesting employment fell by over 22 percent.

Bristol Bay

Bristol Bay's harvesting employment also grew overall (6.2 percent, or 79 jobs), with growth in salmon, small growth for herring, and minor losses for sablefish and groundfish. Over 99 percent of harvesting jobs in the area are for salmon.

Most of the increase came in June, which was up by 935 jobs from June 2016. Overall, this seasonal increase produced an average gain of 73 monthly jobs for Bristol Bay.

Northern Region

The Northern Region made small job gains in almost all of its fisheries, for an overall gain of 33 jobs (21.8 percent). The only exception was groundfish, with zero recorded landings, although the region had just two landings the year before.

The rest of the region's growth was large in percent terms, though small numerically compared to other regions. Northern Region gained eight jobs in crab harvesting, six in halibut, and 23 in salmon.

Southcentral Region

Southcentral Region continued its trend of major overall gains despite the losses in groundfish harvesting jobs. The region added 116 jobs, for 7.0 percent growth.

The main fishery is salmon, where harvesting employment grew by 14, but most of Southcentral's gains came from smaller fisheries. Halibut and sablefish harvesting were up by 54 and 64 monthly jobs, respectively.

Southeast Region

Southeast's harvesting employment was up 7.7 percent in 2017 (176 jobs), with halibut, shellfish, and sablefish harvesting all recording gains.

Halibut harvesting jobs grew the most, by 150. The other fisheries — crab, salmon, groundfish, and herring — all had lower employment compared to 2016. The increases in halibut and sablefish (88 average monthly jobs) were much larger than those losses, however.

Kodiak and Yukon-Delta

Kodiak and the Yukon Delta both lost seafood harvesting jobs in 2017.

While some Kodiak fisheries grew, including halibut and salmon, the groundfish job losses were bigger. Kodiak lost about eight jobs overall (-1.2 percent).

The picture was different in Yukon Delta, where the only two fisheries lost jobs. Groundfish was down by an average of six jobs per month and salmon decreased by 35, an overall loss of 12.7 percent.

2018's picture looks mixed so far

The picture emerging for 2018 is mixed after a strong 2017. For example, the Gulf of Alaska has had a rough salmon year while Bristol Bay harvests have been stellar.

So far in 2018, the fisheries that employ the most people have had the biggest harvests. Late or closed fisheries tend to affect jobs more than harvests do, as a larger physical haul doesn't necessarily mean more boats are on the water or fishing longer.

Joshua Warren is an economist in Juneau. Reach him at (907) 465-6032 or joshua.warren@alaska.gov.

How we estimate fishing jobs

Unlike the employment numbers state and federal statistical agencies publish each month for wage and salary jobs, fish harvesting employment can't be estimated simply by asking employers how many people were on their payroll that month. Instead, we infer employment from landings — the initial sale of the catch — which signals fishing activity and jobs for permit holders and crew.

Because of the way the fisheries are managed — by permits that are generally associated with a specific type of gear, including boat size — a landing under a certain permit requires about the same number of people, which is called the crew factor.

For example, a permit to fish for salmon in Bristol Bay with a drift gillnet requires about two people, according to a survey of permit holders. So when salmon is landed under that permit, we assume the permit generated two jobs that month. We count each permit only once per month regardless of the number of times it returns to port.

Most permits designate where specific species can be harvested, and we assign jobs to the harvest location rather than the residence of the permit holder. This approach best approximates payroll employment, which is categorized by place of work rather than worker residence. Employment generated under permits that allow fishing anywhere in the state receive a special harvest area code and are estimated differently.

We produce the job counts by month because, as with location, that comes closest to wage and salary employment data. And because seafood harvesting employment is much higher in summer than winter, like tourism and construction jobs, averaging employment across all 12 months allows for more meaningful comparisons of job counts in different industries.

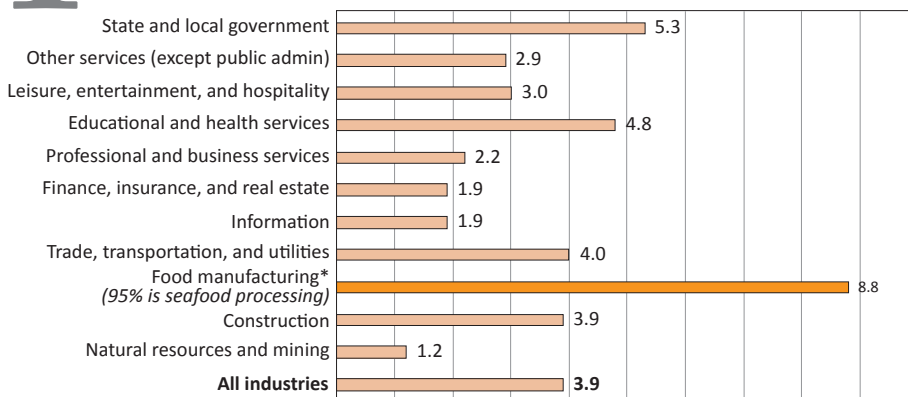
**For detailed seafood harvesting data, visit:
<http://live.laborstats.alaska.gov/seafood/>**

The Highest Injury Rates

Among Alaska industries, seafood processing tops the list

1 Injury Rate Highest in Seafood Processing

INCIDENTS PER 100 WORKERS BY ALASKA INDUSTRY, 2016



*Alaska injury and illness data can't be narrowed further than food manufacturing. See Exhibit 2 below.
Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses

By KOLE KOSKI

Commercial fishing in Alaska has long been known as dangerous work, thanks in part to popular reality TV shows such as *The Deadliest Catch*. The hazards of processing the catch are less well known, but seafood processing has the highest injury and illness rate of any Alaska industry, among those the U.S. Bureau of Labor Statistics tracks.¹ (See Exhibit 1.)

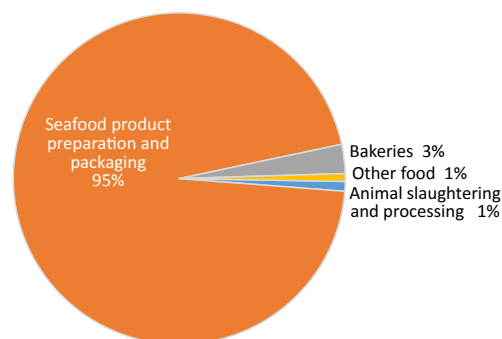
Processing workers are often on the “slime line,” where they cut or filet fish as it moves down an assembly line. Other common tasks include loading and unloading seafood into totes, stacking and moving the products in freezers, and packing and loading seafood into boxes and preparing them for shipment.

Like their harvesting counterparts, seafood processors face some of the harshest working conditions in the state: a constantly wet and slick work area, cold temperatures, knives and other sharp objects, forklifts and freight hauling equipment, and processing machinery with sharp blades and pinching gear mechanisms — all operating quickly and in a busy environment. They also work long hours during fishing season — sometimes 14 to 16 hours a day, seven days a week.

¹BLS doesn't track illness and injury rates for commercial fishing.

2 Alaska Food Manufacturing Mostly Seafood Processing

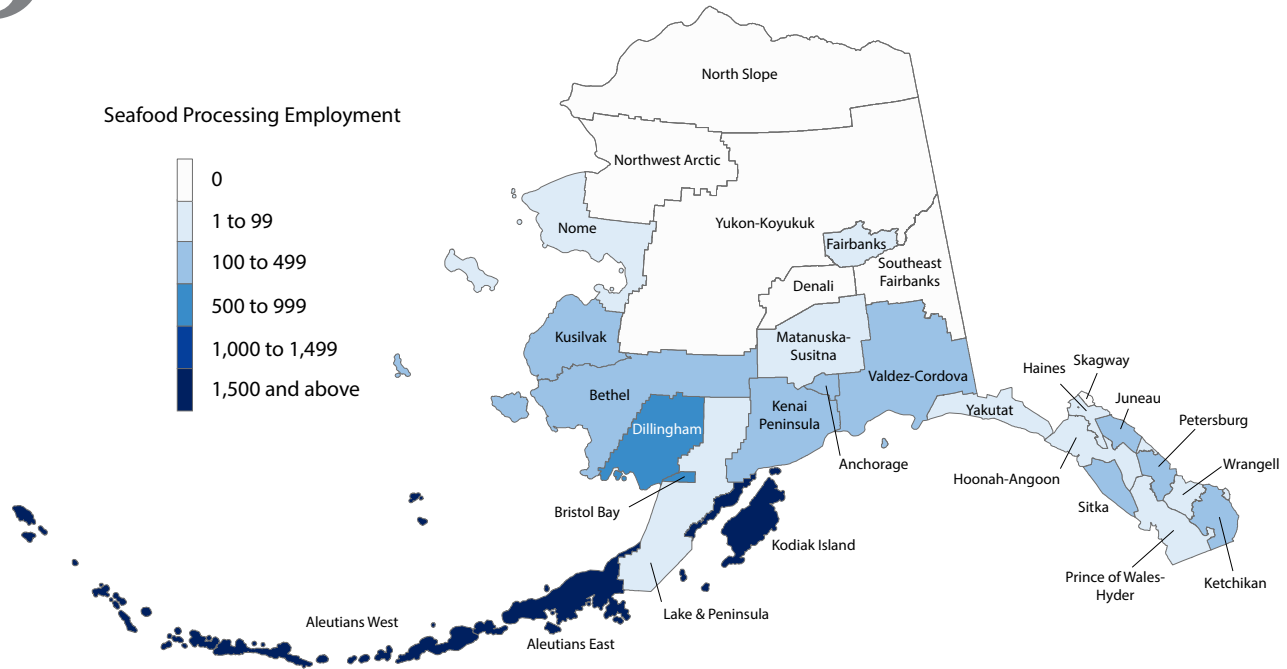
EMPLOYMENT BY FOOD TYPE, 2016



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section and U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

3 Seafood Processing Jobs Concentrated in Aleutians, Kodiak

EMPLOYMENT BY BOROUGH OR CENSUS AREA, 2016



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section and U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Nearly 10,000 jobs, largely in Southwest and Kodiak

Alaska had about 9,814 seafood processing jobs in 2016, with the most in the Aleutians followed by Kodiak. (For more on Aleutians East and its large seafood processing workforce, see page 11.)

Processing workers are spread throughout the state, however, with at least some working in most boroughs and census areas. (See Exhibit 3.)

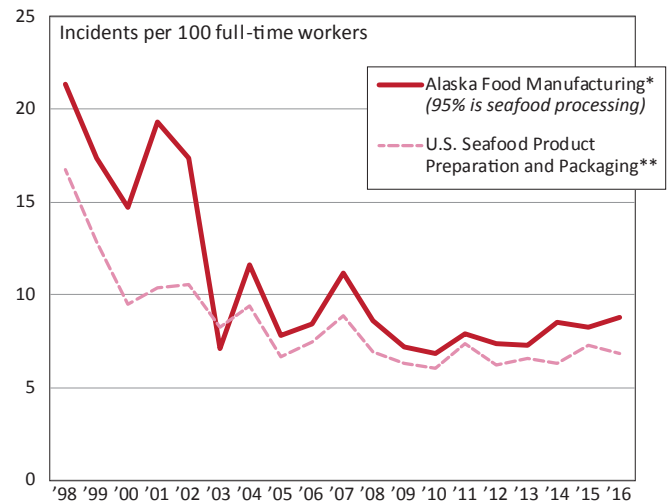
Injury rate more than twice Alaska's industry average

In Alaska, the rate of 8.8 injuries or illnesses for every 100 full-time workers in the food manufacturing industry — 95 percent of which is seafood processing — is more than double the rate for all Alaska industries (3.9 per 100).

It's also more than one-and-a-half times the national average for food manufacturing (4.7), although seafood processing represents a tiny slice of food manufacturing nationwide. Narrowing the U.S. category to seafood product preparation and packaging shows a smaller gap, at 6.8 incidents per 100 workers for the

4 Injuries Down Since '90s

ALASKA AND U.S., 1998 TO 2016



*Alaska injury and illness data can't be narrowed further than food manufacturing.

**Before 2003, U.S. data were separated into fresh/frozen and canned seafood processing. As most national jobs were in the fresh/frozen category and it isn't statistically valid to combine the two, we used the national fresh/frozen incident rate for 1998 through 2002.

Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses

U.S. (See Exhibit 4.)

While Alaska’s rate has inched up in recent years, it’s less than half of what it was in the late 1990s. The comparable national rate has seen a similar decline.

Likely factors in the decreasing incident rates are improved workplace safety procedures and protocols, better training, and technological advancements in seafood processing equipment.

Most common accidents and injuries

The two most common causes of injuries for Alaska manufacturing workers are “contact with objects” followed by “overexertion.”

Examples in the first category include being cut by a slipping knife or dropping a box of frozen fish on a foot. Overexertion injuries are caused by lifting, lowering, pushing, or pulling — for example,



Workers process salmon in Juneau. Photo courtesy of Flickr user Gillfoto

muscle strains from moving heavy carts or boxes. (See Exhibit 5.)

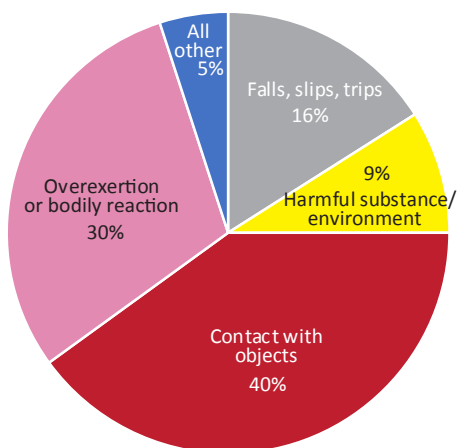
In third is “falls, slips, and trips,” which are common on a fish slime-covered floor. This category also includes accidents such as falling off a raised production line or tripping over a water hose.

As exhibit 6 shows, the most common resulting injuries are sprains and strains, followed by general soreness or pain. The largest category is “all other,” however, which is largely infections and other illnesses but includes burns, amputations, tendonitis, and carpal tunnel syndrome.

Kole Koski is a research analyst in Juneau. Reach him at (907) 465-6034 or kole.koski@alaska.gov.

5 Typical Accidents in Manufacturing*

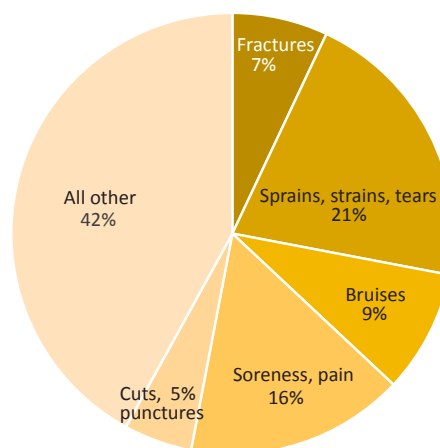
CAUSE OF INJURY, 2016



*About 72 percent of manufacturing in Alaska is seafood processing.
Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses

6 Sprains, Strains Among Most Common Injuries

MANUFACTURING INJURIES,* 2016



*About 72 percent of manufacturing in Alaska is seafood processing.
Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses

Aleutians East



Processing-centered borough stands out in nearly every way

By NEAL FRIED

The Aleutians East Borough formed in 1986, but the area’s history goes back to the last ice age, when the Aleut people settled the island chain.

Thousands of years later, Aleuts were among the first Alaska Natives in contact with the western world. Vitus Bering arrived in 1741, eventually bringing the Russian fur trade and consequently the subjugation of the Aleuts.

Whaling, fishing, and canning attracted an influx of outsiders in the 1900s. During that same century, the area became a war zone where Aleuts were both captured by the Japanese and relocated by the U.S. government to Southeast Alaska. The area became heavily militarized in the aftermath of World War II, which lasted well into the late 1990s, with installations spread throughout the Aleutian chain. Most have closed since.

While the area has seen centuries of occupation and change, one common thread remains since the beginning and explains why the Aleuts settled the area and why people are still there — the rich marine resources that sustain both their economic and cultural existence.

Six small communities

Today, six communities make up the Aleutians East Borough: Nelson Lagoon, King Cove, Cold Bay, Akutan, False Pass, and Sand Point. The borough had 2,977 residents in 2017, with 95 percent living in Akutan, Sand Point,

1 Aleutians East Population by Town 2010 TO 2017

	2010	2011	2012	2013	2014	2015	2016	Total 2017	Group Quarters 2017*
Aleutians East Borough	3,141	3,146	3,146	3,148	3,093	3,047	2,999	2,977	1,726
Akutan city	1,027	1,023	1,021	1,026	1,009	1,010	999	993	937
Cold Bay city	108	102	106	92	97	85	65	72	1
False Pass city	35	27	26	40	34	44	42	42	0
King Cove city	938	932	961	947	938	919	916	925	438
Nelson Lagoon CDP**	52	44	46	45	44	39	34	30	0
Sand Point city	976	1,013	981	993	971	950	943	915	350
Balance	5	5	5	5	0	0	0	0	0

*The group quarters population, a subset of the 2017 total, are fish processors living in dormitories.
**Census designated place

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

and King Cove. (See Exhibit 1.)

No community has more than 1,000 residents, which compounds the already-remote feel of the borough. Even cartographers have a hard time dealing with the expansive Aleutians. The chain is so long it often goes off the map, so the islands are often shown disconnected, floating in a box in the Gulf of Alaska.

Special limitations on the numbers

Describing the area’s economy is difficult, because much of the data that would normally be available are suppressed for confidentiality due to the small populations. Employment data must be suppressed if they provide too much detail about a single employer.

Despite these challenges, a small amount of data is available to paint a cogent economic profile of the area.

Fishing, processing shape economy

Fish harvesting and fish processing define the borough's economy, and the fisheries are diverse. Salmon is king, but halibut, crab, other shellfish and groundfish such as cod are also important.

In 2017, 175 borough fish permit holders earned more than \$44 million, but it was a good year. Just a year earlier, they earned \$16 million less — an illustration of the vagaries of the fishing industry. (See Exhibit 2.) The borough also collected \$4.7 million in raw fish taxes last year.

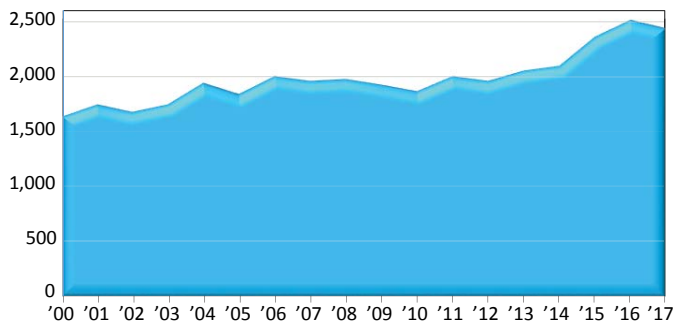
Sand Point is home to the largest fishing fleet in the Aleutian Islands. (See Exhibit 3.) Sand Point, King Cove, Akutan, and False Pass have some of the largest fishing processing plants in the state, and the borough's processing industry is mostly a few large processors. Unlike many canneries, these process a variety of seafood products throughout the year.

Cold Bay is the only community without strong ties to the fishing industry. Instead, during World War II it became a military base and remains a major air transportation hub with one of the largest landing strips in the state. A controversial 30-mile road connecting King Cove with Cold Bay, which would give King Cove residents better access to the airport in Cold Bay, is in the planning stage.

Borough employment hit a near record of 2,436 jobs

4 Jobs Trend is Upward

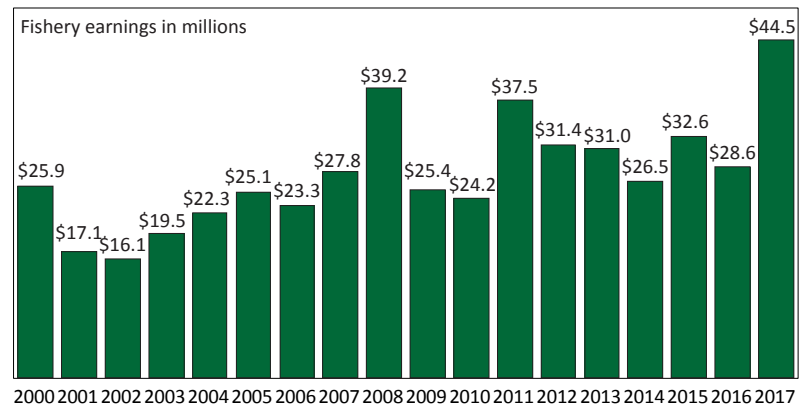
ALEUTIANS EAST BOROUGH, 2000 TO 2017



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

2 Fishing Earnings Are Volatile

ALEUTIANS EAST BOROUGH, 2000 TO 2017



Source: Commercial Fisheries Entry Commission

3 The Catch by Community

ALEUTIANS EAST BOROUGH, 2016

	Permit holders	Pounds landed	Gross earnings
Aleutians East Borough	177	102,568,698	\$28,599,832
Akutan	8	2,024,364	\$612,708
Cold Bay	1	*	*
False Pass	5	*	*
King Cove	46	26,259,235	\$9,218,818
Nelson Lagoon	18	1,536,067	\$1,399,356
Sand Point	99	67,531,115	\$15,741,420

*Data suppressed for confidentiality

Source: Commercial Fisheries Entry Commission

in 2017.¹ (See Exhibit 4.) Because of data suppression, seafood processing job numbers are not available, but seafood processing made up 71 percent of borough jobs in 2007, the last time data weren't suppressed. In 2012, the borough's total seafood processing payroll was the largest in the state.

Borough's unusual demographics

The large processing workforce explains why so many people living in Aleutians East come from outside Alaska. It also explains the borough's unusual demographics.

Just 18 percent of workers in Aleutians East were locals in 2017 — the fourth-lowest percentage in the state. (See Exhibit 5.) Only the North Slope, Denali, and Bristol Bay boroughs had a smaller share of local job holders.

A number of Aleutians East communities feature sepa-

¹This does not include self-employment, so it excludes most seafood harvesters.



Sand Point, photo courtesy of Flickr user J. Stephen Conn

rate, parallel economies. In Akutan, for example, 937 of the 993 total residents live in company-provided bunkhouses, or group quarters. All of them work for Trident Seafoods, the largest seafood company in the United States. King Cove and Sand Point also have sizable group quarters populations. These residents, 67 percent of whom are men, tend not to bring their families with them. This is why the borough's median age is so much older than the state as a whole.

Locals are more likely to commercial fish or work in health care or government, where the pay is better and jobs are less seasonal.

In 2014, the national magazine *Atlantic Monthly* ranked the Aleutians East Borough the second most racially diverse county equivalent in the United States, just ahead of Queens, New York City, and eclipsed only by its coun-

terpart, the Aleutians West Census Area.

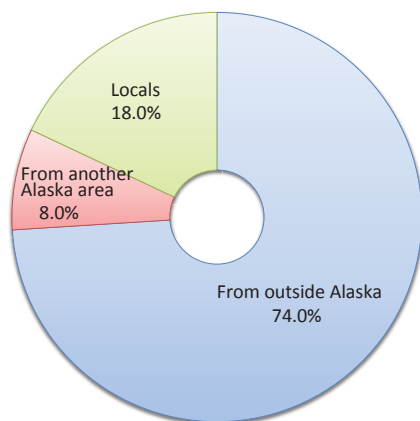
While the magazine's explanation for the diversity was wrong — that the excitement of such a dangerous job draws in people from all backgrounds — the numbers were right. (See Exhibit 6.) The borough was traditionally Alaska Native, but it now has a white population of about equal size. It's also over 42 percent Asian and has sizable black and Hispanic populations.

The reason is many seafood processing workers are first-generation immigrants. Aleutians East also has the highest percentage of foreign-born residents in the nation, at 41 percent. For comparison, just 7.5 percent of Alaska residents are foreign-born.

Neal Fried is an economist in Anchorage. Reach him at (907) 269-4861 or neal.fried@alaska.gov.

5 Most Workers Aren't from Aleutians East

WORKER RESIDENCY, 2017



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

6 Atypical Demographics

ALEUTIANS EAST AND ALASKA, 2017

	Aleutians E	Alaska
Total population	2,977	737,080
Median age	43.3	34.9
White	21.4%	65.7%
Native American	20.5%	15.3%
Black	10.0%	3.7%
Asian	42.6%	6.5%
Hawaiian/Other Pac Islander	1.4%	1.4%
Two or More Races	4.1%	7.4%
Hispanic	13.6%	7.0%
Under 5	2.7%	7.1%
20 and over	89.1%	72.0%
65 years and over	6.7%	11.2%
Percent male population	66.6%	51.5%
Percent female	33.4%	48.5%

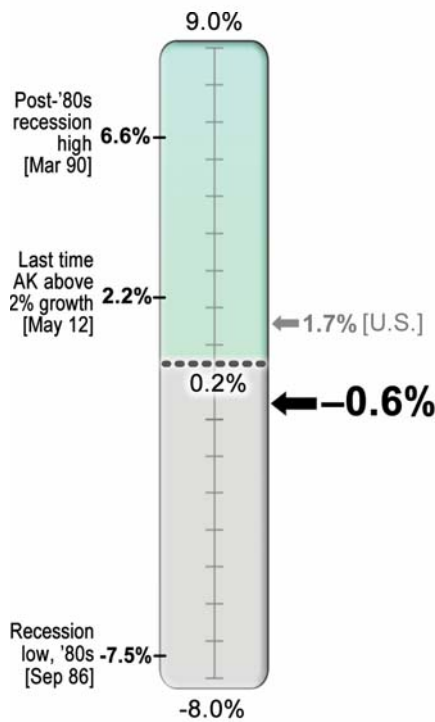
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Gauging Alaska's Economy



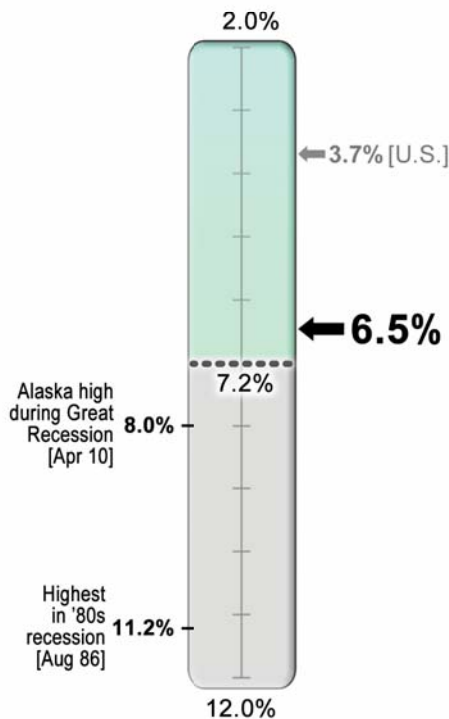
Job Growth

September 2018
Over-the-year percent change



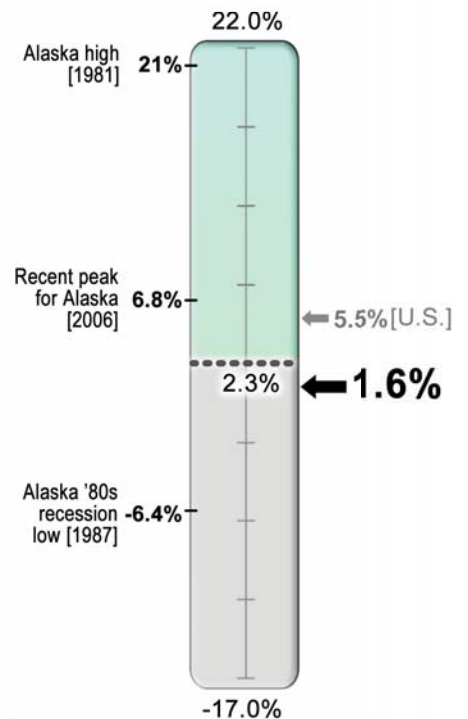
Unemployment Rate

September 2018
Seasonally adjusted



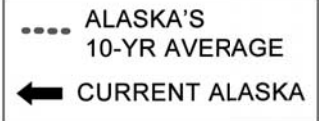
Wage Growth

1st Quarter 2018
Over-the-year percent change



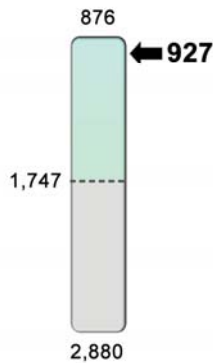
- September was the 36th consecutive month Alaska has recorded job losses.
- The state's September job count is 13,000 lower than September 2015, a total decline of 3.7 percent over that period.
- Job losses during the current recession were at their worst from September 2015 to September 2016 (-2.5 percent).
- Alaska's rate remains the highest in the nation but is seven-tenths of a percentage point below its 10-year average.
- Unemployment rates are revised at the end of the calendar year, and those revisions can be large.
- 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).
- Wages have been up for two consecutive quarters after being down for the prior seven.
- Sustained wage growth, which may have resumed, will be one of the best early indicators that the current Alaska recession is ending.

Gauging Alaska's Economy



Initial Claims

Unemployment, week ending Oct. 6, 2018†

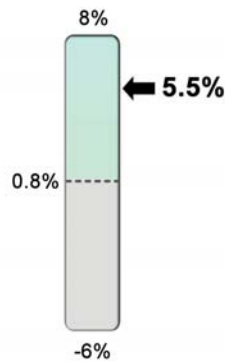


➤ For a variety of reasons, initial claims are well below the 10-year average despite job losses.

† Four-week moving average ending with the specified week

GDP Growth

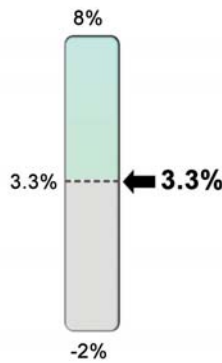
1st Quarter 2018
Over-the-year percent change



➤ Gross domestic product is the market value of all goods and services. It has grown over the year for the past six quarters after declining for the prior 17.

Personal Income Growth

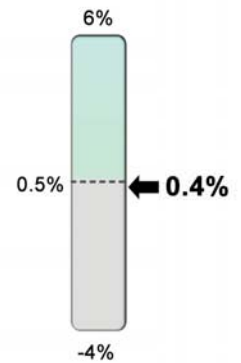
2nd Quarter 2018
Over-the-year percent change



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

Change in Home Prices

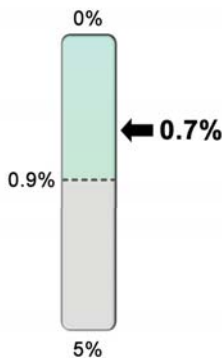
2nd Quarter 2018
Over-the-year percent change



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

Foreclosure Rate

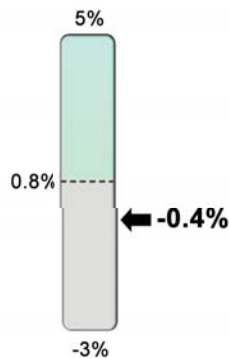
1st Quarter 2018



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

Population Growth

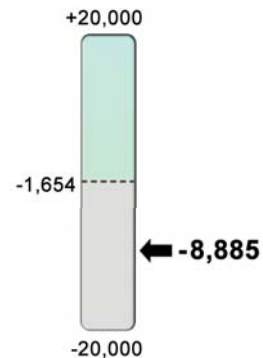
2016 to 2017



➤ 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

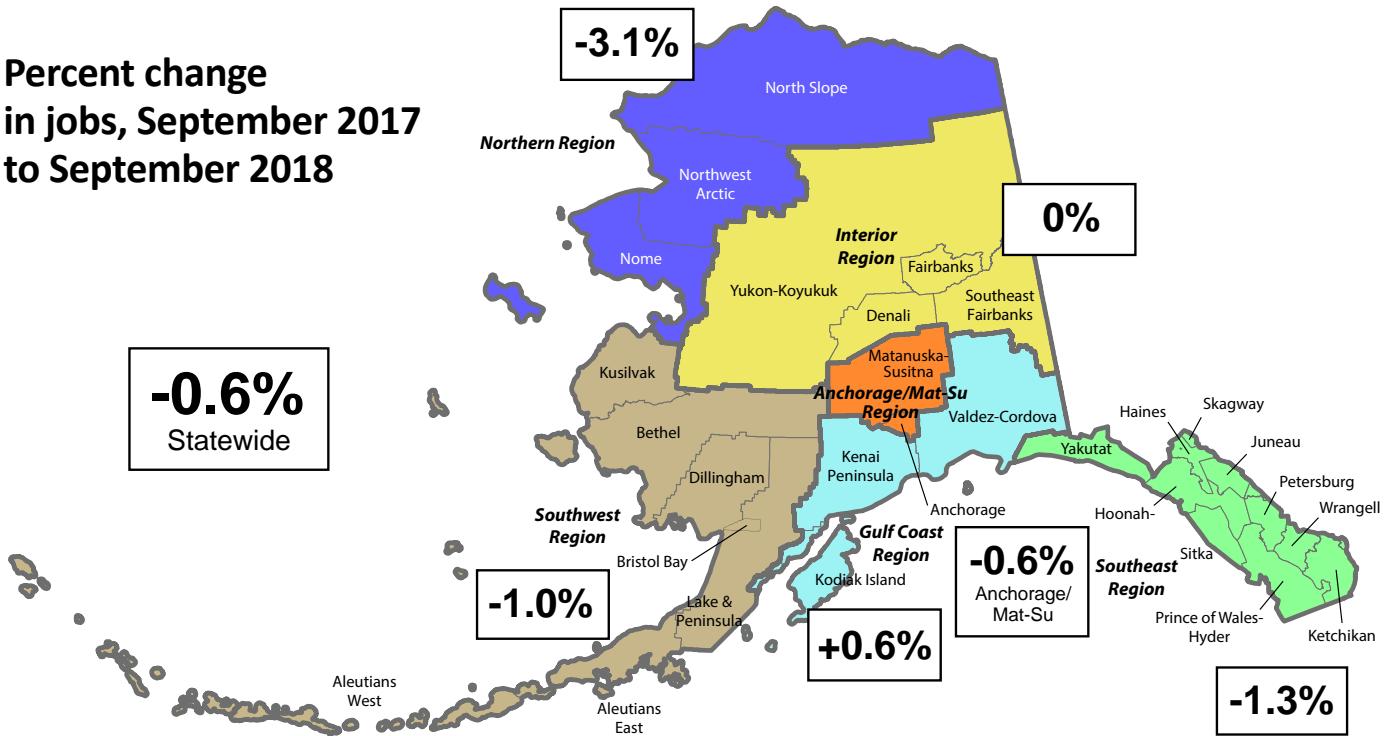
2016 to 2017



➤ 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

Percent change
in jobs, September 2017
to September 2018



Unemployment Rates

Seasonally adjusted

	Prelim.		Revised
	9/18	8/18	9/17
United States	3.7	3.9	4.2
Alaska	6.5	6.7	7.2

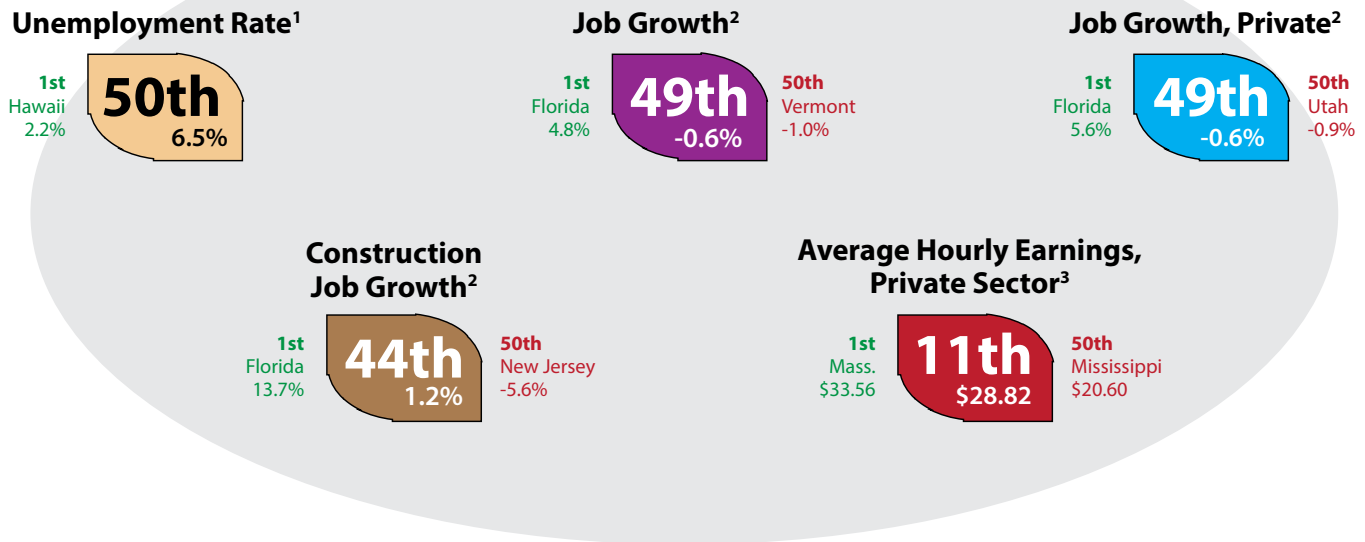
Not seasonally adjusted

	Prelim.		Revised
	9/18	8/18	9/17
United States	3.6	3.9	4.1
Alaska	5.6	5.4	6.6

Regional, not seasonally adjusted

	Prelim.			Revised		
	9/18	8/18	9/17	9/18	8/18	9/17
Interior Region	5.3	4.9	6.4			
Denali Borough	3.1	2.6	4.0			
Fairbanks N Star Borough	4.9	4.4	5.9			
Southeast Fairbanks Census Area	7.6	7.5	8.5			
Yukon-Koyukuk Census Area	12.3	13.0	15.4			
Northern Region	9.7	10.6	11.3			
Nome Census Area	9.8	11.8	11.1			
North Slope Borough	7.0	6.6	8.0			
Northwest Arctic Borough	12.7	14.0	15.2			
Anchorage/Mat-Su Region	5.3	5.1	6.4			
Anchorage, Municipality	4.9	4.7	5.9			
Mat-Su Borough	6.4	6.4	7.9			
Southwest Region	8.8	8.8	9.8			
Aleutians East Borough	2.3	1.6	2.3			
Aleutians West Census Area	3.4	2.8	4.9			
Bethel Census Area	11.6	13.1	13.1			
Bristol Bay Borough	5.2	3.6	6.1			
Dillingham Census Area	7.4	5.9	8.9			
Kusilvak Census Area	15.9	17.9	16.2			
Lake and Peninsula Borough	9.0	8.9	9.3			
Gulf Coast Region	5.8	5.3	6.8			
Kenai Peninsula Borough	6.2	5.8	7.5			
Kodiak Island Borough	4.7	4.5	4.7			
Valdez-Cordova Census Area	5.0	4.0	5.7			
Southeast Region	4.6	4.2	5.3			
Haines Borough	5.8	5.2	6.1			
Hoonah-Angoon Census Area	6.6	6.7	7.5			
Juneau, City and Borough	3.9	3.5	4.5			
Ketchikan Gateway Borough	4.7	4.1	5.1			
Petersburg Borough	6.4	5.9	7.8			
Prince of Wales-Hyder Census Area	8.6	8.4	9.5			
Sitka, City and Borough	3.6	3.0	4.3			
Skagway, Municipality	3.1	2.6	3.7			
Wrangell, City and Borough	5.2	4.7	6.7			
Yakutat, City and Borough	6.4	7.3	8.0			

How Alaska Ranks



¹September seasonally adjusted unemployment rates
²September employment, over-the-year percent change
³September hours and earnings

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
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	\$77.63	Sep 2018	\$54.82	+41.61%
Natural gas, residential, per thousand cubic feet	\$17.88	July 2018	\$17.86	+0.11%
Gold, per oz. COMEX	\$1,224.60	10/22/2018	\$1,280.90	-4.40%
Silver, per oz. COMEX	\$14.57	10/22/2018	\$17.07	-14.65%
Copper, per lb. COMEX	\$2.78	10/22/2018	\$3.19	-12.85%
Zinc, per MT	\$2,626.00	10/19/2018	\$3,129.00	-16.08%
Lead, per lb.	\$0.89	10/19/2018	\$1.12	-20.54%
Bankruptcies				
	105	Q2 2018	130	-19.0%
Business	6	Q2 2018	8	-25.0%
Personal	99	Q2 2018	122	-23.0%
Unemployment insurance claims				
Initial filings	4,410	August 2018	5,171	-14.72%
Continued filings	24,579	August 2018	27,379	-10.23%
Claimant count	6,481	August 2018	8,007	-19.06%

*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

EMPLOYER RESOURCES

Strategies for recruiting more Alaskans for seafood processing jobs

The seafood processing industry in Alaska has a long history of hiring nonresidents to work the “slime lines.” In an industry with over 75 percent nonresident hire, it’s easy to forget that a significant number of experienced Alaskans depend on seafood processing jobs for their livelihood.

Alaskans are a great choice for this well-established industry. They understand the local culture, know what to expect from the job, often have prior experience, are accustomed to Alaska’s climate, are willing to travel, and are less expensive to recruit than nonresidents. Hiring locals also helps sustain a healthy economy by keeping these wages in Alaska and in their communities.

Staff at the Alaska Job Center Network pride themselves on quality referrals of Alaskans to seafood processing employers. The Anchorage Seafood Employment Office at the Midtown Job Center manages Alaska’s seafood workforce and assists those who want to work continuously from one fishing season to the next. Many seafood employers recruit directly from the Anchorage Seafood Office or through other job centers around the state. They can also post online job announcements in Alaska’s Labor Exchange System, or ALEXsys. Job center staff can assist employers during recruitment, referral, and retention by providing orientation into the seafood industry, organizing job fairs and recruitment events, and providing one-on-one application assistance.

Another hiring trend is emerging in Alaska. Alaska Department of Corrections’ Transitional Work Opportunities has quickly become a successful work release program. TWO, which began in Kenai in 2013, gives selected inmates the opportunity to work in seafood processing after their release. Many skills learned in prison are valuable in this industry, such as carpentry, welding, refrigeration, heating, and air conditioning. DOC’s TWO staff, employers, and community members create an employment plan for inmates who qualify through a vetting system.

Because the Kenai project has been so successful, a similar pilot program for remote seafood processing plants will begin in late December 2018 for pollock “A” season with UniSea, Inc., in Dutch Harbor and Trident Seafoods Corporation in Akutan.

For more information about TWO, contact Megan Edge, project manager, at (907) 269-5037. For information about customized strategies for recruiting seafood processing workers in Alaska, contact Nelson San Juan at the Anchorage Seafood Employment Office, Midtown Job Center, 3301 Eagle Street, Anchorage, AK 99503, by phone at (907) 269-4708, or by email at nelson.san.juan@alaska.gov.

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

SAFETY MINUTE

Local emphasis programs for minimizing seafood processing hazards

The seafood processing industry, a vital part of Alaska’s economy, includes shore-based processors as well as floating or at-sea plants. Shore-based plants are located throughout Southeast, while floating processors are barges or ships anchored just off shore. Ships typically operate in the Bering Sea and Bristol Bay.

Workers must be willing to perform a variety of tasks, including off-loading, cleaning, freezing, packaging, warehousing, and shipping. All of these require physical stamina. Working conditions can also be challenging, as they can be noisy where machines are operating, wet where fish are cleaned, and cold where fish are frozen and packaged.

The Occupational Safety and Health Administration regulations minimize these dangers and create a safe working environment in the industry.

The Department of Labor and Workforce Development’s Labor Standards and Safety Division, Occupational Safety and Health Section has a local emphasis program that focuses on reducing or eliminating safety and health hazards in the seafood processing industry. The latest directive, on enforcement procedures, was issued Oct. 10. All directives are available here: http://labor.alaska.gov/lss/program_directives.htm.

For more information on AKOSH’s services for seafood processing employers, see: <http://www.labor.state.ak.us/lss/oshhome.html>.

For more fisheries-related publications, see: <http://jobs.alaska.gov/seafood/publications.html>.

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