

ALASKA ECONOMIC  
**TRENDS**

NOVEMBER 2022

Fishing jobs down  
in 2021, but slightly

ALSO INSIDE

*Adak*



# FROM THE COMMISSIONER

## Apprenticeships provide multiple benefits for trainees

**By Dr. Tamika L. Ledbetter, Commissioner**

Nov. 14-18 is National Apprenticeship Week. In my work, I am honored to meet Alaskans from all corners of the state and to see firsthand the transformative power of education and training. Work-based learning provides students with opportunities to link their career technical training with practical, on-the-job activities. Apprenticeship training also allows students to graduate with little or no debt.

In Alaska, dozens of career pathways follow an apprenticeship model, including jobs in automotive, information technology, aviation, construction, health care, hospitality, maritime, and mining. You can become an electrician, plumber, pilot, or heavy diesel mechanic through apprenticeship training.

Alaska apprenticeship programs are registered by the U.S. Department of Labor Office of Apprenticeship. The Alaska Department of Labor and Workforce Development works closely with the employer community and USDOL to establish apprenticeships.

Employers who register their program may be eligible for partial reimbursement of time spent training/mentoring an apprentice through state or federal workforce training funds. If an apprentice is a veteran, he or she may also use GI bill benefits while completing the program.

A recent partnership between our department and the Alaska Primary Care Association is a great example of successful apprenticeships in action. Through work experience, pre-apprenticeship, high school completion, and support services toward



health care career pathways, Alaskans can choose many rewarding training tracks that lead to high-demand career opportunities.

A key distinction between apprenticeship and other forms of training is that a registered apprentice is a paid employee from the start. Apprentices earn

competitive wages with incremental raises as skill levels increase. Some apprentices can also earn college credit upon completion, and over 90 percent of those who complete a registered apprenticeship in Alaska remain in their job and make an average of \$77,000 per year.

Registered apprenticeship programs can be sponsored by individual businesses with or without a labor management agreement, trade associations, or other industry and labor groups.

Our 10-year job projections show the highest demand over the next decade will be in mining, agriculture, and health care. We will need more respiratory therapists, x-ray and surgical technicians, and nurses as well as earth drillers, laborers, extraction workers, and millwrights. Many of these critical occupations use the apprenticeship training model.

To learn more, email [apprenticeship@alaska.gov](mailto:apprenticeship@alaska.gov) or contact Anne Velardi, program coordinator, at (907) 269-3562.

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



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**ON THE COVER:**

Spawning sockeye salmon,  
courtesy of Wikimedia user  
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The military placed these survival  
barrels all over Adak Island  
for emergency use. They used  
to be stocked with MREs,  
blankets, and other survival gear.  
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**ALASKA**  
DEPARTMENT of LABOR  
and WORKFORCE  
DEVELOPMENT

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# ALASKA ECONOMIC TRENDS

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DOWN SLIGHTLY

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THE ECONOMY

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

**ON THIS SPREAD:** The background image for 2022 is a sparkly Alaska shoreline, taken by  
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# Slight decline for fishing jobs

## Modest harvester loss in 2021 followed big drop in 2020

By JOSHUA WARREN

Seafood harvesting employment declined slightly in 2021 after a large drop in 2020. The industry lost more than 1,000 jobs during the first year of the pandemic — the biggest decline since data collection began — and another 134 last year.

While some harvests were notably large in 2021, no fishery significantly boosted its employment. Larger harvests don't necessarily translate to job growth.

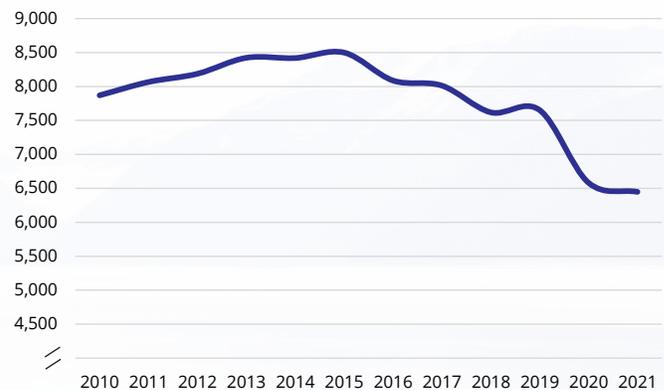
The pandemic was less of an obstacle in 2021 than the year before, but restrictions and outbreaks continued to put a damper on the industry. Biological and environmental changes were also ongoing issues for some areas and species.

August and October employment declined most from 2020, and seven months had fewer jobs than the year before. August has taken a long-term hit; less than a decade ago, it was typical for Alaska to have more than 16,000 fish harvesting jobs in August. August 2021 had less than 12,000.

July is the typical peak, although the July 2021 count of 20,627 jobs was also down considerably from a high of more than 25,000 in 2013.

Winter and spring fisheries performed well, however,

### Alaska fishing jobs, 2010-2021



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

with job gains in February, March, and April. December is the lowest employment month, but its count has risen over the decade. While December didn't reach a new peak in 2021, it hit a five-year high.

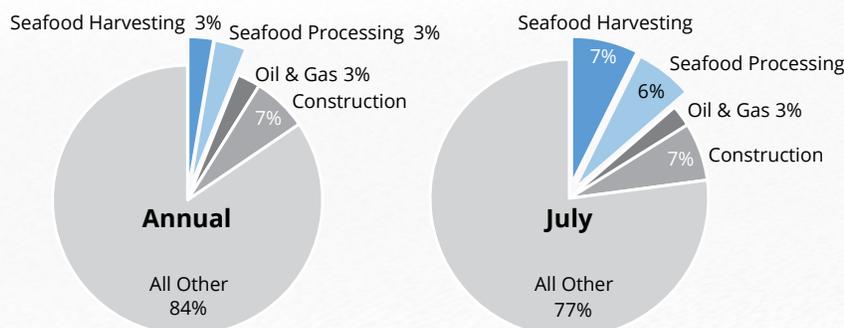
### Fish harvesters by species

#### Salmon

The 2021 statewide salmon harvest was the third-highest on record, according to the Department of Fish and Game, and nearly double 2020's poundage. Similarly, the reported ex-vessel value was the third-highest since the mid-1970s. The number of salmon harvesters was essentially flat, however — down 1 percent — aside from the drastic decline in the Yukon Delta. (The Yukon Delta's salmon fishery has been collapsing in recent years, which the regional section will discuss in more detail.)

Every region fishes salmon, and

### Fishing as a share of Alaska's total jobs, 2021



Note: For more on harvesters' share of the economy, [see November 2021's fishing issue](#).  
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

# Alaska's total seafood harvesters by month, 2001 to 2021

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
2001	2,972	4,286	4,505	4,681	7,053	18,884	21,571	13,921	8,095	6,194	2,617	726	7,959
2002	3,590	4,047	4,334	4,913	6,715	16,292	18,224	11,975	6,983	5,794	2,632	524	7,168
2003	3,284	3,609	4,378	5,797	6,233	17,610	19,670	11,922	7,191	5,969	2,660	526	7,404
2004	3,594	3,492	4,110	5,050	6,476	17,139	19,634	12,308	7,371	6,023	2,259	509	7,330
2005	3,561	3,150	4,227	5,115	6,283	18,169	20,566	12,889	7,192	4,958	2,768	953	7,486
2006	2,700	3,038	4,573	4,293	5,709	17,748	20,066	13,700	7,719	5,003	2,507	720	7,314
2007	2,584	2,966	3,930	4,348	5,949	17,528	20,137	13,567	7,500	4,738	3,080	791	7,260
2008	2,738	3,138	4,511	4,445	5,572	17,022	20,446	13,633	8,225	4,202	2,708	602	7,270
2009	2,527	3,817	3,126	4,874	5,693	17,609	20,076	13,687	7,148	4,593	2,388	507	7,087
2010	2,668	3,060	4,005	5,255	5,685	18,878	23,128	15,287	7,759	4,992	2,887	850	7,871
2011	2,898	3,214	4,010	4,729	5,642	20,112	23,824	15,586	7,918	5,721	2,303	849	8,067
2012	2,923	3,409	4,609	5,402	6,163	19,237	24,761	16,191	6,988	5,453	2,274	853	8,189
2013	2,736	2,930	4,091	5,516	6,270	22,012	25,351	15,419	7,559	5,496	2,780	930	8,424
2014	2,242	2,776	4,879	5,407	6,489	21,167	24,594	16,593	8,018	5,190	2,596	1,097	8,421
2015	2,520	3,247	4,961	5,029	6,749	21,164	24,649	16,283	8,232	5,252	2,661	1,264	8,501
2016	2,678	3,374	5,222	5,363	6,329	18,840	23,695	16,055	7,909	4,953	1,886	765	8,089
2017	2,205	3,076	4,444	5,026	5,646	19,881	23,541	15,407	8,562	5,334	2,292	754	8,014
2018	2,126	2,538	3,379	4,310	5,166	18,942	22,790	14,763	9,211	4,849	2,681	689	7,620
2019	2,347	2,548	3,637	4,372	4,721	18,154	23,440	15,632	8,664	5,201	2,443	679	7,653
2020	1,975	2,296	2,983	3,113	4,020	16,286	20,917	12,325	7,310	5,104	2,193	473	6,583
2021	1,573	2,339	3,305	4,017	3,997	15,732	20,627	11,616	6,995	4,017	2,268	902	6,449

**Note:** Because of a change in how harvest jobs are calculated, data before 2010 are not comparable to data from 2010 forward.

**Sources:** Commercial Fisheries Entry Commission and Alaska Department of Labor and Workforce Development, Research and Analysis Section

the number of salmon harvesters dwarfs the other fisheries. The annual average was 3,611 jobs, which doesn't convey the magnitude of Alaska's salmon harvesting peak and its extreme seasonality. While the peak was lower in 2021, July still recorded almost 18,000 jobs. The low is April, with zero. For context, the next-largest employment peak was just over 1,800 halibut harvesters — 10 percent of salmon's peak.

## Sablefish

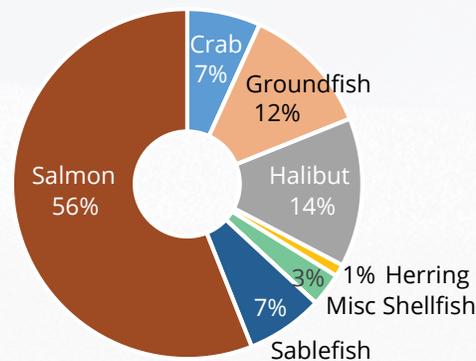
Catching sablefish, or black cod, is also widespread in Alaska, with harvesters in five of the state's seven regions. Most years see a mix of regional ups and downs for sablefish jobs, but all five areas lost harvesting jobs in 2021. September, the peak month, fell 300 jobs below 2020, a loss big enough to make October the peak.

Across the state, the number of sablefish harvesting jobs fell 13.9 percent; averaged over the year, it was a loss of 74, to 458 total jobs.

## Other groundfish

The "other groundfish" category is mostly Pacific cod and walleye pollock; it excludes halibut and sablefish. In poundage terms, groundfish is easily the state's largest fishery. Salmon is higher-value and requires more harvesters to catch it, but if sablefish and other groundfish were combined, the value would also top salmon.

## Majority of fish harvesters catch salmon in Alaska



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

Nearly 60 percent of other groundfish harvesters are in the Aleutians, so an 18 percent drop in that region put a dent in the fishery as a whole. Some groundfish harvesters fish in areas that aren't attributable to a specific region, and an increase in that category pushed March numbers up. It wasn't enough to boost groundfish employment into growth territory, though. The fishery's employment shrank by 6.8 percent, to 783.

Alaska cod harvesting has shown signs of weakness

over the last few years, especially in the Gulf of Alaska, with the drop attributed to “the blob.” Warm water in 2014 cut fish stocks by more than half by 2017. The fishery still hasn’t recovered and has shut down several times. Unless it rebounds, further job losses in the Aleutians and other regions are likely in the coming years. Kodiak, for example, has the state’s second-largest pool of groundfish harvesters.

## Halibut

Southeast, Southcentral, and Kodiak gained halibut harvesting jobs last year. Southeast added the most at 16, but Kodiak was close behind at 14 — a much larger percent gain for that region’s smaller fishery.

Statewide, halibut harvesting employment increased from 858 to 888, or about 3.5 percent, despite a dip during August, the typical peak. September became the peak month in 2021 at 1,623 jobs, but that total was still less than August or September of 2020. The annual increase came from March and June.

## Crab

Crab harvesting employment is largely in Southeast, where it increased slightly in 2021, and the Aleutian Islands, where it held steady.

The Southcentral Region’s small crab fishery lost some jobs, and Kodiak took the biggest hit with zero

**For detailed harvesting data, visit:  
[live.laborstats.alaska.gov/seafood](https://live.laborstats.alaska.gov/seafood)**

jobs between January and March following closures in the area. Kodiak would typically have more than 100 January crab harvesting jobs.

Crab harvesting peaks in February and October, but it’s a far less seasonal fishery than most in Alaska. Fishermen catch crab all year, with most months hovering around the yearly average. February employment fell from 867 in 2020 to 769 in 2021, and October declined from 841 to 464 with losses bleeding into November. Gains in some of the other months muted 2021’s loss to just 13 jobs.

Red king and snow crab closures were announced in late 2022, and those declines will show up in 2022 and 2023 numbers. (See the Aleutians and Bristol Bay sections.)

## Other shellfish

Shellfish harvesting (largely sea cucumber and shrimp) is limited to Southcentral, Southeast, and Kodiak, with Southeast representing 175 of the 200 total jobs.

The number of shellfish harvesters peaked at 795 in

## How we use landings to estimate seafood harvesting jobs

Unlike the wage and salary job numbers we and our federal partner the Bureau of Labor Statistics publish each month, data on the employment fish harvesting generates is not readily available. Harvesters are self-employed, and permit holders aren’t required to report the number of people they employ in the same way as employers subject to state unemployment insurance laws.

To estimate fisheries employment that’s roughly comparable to wage and salary job numbers, we infer jobs in a given month from landings. A landing, or the initial sale of the catch, signals recent fishing activity.

Because fishing permits are associated with a specific type of gear, including boat size, we know roughly how many people a landing requires under various types of permits. The number of people associated with a certain permit is called the crew factor.

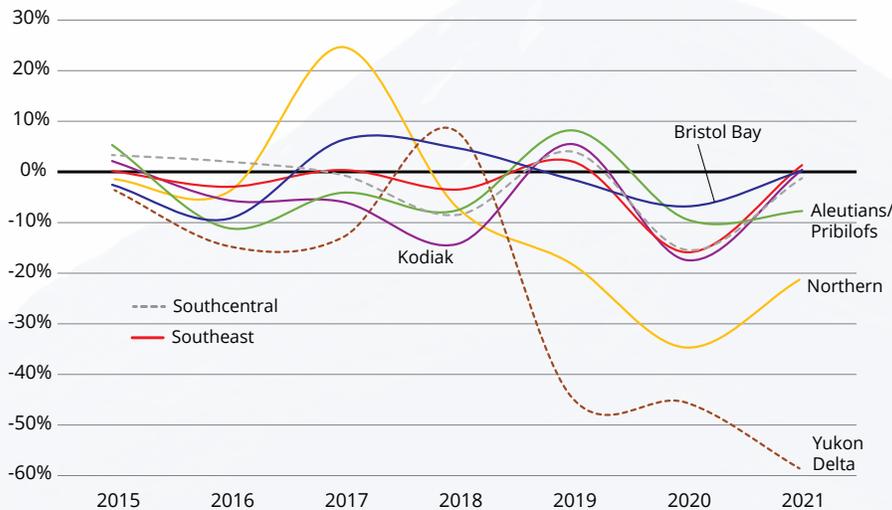
For example, a permit to fish for king crab in Bristol Bay with pot gear on a vessel more than 60 feet long requires about six people, according to a survey of those

permit holders. So when crab are landed under that permit, we assume it generated six jobs that month. We count each permit once per month regardless of the number of landings, which is similar to the way wage and salary employees work different numbers of hours.

Most permits designate where specific species can be harvested, so we assign jobs to the harvest location rather than the residence of the permit holder. This approach also best approximates wage and salary employment, which is categorized by place of work rather than residence. Jobs generated under permits that allow fishing anywhere in Alaska receive a special harvest area code and are estimated and allocated 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, similar to tourism and construction, averaging employment across all 12 months allows for more meaningful comparisons among job counts in different industries.

## Percent change in seafood harvesting jobs regionally



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

October, but most months record some jobs. More than half have at least 100. The lowest month was September, at 23, right before the peak.

The number of shellfish harvesters rose about 2.2 percent, but that was just five more jobs for the year.

### Herring

Herring is typically a one-month harvest, and Southeast has 59 of the 72 yearly jobs. Herring is a small fishery, but that number averages 12 months — of which 11 are zero. At the peak in April, Southeast had nearly 600 herring harvesting jobs.

The Northern Region's herring fishery lost 20 jobs in its single active month, but overall, the state's herring harvesting employment grew 23 percent.

## Fish harvesters by region

### Southeast

Southeast caught a banner salmon harvest in 2021, landing four times the poundage harvested in 2020 and double the value. Salmon harvesting employment peaked at higher levels and also had a higher average monthly job count in 2021.

The opposite was true for sablefish, down nearly 100 jobs at its peak and 14.3 percent annually. Shellfish was stable, but summer activity was far below normal — down almost 100 jobs in those months. However, winter harvests offset the job losses.

The small herring fishery grew 22 percent, from 48 to

59 jobs. Southeast herring harvesters got an early start last year, with landings beginning in March and leading into a higher-than-usual peak month.

Southeast halibut harvesting grew slightly, to 447 total jobs with losses and gains scattered over the year. Groundfish harvesting was similar, with many ups and downs equaling an overall decline. The loss was just four jobs, but that was nearly 17 percent of Southeast's groundfish harvesting employment.

Southeast crab harvesting employment grew 5.5 percent, with more harvesters in most high-activity months.

### Aleutians and Pribilofs

Salmon harvester counts in the Aleutian and Pribilof islands grew more in percentage terms than in any other region, with gains in all active months, but salmon represents only about 20 percent of the region's harvesting jobs. Crab and groundfish are larger fisheries. Aleutians groundfish harvesting employment declined by over 18 percent (-105).

While Kodiak has weathered crab closures and a dramatic annual job loss, we have yet to see similar decreases in the Aleutians. Aleutians crab harvesting employment was stable in 2021. Future reports will reflect big losses in crab fisheries, however, because of 2022-2023 snow crab closures announced just before this article was published.

The region also has small numbers of halibut, herring, and sablefish harvesting jobs, all of which stayed about the same in 2021. However, the drop

Text continues on page 18

# Adak

## A centuries-long transformation

By SARA WHITNEY

Adak has piqued public interest repeatedly over the past decade. The former naval station and now mostly empty town on Adak Island in the Aleutian chain has sparked renewed military interest, gone viral for some of its lore, and hosted a reality television show.

The island's mystique includes some unusual historical stories and features. The Netflix series "Pirate Gold of Adak" is centered on the tale of a pirate and fugitive seal poacher named Gregory Dwardstof who reportedly stashed gold coins now worth \$365 million on the island but died before he could return.

Workers found gold coins in tin cans on the island twice when it was an active military base. The first

find, in the 1940s, was worth thousands and the second, in the '50s, was estimated at \$2.5 million. In the series, an expedition team that included the mayor combed the island for the rest of the booty, unearthing other curiosities as they went.

The City of Adak has a warning for those drawn in by the prospects of wealth or exploration, however: Adak can be a dangerous place that's relatively difficult to reach.

The island has two four-hour flights a week from Anchorage and no ferry service. It has few amenities and extreme weather. Digging is forbidden because unexploded ordnance remains. And while the majority of the structures in Adak are empty and the photos would stoke the curiosity of any urban explorer, they aren't abandoned.



### The start of the boom years

*President Franklin D. Roosevelt visited Adak in 1944 during his tour of Pacific bases. At left is the Quonset Hut mess hall with the speaker's table in the background. Soldiers, sailors, and Marines were the only guests, in addition to the two commanding officers, at the head table with the president. (U.S. Navy photo, National Archives) Below is the U.S. Tennessee at Adak on Aug. 12, 1943, just before the Kiska Operation.*



Banner: An empty road in Adak, by Travis Shinabarger. All Flickr images in this article are licensed under [creativecommons.org/licenses/by-nc/2.0/](https://creativecommons.org/licenses/by-nc/2.0/).



## The Aleutian Islands

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

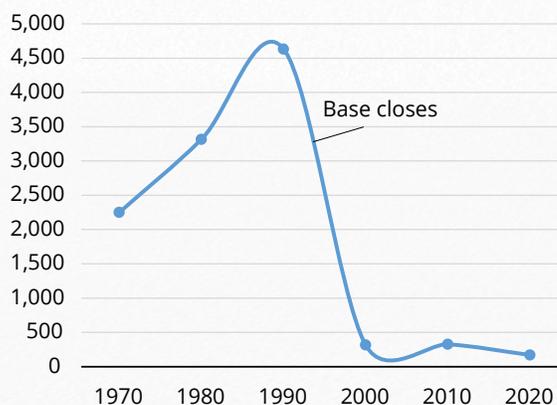
### Military buildup made Adak a powerhouse for decades

Despite the extreme climate, people have occupied or used the island for nearly 10,000 years. According to the Aleut Corporation, which was formed in 1972 under the Alaska Native Claims Settlement Act, the area was home to only *Unangax* until fur hunters arrived in 1741. Foreigners called the indigenous population “Aleuts,” but the people are known as *Unangax* in their language, *Unangam Tunuu*. The *Unangax* lived on the island until the 1830s, when they abandoned permanent villages and used it mostly for subsistence.

Russian occupation in the 1800s devastated the *Unangax*, shrinking the population by 80 percent to just 2,500 people. By the end of Russian occupation in 1867, according to the Aleut Corporation, only 17 *Unangax* villages remained in the Aleutians.

Adak’s location halfway between the United States and Japan led the military to establish a defense against the Japanese forces occupying Attu and Kiska during World War II. (See the map above.) The first development was the Adak Army Airfield, which

### Population falls from thousands to a handful in just a few years



Source: U.S. Census Bureau, decennial censuses

was transferred in 1945 to the Alaskan Air Command and then to the U.S. Navy in 1950.

The island bustled for nearly 50 years, becoming one of the larger communities in Alaska. During the peak of the Cold War, the population reached nearly 6,000 military personnel and their families, according to the new book *Atomic Island* by Ben Huff. The publisher called Adak “the westernmost physical front in the defense of democracy from 1937 to 1997.”

During the military years, Adak gained many of the amenities you’d see in Lower 48 communities, including chain restaurants such as Pizza Hut and McDonald’s, a movie theater, and a ski area.

The base closed on March 31, 1997, and the military transferred ownership of all the island’s naval facilities to the Aleut Corporation in 2004. Only a handful of these buildings are occupied, however.

The city was incorporated in 2001, but after the military left, the population plummeted. Adak had 4,633 people at the 1990 Census and just 316 residents 10 years later. Between the 2010 and 2020 censuses, the population dropped even further.

## The essentials in the 21st century

Adak’s 2020 Census count, taken before the seafood processing plant closed, was 171 — but the exact number is hard to pinpoint. Data for a community this small have large margins of error, especially in

## Still waiting?

*At right, a hallway in the empty naval station still has a spot for a “quality of life” suggestion box. (Photo by Travis Shinabarger)*

*Below, if this patron had an appointment at the hospital or clinic, he’s very late. (Photo by Flickr user Kim F.)*



## A few Adak stats, 2016-2020

Households	51
In the labor force	79%
Living in a multi-unit structure	94%
Born in Alaska	37%
Median age	34.5
Males per 100 females	147
Median household income	\$51,250

**Note:** Because Adak is so small, these numbers have large margins of error and should be taken as a broad look rather than precise counts.

**Source:** U.S. Census Bureau, American Community Survey 2016-2020

the recent census when the U.S. Census Bureau began inserting “noise” into small groups’ numbers to protect privacy. Estimates of the year-round population range from 50 to more than 100, depending on where you look, with as many as 200 or 300 in recent years’ seasonal peaks. Our July 2021 estimate put the population at 179.

For those who make the modern Adak home, remoteness and safety are some of the reasons to stay. COVID-19 provided a good example; Adak made it 18 months into the pandemic with only one COVID case. A handful of additional cases that came with the delta variant in the fall of 2021 raised alarm, as the town has only one health care provider.

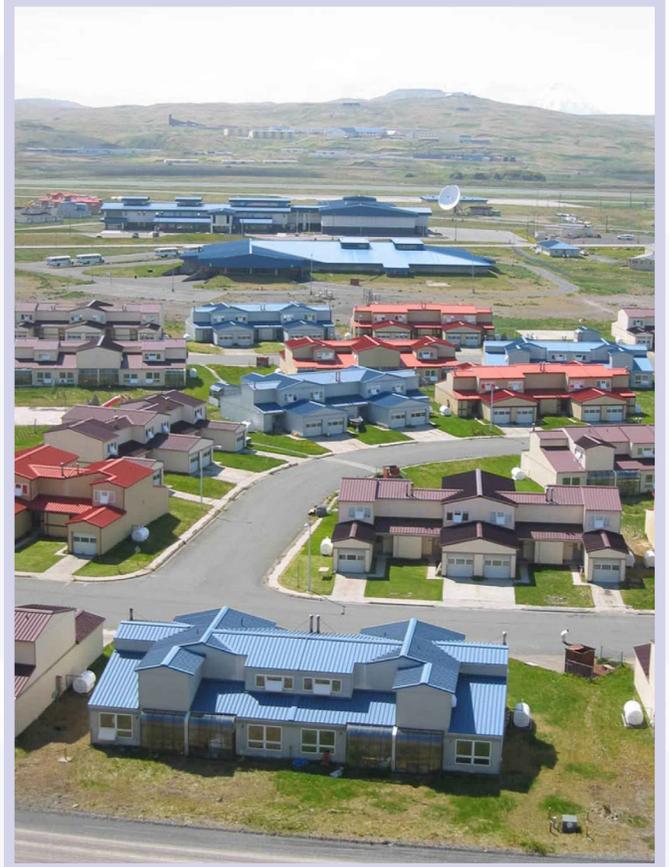
Adak has a handful of other amenities, including



## Frozen in time

*Above, visitors pretend to wait at the drive-through of the defunct McDonald's in 2009, shortly before the building sold and was renovated for commercial kitchen use. The restaurant closed in the 1990s when the Navy left the island. (Photo by Flickr user Kim F.)*

*At right, most of the buildings in Adak, which were built for a population of thousands, now stand empty. (Photo by Sundseth Kent, U.S. Fish and Wildlife Service)*



places to eat and drink, a grocery store, a school (14 enrolled during the 2021-22 school year), and several rental and charter businesses. As of October, the town had 13 active business licenses.

Some local businesses rent rooms in the repurposed military housing and the vehicles necessary for backcountry exploration. As a host told one reporter, "In Adak, roads aren't always roads."

Hunting or hiking requires a permit from the Aleut Corporation, available at the airport. Other long-established draws to the area include views of the Great Sitkin Volcano, the bunkers built into the hills near Lake Bonnie Rose, and caribou hunting.

## It's an easy life for the island's herd of large, introduced caribou

Caribou hunting is big on Adak, and so are the caribou. They aren't native; they were introduced in the 1950s for base residents to hunt. The herd flourished on the island, reaching nearly 3,000 animals at the last count in 2012. That's because nothing controls herd size. Plants are abundant, and Adak has no predators or pests.

## The intrigue of a ghost town and an 'abandoned' McDonald's

The town also has plenty of empty buildings to look at, many in various states of disrepair after decades exposed to the elements. And the elements are intense — Adak is known as the birthplace of the winds. Hurricane-force winds are common, and just 3 percent of its days are calm. Seven percent are clear.

One empty building drew curiosity on social media: the old McDonald's (pictured above in 2009, shortly before the building was sold). Visitors were fascinated by how well-preserved it was — even the prices on the drive-through sign hadn't succumbed to decades of weathering. Former employees of the Adak McDonald's said in a related Facebook group that it opened in July 1986 and closed in the mid-'90s.

The building wasn't abandoned, though. The Adak Community Development Corporation purchased it in 2009 and turned it into a temporary halibut processing facility in 2011. After that, it became a galley for the now-shuttered seafood processing plant. Since 2015, after an especially brutal storm, the building has remained boarded up to preserve it for future commercial kitchen use.



## Birthplace of the winds

*This sign on the airport used to read, "Welcome to Adak, Alaska, Birthplace of the winds," but the wind appears to have blown off half the sign. (Photo by Flickr user Kim F.)*

## The seafood processing plant was a pillar of the town

Adak's location and military facilities enabled the community to provide a fueling port and crew transfer facility for the large fishing fleets based in Seattle and elsewhere in Alaska, and the old naval airport allowed the seafood processing plant, which buoyed the local economy for years, to transfer massive amounts of product all over the globe.

Golden Harvest Alaska Seafoods owned the plant when it shut down in 2020. The plant processed Pacific cod, pollock, mackerel, halibut, snow crab, and king crab. Between 20 and 50 people worked there when it closed, but it has employed as many as 300 in the past.

The plant hit hard times when Adak lost its 5,000

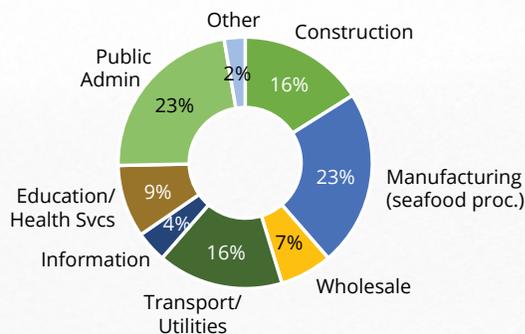
Adak is the westernmost town in the United States and the southernmost town in Alaska.

metric ton federal allocation of Pacific cod, leading to several years of lawsuits and regulatory battles. Golden Alaska Harvest Seafoods had invested millions based on that anticipated cod allocation. While the plant purchased several species, it was the cod catch that made the venture economically viable.

In 2019, a federal court overturned that allocation amid a dispute with the large trawl industry. The North Pacific Fisheries Management Council rejected Adak's appeals to restore it, and in 2021, a large seafood company working with the city to revive the plant suspended their efforts.

The closure and job loss were devastating. However, the Adak Community Development Corporation hired a consultant to secure a new plant operator and reopen by fall 2023. In October, the consultant reported progress to the Alaska Board of Fisheries and said details would come later this year.

## Where Adak residents worked from 2016 through 2020



**Notes:** Excludes seafood harvesters, who are self-employed. In Alaska, manufacturing is mostly seafood processing. Adak's seafood processing plant closed in 2020.

**Source:** U.S. Census Bureau, American Community Survey 2016-2020

## Commercial fishing and other industries for Adak workers

Adak residents work in a handful of other industries, mostly those that provide essential services. Right before the seafood plant closed, the most common jobs were in manufacturing (seafood processing), followed by public administration, construction, transportation and utilities, education and health services, wholesale trade, and information. (See the chart on this page.)

This breakdown doesn't include seafood harvesters, who are mainly self-employed. According to the Commercial Fisheries Entry Commission, Adak had five permit holders and 11 total permits in 2020 for halibut, sablefish, and other groundfish. Four people fished, landing 193,081 total pounds with \$511,777 in estimated gross earnings.



## The living's easy for some

*The island's introduced caribou herd, shown here in early June as they lose their winter fur and sprout antlers, face no predators or threats on the island, aside from the occasional hunter. Food is plentiful. (Photo by Travis Shinabarger)*

## Marine shipping lane potential and renewed military interest

Federal infrastructure funds for the Port of Adak and a few other economic prospects are on the horizon.

The military hasn't committed to reviving the island's military assets or resuming operations, but the Navy conducted a joint exercise with the Marines and Coast Guard on Adak in 2019 and is focused on a stronger Arctic presence as melting sea ice continues to open marine shipping lanes.

Adak has the farthest-west deep water port in the U.S. and a fuel terminal. The Aleut Corporation — which manages both — envisions Adak as a cargo shipping hub.

At the end of October, U.S. Sens. Lisa Murkowski and Dan Sullivan announced that Adak will receive \$10.1 million in infrastructure funding this year for repairs and upgrades to the Port of Adak.

Sullivan and the Aleut Corporation are also pushing for a renewed military partnership. "When you look at where Adak is on the Aleutian chain, it is enormously strategic in terms of, really, the Gateway to the Asia-Pacific and the Gateway to the Arctic," Sullivan told KTUU.

## Area shows mariculture promise

Seaweed farming is another small but notable possibility, and a proposal filed early this year for an aquatic farm is under review.

Seaweed is a growing industry globally, as it's used in multiple foods, personal care products, and

medications. Kelp forests support the fishing and recreation industries by providing biologically productive habitats for other marine species.

Alaska represents just one-hundredth of 1 percent of the world's seaweed market, with eight seaweed farms in 2022. Production began just four years ago, though, amid high hopes that Alaska can become a major player.

Early this year, an Alaska Fisheries Development Foundation report assessed the feasibility of six Alaska communities for new seaweed facilities, and Adak was one.

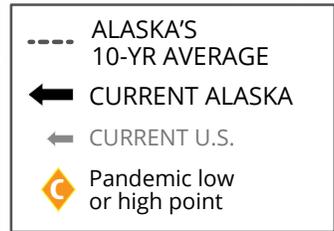
The report noted the Aleutians will be a "prime seaweed growing and processing location in the future" because of the significant Bering Sea seafood processing infrastructure and an existing seafood supply chain that sends large volumes of seafood products to Asia. The region also has large swaths of undeveloped coastline. The listed downside is the relative scarcity of protected bays, given the region's notorious wind and waves.

One of the three farms proposed for the Aleutians was near Adak. Golden Harvest Alaska applied for a permit in 2020, then withdrew it in 2021 when the company shuttered. However, a new proposal is under state review.

Adak Community Seafoods, LLC, applied for an aquatic farm lease in February. The application, which is moving through the Department of Natural Resources permitting process, is for three parcels on 20 acres within Kagalaska Strait, which separates Adak Island and Kagalaska Island in the Andreanoffs. Species include Pacific geoduck, ribbon kelp, bull kelp, dragon kelp, and sugar kelp.

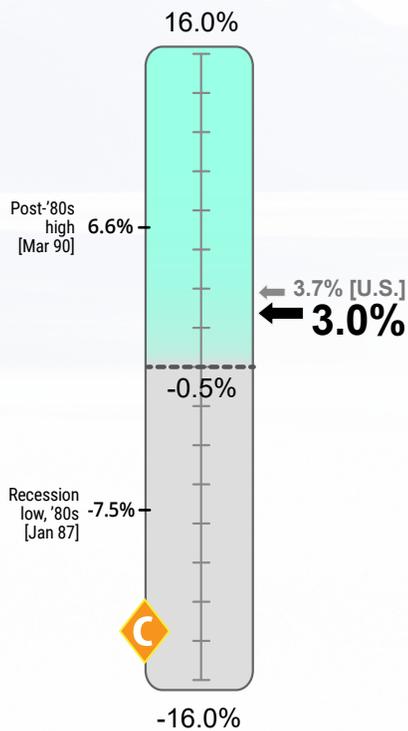
Sara Whitney is the editor of *Alaska Economic Trends*. Reach her in Juneau at (907) 465-6561 or [sara.whitney@alaska.gov](mailto:sara.whitney@alaska.gov).

# Gauging The Economy



## Job Growth

September 2022  
Over-the-year percent change

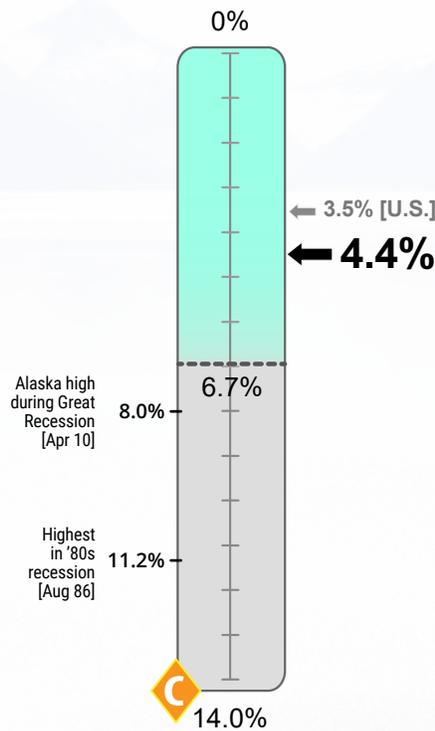


The spread of COVID-19 caused rapid job loss in early 2020. Although employment is up significantly from pandemic lows, it is still 3.9 percent below September 2019.

U.S. employment, which was up 3.7 percent from September 2021, is now 1 percent above its 2019 level.

## Unemployment Rate

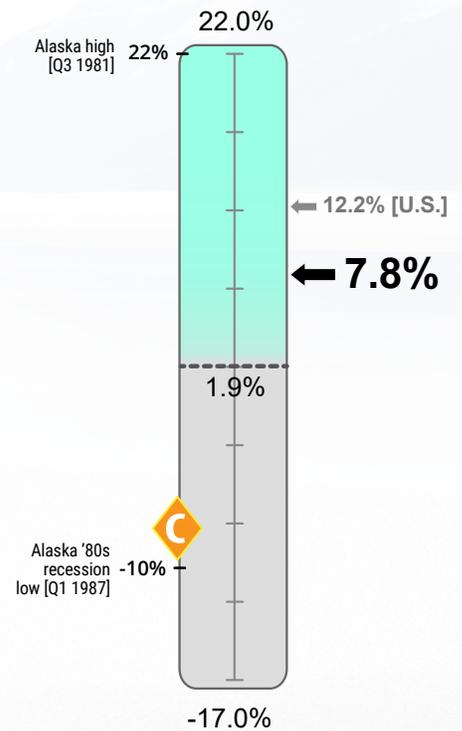
September 2022  
Seasonally adjusted



Alaska's unemployment rate has been less useful as an economic measure during the pandemic because of data collection difficulties and an unusually large number of people leaving the labor market — that is, not working or looking for a job.

## Wage Growth

1st Quarter 2022  
Over-the-year percent change



After being well down during the second and third quarters of 2020, total wages paid by Alaska employers climbed above year-ago levels in the fourth quarter of 2020.

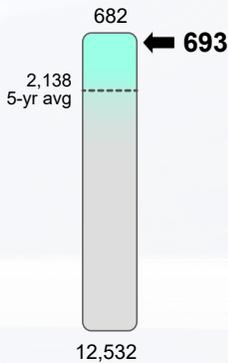
Wages were up 7.8 percent from year-ago levels in the first quarter of 2022 and 3.1 percent above first quarter 2019.

# Gauging The Economy

----- ALASKA'S 10-YR AVERAGE  
 ← CURRENT ALASKA

## Initial Claims

Unemployment, week ending Oct. 8, 2022\*

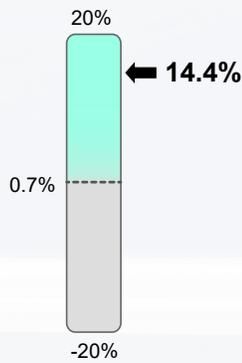


Unemployment claims jumped in the spring of 2020 with the pandemic as many businesses shut down or limited services. Pandemic-driven claims loads have fallen, and new claims for benefits are back below their long-term average.

\*Four-week moving average ending with specified week

## GDP Growth

2nd Quarter 2022 Over-the-year percent change\*

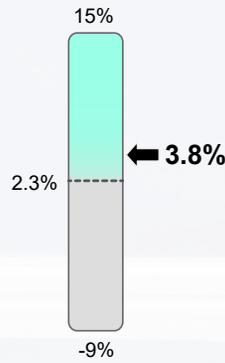


Gross domestic product is the value of the goods and services a state produces. Alaska's GDP fell hard in early 2020 but recovered most of those losses in 2021.

\*In current dollars

## Personal Income Growth

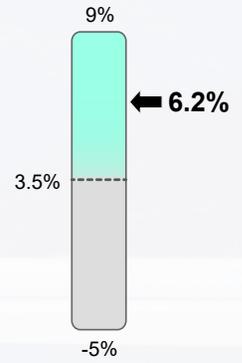
2nd Quarter 2022 Over-the-year percent change



Although wages and other types of employment income were up, a bigger decline in transfer receipts (government payments) pulled personal income into negative territory.

## Change in Home Prices

Single-family, percent change from prior year, Q1 2022\*

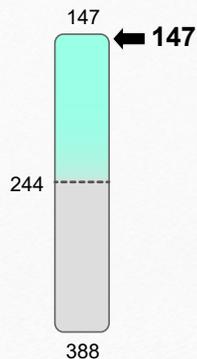


Home prices shown include only those for which a commercial loan was used. This indicator tends to be volatile from quarter to quarter.

\*Four-quarter moving average ending with specified quarter

## Foreclosures

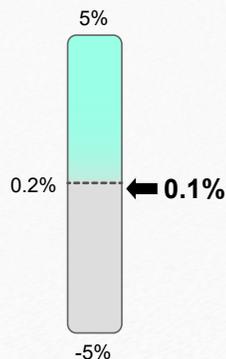
1st Quarter 2020



Foreclosure moratoriums have kept these numbers low during the pandemic.

## Population Growth

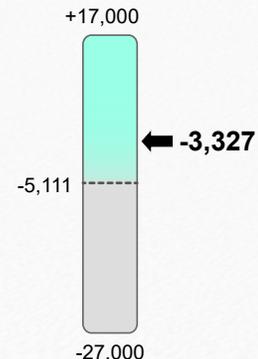
2020 to 2021



After four years of decline, Alaska's population grew slightly in 2021.

## Net Migration

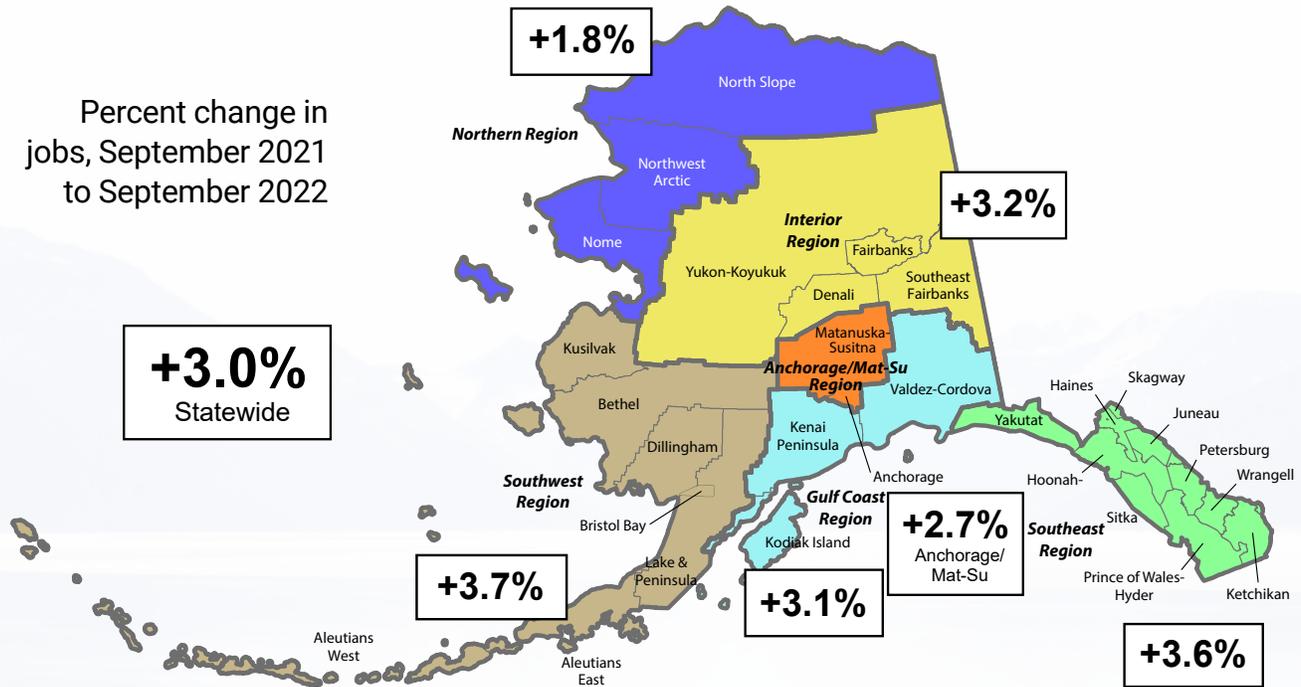
2020 to 2021



The state had net migration losses for the ninth consecutive year in 2021, although the loss was smaller. Net migration is the number who moved to Alaska minus the number who left.

# Employment by Region

Percent change in jobs, September 2021 to September 2022



## Unemployment Rates

Seasonally adjusted

	Prelim.		Revised
	9/22	8/22	9/21
United States	3.5	3.7	4.7
Alaska	4.4	4.6	5.9

Not seasonally adjusted

	Prelim.		Revised
	9/22	8/22	9/21
United States	3.3	3.8	4.6
Alaska	3.5	3.5	5.2

Regional, not seasonally adjusted

	Prelim.			Revised				Prelim.			Revised		
	9/22	8/22	9/21	9/22	8/22	9/21		9/22	8/22	9/21	9/22	8/22	9/21
<b>Interior Region</b>	<b>3.3</b>	<b>3.2</b>	<b>4.6</b>				<b>Southeast Region</b>	<b>3.0</b>	<b>2.9</b>	<b>4.5</b>			
Denali Borough	4.6	4.2	6.4	<b>Southeast Region</b>	5.3	5.5	7.8						
Fairbanks N Star Borough	2.9	2.9	4.2	Aleutians East Borough	1.4	1.2	1.9	Haines Borough	5.3	5.5	7.8		
Southeast Fairbanks Census Area	4.3	4.3	5.5	Aleutians West Census Area	3.0	2.0	3.3	Hoonah-Angoon Census Area	3.9	3.6	5.3		
Yukon-Koyukuk Census Area	7.5	7.2	9.6	Bethel Census Area	9.2	9.5	12.0	Juneau, City and Borough	2.3	2.3	3.6		
<b>Northern Region</b>	<b>7.2</b>	<b>7.1</b>	<b>8.2</b>	Bristol Bay Borough	2.9	2.0	5.3	Ketchikan Gateway Borough	3.4	3.3	5.4		
Nome Census Area	7.2	7.5	8.2	Dillingham Census Area	5.2	5.0	6.6	Petersburg Borough	4.2	3.6	5.4		
North Slope Borough	5.1	4.8	6.5	Kusilvak Census Area	13.1	14.5	16.6	Prince of Wales-Hyder Census Area	5.2	5.0	6.7		
Northwest Arctic Borough	9.2	8.6	10.0	Lake and Peninsula Borough	4.8	3.9	7.4	Sitka, City and Borough	1.8	1.9	3.1		
<b>Anchorage/Mat-Su Region</b>	<b>3.2</b>	<b>3.2</b>	<b>4.9</b>	<b>Gulf Coast Region</b>	<b>3.9</b>	<b>3.6</b>	<b>5.6</b>	Skagway, Municipality	5.0	4.7	8.3		
Anchorage, Municipality	2.9	2.9	4.8	Kenai Peninsula Borough	4.0	3.7	5.8	Wrangell, City and Borough	3.9	4.1	6.8		
Mat-Su Borough	4.0	4.0	5.4	Kodiak Island Borough	3.2	2.9	5.2	Yakutat, City and Borough	3.4	3.7	6.0		
				Chugach Census Area	2.7	2.5	4.3						
				Copper River Census Area	7.5	6.4	7.3						

# How Alaska Ranks



Note: Government employment includes federal, state, and local government plus public schools and universities.

<sup>1</sup>September seasonally adjusted unemployment rates

<sup>2</sup>September employment, over-the-year percent change

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	
<b>Urban Alaska Consumer Price Index</b> (CPI-U, base yr 1982=100)	252.271	1st half 2022	232.679	+8.42%
<b>Commodity prices</b>				
Crude oil, Alaska North Slope, * per barrel	\$92.43	Sept 2022	\$74.85	+23.49%
Natural gas, Henry Hub, per thousand cubic feet (mcf)	\$7.76	Sept 2022	\$5.12	+51.56%
Gold, per oz. COMEX	\$1,656.13	10/24/2022	\$1,806.80	-8.33%
Silver, per oz. COMEX	\$19.07	10/24/2022	\$24.59	-22.45%
Copper, per lb. COMEX	\$3.48	10/24/2022	\$4.53	-23.15%
Zinc, per lb.	\$1.35	10/26/2022	\$1.57	-14.01%
Lead, per lb.	\$0.87	10/26/2022	\$1.10	-20.91%
<b>Bankruptcies</b>				
Business	49	Q2 2022	65	-24.62%
Personal	4	Q2 2022	6	-33.33%
<b>Unemployment insurance claims</b>				
Initial filings	3,217	Sep 2022	5,759	-44.14%
Continued filings	13,719	Sep 2022	28,729	-52.25%
Claimant count	3,355	Sep 2022	6,330	-47.00%

\*Department of Revenue estimate

Sources for this page and the preceding three pages 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. Energy Information Administration; Kitco; U.S. Census Bureau; COMEX; NASDAQ; Alaska Department of Revenue; and U.S. Courts, 9th Circuit

# FISH HARVESTERS

Continued from page 7

in groundfish harvesting employment pushed the region's total down 7.8 percent, or by 92 jobs.

## Bristol Bay

Bristol Bay has seen flat or rising employment for the last few years, even as other regions lost jobs. Bristol Bay salmon fishing employment was flat overall last year, with some ups and downs over the season. July, the peak, was slightly lower but a more active June offset the loss.

Bristol Bay's red king crab fishery remained closed (and will not reopen this year). The other fishery, herring, is small — but all of Bristol Bay's annual harvesting job gains came from herring. Herring harvesters work only in May, but jobs that month jumped from 10 in 2020 to 37 in 2021.

Still, Bristol Bay's salmon harvest represents 99.8 percent of its fishing jobs, keeping overall employment essentially flat (1,300 jobs in 2020 and 1,303 in 2021).

## Yukon Delta

The Yukon Delta's salmon harvest continued to crash in 2021, with the employment peak in July falling from 441 in 2020 to just 144. Only four years ago, the yearly peak was more than 1,000 jobs.

The spring groundfish harvest provided some jobs, but not enough to offset the loss of salmon stocks. With its largest fishery stalling, the region's total harvesting job count fell from 93 to 38 for the year.

The last few years of job losses in the Yukon Delta have been the largest our data have recorded in Alaska. Salmon harvesting jobs have plunged to near-zero as the fish fail to return in adequate numbers for both subsistence and commercial use. The reasons the fish aren't returning (called escapement) are under debate, but a combination of factors is likely. Young salmon headed into the Pacific are vulnerable to warmer waters, competition with hatchery salmon, and bycatch. In the past, phytoplankton blooms have also hampered regional runs.

## Kodiak

Harvesting employment in Kodiak was a mixed bag in 2021. The overall job count didn't change much, but the mix of species did. Crab essentially closed, for example, with one brief window in late fall.

Kodiak's sablefish fishery also lost about a third of its annual jobs, mainly because the peak month dropped from 181 to just 81.

Salmon and halibut harvesting employment grew. The number of jobs fishing salmon increased in the summer and halibut jobs rose in November and December after salmon fishing stopped.

Overall, Kodiak's average employment grew 0.4 percent, and its peak month rose from 1,178 to 1,194 jobs.

## Southcentral

Southcentral depends on salmon harvesting, and the job count declined by 2.1 percent in 2021. The numbers of sablefish and crab harvesting jobs also decreased, although crab is a small fishery. Groundfish and halibut, also small fisheries, saw modest gains. Employment in Southcentral's herring fishery was stable, which is typical. This mix of losses and gains resulted in a 1.8 percent decline for the year, from 1,419 to 1,393 average jobs.

## Northern

The Northern Region typically has the smallest number of fishing jobs, but the Yukon Delta's catastrophic job losses moved it into last place in 2021.

The Northern Region has single-digit job counts for all of its species except salmon. Still, the region lost around 19 percent of its salmon harvesting employment in 2021, which combined with other losses produced a 21 percent drop in fishing jobs overall.

## The outlook for 2022 so far

Harvests in 2022 have followed many of 2021's trends. Bristol Bay continues to catch more salmon each year, and the Yukon Delta sustained further closures in 2022, to the degree that subsistence was also restricted. Fish and Game projects a 32 percent drop in salmon runs in 2022, and as mentioned earlier, two major crab fisheries were closed late this year — something that will show up in future data.

Although climate science and biology are outside this article's scope, the concern that ocean warming will cause large-scale biological shifts is important to note. Fish harvesting numbers don't yet capture these impacts for most regions, but they will be key influences on current and future harvests.

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

# SAFETY MINUTE

## Caring for the caregivers: Keeping hospital workers safe

Health care workers found themselves at the forefront of the fight against COVID-19, which lifted the curtain on an industry widely perceived as healing. While every sector of the economy faced unique challenges in navigating the pandemic, medical staff weathered grueling hours, personal protective equipment shortages, elevated exposure to infection, and record levels of burnout.

Some people may not realize that even before the pandemic, hospitals were a hazardous work environment. According to the U.S. Bureau of Labor Statistics, the likelihood of injury or illness that results in days away from work is higher in hospitals than in construction or manufacturing and is almost double that of the private sector overall.

Hospitals present unique risks, from ergonomic problems stemming from the lifting and transferring of patients to exposure to bloodborne pathogens and needle sticks, workplace violence by patients or visitors, infectious diseases, chemicals, drugs, respiratory hazards, lasers, radioactive material, and x-rays, to name just a few.

Hospital culture emphasizes patient safety, and workers take an oath to do no harm. This can prompt selfless workers to risk their own safety and health if a patient is in need.

Hospitals are often miniature cities, too, with a range of staff including food services, material handling, maintenance, and cleaning, all working in a dynamic and unpredictable environment where frequent split-second decisions can affect the health and safety of many.

Employers can create work environments that are a place of healing for all by continuously improving safety and health measures and mitigating unsafe conditions. Following are some of the major hazards in hospitals and ways to keep these workers safe and healthy.

### Safe patient handling

One primary cause of injury for health care workers is musculoskeletal disorders, with nursing

assistants having the highest incidences of any occupation. These injuries stem from overexertion while lifting and transferring patients and providing care in awkward positions. High-risk areas include the bathing room, extended care wings, and diagnostic units.

Patient transfer and lifting devices are an engineering control that can mitigate these risks and benefit both staff and patients. Explaining the lift equipment and procedures to patients ensures cooperation and engagement, making the process safer for everyone.

### Safety management systems

Implementing programs with management commitment and active worker participation, and systems to proactively reduce workplace hazards, are an effective way to reduce worker illness and injuries. See the following resources for more:

- [OSHA: Safety and Health Management Systems](#)
- [Improving Patient and Worker Safety](#)

### Preventing workplace violence

Violence in the workplace is preventable with an assortment of hazard controls. Engineering controls can create a barrier; this could involve changing floor plans to ensure exits are within sight, improving lighting, installing mirrors, and investing in security technologies such as metal detectors or panic buttons.

Administrative controls could include procedures for communicating information about patient behavior, policies that minimize stress for patients and visitors, and training in de-escalation techniques.

More ideas and assessment tools are available at [OSHA: Workplace Violence Program](#)

*This Safety Minute was written by Heather Miley, a health consultant for the Alaska Occupational Safety and Health Consultation and Training Section of the Department of Labor and Workforce Development. For more information on keeping your employees safe, please visit [labor.alaska.gov/lss/oshhome.htm](http://labor.alaska.gov/lss/oshhome.htm).*