



# ALASKA ECONOMIC **TRENDS**

NOVEMBER 2011

## Fish Harvesting in Alaska

### WHAT'S INSIDE

#### The Bristol Bay Region

Area relies on fishing, synthesis  
of modern and traditional



ALASKA DEPARTMENT OF LABOR  
& WORKFORCE DEVELOPMENT

Governor Sean Parnell  
Commissioner Click Bishop

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November 2011

Volume 31

Number 11

ISSN 0160-3345

To contact us for more information, a free subscription, mailing list changes, or back copies, e-mail [trends@alaska.gov](mailto:trends@alaska.gov) or call (907) 465-4500.

*Alaska Economic Trends* is a monthly publication dealing with a wide variety of economic issues in the state. Its purpose is to inform the public about those issues.

*Alaska Economic Trends* is funded by the Employment Security Division of the Alaska Department of Labor and Workforce Development. It's published by the Research and Analysis Section.

*Alaska Economic Trends* is printed and distributed by Assets, Inc., a vocational training and employment program, at a cost of \$1.09 per copy.

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Cover: King salmon are offloaded from the F/V Sea Haven in Sitka. Photo courtesy of [sitkaphotos.com](http://sitkaphotos.com).

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# Fishing industry supports state economy several ways



**By Commissioner  
Click Bishop**

Alaska provided almost 53 percent of the fish harvested in the United States last year. More than 4.3 billion pounds of seafood were caught in Alaska, worth \$1.6 billion.

This month's *Trends* focuses on the jobs provided by harvesting Alaska's seafood, which can number as many as 20,000 during the peak summer months.

Earlier this year, the Alaska Department of Labor and Workforce Development surveyed the Alaska Department of Fish and Game's Fisheries Entry Commission permit holders from 2009. The last Alaska Seafood Employment Survey was in 2002, and much has remained constant.

Alaska's fisheries are among the most sustainable, best managed in the world. Commercial fishing is one of the largest private-sector industries in the state, including all seafood harvesting and processing.

Thousands of visitors come to Alaska each year to enjoy world-class sport fishing and in the process contribute to the economy by supporting local businesses.

Fishing also provides about 60 percent of subsistence foods taken each year by both Alaska Natives and non-Natives. The subsistence tradition also fosters a love of fishing that is passed from one generation to the next.

While this month's *Trends* focuses on fish harvesting, fish processing continues to provide seasonal employment opportunities. The industry needs employees when the fish show up, creating an instant supply of jobs. We are working to increase Alaska hire in this industry through the Alaska Department of Labor and Workforce Development's Alaska Job Center Network.

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 receive information about job requirements and working conditions, and assistance with one-on-one job interviews with seafood employers. Applicants also register with ALEXsys, Alaska's online job bank.

While June, July, and August are peak months for seafood processing in Alaska, seafood workers can find employment 10 to 11 months of the year — but that means moving around the state based on the season. Our job centers are gearing up for pollock "A" season, which starts in January and runs through March or April with most of the jobs in Dutch Harbor, King Cove, Kodiak, and the Bering Sea. The short two-week herring season in Bristol Bay usually begins the last week of April. The summer salmon processing season usually runs June through August. In October and November, workers process king crab, pollock, and cod out of Dutch Harbor.

Many of the processing jobs available in the seafood industry are in remote locations — such as Dutch Harbor and Naknek — or on at-sea processors in the Bering Sea. The work is challenging, but because the work schedule is flexible and the money can be good, we're seeing second- and third-generation workers in the industry.

For more information about ALEXsys, go to [Jobs.Alaska.Gov](http://Jobs.Alaska.Gov). To find out more about seafood-related jobs, go to [Jobs.Alaska.Gov](http://Jobs.Alaska.Gov) and click on "Seafood Jobs" on the right, or call (800) 473-0688. For your local job center, call (877) 724-2539 (ALEX).

# Fish Harvesting in Alaska

## Survey provides updated estimates for 2010

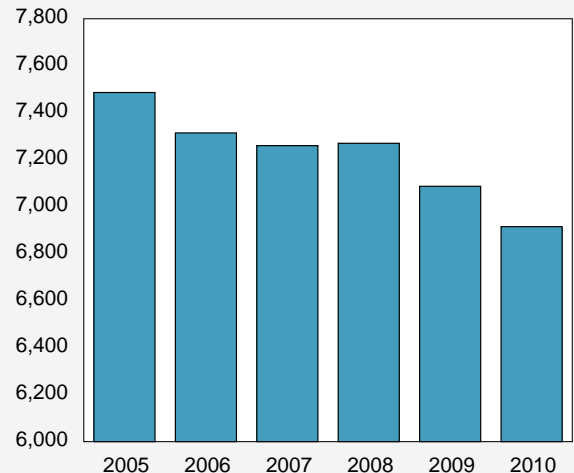


**F**ish harvesting is a critical component of Alaska's economy, employing thousands of people across the state and bringing money and workers to parts of Alaska that might otherwise struggle to find steady sources of income. Its economic impact goes beyond the harvesting of fish, and includes seafood processing and all necessary support activities.

Alaska produces a massive amount of seafood each year. The most recent data from the National Marine Fisheries Service show that in 2010, 53 percent of domestic harvested poundage came from Alaska — 4.35 billion pounds of product worth \$1.6 billion. Dutch Harbor/Unalaska led the nation that year for pounds harvested, and in dollar value was second only to New Bedford, Mass.<sup>1</sup>

Commercial fishing in Alaska is a complex mix of government agencies, regulations, permits, seasons, and species. This article examines just a small part of that picture: the numbers of jobs created by fish harvesting in Alaska

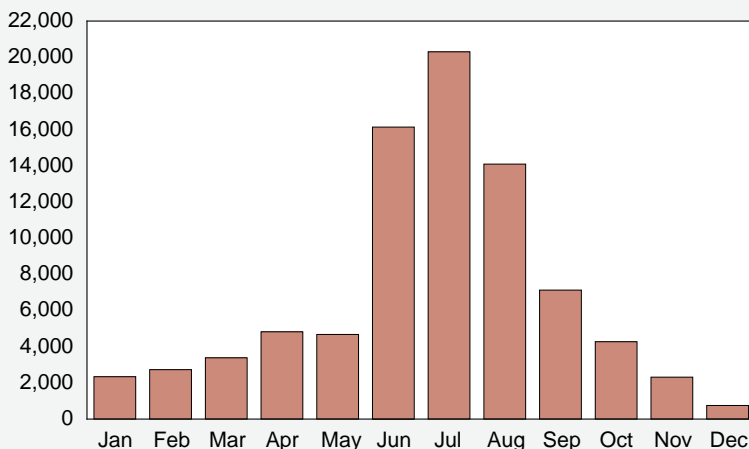
### 1 Average Monthly Employment Alaska fish harvesting, 2005 to 2010



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

and how those figures have changed since 2005.

### 2 Monthly Harvesting Employment Alaska, 2010



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

### Origins of the numbers

The Alaska Department of Labor and Workforce Development can accurately count seafood processing jobs because, like all other wage and salary jobs, employers are required to report the number of employees and their earnings each month as part of their mandatory unemployment insurance coverage. But because the majority of fish harvesting jobs are exempt from state unemployment insurance laws, the department uses surveys and industry research to estimate harvesting employment. (See the “About these data” sidebar on page 7.)

Most of what we know about Alaska's fish harvests comes from the Alaska Department of Fish and Game's Commercial Fisheries Entry Commission, which provides detailed data on gross estimated earnings, pounds caught, permit

## Monthly Fish Harvesting Employment **3**

All species, Alaska, 2005 to 2010

Year	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Monthly average
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	7,315
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	2,817	3,126	4,874	5,693	17,609	20,076	13,687	7,148	4,593	2,388	507	7,087
2010	2,342	2,733	3,388	4,826	4,678	16,141	20,302	14,093	7,129	4,277	2,317	753	6,915
Change since '05	-1,219	-417	-839	-289	-1,605	-2,028	-264	1,204	-63	-681	-451	-200	-571
Percent change	-34.2%	-13.2%	-19.8%	-5.7%	-25.5%	-11.2%	-1.3%	9.3%	-0.9%	-13.7%	-16.3%	-21.0%	-7.6%

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

holders, and permit holders who fished. Since 2000, the Department of Labor has used Fish and Game's weekly landing and daily delivery records plus data from the National Marine Fisheries Service to estimate fish harvesting employment.

Fish and Game provides information on who bought a crew license, but not on how, where, when, and if they fished. To estimate harvesting employment by region, gear, and species, the Department of Labor periodically sends out a survey to permit holders to estimate the number of working crew for each permit, or "crew factor." These crew factors are added to the existing landings<sup>2</sup> database.

The last Alaska Seafood Employment Survey was in 2002, and until this year, estimates were based on 2002 crew factors. In 2011, the department sent out an updated survey to most of the permit holders who fished in 2009, which resulted in minor updates to most of the crew factors for the 2010 employment estimates.<sup>3</sup>

### Harvesting is highly seasonal

Harvesting employment was distributed among the following fisheries in 2010: salmon (50.2 percent), halibut (20.1 percent), groundfish (8.1 percent), sablefish (7.4 percent), crab (5.4 percent), herring (4.9 percent), and miscellaneous shellfish (3.9 percent).

Average monthly fish harvesting employment has declined nearly every year since 2005 and in 2010, hit its lowest level since the data series was created. (See Exhibit 1.) In 2010, there were

6,915 harvesters working each month on average, a decline of 2.4 percent from the previous year and down 7.6 percent from 2005.<sup>4</sup> (See Exhibit 3.)

July has historically had the highest levels of employment as the salmon season goes into full swing — in 2010, July's harvesting employment topped 20,000. (See Exhibit 2.) On the other end of the spectrum, December's commercial fishing job count has been below 1,000 every year from 2005 to 2010.

Employment in the peak summer months — June, July, and August — has declined at a slower rate than in the off-peak months. The biggest declines (in percentages and in some cases whole numbers) have been in January and May, indicating a mostly stable employment pattern in the summer and a greater emphasis on peak harvesting months.

It's important to note that declining average monthly employment is not necessarily an indicator of weakness in the industry. A better overall indicator of the harvesting industry's health is gross earnings, which grew modestly from 2005 to 2010.

### Regional worker counts

Average monthly job counts — the 6,915 number for 2010 in Exhibit 3 — approximate how fish harvesting compares to other industries for which employment numbers are regularly produced and published. A different way to look at harvesting employment is to estimate the number of people involved at some point in the year, either as

crew members or as permit holders who actively fished.

The following sections examine those numbers for the seven regions: Aleutians and Pribilof Islands, Bristol Bay, Kodiak, Northern, Southcentral, Southeast, and the Yukon Delta. (See Exhibit 4.)

## 4 Harvesters and Earnings Alaska by region, 2005 to 2010

Region	Year	Active permit holders	Estimated crew	Total estimated workforce	Total gross earnings
Aleutians and Pribilof Islands	2005	1,228	3,733	4,961	\$444,403,459
	2006	952	3,908	4,860	\$348,622,994
	2007	1,040	4,114	5,154	\$444,955,461
	2008	1,058	4,362	5,420	\$572,375,902
	2009	1,070	4,239	5,309	\$657,505,626
	2010	1,070	3,623	4,693	\$473,872,054
Bristol Bay	2005	2,476	4,368	6,844	\$98,382,802
	2006	2,405	4,852	7,258	\$96,787,867
	2007	2,257	4,543	6,800	\$110,826,728
	2008	2,268	4,573	6,841	\$113,420,471
	2009	2,335	4,715	7,050	\$133,326,958
	2010	2,272	4,953	7,225	\$169,465,187
Kodiak	2005	819	2,208	3,027	\$83,908,817
	2006	811	2,461	3,272	\$80,750,669
	2007	742	2,526	3,268	\$122,303,929
	2008	793	2,877	3,670	\$132,924,864
	2009	820	2,844	3,664	\$111,163,060
	2010	789	2,571	3,360	\$118,358,991
Northern	2005	177	345	522	\$2,024,124
	2006	202	445	647	\$1,888,421
	2007	145	469	614	\$2,045,962
	2008	165	465	630	\$3,178,163
	2009	199	428	627	\$2,780,621
	2010	217	738	955	\$4,121,598
Southcentral	2005	2,653	5,141	7,794	\$168,398,092
	2006	2,058	4,373	6,431	\$76,125,399
	2007	2,126	5,387	7,513	\$193,246,998
	2008	2,152	6,012	8,164	\$194,786,893
	2009	2,283	5,788	8,071	\$131,353,891
	2010	2,183	5,528	7,711	\$264,910,322
Southeast	2005	2,907	6,129	9,036	\$158,778,748
	2006	2,779	6,286	9,065	\$134,127,575
	2007	2,637	6,898	9,535	\$181,835,207
	2008	2,623	7,362	9,985	\$200,044,109
	2009	2,835	7,315	10,150	\$173,481,400
	2010	2,617	6,565	9,182	\$208,125,637
Yukon Delta	2005	1,092	2,738	3,830	\$3,576,085
	2006	1,048	3,134	4,182	\$4,614,006
	2007	1,006	3,045	4,051	\$4,786,208
	2008	897	2,707	3,604	\$3,552,485
	2009	987	2,986	3,973	\$5,941,948
	2010	957	3,283	4,240	\$4,885,517

Note: ND means the number is not disclosable.

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

### Aleutians and Pribilof Islands

Though its harvesting workforce is fourth-largest, the Aleutians and Pribilof Islands region was the leader in gross earnings at almost \$500 million in 2010 — nearly double that of the second-highest earning region, Southcentral. Despite the high gross earnings for the area, its number of fish harvesters has declined over the last six years. From 2005, there was an estimated loss of 158 permit holders and 110 crew members.

### Bristol Bay

Bristol Bay's earnings and harvesting employment have grown the most over the last six years. In 2010, the region's gross earnings topped \$169 million, a 72 percent increase from 2005. Harvesting employment in the same period rose by 381 workers, to 7,225.

### Kodiak

The Kodiak fisheries are among the most stable in the state, with the number of permit holders consistently around 800 and 789 actively fishing in 2010. Estimated crew is typically near 2,500, with about 2,571 crew members working in 2010. Gross harvest earnings in 2010 were \$118 million, an increase of 41 percent over 2005.

### Northern

The Northern region has the smallest workforce, primarily because of the lack of accessible fisheries. However, it has grown somewhat since 2005, from 177 to 217 active permit holders and double the number of crew members. The region's gross earnings have also doubled, approaching \$4.2 million in 2010.

### Southcentral

Southcentral is second in earnings following the Aleutians and Pribilof Islands, and second in employment after Southeast with close to 2,200 active permit holders. Gross earnings hit a record high in 2010 at nearly \$265 million, mostly due to a stellar year for regional salmon harvests.

### Southeast

The Southeast region had the largest fish harvesting workforce in 2010, but its gross earnings

## About these data

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 publishes. For example, information on fish landings is reported annually, several months after the end of the calendar year. This can lead to a significant delay between the fish harvest and data publication.

### Permits

As a substitute for detailed payroll records,<sup>1</sup> state and federal fish management agencies provide information on the specific landings made under each commercial permit over the year. A landing is the initial sale of harvested fish to a buyer. The Alaska Fisheries Information Network records the landing information — including fish type, value, and volume caught — as well as the number of permit holders who fished that year and their residency status.

Each permit holder has a unique identifying number that allows the Department of Labor to assign only one set of workers to a specific permit in any given calendar month, even if there are numerous landings during the month.<sup>2</sup> Jobs are also assigned by place of work rather than the residence of the workers. Most

<sup>1</sup>Another factor limiting employment data for fisheries is that the U.S. Bureau of Labor Statistics, which governs how employment is counted in the federal-state cooperative program called Current Employment Statistics, defines fishing as an agricultural activity. Agricultural employment has traditionally been excluded from employment statistics under this program.

<sup>2</sup>The same approach to counting the number of monthly jobs is used for other industries in that a person who works 60 hours in a week for a single employer is counted the same way as a person who works 20 hours in a week. Each is said to hold one job in that month.

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 of Labor deems the permit itself the employer, which means that 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.

### Changes in the 2011 survey

The monthly harvesting employment estimates are conservative because they don't currently reflect time spent by permit holders or their crew preparing to fish or winding up operations at the end of the season. This is because the Department of Labor determines the months of work only by months with registered landings. So if the permit holder works for two weeks in May getting the boat ready and begins to make landings in June, the effort in May is not counted as employment despite its obvious importance to the enterprise. However, the Alaska Seafood Employment Survey for 2010, conducted in 2011, included new questions on preparation and cleanup time for the crew that may be incorporated into future estimates. While the department gathered some responses to these new questions for 2010, more are necessary for detailed analysis and incorporation into harvesting estimates. Experience with this year's survey and suggestions from these early responses will help the department refine future surveys and improve the accuracy of future harvesting employment estimates.

ranked third behind Southcentral. Harvesting employment grew by 146 workers, reaching 9,182. As with many of the regions in 2010, Southeast had a record year for gross earnings — \$49 million more than in 2005.

### Yukon Delta

In the Yukon Delta region, the number of active permit holders has slowly decreased since 2005; however, the number of crew has grown, resulting in higher overall employment. From 2005 to 2010, gross earnings in the region rose 37 percent, to \$4.9 million.

## A look at 2011

The Alaska Department of Fish and Game's in-season reports for 2011 show the spike in Prince William Sound salmon that boosted Southcentral's gross earnings in 2010 has returned to its five-year average. However, other regions show higher-than-normal salmon harvests. Southeast

in particular is showing a strong season and may see an increase in earnings and workers in 2011.

## Notes

<sup>1</sup>Source: NOAA Fisheries' Office of Science and Technology, "Fisheries of the United States – 2010"

<sup>2</sup>A landing is the initial sale of harvested fish to a buyer.

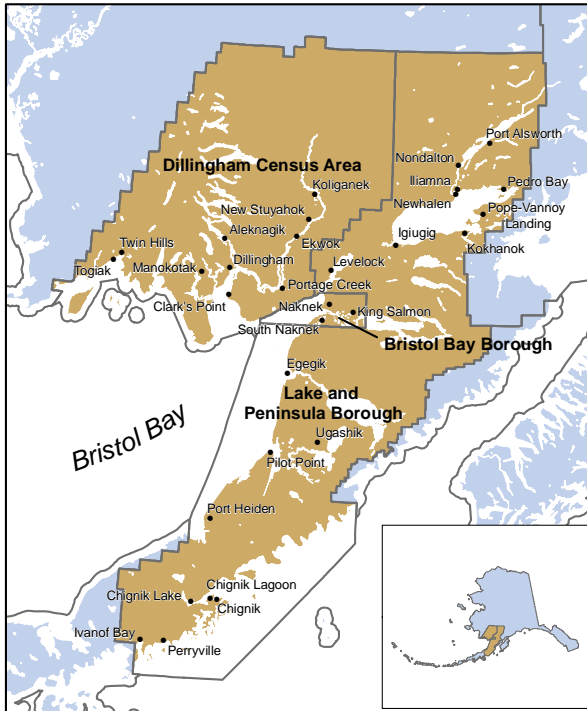
<sup>3</sup>For employment estimates by gear type or species, see <http://labor.alaska.gov/seafood/seafood.htm>.

<sup>4</sup>Average monthly employment over a year is the most commonly used employment measure in Alaska. It allows a more meaningful comparison of highly seasonal industries — such as fishing, tourism, and construction — to other industries in terms of economic impact. Average monthly employment numbers, because they are averages, can be significantly smaller than peak-month employment numbers, as is the case with fish harvesting.

# The Bristol Bay Region

Area relies on fishing, synthesis of modern and traditional

## 1 Bristol Bay Region The lay of the land



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

If you were to drift down the Nushagak River and watch the scenery unfold between New Stuyahok and Clarks Point south of Dillingham, you would see the boreal forests of Southcentral Alaska begin to fade into the tundra marshlands of the Southwest.

Along the way, you might pass a fuel barge headed up the river or an overloaded Lund idling down, stuffed to the gunwales with fresh moose. Farther downriver you'd reach the freight dock (where the fish goes out and the groceries come in), and the fish dock (where the groceries go out and the fish comes in). A unique backdrop would lie in every direction: Kuskokwim Mountains to the north, the famous king crab fishery to the south, seemingly endless tundra stretching west, and smoke from the Alaska Peninsula volcanoes to the east.

If you went into town to call home, you might hear Tagalog, Czech, Spanish, or Inupiaq while you waited at the pay phone. A walk to the coffee shop could get you an expertly made mocha, and while perusing the bulletin board offers you might find “one gallon seal oil: \$60. Also, Roomba floor cleaning robot, still in box, \$225.”

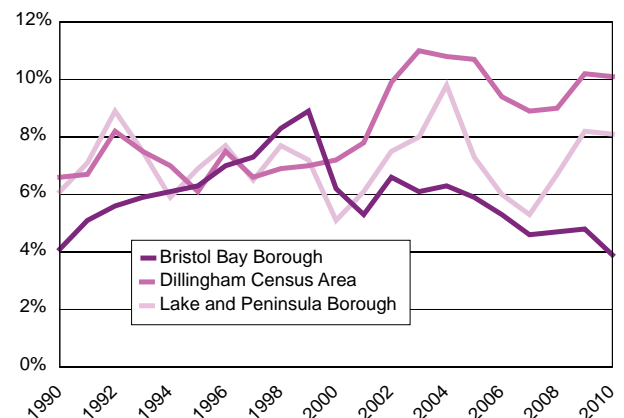
The Bristol Bay region<sup>1</sup> is in many ways the cultural and ecological crossroads of Alaska. It's home to one of the state's more diverse populations, a century-old commercial fishery, and a 6,000-year-old Yupik, Athabascan, Aleut, and Inupiat legacy.

The region is essentially rural — an informal group of the Bristol



Photo by Todd Arlo  
The village of Naknek, in the Bristol Bay Borough, had a population of 544 in 2010.

## 2 Volatile Unemployment Rates Bristol Bay region, 1990 to 2010



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



Bay Borough, Dillingham Census Area, and the Lake and Peninsula Borough. Tiny communities accessible only by air and sea dot the rivers and beaches. (See Exhibit 1.)

Only Dillingham has more than 1,000 people, and there are just three villages with more than 500. Consistent with statewide migration patterns, many of these small villages shrank over the last decade as residents moved to more urban places. (See Exhibit 3.)

### Range in standard of living

Bristol Bay Borough’s per-capita income — augmented by relatively high retirement benefits, dividends, and other transfer receipts — is second-highest in the state at about \$59,000<sup>2</sup> per year. In contrast, Dillingham Census Area and Lake and Peninsula Borough incomes are \$36,000 and \$37,000 per year, respectively — well below the state average of \$43,000.

In the summer, unemployment rates plummet to the lowest in the state — sometimes less than 2 percent in Bristol Bay Borough — while winter rates reach the 12 to 13 percent range. Regional annual unemployment hovered around 7 percent in the 1990s but has become more volatile since 1999, with Dillingham Census Area’s rates reaching double digits and Bristol Bay Borough’s falling to 4 percent. (See Exhibit 2.)

All who live and work in the region pay a premium on fuel, food, and building materials due to the high costs of transport to the Bush. Several price indexes show Southwest communities have among the highest prices in Alaska.<sup>3</sup> The small, isolated populations and harsh conditions also mean most of the communities have water and sewer infrastructure problems endemic in much of rural Alaska.<sup>4</sup>

### Employment and subsistence

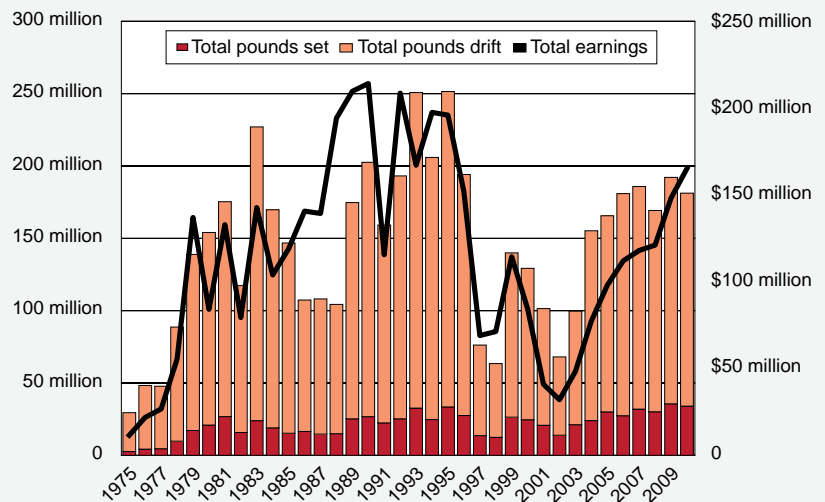
The area has abundant natural resources — and though the amount used for subsistence is small, it’s vital. Subsistence users in the re-

## Populations of Region’s Villages 3 Bristol Bay area, 2000 and 2010

Community	Year incorporated	Census 2010 population	Census 2000 population	10-year change	Percent change
Bristol Bay Borough	1962	997	1,258	-261	-21%
King Salmon	—	374	442	-68	-15%
Naknek	—	544	678	-134	-20%
South Naknek	—	79	137	-58	-42%
Dillingham Census Area	—	4,847	4,922	-75	-2%
Aleknagik	1973	219	221	-2	-1%
Clark’s Point	1971	62	75	-13	-17%
Dillingham city	1963	2,329	2,466	-137	-6%
Ekwok	1974	115	130	-15	-12%
Koliganek	—	209	182	27	15%
Manokotak	1970	442	399	43	11%
New Stuyahok	1972	510	471	39	8%
Portage Creek	—	2	36	-34	-94%
Togiak	1969	817	809	8	1%
Twin Hills	—	74	69	5	7%
Lake and Peninsula Borough	1989	1,631	1,823	-192	-11%
Chignik	1983	91	79	12	15%
Chignik Lagoon	—	78	103	-25	-24%
Chignik Lake	—	73	145	-72	-50%
Egegik	1995	109	116	-7	-6%
Igiugig	—	50	53	-3	-6%
Iliamna	—	109	102	7	7%
Ivanof Bay	—	7	22	-15	-68%
Kokhanok	—	170	174	-4	-2%
Levelock	—	69	122	-53	-43%
Newhalen	1971	190	160	30	19%
Nondalton	1971	164	221	-57	-26%
Pedro Bay	—	42	50	-8	-16%
Perryville	—	113	107	6	6%
Pilot Point	1992	68	100	-32	-32%
Pope-Vannoy Landing	—	6	8	-2	-25%
Port Alsworth	—	159	104	55	53%
Port Heiden	1972	102	119	-17	-14%
Ugashik	—	0	11	-11	-100%

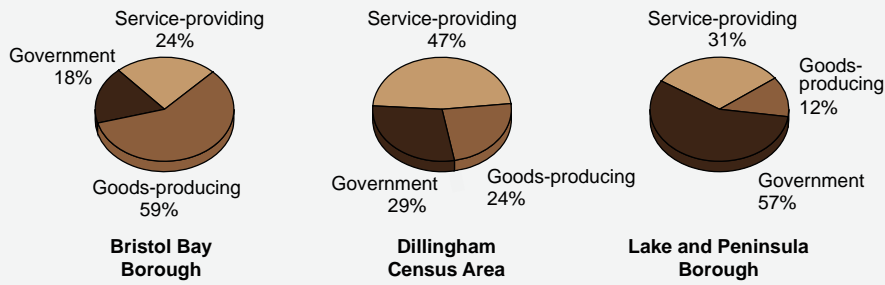
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; United States Census Bureau

## Drift and Set Net Salmon Fisheries 4 Bristol Bay region, 1975 to 2010



Source: Alaska Department of Fish and Game, Commercial Fisheries Entry Commission

## 5 Wage and Salary Employment Bristol Bay region, 2010



	Avg annual employment	Total wages
Bristol Bay Borough	1,366	\$58,233,826
Dillingham Census Area	2,578	\$94,232,372
Lake and Peninsula Borough	751	\$27,516,776
Area totals	4,695	\$179,982,974

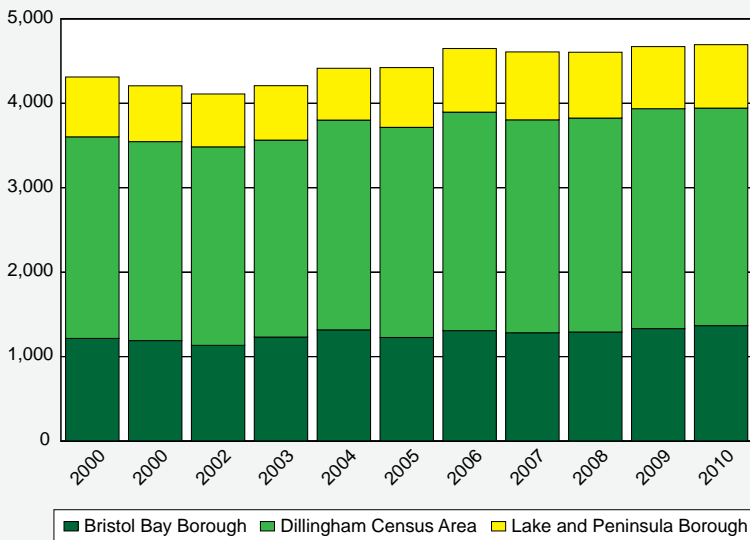
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

## Fishing is the backbone

The area's commercial salmon fishery is the state's largest in terms of earnings: \$165 million in 2010<sup>6</sup> from 181 million pounds of fish. Bristol Bay's salmon volume is second to Prince William Sound, but more of Bristol Bay's harvests are sockeye, a higher value species. These earnings are dramatically higher than in the early 2000s, approaching levels not seen since 1996. (See Exhibit 4.) As fishermen have adjusted their expected future earnings, salmon permit prices have followed suit, also rising to mid-1990s levels.

Other significant seafood products are king crab at \$83 million, herring roe at \$3.9 million, and the Chignik salmon harvest — on the Pacific coast of the Lake and Peninsula Borough — at \$12 million in 2010.

## 6 Gradual Employment Growth Bristol Bay region, 2000 to 2010



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

gion harvested 145,820 salmon in 2008, according to estimates from the Alaska Department of Fish and Game.<sup>5</sup> Residents also hunt moose, caribou, and marine mammals for food. Although detailed information on subsistence is outside the scope of this article, it's clear that the time demands of a subsistence economy limit the number of hours some residents can work in wage and salary jobs, effectively lowering potential cash income.

The area exports more than just frozen and canned seafood: 60 percent of earnings in 2010 went to out-of-state permit holders. Among Alaskan permit holders, Bristol Bay residents made \$36 million — roughly 14 percent of 2010 estimated earnings in Bristol Bay and Chignik fisheries.

## Wage and salary jobs by area

Industry employment shows an economy that's compartmentalized to serve the Bristol Bay region. Canneries in Naknek and King Salmon make the Bristol Bay Borough the leader in production of goods. Dillingham leads in private services with the agglomeration of trade and visitor services, a hospital, and transportation/distribution hubs. Fifty-seven percent of Lake and Peninsula employment is in government. (See Exhibit 5.)

Total wage and salary employment in 2010 — which does not include fish harvesting — averaged 4,695, and firms paid \$180 million in total wages. Employment inched upward over the last decade (see Exhibit 6) because of heightened summer activity. Peak July hiring increased by several hundred over the last 10 years while nonseasonal employment remained flat or declined in most sectors. Seventy percent of jobs, or 3,285, were in private-sector firms in 2010, while the rest were in government.

## Summer is the busiest time

Seasonal employment is the norm rather than the exception in the Bristol Bay region; most wages are earned in a few short months rather than in the typical year-round, 40-hour work week. In 2010, wage and salary employment fluctuated from 3,350 in December to 8,900 in July when the fishing season was in full swing. (See Exhibit 7.)

Thousands of seafood processing workers from all over the world descend on King Salmon, Naknek, Chignik, and Dillingham each summer. Housed in dormitories, nine out of 10 Bristol Bay seafood processing workers are from outside Alaska, which contributes to the area's high average non-resident employment rates among wage and salary workers. (See Exhibit 8.)

Summers also include wildlife viewing, sport fishing, and tourism in the nearby wilderness and national parks. Katmai National Park, home of the famous fishing grizzly bears and the Novarupta volcano, had a record 82,600 visitors in 2007.<sup>7</sup> Leisure and hospitality services pick up 500 employees each visitor season. Weather-dependent outdoor work — such as waste removal, transportation, building, and repairs — also increases in the summer.

## Jobs to stick around for

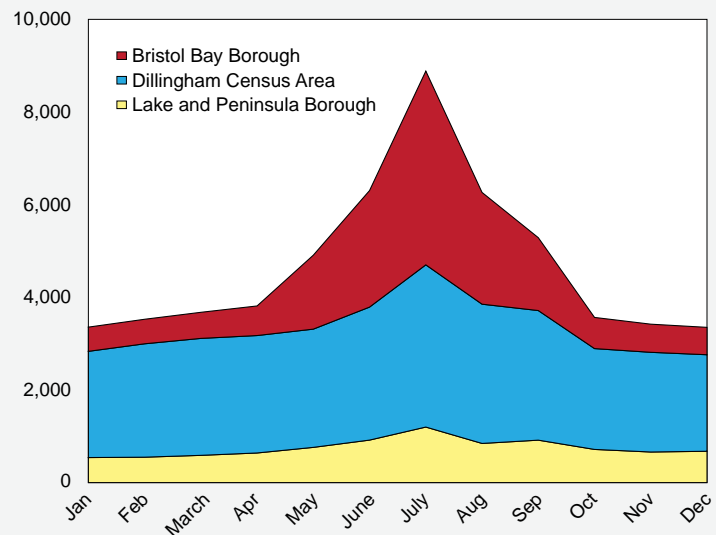
Many establishments close at summer's end, making government the employment mainstay the rest of the year. Four school districts served 1,672 pre-kindergarten through 12th-grade students in 2009–2010,<sup>8</sup> employing 514 workers in 2010. Tribal and local government agencies had average employment of 579 that year. Average yearly earnings are generally lower for local government than for the private sector or state and federal government. (See Exhibit 9.)

The University of Alaska has a small extension campus in Dillingham that bumps up state government employment to more than 100. The U.S. Postal Service, Federal Aviation Administration, Department of the Interior, and Department of Agriculture also employ more than 100 people year-round — more in the summer — and federal agencies typically pay well.

Other private industries make up the balance of employers. The hospital in Dillingham, the

## The Seasons Matter 7

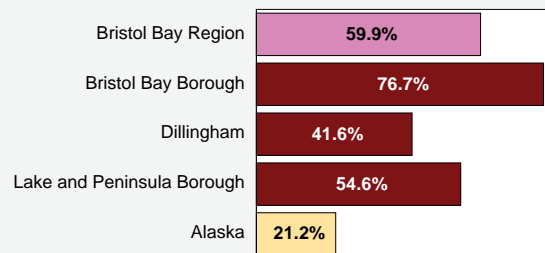
Bristol Bay employment, 2010



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

## Private Nonresident Hire 8

Bristol Bay, 2009



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

Bristol Bay Native Association, and a few small clinics create 600 health care and social assistance jobs in the region. The trade and transportation sectors provide year-round services and employed 520 in 2010. Key players were small general stores and air services.

## The self-employed

Certain workers — such as the self-employed, most fishermen, and those in family businesses — are exempt from unemployment insurance laws, so they aren't represented in wage and salary data. However, these groups are an important part of the region's economy. The U.S. Cen-

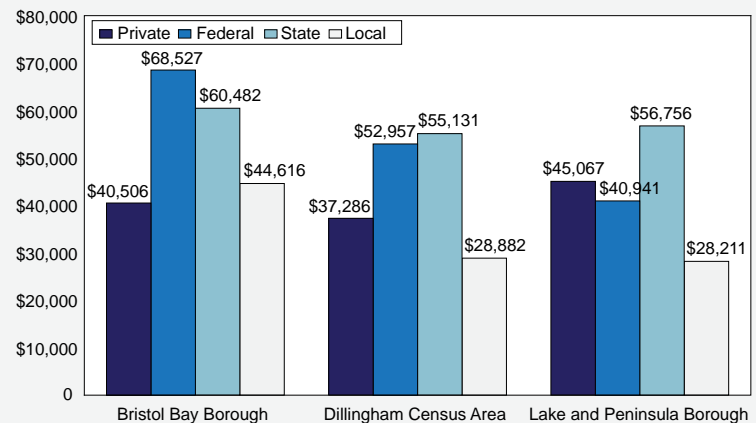
sus Bureau's Nonemployer Statistics (which are based on tax records of businesses that have no employees)<sup>9</sup> show that 1,382 firms sold \$40.7 million in goods and services in 2009, the most recent year for which data are available. Most of these sales were in fishing, though construction workers, daycare providers, bed and breakfasts, and real estate agents all contributed. (See Exhibit 10.)

## Industry crossroads

Though tourism is gaining a foothold, Bristol Bay's industries are built around fisheries. Economic activity hinges on logistics — shipping the product out and the goods in — while supporting the necessary workers and their villages.

The synthesis and adaptability of modern and conventional methods are what make this possible in Southwest Alaska. For example, community development fishing quotas provide education money while those same students set nets for subsistence salmon. Locals can hop on their snowmachines or on the Internet to visit neighboring villagers. Lamps are lit with seal oil as well as wind power. These crossings do not replace each other, nor are they at odds — both are fundamental to the region's ability to manage and increase the benefits from their resources.

## 9 Government and Private Wages Bristol Bay average annual earnings, 2009



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

## Notes

<sup>1</sup>Hereafter, "Bristol Bay region" or "region" will refer to the area made up of the Bristol Bay Borough, the Dillingham Census Area, and the Lake and Peninsula Borough, while "Bristol Bay" refers to the water body.

<sup>2</sup>Per capita incomes are data for 2009, the most recent year available.

<sup>3</sup>For more on the cost of living, see May 2011 *Alaska Economic Trends*.

<sup>4</sup>Source: Indian Health Service Sanitation Tracking and Responding System: [wstars.ihs.gov](http://wstars.ihs.gov)

<sup>5</sup>Includes the Bristol Bay and Chignik subsistence use areas. Source: Alaska Department of Fish and Game.

<sup>6</sup>Fisheries data from 2010 are preliminary estimates. Source: Alaska Department of Fish and Game, Commercial Fisheries Entry Commission

<sup>7</sup>Source: National Park Service, [www.nature.nps.gov/stats](http://www.nature.nps.gov/stats)

<sup>8</sup>Source: Alaska Department of Education and Early Development

<sup>9</sup>Receipts include gross receipts, sales, commissions, and income from trades and businesses as reported on annual income tax returns. Source: U.S. Census Bureau Nonemployer Statistics

## 10 Self-Employed Workers in Bristol Bay Region Select nonemployer\* statistics, 2009

Industry	Bristol Bay Borough		Dillingham Census Area		Lake And Peninsula Borough		Totals	
	Firms	Receipts	Firms	Receipts	Firms	Receipts	Firms	Receipts
Total for all sectors	261	\$8,380,000	809	\$20,023,000	312	\$12,309,000	1,382	\$40,712,000
Fishing	153	\$5,305,000	573	\$12,649,000	180	\$8,002,000	906	\$25,956,000
Construction	13	\$703,000	31	\$431,000	7	\$74,000	51	\$1,208,000
Retail trade	—	—	—	—	15	\$993,000	15	\$993,000
Transportation and warehousing	7	\$173,000	22	\$1,824,000	15	\$1,038,000	44	\$3,035,000
Real estate and rental and leasing	—	—	13	\$1,556,000	—	—	13	\$1,556,000
Professional, scientific, technical services	10	\$265,000	40	\$693,000	18	\$300,000	68	\$1,258,000
Administrative and support and waste management and remediation services	14	\$353,000	—	—	10	\$195,000	24	\$548,000
Educational services	4	\$28,000	6	\$51,000	22	\$160,000	32	\$239,000
Health and social services	—	—	31	\$183,000	6	\$17,000	37	\$100,000
Arts, entertainment, and recreation	—	—	11	\$172,000	—	—	11	\$172,000
Accommodations and food services	7	\$286,000	13	\$340,000	11	\$334,000	31	\$960,000
Other services (except public administration)	23	\$611,000	30	\$731,000	13	\$170,000	66	\$1,512,000

\*Based on tax receipts from businesses with no employees. Receipts include gross receipts, sales, commissions, and income from trades and businesses as reported on annual business income tax returns.

Source: United States Census Bureau

# Employment Scene

## Unemployment rate at 7.6 percent in September



**A**laska's seasonally adjusted unemployment rate for September was essentially unchanged, declining one-tenth of a percentage point to 7.6.

The comparable national rate for September was noticeably higher at 9.1 percent, unchanged from August and July. (See Exhibit 1.) The U.S. rate is down slightly compared to September 2010's 9.6 percent, but like Alaska has shown no clear trend up or down for most of 2011.

### Nearby states have higher rates

Alaska's rate is also lower than the nearest other states, including Washington (9.1 percent), Oregon (9.6 percent), and California (11.9 percent). Hawaii was the only "close" state whose unemployment rate was lower than Alaska's, at 6.4 percent. In



September, the most recent month available for comparison, Alaska's unemployment ranked 19th in the country. (See Exhibit 2.)

## **2** Unemployment by State September 2011

1	North Dakota	3.5%	26	Arkansas	8.3%
2	Nebraska	4.2%	27	Colorado	8.3%
3	South Dakota	4.6%	28	Texas	8.5%
4	New Hampshire	5.4%	29	Missouri	8.7%
5	Wyoming	5.8%	30	Connecticut	8.9%
6	Vermont	5.8%	31	Indiana	8.9%
7	Oklahoma	5.9%	32	Idaho	9.0%
8	Iowa	6.0%	33	Washington	9.1%
9	Hawaii	6.4%		<b>U.S. Average</b>	<b>9.1%</b>
10	Virginia	6.5%	34	Arizona	9.1%
11	New Mexico	6.5%	35	Ohio	9.1%
12	Kansas	6.7%	36	New Jersey	9.2%
13	Louisiana	6.9%	37	Oregon	9.6%
14	Minnesota	6.9%	38	Kentucky	9.7%
15	Massachusetts	7.3%	39	Alabama	9.8%
16	Maryland	7.4%	40	Tennessee	9.8%
17	Utah	7.4%	41	Illinois	10.0%
18	Maine	7.5%	42	Georgia	10.3%
19	Alaska	7.6%	43	Rhode Island	10.5%
20	Montana	7.7%	44	N. Carolina	10.5%
21	Wisconsin	7.8%	45	Mississippi	10.6%
22	New York	8.0%	46	Florida	10.6%
23	Delaware	8.1%	47	S. Carolina	11.0%
24	West Virginia	8.2%	48	Michigan	11.1%
25	Pennsylvania	8.3%	49	California	11.9%
			50	Nevada	13.1%

Source: U.S. Bureau of Labor Statistics

### Jobs up from last September

Preliminary nonfarm employment estimates, which are subject to potentially large revisions and volatility, show Alaska gained 3,700 jobs between September 2010 and September 2011. (See Exhibit 3.)

Although Alaska and U.S. job numbers were both up by about 1 percent over last September's levels, the national numbers remain significantly below pre-recession highs while Alaska has more than recovered its relatively small recession-related losses. In contrast, the nation's number of employed in September — 131.1 million — was 6.6 million lower than its previous peak employment in January 2008. The nation's current employment is at its July 2004 level, which means the U.S. has to make up seven years of lost ground to reach its previous high.

### Seasonal unemployment rises

Unemployment rates for September (not seasonally adjusted) increased slightly over the

month in half the state's regions. In four regions, rates fell slightly below year-ago levels. (See Exhibit 4.) For example, Fairbanks' unemployment rate was 5.8 percent versus 6.2 percent last September. The Northern and Southwest regions were the only areas whose rates were slightly higher than at this time last year.

The unemployment numbers remained exceptionally low in a number of areas, and five areas had rates of 5 percent or less. In Skagway and the Denali Borough, the short but intense visitor season drives these numbers so low. However, by October, these rates are likely to hit double digits.

Seven areas' rates were in the double digits in September, and nearly all were in rural parts of the state where employment opportunities remain scarce year-round.

### 3 Statewide Employment Nonfarm wage and salary

	Preliminary		Revised		Year-Over-Year Change	
	9/11	8/11	9/10	9/10	90% Confidence Interval	
<b>Alaska</b>						
<b>Total Nonfarm Wage and Salary<sup>1</sup></b>	342,900	352,300	339,200	3,700	-2,377	9,777
Goods-Producing <sup>2</sup>	49,600	58,500	49,700	-100	-3,066	2,866
Service-Providing <sup>3</sup>	293,300	293,800	289,500	3,800	—	—
<b>Mining and Logging</b>	17,100	17,200	16,300	800	-435	2,035
Mining	16,500	16,700	16,000	500	—	—
Oil and Gas	13,700	13,600	13,300	400	—	—
<b>Construction</b>	18,600	19,000	19,000	-400	-1,913	1,113
<b>Manufacturing</b>	13,900	22,300	14,400	-500	-2,859	1,859
<b>Wholesale Trade</b>	6,400	6,700	6,400	0	-339	339
<b>Retail Trade</b>	37,000	37,800	35,800	1,200	416	1,984
Food and Beverage Stores	6,300	6,500	6,300	0	—	—
General Merchandise Stores	10,400	10,400	10,000	400	—	—
Transportation, Warehousing, Utilities	23,700	25,100	22,800	900	66	1,734
Air Transportation	6,100	6,400	5,800	300	—	—
Truck Transportation	3,700	3,900	3,300	400	—	—
<b>Information</b>	6,600	6,600	6,400	200	-75	475
Telecommunications	4,500	4,500	4,200	300	—	—
<b>Financial Activities</b>	14,800	15,000	15,000	-200	-1,067	667
<b>Professional and Business Services</b>	28,100	28,600	27,400	700	-656	2,056
<b>Educational<sup>4</sup> and Health Services</b>	43,500	42,900	41,700	1,800	665	2,935
Health Care	32,000	31,900	30,100	1,900	—	—
<b>Leisure and Hospitality</b>	36,800	40,800	35,200	1,600	-1,069	4,269
<b>Other Services</b>	11,100	11,100	11,800	-700	-1,521	121
<b>Government</b>	85,300	79,200	87,000	-1,700	—	—
Federal Government <sup>5</sup>	17,200	17,500	17,600	-400	—	—
State Government	26,700	24,300	26,800	-100	—	—
State Government Education <sup>6</sup>	8,500	5,700	8,400	100	—	—
Local Government	41,400	37,400	42,600	-1,200	—	—
Local Government Education <sup>7</sup>	23,700	19,200	24,400	-700	—	—
Tribal Government	4,000	3,800	4,000	0	—	—

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>Includes the University of Alaska

<sup>7</sup>Includes public school systems

Sources for Exhibits 1, 3, and 4: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Department of Labor, Bureau of Labor Statistics

## 4 Unemployment Rates Boroughs and census areas

	Prelim.		Revised	
	9/11	8/11	9/10	9/10
<b>SEASONALLY ADJUSTED</b>				
<b>United States</b>	9.1	9.1	9.6	
<b>Alaska Statewide</b>	7.6	7.7	7.9	
<b>NOT SEASONALLY ADJUSTED</b>				
<b>United States</b>	8.8	9.1	9.2	
<b>Alaska Statewide</b>	6.7	6.6	7.2	
<b>Anchorage/Mat-Su Region</b>	6.2	6.2	6.9	
Municipality of Anchorage	5.8	5.8	6.7	
Matanuska-Susitna Borough	7.6	7.5	7.8	
<b>Gulf Coast Region</b>	7.5	7.0	7.8	
Kenai Peninsula Borough	8.1	7.6	8.6	
Kodiak Island Borough	5.6	5.8	5.4	
Valdez-Cordova Census Area	6.7	5.8	6.5	
<b>Interior Region</b>	6.5	6.5	6.7	
Denali Borough	4.9	3.7	4.3	
Fairbanks North Star Borough	5.8	5.9	6.2	
Southeast Fairbanks Census Area	9.6	9.3	9.0	
Yukon-Koyukuk Census Area	14.7	14.9	12.5	
<b>Northern Region</b>	9.5	9.5	9.4	
Nome Census Area	11.6	12.7	12.2	
North Slope Borough	5.0	4.7	5.1	
Northwest Arctic Borough	14.9	14.0	13.4	
<b>Southeast Region</b>	5.8	5.5	6.1	
Haines Borough	5.6	4.5	5.5	
Hoonah-Angoon Census Area <sup>1</sup>	10.8	10.0	10.0	
Juneau, City and Borough of	4.5	4.5	5.1	
Ketchikan Gateway Borough <sup>1</sup>	5.5	5.2	5.9	
Petersburg Census Area <sup>1</sup>	7.9	6.1	—	
Prince of Wales-Hyder Census Area <sup>1</sup>	12.9	12.3	—	
Prince of Wales-Outer Ketchikan CA <sup>1</sup>	—	—	12.4	
Sitka, City and Borough of <sup>1</sup>	5.4	4.6	5.4	
Skagway, Municipality of <sup>1</sup>	5.0	3.9	3.7	
Wrangell, City and Borough of <sup>1</sup>	7.3	5.6	—	
Wrangell-Petersburg Census Area <sup>1</sup>	—	—	7.9	
Yakutat, City and Borough of	7.2	7.2	6.1	
<b>Southwest Region</b>	11.7	11.2	11.6	
Aleutians East Borough	10.8	8.2	8.0	
Aleutians West Census Area	6.8	5.9	7.0	
Bethel Census Area	14.0	14.3	14.5	
Bristol Bay Borough	2.8	1.7	2.8	
Dillingham Census Area	9.4	8.8	8.8	
Lake and Peninsula Borough	5.8	6.2	5.6	
Wade Hampton Census Area	19.0	21.2	18.6	

<sup>1</sup> Because of the creation of new boroughs, this borough or census area has been changed or no longer exists. Data for the Municipality of Skagway and Hoonah-Angoon Census Area became available in 2010. Data for the City and Borough of Wrangell, Petersburg Census Area, and Prince of Wales-Hyder went into effect in January 2011. Prior to January, data were published for Wrangell-Petersburg Census Area and Prince of Wales-Outer Ketchikan Census Area.

### Changes in producing the estimates

Beginning with the production of preliminary estimates for March 2011, production of state and metropolitan area Current Employment Statistics estimates transitioned from the Alaska Department of Labor and Workforce Development's Research and Analysis Section to the U.S. Bureau of Labor Statistics. Concurrent with this transition, BLS implemented several changes to the methods to help standardize estimation across states. While these changes reduce the potential for statistical bias in state and metropolitan area estimates, they may increase month-to-month variability. More detailed information on the CES changes is available on the BLS Web site at <http://www.bls.gov/sae/cesprocs.htm>.

For more current state and regional employment and unemployment data, visit our Web site: [laborstats.alaska.gov](http://laborstats.alaska.gov)

# Employer Resources

## December job fair to focus on Alaska at-sea processing

The semiannual At-Sea Processors Association Job Fair will be held Thursday, Dec. 8, at the Anchorage Midtown Job Center. The At-Sea Job Fair, which typically attracts between 200 and 250 applicants, is a collaboration between the Alaska Department of Labor and Workforce Development and the At-Sea Processors Association.

Those seeking processing work must attend a seafood orientation and preregister before Dec. 8. Seafood orientations are held Monday through Thursday at 10 a.m. at the Midtown Job Center.

Some companies request that job applicants apply online before attending the job fair, and some provide paper applications. Those who are hired will begin work in January 2012 and spend three to four months aboard a catcher/processor.

The Alaska seafood processing industry provides tens of thousands of processing jobs each year, with opportuni-

ties for seasonal or full-time work and possible advancement into management or technical positions with good pay and benefits. Most companies look for seafood employees who:

- Will work the full season or contract period
- Enjoy physical work
- Enjoy working as a team in a multicultural environment
- Take pride in a quality seafood product
- Will work with others in remote locations under demanding conditions while wearing rain gear and rubber boots
- Recognize the value of following directions and safety rules

For more information, contact the Anchorage Seafood Unit at (907) 269-4775 or find the nearest local job center at: <http://jobs.alaska.gov>.

## A Safety Minute

### Four-point OSHA program can help reduce processing injuries

Seafood processing plants are complex work sites that can present many hazards, including:

- Unprotected machinery
- Wet and slippery surfaces
- Falls from elevated platforms
- High noise levels
- Low temperatures
- Electrical shocks
- Sharp instruments and tools
- Powered industrial trucks such as forklifts
- Repetitive work and ergonomic hazards
- Fatigue from long hours
- Exposure to hazardous materials
- Confined spaces
- Hazards to workers' eyes from flying particles

The law requires employers to provide a safe and healthful workplace, but doing so also saves money and adds value to a business. A good way to address these issues is to implement a four-point program based on the Safety and Health Program Management Guidelines issued by the Occupational Safety and Health Administration in 1989.

1. **Management commitment and employee involvement.** The manager or management team

sets policy, assigns and supports responsibility, sets an example, and involves employees through safety committees. No safety and health program can succeed without management commitment and employee support.

2. **Work site analysis.** Management and employees continually analyze the work site to identify potential hazards and monitor existing hazard controls.
3. **Hazard prevention and control.**
4. **Training for employees, supervisors, and management.**

Many Alaska seafood processors operate seasonally, requiring new employees to be hired each year. Safety and health management programs are critical with new hires, as a significant number are new to the industry or to the specific plant.

Safety consultants with the Alaska Department of Labor and Workforce Development's Occupational Safety and Health Section provide free assistance developing a health and safety management program. Employers with exemplary programs may also be eligible for the Voluntary Protection Program or the Safety and Health Achievement Recognition Program. For more on these programs or for assistance, call (800) 656-4972 or visit our Web site at: [labor.alaska.gov/lss/oshhome.htm](http://labor.alaska.gov/lss/oshhome.htm).