

# ALASKA ECONOMIC **TRENDS**

NOVEMBER 2012

## **Alaska's Fishermen** Harvests, earnings, and their other jobs

### **WHAT'S INSIDE**

**Seafood processors**

Long hours on the 'slime line'

**A portrait of Aleutians West**



**ALASKA DEPARTMENT OF LABOR  
& WORKFORCE DEVELOPMENT**

**Sean Parnell, Governor**

**Dianne Blumer, Commissioner**

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ALASKA DEPARTMENT OF LABOR  
& WORKFORCE DEVELOPMENT

Sean Parnell, Governor  
Dianne Blumer, Commissioner

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On the cover: Sockeye salmon head upstream to spawn at Hansen Creek, a tributary of Lake Aleknagik in the Wood River drainage of Bristol Bay. Photo by Rachel Hovel

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<b>Alaska's Fishermen</b>	<b>4</b>
Harvests, earnings, and their other jobs	
<b>Long Hours on the 'Slime Line'</b>	<b>10</b>
Seafood processors key to Alaska's largest export	
<b>Aleutians West Census Area</b>	<b>12</b>
An area with a turbulent past, flourishing modern ports	
<b>Employment Scene</b>	<b>17</b>
Seasonal adjustment and how it works	

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# Training, partnerships boost fishing industry for Alaska's future



**By Dianne Blumer,  
Commissioner**

With a coastline of more than 6,600 miles — more than half of the U.S.'s 12,300 miles combined — Alaska's renewable fisheries have long been both sustenance and an economic driver for the state. Alaska remains the leader in the value of its fisheries landings — about \$1.9 billion of the \$5.3 billion U.S. total in 2011, according to the National Marine Fisheries Service.

In this month's *Trends* we focus on seafood harvesting — commercial fishing — which employs more than 30,000 permit holders and crew each year. These workers harvest an incredible variety of species including crab, salmon, and groundfish.

If seafood processing is added to harvesting, Alaska's commercial fishing industry is one of the largest industries in the state. In many of Alaska's coastal communities, most private-sector jobs are connected to the fishing industry.

The industry needs thousands of workers — more than 10,000 seafood processors were new hires in 2011. Short seasons and high demand also mean that about 76 percent of processors were not Alaska residents. Changes on Nov. 1 to the U.S. Department of State's J-1 Visa program may also mean that some former or new workers would no longer be eligible to work in the industry.

The Alaska Department of Labor and Workforce Development is working to get more Alaska residents in both seafood harvesting and processing jobs. Each year thousands of applicants go through seafood orientation, which is held Monday through Thursday at 10 a.m. in the Anchorage Midtown Job Center. Applicants learn about job requirements and working conditions, and interview one-on-one with seafood employers.

Through our workforce development partnership, Copper River Seafoods has implemented registered apprenticeship in construction equipment repair, mechanical repair industrial/refrigeration, and the first certified quality control program for seafood.

Copper River's President/CEO Scott Blake, who is also a fisherman, continues to focus on expanding secondary processing for Copper River and the entire Alaska seafood processing industry. More jobs mean more training, and CRS will soon implement registered apprenticeships for IT specialist and graphics designer.

The Alaska Department of Labor also partnered with the Yukon Delta Fisheries Development Association to provide the summer Youth Employment Program. For the last two summers, more than 200 young Alaskans from the villages of Emonak, Nunam Iqua, Alakanuk, Mountain Village, Pilot Station, Tuluksak, Stebbins, and Kotlik were employed at the Kwikpak Fishery, earning a paycheck while learning job skills for the future.

These youth worked a variety of age-eligible jobs, such as harvesting eggs to sell as caviar to high-end restaurants and supporting promotion including designing marketing materials and maintaining the Web site. They also supported administrative duties including scheduling for the plant, worked in the fisherman's break room and store, and learned lodging management and housekeeping as well as packing and distribution of the fish and caviar.

The participants are also working on two ongoing projects: World Suicide Prevention Day activities and the upkeep of the Trace Register, a Web site that allows buyers to track the shipment of their fish and also provides information on where it was caught and processed.

I was able to attend part of this year's summer program — a job fair in Emonak that included seven education and training programs as well as information about the Alaska Performance Scholarship. As I looked around the auditorium at about 80 youth who were part of this successful program, I felt hopeful that this partnership will help provide successful futures to keep these young people in Alaska.



# Alaska's Fishermen

## Harvests, earnings, and their other jobs

**A**laska has long had one of the most valuable commercial fishing industries in the nation. Four of the top 10 ports for landings by volume and six of the top 10 ports for value are in the state. More than half of commercially captured U.S. seafood is caught in Alaska.

In 2011, for the 15th year in a row, Dutch Harbor-Unalaska led the nation in the amount of fish landed. (See page 12 for a profile of that area.)

### The industry's reach

The seafood industry directly employs thousands of workers, some from communities without many other job opportunities. About 32,200 people

### The challenge of counting harvesters

Most payroll jobs in Alaska — those where employers pay a wage or salary — are covered under state unemployment insurance laws. Employers are required to report job numbers and wages to the Department of Labor and Workforce Development, which uses those numbers to count jobs and record wages.

Counting fish harvesters is more difficult, because most commercial fishermen are considered self-employed and do not pay into the unemployment insurance system, and crew generally work for a share of the profit rather than a set wage. Without these UI records, the department uses a variety of other sources to estimate employment.

For more detail on the methods the department uses to create these estimates, see the "About these numbers" box on page 8.

fished commercially in 2011, including about 9,900 permit holders who made at least one landing that year and more than 22,000 crew members.

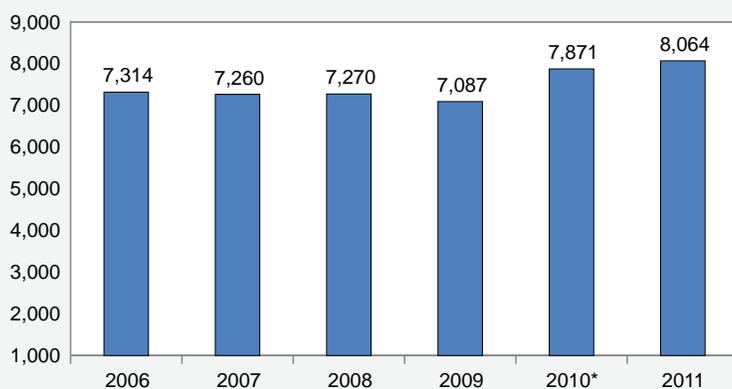
Though this article focuses exclusively on fish harvesting, thousands more Alaskans work in fish processing plants, fishing-related support services, and businesses such as restaurants, bars, and retail shops where people who fish spend their money. These support jobs are also an important part of the Alaska economy and show the broad reach of the seafood industry as a whole. (For a profile of seafood processors, see page 10.)

### Fishing employment up in 2011

Because fish harvesting is so seasonal and varies from fishery to fishery, comparing employment in any particular month is not always useful for identifying industry trends. Average monthly job counts give a better picture, and they were up overall in 2011. (See Exhibit 1.)

Salmon harvesting, which represents more than half of the total jobs, and groundfish harvesting each added more than 200 jobs over the year. Halibut, crab, and herring were among the species with employment down for the period.

### 1 Average Monthly Employment Alaska fish harvesting, 2006 to 2011



\*The 2010 data were revised using 2011 crew factors. Because the crew factors changed, adjusting the earlier data allows the two years to be compared. For more on crew factors, see "About these numbers" on page 8.

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

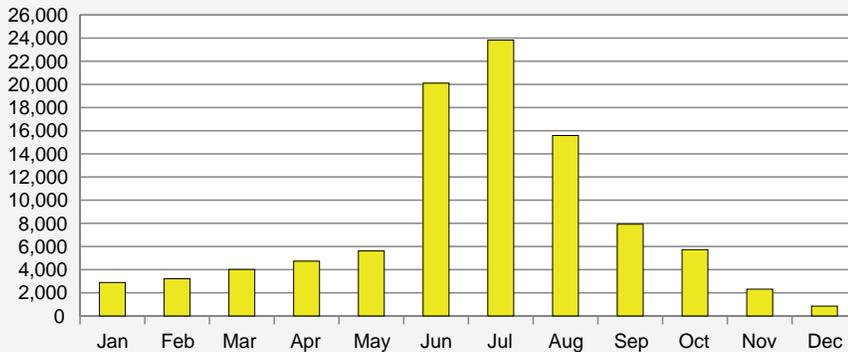
# 2a

## Fish Harvesting Employment by Year Alaska, 2001 to 2011

	Monthly Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2001	7,959	2,972	4,286	4,505	4,681	7,053	18,884	21,571	13,921	8,095	6,194	2,617	726
2002	7,168	3,590	4,047	4,334	4,913	6,715	16,292	18,224	11,975	6,983	5,794	2,632	524
2003	7,404	3,284	3,609	4,378	5,797	6,233	17,610	19,670	11,922	7,191	5,969	2,660	526
2004	7,330	3,594	3,492	4,110	5,050	6,476	17,139	19,634	12,308	7,371	6,023	2,259	509
2005	7,486	3,561	3,150	4,227	5,115	6,283	18,169	20,566	12,889	7,192	4,958	2,768	953
2006	7,314	2,700	3,092	4,448	4,458	5,725	17,666	20,175	13,531	7,671	4,838	2,422	717
2007	7,260	2,584	2,966	3,930	4,348	5,949	17,528	20,137	13,567	7,500	4,738	3,080	791
2008	7,270	2,738	3,138	4,511	4,445	5,572	17,022	20,446	13,633	8,225	4,202	2,708	602
2009	7,087	2,527	3,817	3,126	4,874	5,693	17,609	20,076	13,687	7,148	4,593	2,388	507
2010	7,871	2,668	3,060	4,005	5,255	5,685	18,878	23,128	15,287	7,759	4,992	2,887	850
2011	8,064	2,886	3,210	4,014	4,727	5,614	20,105	23,821	15,582	7,920	5,725	2,311	849

# 2b

## Fish Harvesting Employment by Month Alaska, 2011



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

### Fisheries and seasonality

Employment trends follow fishing seasons, and though high employment months vary by fishery, over 60 percent of the year’s total harvesting employment takes place in June through August. (See exhibits 2 and 3.) Salmon averaged more than 16,000 jobs a month during those months — 80 percent of total summer harvesting employment.

Though salmon fisheries have the most jobs by far and account for the majority of seasonal work, other fisheries are seasonal as well. Employment numbers for some fisheries are smaller than salmon’s, but vary from month to month just as dramatically. For example, most employment in dive fisheries (such as sea cucumber) begins in October and tapers off through the remaining winter months.

### Jobs by species, gear, and region

Nearly 4,700 harvesters fished for salmon per

month in 2011, about 58 percent of the monthly average for all fish harvesters for the year.

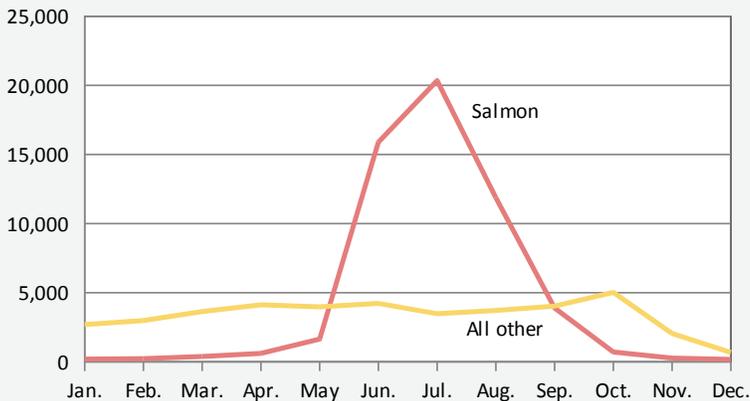
Groundfish and halibut followed with 14 and 13 percent, respectively. (See Exhibit 4.)

Three gear types accounted for almost 60 percent of harvesting jobs in the state in 2011. Longliners primarily caught halibut, sablefish, and other bottomfish, while gillnetters and set netters targeted salmon. Together, the three provided an average of about 4,800 jobs a month. (See Exhibit 5.)

Longliners fished species with seasons that offered steady, significant employment for most of the year, while most employment for gillnetters and set netters was during the summer.

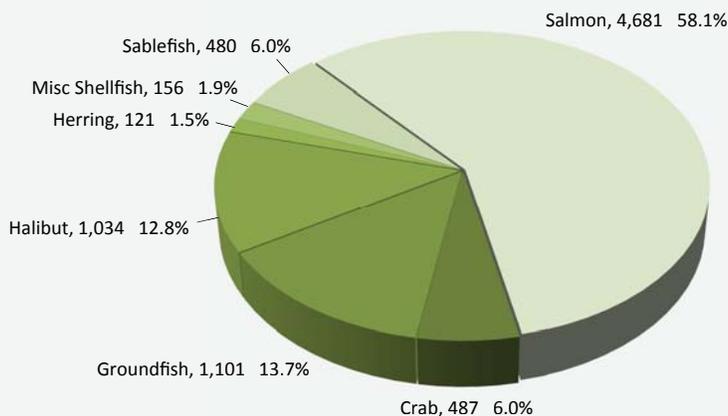
Some fisheries and areas of the state, such as the sockeye run in Bristol Bay, follow intense and relatively short fishing seasons that offer plentiful jobs for a brief time. Fishing seasons in other areas such as Southeast allow permit holders to fish year-round, creating a job market that fluctuates far less. (See Exhibit 6.)

### 3 Monthly Harvesting Employment Salmon vs. other species, 2011



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

### 4 Average Monthly Jobs by Species Alaska fish harvesting, 2011



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

#### Most are men, crew are young

Of the 30,300 fish harvesters whose genders were recorded in 2011, 85 percent were men. (See Exhibit 7.)

Forty-five percent of all permit holders were between ages 45 and 60, with an average age of 47. (See Exhibit 8.) The 2011 numbers show there were roughly twice as many permit holders between 45 and 60 as there were between 30 and 44.

Crew members were much younger on average than permit holders, with an age distribution centered around 21. There was also a higher incidence of crew members in their mid-30s, dropping off in the older age range. This may be due in part to aging crew eventually purchasing their own permits.

#### What else fish harvesters do

Like other working Alaskans, fish harvesters often hold more than one job. Because their fishing-related work is seasonal, many work part of the year in other occupations.

Almost 9,000 active permit holders and crew had payroll jobs in 2011 — that is, they worked for an employer when they weren't fishing. Over 29 percent of the more than 9,900 permit holders and 27 percent of 22,200 crew members held second jobs in Alaska where they drew a wage.

A number of other fishermen may have also been self-employed when they weren't fishing. Further, the information necessary to track permit holders and crew into the workforce is not always available (for example, second-job information for fishermen who worked in other states or for the federal government).

Permit holders earned more on average than crew in their other, nonfishing-related jobs. Permit holders made an average of more than \$29,000 each in nonfishing wages. In contrast, crew members earned \$18,650 at their other jobs on average.

#### Second jobs by area of the state

Permit holders who made landings in the Yukon Delta and Northern coastal areas were less likely to depend solely on fishing income than those who fished other areas. (See the third table of Exhibit 9.) In these areas, more fish may be caught for subsistence use than for commercial sale. At the other end of the scale, only 14.4 percent of permit holders in the heavily fishing-based Aleutians and Pribilof Islands areas had other earnings.

Those in Southcentral, as a group, earned the most in nonfishing jobs and had the highest average annual earnings at more than \$41,000. The region includes Anchorage and Mat-Su, high

population areas with diverse economies and a variety of job opportunities.

## Set netters most likely to hold another job

Set net permit holders were especially likely to also have other jobs. (See the second table of Exhibit 9.) They made nearly \$41 million of the \$84.5 million in payroll earnings of all harvesters in 2011.

Set netting is a small-scale type of gillnetting, often done by families, and is seldom the permit holder's only source of income. More than 50 percent of all set net permit holders also had a known wage and salary job.

At the other end of the scale, less than 3 percent of trawl permit holders held a separate payroll job. Trawlers are generally large vessels and can work fisheries with relatively long seasons.

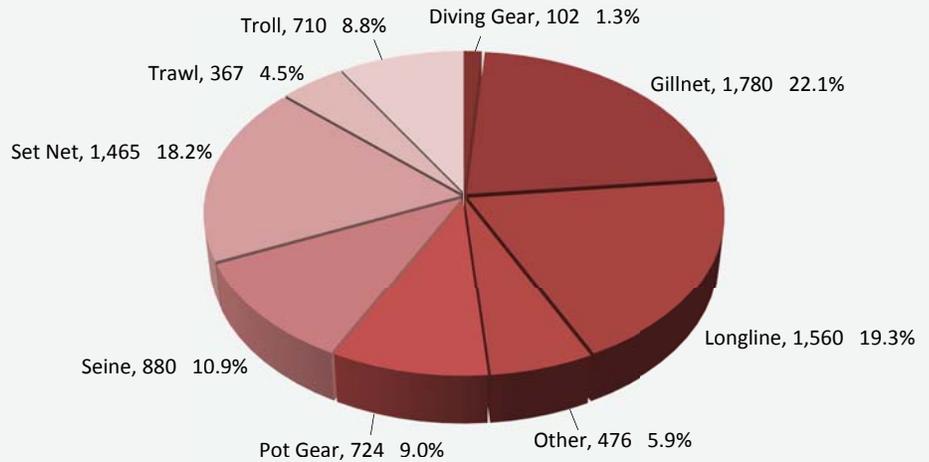
## Most with multiple jobs fish for salmon

More than three-quarters of the 2,901 permit holders known to have held a payroll job in 2011 were salmon harvesters. (See the first table of Exhibit 9.) About one in three salmon permit holders worked another job when they weren't fishing, and earned \$65.6 million of the \$85.5 million in payroll earnings of all permit holders. Because salmon harvests are mainly in the summer, these harvesters have an extended off-season for other work.

On the other end of the spectrum, less than 10 percent of the 386 sablefish permit holders held a separate payroll job in 2011. Groundfish and crab permit holders were also less likely to hold another

## Average Monthly Jobs by Gear Type 5

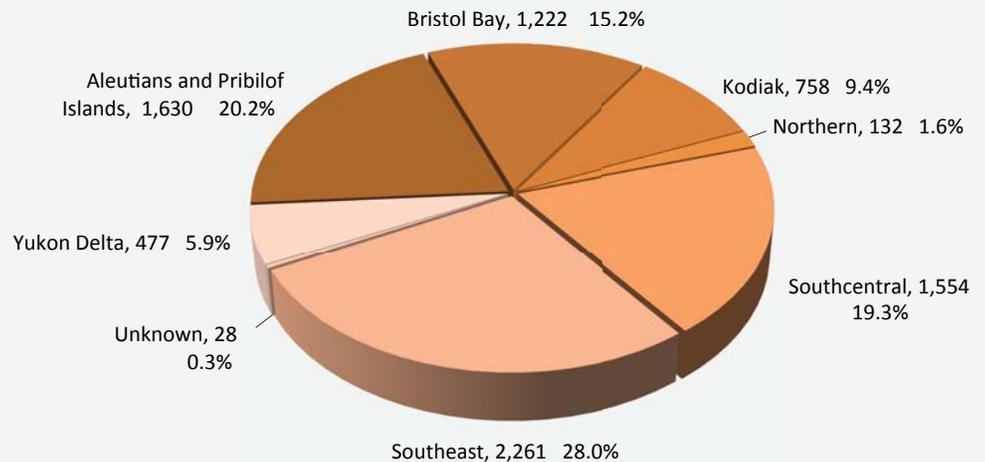
Alaska fish harvesting, 2011



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

## Average Monthly Jobs by Region 6

Alaska fish harvesting, 2011



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

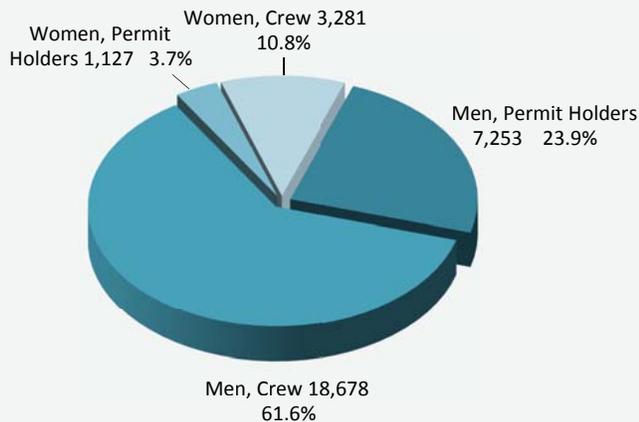
job, at 11.7 percent and 13.6 percent, respectively.

## Construction tops offseason work

Jobs in the construction trades were the most common for both permit holders and crew when

## 7 Most Fish Harvesters Are Men

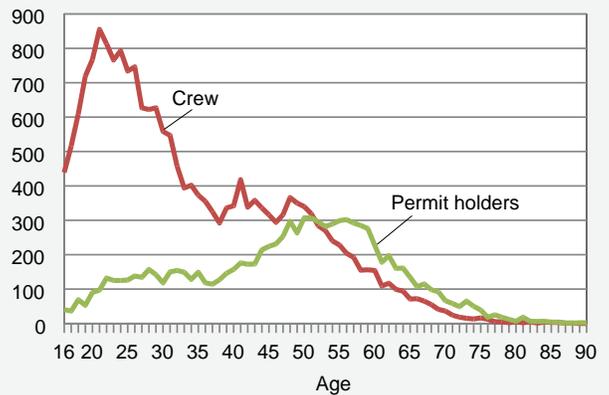
Resident permit holders and crew,\* 2011



\*Includes only active permit holders and crew whose gender has been reported. Gender data are not available for nonresident harvesters.  
Sources: Commercial Fisheries Entry Commission; Alaska Department of Fish and Game; and Alaska Department of Labor and Workforce Development, Research and Analysis Section

## 8 Crew Members Mostly Young

Alaska permit holders and crew, 2011



Note: Includes only active permit holders and crew who are at least 16 years old.  
Sources: Commercial Fisheries Entry Commission; Alaska Department of Fish and Game; and Alaska Department of Labor and Workforce Development, Research and Analysis Section

### About these numbers

Because fisheries data come from a variety of sources with different lag times, harvesting estimates are not available as quickly as other data series the Department of Labor and Workforce Development publishes. For example, information on fish landings is reported annually, several months after the end of the year. This can lead to delays between harvests and data publication.

As a substitute for detailed payroll records, the department applies a crew factor, explained below, to Alaska Department of Fish and Game's weekly landing and daily delivery records along with National Marine Fisheries Service's landings data to estimate fish harvesting employment. A landing is the initial sale of harvested fish to a buyer.

The department receives these numbers from the Alaska Fisheries Information Network, or AKFIN, whose records are a combination of those two sources and also report fish type, value, and volume caught as well as the number of permit holders who fished that year and their residency status.

Permit holders are assigned unique identifying numbers to ensure that if they make multiple landings in a month on the same permit, they are counted only once. Jobs are also assigned by place of work rather than the residence of the workers. Most permits have a geographic designation where specific species can be harvested. Permits that allow fishing anywhere in the state receive a special harvest area code.

The department considers the permit itself the employer, which means a permit holder who makes landings under two different permits in the same month will generate two sets of jobs. Considering the permit the employer rather than the permit holder is a slightly better approximation of how jobs and workers are counted in wage and salary numbers. If permit holders were the employers, it would incorrectly appear that they maintain identical crew for every permit.

### Crew factors and the 2012 survey

The department sent surveys to 8,952 permit holders in March of 2012 to determine maximum crew requirements by month. The return rate was 32 percent, with almost 94 percent of permit holders who replied indicating they fished in 2011.

Responses from the 2012 survey were combined with those from the 2011 survey to produce a crew factor by gear type. The department applied the crew factor to landings data for active permit holders to estimate 2011 fish harvesting employment.

The monthly harvesting employment estimates are likely conservative as they don't reflect time spent by permit holders and crew preparing to fish or winding up operations during months not spent fishing.

### Who was counted

DOL included only permit holders who had made at least one landing in 2011. In most fisheries in the state, a permit holder can crew for another fish harvester without buying a separate crew license, so it's possible some permit holders not only fished their own permit, but crewed on someone else's boat as well.

Because crew licenses are purchased for either a seven-day period or a calendar year, the department assumed that all 2011 license holders fished at least once that year.

Though most fish harvesters are exempt from paying into the state unemployment insurance program, some do. DOL records show 886 crew and 176 permit holders paid into the UI system and held positions that were likely fishing-related. Because the focus of that part of the article was on work being done other than fish harvesting, these workers were not included in the discussion or data. The jobs not included were fishermen and related fishing workers, sailors and marine oilers, captains, mates, pilots of water vessels, and ship engineers.

they weren't fishing. (See Exhibit 10.) Together, permit holders and crew worked more than 1,200 construction jobs, nearly double the number of material moving occupations, the job group with the second highest number.

Various material moving jobs were high on the list for both crew and permit holders. Some of the top employers for these workers were marine cargo handling companies.

Nearly 550 crew members also worked in food processing, mostly in fish processing plants. This makes sense, given the seasonality of fishing, especially for small communities where fishing is a major part of the economy and other opportunities are limited.

For some, such as teachers or school aides, fishing is the "other" job. The seasonality of school complements their fishing work, and they take advantage of their free summers to earn money at sea.

## 9 Permit Holders' Other Jobs Alaska, wage and salary earnings, 2011

BY SPECIES FISHED					
Species	With WS Earnings	No WS Earnings	Percent With WS earnings	Total Species WS Earnings	Average Earnings
TOTAL	2,901	7,011	29.3%	\$84,548,061	\$29,144
Salmon	2,237	4,540	33.0%	\$65,557,409	\$29,306
Halibut	434	1,169	27.1%	\$13,184,174	\$30,378
Misc Shellfish	64	206	23.7%	\$1,996,344	\$31,193
Crab	48	306	13.6%	\$1,352,447	\$28,176
Groundfish	46	348	11.7%	\$960,516	\$20,881
Sablefish	37	349	9.6%	\$775,961	\$20,972
Herring	26	90	22.4%	\$551,762	\$21,222
Other	9	3	75.0%	\$169,449	\$18,828

BY GEAR TYPE					
Gear	With WS Earnings	No WS Earnings	Percent With WS earnings	Total Species WS Earnings	Average Earnings
TOTAL	2,901	7,011	29.3%	\$84,548,061	\$29,144
Set Net	1,410	1,379	50.6%	\$40,864,221	\$28,982
Gillnet	583	2,028	22.3%	\$18,490,286	\$31,716
Longline	394	1,512	20.7%	\$12,315,875	\$31,259
Troll	252	668	27.4%	\$6,739,392	\$26,744
Seine	81	589	12.1%	\$1,302,131	\$16,076
Pot Gear	70	404	14.8%	\$2,349,865	\$33,570
Diving Gear	46	140	24.7%	\$969,419	\$21,074
Trawl	5	174	2.8%	\$54,525	\$10,905
Other	60	117	33.9%	\$1,462,346	\$24,372

BY REGION					
Region	With WS Earnings	No WS Earnings	Percent With WS earnings	Total Species WS Earnings	Average Earnings
TOTAL	2,901	7,011	29.3%	\$84,548,061	\$29,144
Yukon Delta	827	249	76.9%	\$18,745,537	\$22,667
Bristol Bay	589	1,620	26.7%	\$18,209,391	\$30,916
Southeast	542	2,143	20.2%	\$14,467,168	\$26,692
Southcentral	503	1,590	24.0%	\$20,767,800	\$41,288
Northern	158	119	57.0%	\$5,208,684	\$32,966
Aleutians and Pribilof Islands	122	728	14.4%	\$3,075,513	\$25,209
Kodiak	110	543	16.8%	\$3,170,373	\$28,822
Unknown in AK	50	19	72.5%	\$903,594	\$18,072

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

## 10 Top Second Jobs for Fish Harvesters Alaska, by occupational categories, 2011



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

# Long Hours on the ‘Slime Line’

## Seafood processors key to Alaska’s largest export



Seafood is one of Alaska’s most lucrative natural resources — and with Alaska fishermen bringing in more than half of the country’s poundage, it takes an enormous workforce to bring the product to market. Seafood processors are the largest share of workers in the fishing industry and also the largest group of seasonal workers in the state.

Processors must be physically fit and able to work long and repetitive hours in wet and slippery conditions. Their duties — which require rain gear, gloves, and boots — can include sorting, grading, washing, cutting, or trimming seafood. The work is sometimes by machine, but often by hand.

This job may not be glamorous — it’s often called the “slime line” — but it’s a critical step in a major supply chain.

### A large, mobile workforce

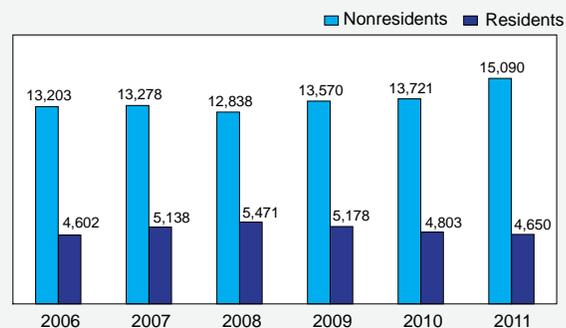
The seafood processing industry provides mostly seasonal jobs wherever there is commercial fishing. The various fisheries span the calendar, and facilities are spread across the state.

Though most salmon species are harvested during the summer only, various shellfish, cod, and bottom fish are harvested throughout the year. The processing industry as a whole employed 25,112 workers statewide in 2011. Of those workers, 19,740 were seafood processors. (See Exhibit 1.)

The areas with the biggest catches also have the highest employment. (See Exhibit 2.) The Aleutians East and Aleutians West census areas and Bristol Bay and Kodiak boroughs each had more than 2,600 processors in 2011. Together, those areas employed 51 percent of the industry’s workers.

The industry relies on widespread recruiting to ensure they will have an adequate number of workers when it’s time to process the fish, and they

## 1 Seafood Processors Alaska, 2006 to 2011



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

hire thousands for short periods of time. To meet the annual need, the largest employers host hiring events across the United States, which means a large pool of new workers each year. During 2011, more than 10,000 seafood processors were new hires, defined as those who didn’t work for their current employer in any of the previous four quarters.

In 2011, 76.4 percent of seafood processors were nonresidents<sup>1</sup> — much higher than any other occupation. In the industry as a whole, 72.8 percent of workers were not Alaska residents.

The rate of nonresident hire varies widely by area, though. In Kodiak Island Borough, 49.3 percent of its 2,822 processors were nonresidents in 2011 — a sharp contrast to 91.6 percent in Aleutians East.

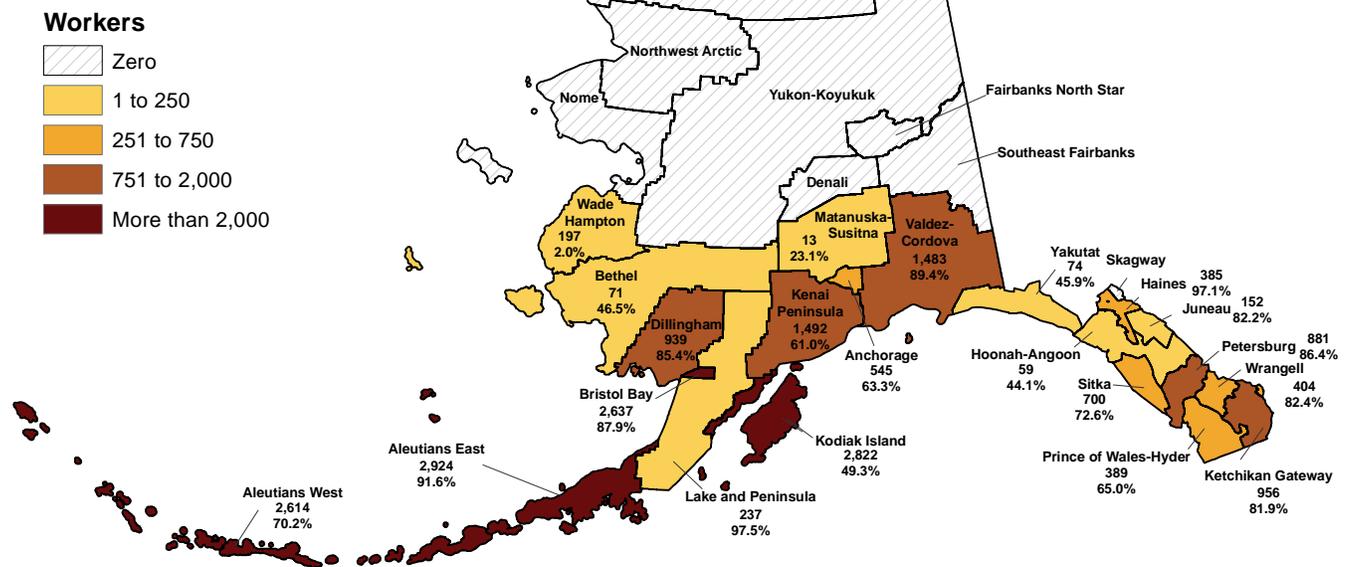
Remote facilities such as those in Aleutians East have a greater need for nonresident workers because there isn’t a large enough pool of locals to fill the jobs. Among workers on large offshore vessels, 98.1 percent of the 1,599 workers were nonresidents.

<sup>1</sup>Residency is determined by a match with the two most recent Permanent Fund Dividend applicant files. Data may not be comparable with the *Nonresidents Working in Alaska* publication due to differences in methodology.

## 2 Where the Seafood Processing Workers Are

Employment and percent nonresident, Alaska, 2011

There were also 1,599 marine/offshore workers, 98.1% nonresident



Notes: The count of workers shown here represents those who worked at any time during 2011. Some may have worked in more than one borough and could be counted more than once. Nome Census Area has three seafood processing plants, but their wages are reported outside the processing industry.  
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

### Onshore and offshore work sites

Alaska has more miles of coastline than the rest of the U.S. combined, and workers process seafood in a variety of land-based facilities, ships, and barges close to the resource.

Shore-based facilities are of two types: canneries, and those producing seafood to be frozen or refrigerated. Statewide, there are 28 canneries and 173 facilities that do not can. A small number of the latter are local butcher shops that also handle fish, but the majority deal exclusively with seafood.

There are also 105 licensed processor vessels in Alaska waters, including floating processors and factory trawlers. Processor vessels receive and process deliveries of salmon and herring. They range in length from just over 100 feet to more than 300 feet, and the largest have crews of several hundred. Many of these vessels are owned by large companies with multiple vessels and shore-based facilities.

The other type, a factory trawler, catches and processes its own fish, targeting just a few species. For example, trawlers are used extensively for pollock, Alaska's largest catch. Alaska harvested about 2.8

billion pounds of pollock in 2011 — more than a quarter of all U.S. landings and more than any other species.

Ships shorter than 65 feet that process their own catch are called direct marketing processors, and they blur the lines between fishermen and processors. The business model behind this emerging trend is to bypass the middle man and sell directly to the market. These vessels, which are often owned by small businesses or independent operators, are typically not captured in the standard economic data because their owners are self-employed. In 2012, 135 direct marketing ships were licensed to process their own catch.

### Pay and benefits vary

Pay varies by year and location, but many new employees make the minimum hourly wage of \$7.75, sometimes with a monetary bonus for completing the season. Processors are expected to work overtime, sometimes logging 12 to 18 hours per day.

It's common for employers to provide room and board — some charge a daily rate, and for some it's

*Continued on page 18*

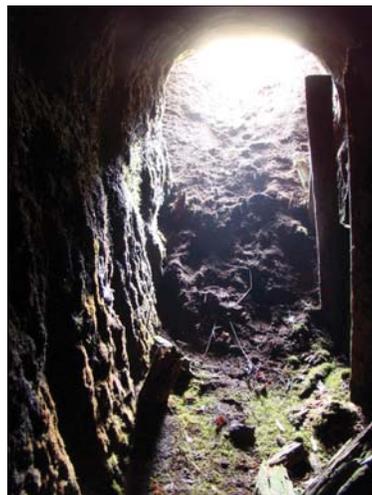
# Aleutians West Census Area

## An area with a turbulent past, flourishing modern ports

The Aleutian Islands arose from the active volcanic arc that divides the Bering Sea and the Pacific Ocean basin, spanning 1,200 miles from the western Alaska mainland to eastern Russia. The Aleutians West Census Area also includes the Pribilof Islands — four isolated basalt outcrops jutting out of the Bering Sea Shelf more than 300 miles north of the town of Nikolski.

A complex history of militarization and hardships combined with a traditional subsistence fishing culture have shaped the Aleutians West Census Area into what it is today — a sparsely populated but culturally diverse area largely dependent on fishing.

Inhabited places now include Nikolski, St. George, St. Paul, Adak, Atka, and Dutch Harbor-Unalaska — the population center and home to most of the area's industrial jobs. (See Exhibit 1.) The other small communities mainly rely on subsistence.



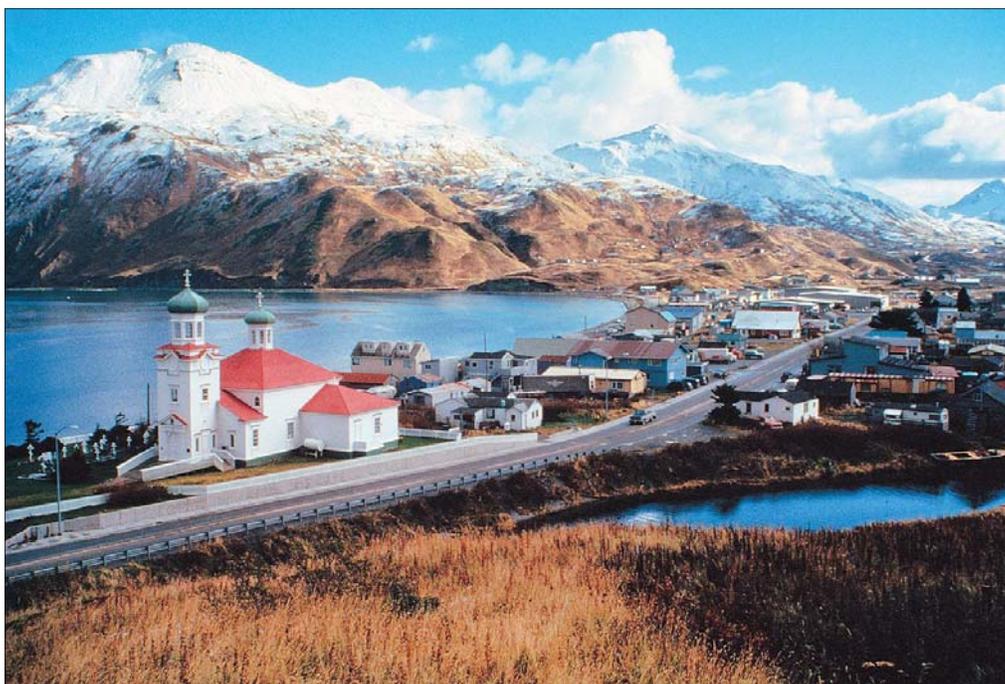
At left is a bomb shelter tunnel on Kiska Island, a remnant of Japanese military occupation during World War II. The entrance, as seen from the inside, has been partially blocked by dirt and debris. Kiska Island is nearly 1,300 miles from Anchorage. Photo by Buzz Hoffman

Attu Island was populated with Coast Guard personnel stationed at the LORAN outpost until 2010, when the tower was decommissioned.

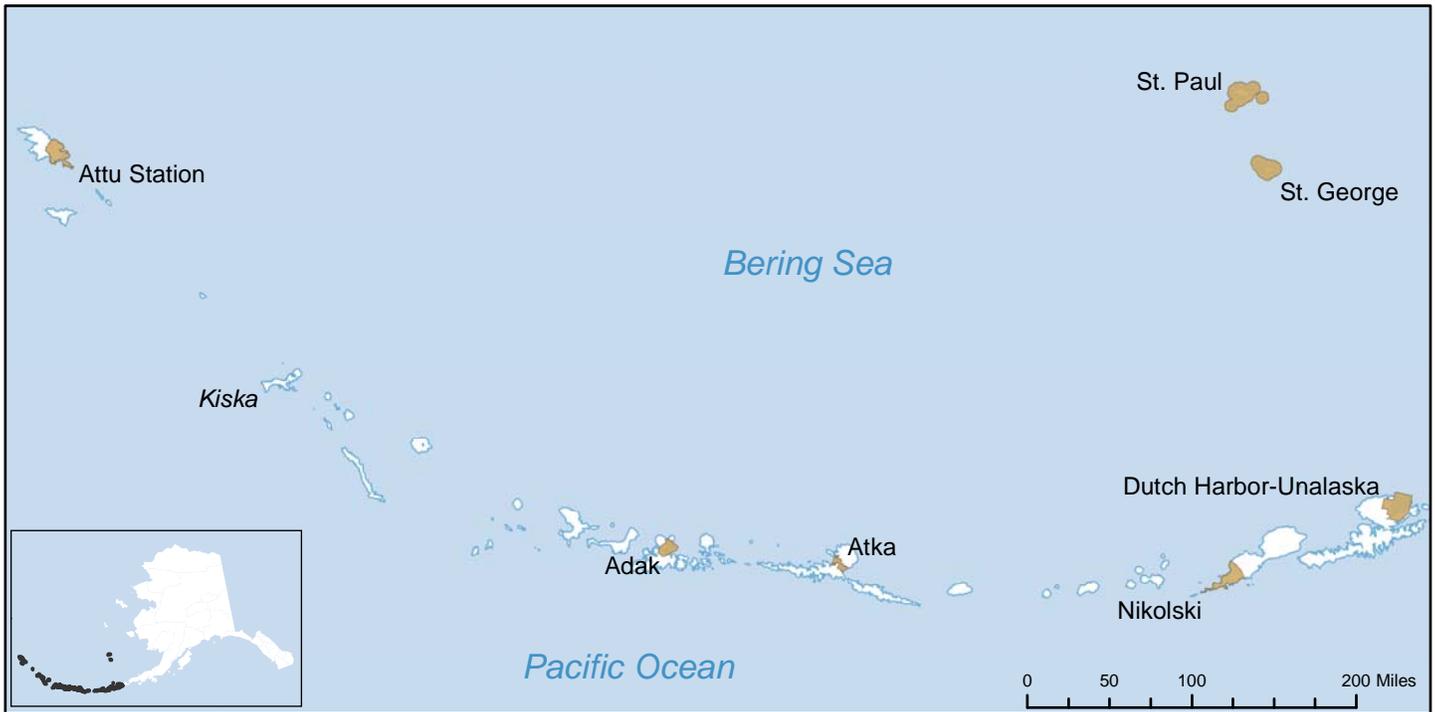
### The original population

The Alaska Natives of the region are Unangan, later given the name “Aleut” by Russian explorers. Early estimates for the Native population were in the thousands when the Danish explorer Vitus Bering arrived in 1741, but the subsequent arrival of the Russian fur trade and subjugation of the Aleuts greatly reduced the population through famine, disease, war, and enslavement.

Nearly two centuries later, in June of 1942, the Japanese attack on Dutch Harbor and the invasions of Attu and Kiska left the area a war zone. According to National Park Service estimates, 800 Aleuts were captured and another 840 interned



Above, downtown Unalaska is seen from the air. Photo by Wanetta Ayers



to Southeast Alaska by the U.S. government. By 2011, the area was home to fewer than 1,000 Alaska Natives.

### Military aftershocks

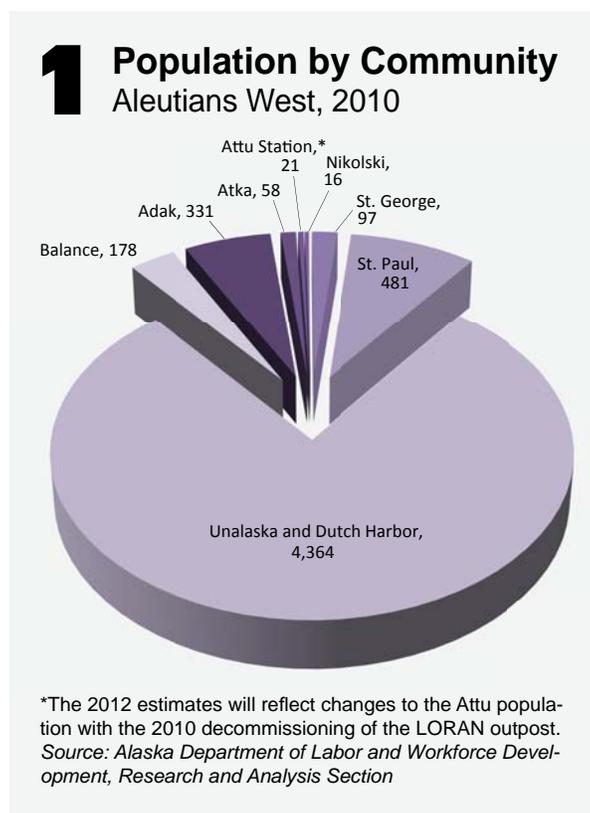
After World War II ended, the military maintained its naval and radar presence throughout the Cold War. The last military installation was closed during an iteration of National Base Realignment and Closure, and the last troops left a now-abandoned Adak Naval Station in 1997.

The removal of roughly 5,000 troops heavily impacted the population and employment trends, as seen in exhibits 2 and 3. Though both declined dramatically, they have since stabilized and the focus has shifted to the area’s other industries.

Although the region used to have much lower unemployment than the rest of the state, since the military’s departure its unemployment has tracked just a few points lower than the statewide average.

### A diverse area

The area’s demographics make it an outlier in nearly every category in comparison to the rest of the state. The population is highly multicultural, with high numbers of minorities. (See Exhibit 4.) Aleutians West is also nearly two-thirds male, the

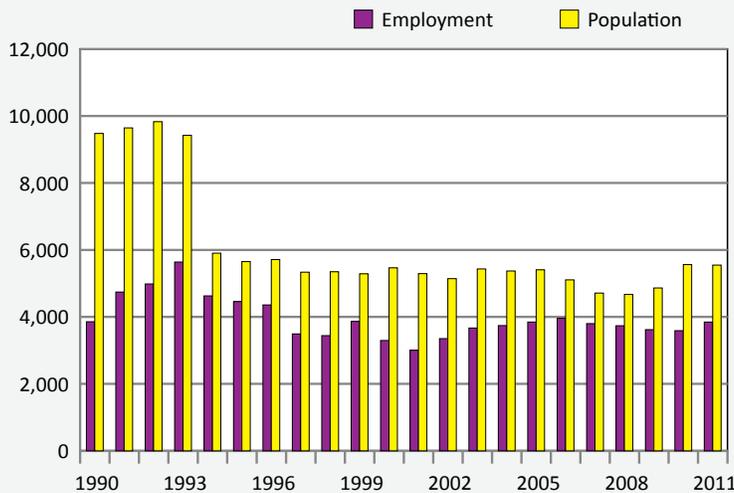


highest proportion in Alaska, and its workforce is also predominantly men.

Of the current census area population of 5,546, more than 2,500 live in group quarters rather than homes, a hallmark of the manufacturing industry.

## 2 Population and Employment

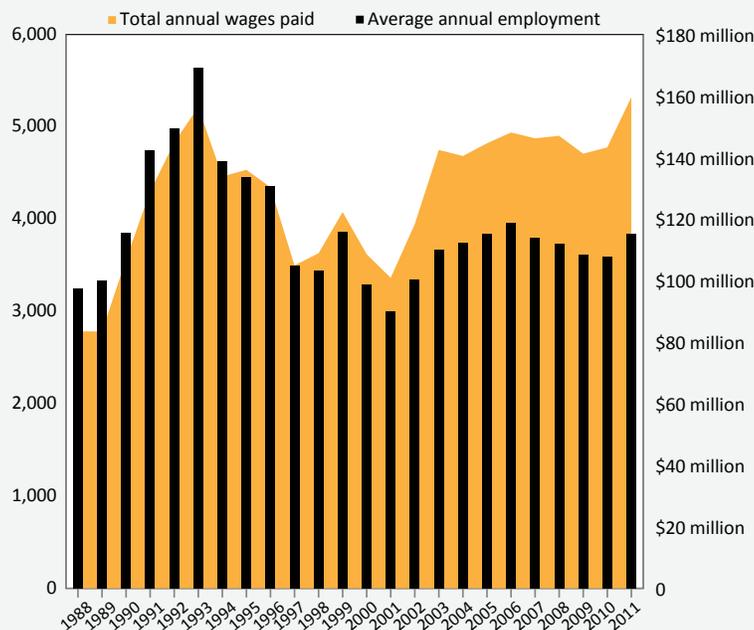
### Aleutians West Census Area, 1990 to 2011



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

## 3 Employment and Wages

### Aleutians West Census Area, 1988 to 2011



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

## Most jobs are in fisheries

The crab and groundfish<sup>1</sup> Bering Sea and Aleutian Islands fisheries — or BSAI — that use Dutch Harbor as a processing port are unlike the coastal salmon fisheries in other Alaska regions, because they take place far offshore in federal waters and span both summer and winter.

Bering Sea pollock, the largest Alaska harvest in volume and value, has one season that begins in January and a longer one that starts in June. Opilio and tanner crab are harvested in the winter starting in October until the quota is reached. Cod, rockfish, sablefish, sole, and other groundfish are harvested throughout the year, depending on catch limits.

The BSAI fisheries provide year-round opportunities for vessels of all size classes, and keep processors in Dutch Harbor at work throughout the year. Last year for the 15th year in a row, Dutch Harbor was the top ranking seafood port in the nation for pounds of fish harvested. (See Exhibit 5.)

The area's crab and groundfish harvest volume dwarfs the neighboring salmon fisheries, and they have created a small world dedicated to the harvesting, packaging, and delivery of seafood from the ocean floor to dealers all over the globe. Cod and pollock fisheries began to flourish in the 1980s following a crash in shellfish stocks, such as opilio crab, which have since rebounded.

## Jobs outside seafood

Of the Aleutians West's 3,844 total jobs in 2011, only 1,550 were outside of manufacturing — that is, outside seafood processing. Among the other industries, 310 jobs were in transportation and warehousing, 187 were in retail, and 122 were in health care.

Similar to many rural fishing communities, however, most jobs are connected to fishing in one way or another. In Unalaska, the large processing company Unisea owns not only the manufacturing plant, but also the hotels and worker housing.

Seasonality means a few highs and lows for these jobs, but the overlap of harvest times and the support services required to host large-scale produc-

<sup>1</sup>Groundfish includes all fisheries except salmon, herring, halibut, crustaceans, and dive fisheries.



Above, Dutch Harbor is seen from the top of Bunker Hill. Mount Ballyhoo is in the background, and one of the community's seafood plants is in the front. Photo by Scot Loehrer

tion create a flat underlying trend of year-round jobs. (See Exhibit 6.)

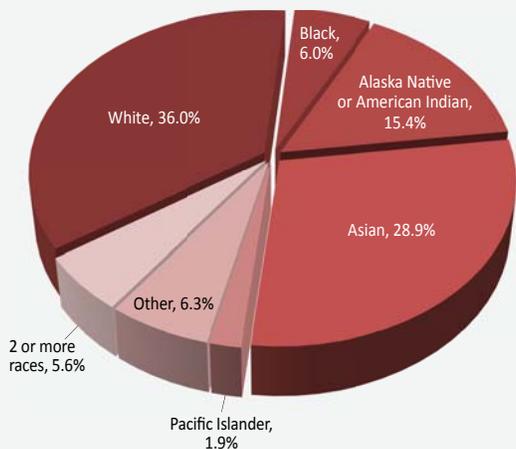
Aleutians West has the lowest government employment of all boroughs and census areas in Alaska. Government jobs account for less than 15 percent of total employment compared to about 25 percent statewide. Local government, combined with municipal and tribal agencies, had the largest government presence at 487 jobs in 2011. Three

school districts served more than 500 students during that school year.

## Residents are often processors

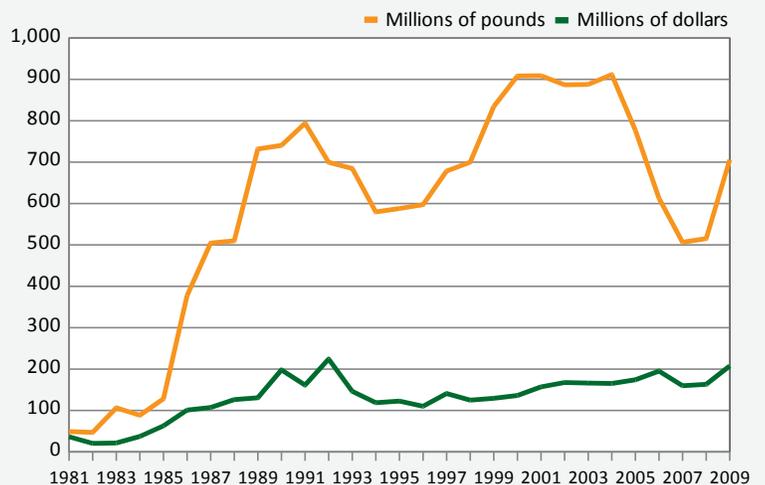
It's a common perception that seafood jobs tend to be filled by migrant and transient workers, and this is true — nearly 75 percent of seafood processing workers in Alaska were nonresidents in 2010. However, in Aleutians West, these jobs are viable

## Multicultural Census Area 4 Aleutians West, 2010



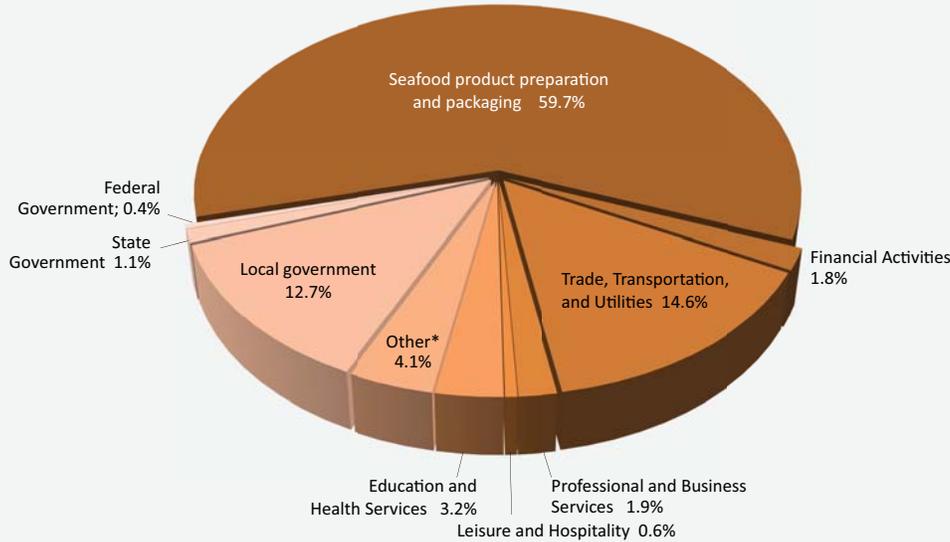
Note: Hispanics, who can be of any race, made up 14 percent.  
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

## 5 The Nation's Busiest Port Dutch Harbor-Unalaska, 1981 to 2009



Source: National Oceanic and Atmospheric Administration

## 6 Employment by Industry Aleutians West Census Area, 2011



\*Includes other nonseafood manufacturing, construction, information, and other services  
 Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

for locals because of the fisheries making year-round deliveries and the sheer volume processed. In 2010, 34 percent of seafood processing workers in Aleutians West were Alaska residents, and of those, 30 percent lived in the census area. This put Aleutians West in the middle of the pack for residency among Alaska's large seafood processing ports.

More than 800 Aleutians West residents worked in the manufacturing industry in 2011, and food processing has consistently been the top occupation among locals. (See Exhibit 7.)

## A checkpoint in the race to the Arctic

Although fishing remains the chain's primary industrial activity, the area's location puts it at the forefront of emerging possibilities for arctic commerce.

The Aleutian chain forms part of the southern boundary of the Arctic Ocean and the Bering, Beaufort, and Chukchi seas. The retreating sea ice in the Arctic Ocean has prompted much discussion about whether it would provide a less expensive shipping lane for ocean-going freightliners. The area is also under exploration as a potential source for offshore oil drilling.

Adak's underused military facilities and Dutch Harbor's existing port capability — in conjunction with the islands' proximity to existing shipping lanes and the waters being explored — make these communities possible future staging and transfer areas.

## 7 Top Jobs for Residents Aleutians West Census Area, 2011

Occupation	Number of workers	Female	Male	Age 45 and over
Meat, Poultry, and Fish Cutters and Trimmers	464	142	322	277
Material Moving Workers, All Other	143	15	128	85
Installation, Maintenance, and Repair Workers, All Other	60	1	59	34
Laborers and Freight, Stock, and Material Movers, Hand	56	5	51	16
Office Clerks, General	50	37	13	24
Stock Clerks and Order Fillers	47	7	40	19
Helpers: Installation, Maintenance, Repair Workers	38	4	34	15
Maids and Housekeeping Cleaners	34	24	10	24
Janitors and Cleaners, Except Maids/Housekeeping Cleaners	32	13	19	21
Cashiers	31	30	1	9
Maintenance and Repair Workers, General	31	1	30	15
Construction Laborers	31	5	26	8
General and Operations Managers	30	10	20	21
Executive Secretaries and Executive Admin Assistants	28	27	1	9
Operating Engineers and Other Construction Equip Operators	27	2	25	12
Sales and Related Workers, All Other	25	19	6	7
Billing and Posting Clerks	24	19	5	11
Teachers and Instructors, All Other	22	17	5	10
Cooks, Institution and Cafeteria	21	9	12	14
Office and Administrative Support Workers, All Other	21	18	3	6
Industrial Truck and Tractor Operators	21	1	20	11
Security Guards	17	6	11	8
First-Line Supervisors of Retail Sales Workers	17	8	9	8
Police and Sheriff's Patrol Officers	16	2	14	6
Food Preparation Workers	15	9	6	12

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

# Employment Scene

## Seasonal adjustment and how it works

An economist is waiting at a bus stop and notices a dejected young man sitting on a bench. She asks him what's wrong, and he replies that summer is over, the place where he worked has closed for the winter, and he's depressed to be out of work. The economist replies, "Don't worry, then. Seasonally adjusted, you still have a job!"

It's an old joke, but useful for pointing out that seasonally adjusted job numbers and unemployment rates are a little more complicated than data that haven't been adjusted.

Last month's Employment Scene outlined the dramatically changing employment and wage levels in Alaska due to jobs that only happen at certain times of the year. Seasonal adjustment is a statistical method that attempts to eliminate the influence those fluctuations have on the employment and unemployment rates, making the underlying trends easier to see.

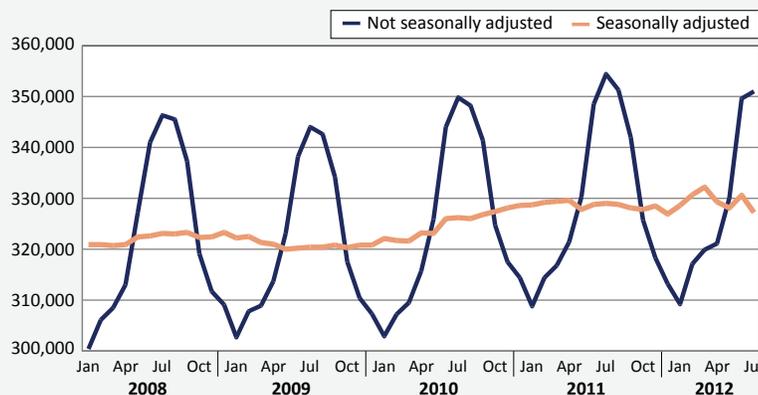
Seasonal adjustment works because seasonal swings in employment and unemployment rates follow a predictable pattern. Over the course of the year, Alaska schools open and close, seasonal tourism workers arrive and leave, and fisheries follow mostly regular seasons.

### Which numbers are changed

The number of people employed is much larger in the summer in Alaska, and the number unemployed is larger in the winter. Using historical and current seasonal factors, seasonal adjustment smoothes each of these components to create the seasonally adjusted rate, which is the rate reported each month for the nation as well as the state.

Similarly, Alaska's employers have more work

### Seasonal Adjustment Reveals Trends Alaska, 2008 to 2012



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

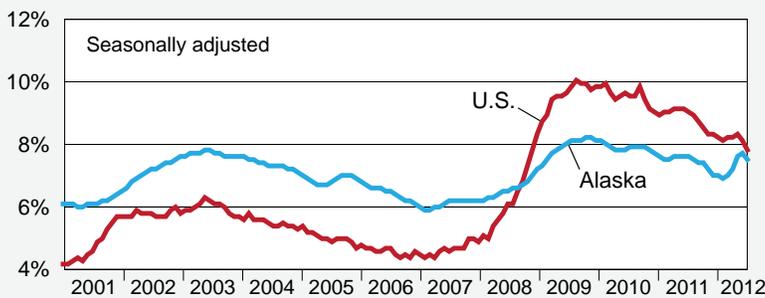
in the summer, so seasonally adjusted monthly employment adjusts the number of jobs up in the winter and adjusts them down in the summer. (See Exhibit 1.)

### The reasons for adjusting

Seasonally adjusted rates are useful for comparing market conditions at different times of the year; for instance, January employment is always lower than July, but seasonal adjustment allows comparison of those two months despite the disparity in actual job levels.

The seasonally adjusted unemployment rates and employment levels are also the most current and most cited nationwide statistics that are released monthly, so adjustment allows comparison of Alaska's labor market conditions to other states and the nation.

## 2 Unemployment Rates January 2001 to September 2012



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

## 4 Unemployment Rates Boroughs and census areas

	Prelim.	Revised	
	9/12	8/12	9/11
<b>SEASONALLY ADJUSTED</b>			
<b>United States</b>	7.8	8.1	9.0
<b>Alaska Statewide</b>	7.5	7.7	7.6
<b>NOT SEASONALLY ADJUSTED</b>			
<b>United States</b>	7.6	8.2	8.8
<b>Alaska Statewide</b>	6.4	6.5	6.9
<b>Anchorage/Mat-Su Region</b>	5.7	6.0	6.3
Municipality of Anchorage	5.3	5.6	6.0
Matanuska-Susitna Borough	7.1	7.4	7.7
<b>Gulf Coast Region</b>	7.1	6.8	7.5
Kenai Peninsula Borough	7.6	7.4	8.2
Kodiak Island Borough	5.0	5.3	5.4
Valdez-Cordova Census Area	7.1	6.1	6.9
<b>Interior Region</b>	6.1	6.3	6.7
Denali Borough	5.3	4.2	5.0
Fairbanks North Star Borough	5.4	5.8	6.0
Southeast Fairbanks Census Area	9.6	9.2	9.7
Yukon-Koyukuk Census Area	13.3	13.4	14.2
<b>Northern Region</b>	9.8	10.3	10.1
Nome Census Area	11.3	12.2	11.7
North Slope Borough	5.6	5.8	5.8
Northwest Arctic Borough	14.9	15.5	15.2
<b>Southeast Region</b>	5.6	5.4	6.0
Haines Borough	4.8	4.2	5.3
Hoonah-Angoon Census Area	12.0	10.5	11.1
Juneau, City and Borough of	4.4	4.6	4.8
Ketchikan Gateway Borough	5.3	5.1	5.5
Petersburg Census Area <sup>1</sup>	6.8	7.7	7.7
Prince of Wales-Hyder Census Area	12.7	11.4	13.2
Sitka, City and Borough of	4.9	4.4	5.6
Skagway, Municipality of	2.4	2.7	5.1
Wrangell, City and Borough of	6.9	6.1	6.9
Yakutat, City and Borough of	5.7	7.0	7.1
<b>Southwest Region</b>	12.8	12.2	11.8
Aleutians East Borough	11.3	9.2	10.0
Aleutians West Census Area	7.9	7.0	6.6
Bethel Census Area	15.7	16.4	14.9
Bristol Bay Borough	3.0	2.2	2.9
Dillingham Census Area	9.2	8.1	9.4
Lake and Peninsula Borough	5.6	5.9	6.1
Wade Hampton Census Area	21.0	22.7	18.9

## 3 Statewide Employment Nonfarm wage and salary

Alaska	Preliminary		Revised		Year-Over-Year Change	
	9/12	8/12	9/11	9/11	90% Confidence Interval	
<b>Total Nonfarm Wage and Salary<sup>1</sup></b>	342,900	351,800	342,000	900	-5,177	6,977
Goods-Producing <sup>2</sup>	46,500	53,200	48,000	-1,500	-4,466	1,466
Service-Providing <sup>3</sup>	296,400	298,600	294,000	2,400	-	-
<b>Mining and Logging</b>	17,300	17,400	16,500	800	-435	2,035
Mining	17,000	17,000	16,300	700	-	-
Oil and Gas	13,500	13,500	13,400	100	-	-
<b>Construction</b>	15,300	16,000	17,700	-2,400	-3,913	-887
<b>Manufacturing</b>	13,900	19,800	13,800	100	-2,259	2,459
<b>Wholesale Trade</b>	6,900	7,000	6,200	700	361	1,039
<b>Retail Trade</b>	35,900	37,200	36,400	-500	-1,284	284
Food and Beverage Stores	6,300	6,400	6,300	0	-	-
General Merchandise Stores	9,900	10,400	10,000	-100	-	-
<b>Transportation, Warehousing, Utilities</b>	23,700	25,100	23,400	300	-534	1,134
Air Transportation	6,200	6,400	6,000	200	-	-
<b>Information</b>	6,400	6,500	6,400	0	-275	275
Telecommunications	4,000	4,100	4,200	-200	*	*
<b>Financial Activities</b>	15,200	15,400	14,900	300	-567	1,167
<b>Professional and Business Services</b>	28,900	29,100	29,000	-100	-1,456	1,256
<b>Educational<sup>4</sup> and Health Services</b>	46,000	46,100	44,700	1,300	165	2,435
Health Care	32,300	32,600	31,700	600	-	-
<b>Leisure and Hospitality</b>	36,200	40,300	36,200	0	-2,669	2,669
<b>Other Services</b>	11,000	11,100	10,600	400	-421	1,221
<b>Government</b>	86,200	80,800	86,200	0	-	-
Federal Government <sup>5</sup>	16,400	16,800	17,400	-1,000	-	-
State Government <sup>6</sup>	26,700	25,200	26,700	0	-	-
State Government Education <sup>7</sup>	8,400	6,600	8,400	0	-	-
Local Government	43,100	38,800	42,100	1,000	-	-
Local Government Education <sup>8</sup>	25,200	20,500	24,200	1,000	-	-
Tribal Government	4,300	4,300	4,000	300	-	-

A dash means confidence intervals aren't available at this level.

<sup>1</sup>Excludes the self-employed, fishermen and other agricultural workers, and private household workers. For estimates of fish harvesting employment and other fisheries data, go to [labor.alaska.gov/research/seafood/seafood.htm](http://labor.alaska.gov/research/seafood/seafood.htm).

<sup>2</sup>Goods-producing sectors include natural resources and mining, construction, and manufacturing.

<sup>3</sup>Service-providing sectors include all others not listed as goods-producing sectors.

<sup>4</sup>Private education only

<sup>5</sup>Excludes uniformed military

<sup>6</sup>This number is not a count of state government positions, but the number of people who worked during any part of the pay period that included the 12<sup>th</sup> of the month (the same measure used for all employment numbers in this table). The numbers can vary significantly from month to month; when attempting to identify trends, annual averages are more useful.

<sup>7</sup>Includes the University of Alaska. Variations in academic calendars from year to year occasionally create temporarily large over-the-year changes.

<sup>8</sup>Includes public school systems. Variations in academic calendars from year to year occasionally create temporarily large over-the-year changes.

Sources for Exhibits 2, 3, and 4: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Department of Labor, Bureau of Labor Statistics

## SEAFOOD PROCESSORS

*Continued from page 11*

included. Room and board is a necessity at remote locations and on larger floating processors.

The median hourly wage for seafood processors was \$9.03 per hour in 2011, but those working in Southeast made a higher median wage by nearly \$3 per hour.

## Most processors are men

Age and gender are only available for the 23.6 percent of processors who are Alaska residents. Their average age was 40.7, and 68.1 percent were male. Most of their processing jobs were short-lived, with 22.7 percent having worked in the occupation for more than five years. Just 48.9 percent worked for a processor the previous year.

Economist Josh Warren contributed to this article.

# Employer Resources

## New tax credits provide more incentives to hire veterans

For many years, Alaska and the nation have honored veterans during the month of November. Veterans Day, observed on Nov. 11, is the anniversary of the World War I armistice that ended hostilities on the 11th hour of the 11th day of the 11th month of 1918.

Alaska has also instituted "Hire a Veteran Month" in November, beginning with a proclamation by the governor and led by the Alaska Department of Labor and Workforce Development.

The department will host its annual Alaska Veterans' Job Fair on Nov. 9 from 10 a.m. to 3 p.m. at the University Center Mall, located at 3801 Old Seward Hwy in Anchorage. More than 120 employers and 1,500 job seekers are expected.

### Did you know...

Under the new "Vow to Hire Heroes Act," employers can receive a federal tax credit up to \$9,600 for each unemployed veteran hired. The amount of tax credit is based on the veteran's length of unemployment and service-connected disability status. The state's "Veteran Employment Tax Credit," effective July 1, uses similar criteria and provides for an additional tax credit of up to \$3,000.

Employers who want to learn more about these programs or reasons to hire veterans can contact their nearest Alaska Job Center or call (877) 724-2539. For more information about the veteran employment and training program, go to: <http://www.jobs.alaska.gov/veterans/>.

# Safety Minute

## Behavior-based programs help create a 'culture of safety' at work

People involved in safety have known for a long time that most workplace accidents are caused by unsafe acts. Accidents that result in injuries and economic loss rest on a larger number of near-misses, which rest on a still-larger foundation of unsafe acts. This "safety pyramid" is the basis of behavior-based safety programs, which focus on promoting desirable behaviors in the workplace. Behavior-based safety programs are especially important in industries with hazardous working conditions and high accident rates, such as the seafood industry.

Ralph Waldo Emerson wrote, "Who you are speaks so loudly I can't hear what you are saying." This is true in safety. Managers promote safety when they make safety expectations clear, provide the resources to meet them, and model the behaviors they expect from their employees. Supervisors also lead by example, and ensure that employees understand and meet management's expectations. Only employees have the moment-to-moment control necessary to ensure their individual safety, however. Employees recognize whether or not the safety walk matches the safety talk,

and they react accordingly.

The best behavior-based safety programs promote employee commitment to safety through employee participation, which includes involvement in safety committees, incident investigations, training, developing safe work procedures, and safety inspections. The best programs don't limit themselves to workplace safety, but make it a consideration around the clock.

Safety begins with management commitment shared by every level of the organization. Every workplace has a safety culture, good or bad, and the goal is a culture of safety. The result can be a workplace with employees at every level of the organization routinely practicing safe behavior, whether or not they believe anyone is watching.

The AKOSH Consultation and Training Program can assist employers who want to assess and improve their safety and health programs. Consultations are free and confidential. To discuss or request a consultation, call (800) 656-4972.

