

## Remote and rich in resources and history

**A**bundant fish, shellfish and maritime mammals have sustained life for residents on the Alaska Peninsula and Aleutian Islands for some 7,000 years. Until the arrival of Russian fur traders in the mid- and late 1700s, an estimated population of 12,000 to 15,000 “Unangan” – the Aleut word for the people – thrived off the riches of the sea. Russian colonization that turned American in 1867 held back population growth of the indigenous population. According to historians, disease and resource depletion caused the sharp decline.

By the early 1900s, the fur trade collapsed from overhunting and economic interest switched to the area’s seafood resources. Whaling, fishing, salteries and canneries brought Scandinavians, Europeans and Americans, yet only a few stayed, likely due to the harsh climate and lack of amenities.

During World War II the Aleutian Islands came under Japanese attack and turned the western islands into the only battlefields on American soil. In 1942, U.S. defense forces relocated the Native residents west of Unimak Pass to internment camps in Southeast Alaska. And after the war only a few of the Aleut evacuees returned home.

The Aleut population has never matched 12,000 to 15,000 people that historians think lived in the Aleutians prior to the mid-1700s. The 2000 Census counted 10,695 people with full or partial Aleut heritage living in Alaska. Yet, in 2005,<sup>1</sup> fewer than 2,000 lived on the Alaska Peninsula and Aleutian Islands, an area now divided into the Aleutians West Census Area and the Aleutians East Borough. This article will focus on the latter.

<sup>1</sup> The year 2005 is the most recent year for which race estimates are currently available.

## 1 Population Changes The Aleutians East Borough and its communities, 1980 to 2006

	1980 Census	1990 Census	2000 Census	2006 Estimate <sup>1</sup>	Percentage Change, 2000 to 2006	Percentage Change, 1990 to 2006	Year of Incorporation
<b>Aleutians East Borough</b>	1,643	2,464	2,697	2,643	-2%	7%	1988
Akutan	169	589	713	741	4%	26%	1979
Ships in Port		187 <sup>2</sup>					
Belkofski	10	0	0	0			
Cold Bay	192	148	88	87	-1%	-41%	1982
False Pass	70	68	64	54	-16%	-21%	1990
King Cove	460	451	792	807	2%	79%	1947
Nelson Lagoon	59	83	83	63	-24%	-24%	
Sand Point	625	878	952	890	-7%	1%	1978
Remainder of Aleutians East Borough	58	247	5	1			

Notes: The communities listed are cities, with the exception of Belkofski and Nelson Lagoon. Belkofski is an Alaska Native Village Statistical Area; ANVSA boundaries encompass the settled area associated with each Alaska Native Village. Nelson Lagoon is a Census Designated Place, which is a closely settled unincorporated population center.

The U.S. Census Bureau provided the Census numbers. The Alaska Department of Labor and Workforce Development provided the 2006 estimates.

<sup>1</sup> All references to the 2006 population in this article are to the Department of Labor’s 2006 population estimates, which are the average annual resident population often referred to as the July 1 population.

<sup>2</sup> The number 187 is a subset of 589.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section, Demographics Unit; and the U.S. Census Bureau

## The Aleutian East Borough emerges

At statehood fewer than 1,000 people lived in the communities of today's Aleutians East Borough. The borough had 1,573 residents when it was formed in 1988. It's grown 7 percent since 1990 – a low figure for population growth. The area's out-migration of the local year-round population has been masked by the growth of a transient seafood processing work force.

In 2006, the Aleutians East Borough population estimate stood at 2,643, and over half – 1,419 people – were transient seafood processing workers. The borough's largest communities are Sand Point, King Cove and Akutan, in that order. (See Exhibit 1.) All three are seafood processing centers.

Numbers are important when looking at the borough's demographics, because the numbers are small – smaller than many Alaska communities. The entire borough makes up 0.4 percent of the state's population. (See Exhibit 2.)

### Transient workers skew demographics

Borough-specific demographic data may seem surprising: The Aleutian East Borough is very racially diverse. (See Exhibit 3.) Although the area is traditionally Alaska Native, nearly as many whites (36 percent) lived in the borough in 2005<sup>2</sup> as Natives (37 percent). Asian and Pacific Islanders made up 25 percent in 2005 and African Americans made up 2 percent.

The large presence of a foreign-born work force in the borough closely resembles the demographic composition of Alaska's entire seafood work force, many of whom are first-generation immigrants. The 2000 Census, for example, shows that 18.3 percent of the borough's population was born outside the United States.

<sup>2</sup> The year 2005 is the most recent year for which data are currently available.

## The Demographics and Population Growth Aleutians East Borough, 1990 to 2006 **2**

	Aleutians East Borough		Alaska	
	Number of People	Percentage	Number of People	Percentage
Population in 2006:	2,643	100%	670,053	100%
Age Distribution in 2006:				
Birth to age 19	397	15%	215,486	32%
Age 20 to age 59	2,089	79%	382,884	57%
Age 60 and older	157	6%	71,683	11%
Male to Female Ratio in 2006:	198 men to 100 women		105 men to 100 women	
Birthrate, 2005 to 2006:	7.9 per 1,000 population		15.4 per 1,000 population	
Population Growth, 1990 to 2006:	179	7%	120,010	22%

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section, Demographics Unit; and the U.S. Census Bureau

The borough's gender ratio is extreme, as there were nearly twice as many men as women in 2006 – 198 males to every 100 females. (See Exhibit 2.) The predominantly male seafood processing work force lives in company-provided bunkhouses, a dormitory type of living. Many of the seafood workers have families elsewhere. The gender dominance explains to some degree the low birth rate of 7.9 births per 1,000 population. That was about half the Alaska average in the 2005-2006 period and the third lowest in the state.

The strong presence of seafood workers in the borough explains the age factor. A clear majority of the borough's population in 2006, 79 percent, was between the ages of 20 and 59, the prime working-age population. Fifteen percent were younger than 20, and less than 6 percent were 60 and older.

### Resident population trends downward

The Aleutians East Borough's young-age group (birth to age 19) declined by 38 percent – 239 people – between 1990 and 2006. Although 239 isn't a huge number, the change is significant.

School enrollment further suggests that area residents are leaving. Between October 2000 and October 2006, the borough's total school enrollment (kindergarten to 12th grade) dropped 23 percent from 301 students to 232. The schools in Akutan, Cold Bay and False Pass each had 10 or fewer students in 2006.

# 3 Race and Ethnicity

## Aleutians East Borough, 2005

Race Composition in 2005: <sup>1</sup>	Aleutians East Borough		Alaska	
	Number of People	Percentage	Number of People	Percentage
White	967	36%	484,673	73%
Native American	981	37%	117,743	18%
African American	51	2%	25,970	4%
Asian and Pacific Islander	660	25%	35,275	5%
<b>Ethnicity Composition in 2005:</b>				
Hispanic	300	11%	26,413	4%

<sup>1</sup> Race composition in 2005 is a bridged series. For an explanation of “bridged series,” go to Research and Analysis’ home page at [almis.labor.state.ak.us](http://almis.labor.state.ak.us) and click on “Population & Census” in the blue box on the left. Then click on the “Alaska Population Estimates 2000-2006” link. Under “Vintage 2006 Estimates” and “Alaska State Estimates,” click on the “Alaska State Race Bridged Smooth Series 1990-2006” link.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section, Demographics Unit; and the U.S. Census Bureau

Some of the reasons to explain out-migration include dwindling or static income and the rise in the cost of living, plus the overall trend of rural to urban migration that’s occurring throughout Alaska – at least partly due to increased job opportunities and improved services in the urban areas.

### Despite the ups and downs, fish reigns king

The fishermen who live in the Aleutians East Borough target salmon, various groundfish and halibut as their principal species. Local fishermen fished for crab until the crab rationalization<sup>3</sup> in 2005; a few fishermen still pursue herring. In all, the Alaska Peninsula has a diversified and a near year-round fishery.

As elsewhere in Alaska’s coastal regions, seafood harvesting evolved as a local economic activity while seafood processing became reliant mostly on a migrating work force, largely from outside the United States.

### Alaska Peninsula fishermen face challenges

The borough’s salmon fishermen, who are part of the Alaska Peninsula fishing district, suffered like other area fishermen when prices started to

<sup>3</sup> Crab rationalization is explained in the next section.

deteriorate in the mid-1990s and plummeted in 2001. Since then prices for sockeye, the area’s preferred targeted species, have stayed low, rebounding only slightly.

The borough and surrounding area is a mixed-stock fishery, where salmon are caught on the way to their spawning grounds in Bristol Bay and further north. Regulators, who closely monitor the stock and natural escapement of fish, often impose strict harvest guidelines on the area’s fleet. Curtailed fishing time, for example, resulted in particularly low salmon harvests in 1996 and 1997.

Even so, the salmon fishery is still one of the area’s most important. The fishery has had the highest number of participants, but the fact that the area’s fishing effort is declining has become a dire fact. The Alaska Peninsula fishing district had 373 permit holders plus crew in 1996. That number dropped 29 percent to 264 in 2006. Local residents fished 197 salmon permits in 1996, compared to 140 a decade later.<sup>4</sup>

Other fisheries have been more positive for the area’s fishermen. Groundfish, particularly cod, has made sizeable contributions to earnings. Local fishermen earned more from groundfish than from salmon from 2000 to 2003. In recent years, halibut has also been a moneymaker.

The picture hasn’t been as good for the area’s crab fishery – earnings from the crab fishery have declined sharply in the last 25 years. The value of the crab fishery, for instance, was 70 percent less in 2005 than it was in 1980. (Back then, even king crab was still fished; stock depletion caused its decline.)

Local harvesters have also participated in the Bering Sea tanner crab fishery. Recently, crab fishing again changed its course with the implementation of the crab rationalization program of 2005, which aimed to reduce the crab catcher fleet. It had an immediate effect on the area’s

<sup>4</sup> According to the Alaska Department of Fish and Game’s Commercial Fisheries Entry Commission

# Wage and Salary Employment and Local Harvesting Earnings

## Aleutians East Borough, 2000 to 2006

# 4

	2000 <sup>1</sup>	2001 <sup>1</sup>	2002 <sup>1</sup>	2003 <sup>1</sup>	2004 <sup>1</sup>	2005 <sup>1</sup>	2006 <sup>1</sup>	2000 to 2006
Resident Gross Fish Harvesting Earnings <sup>2</sup>	\$25,942,096	\$17,029,791	\$16,112,833	\$19,477,657	\$22,303,407	\$25,074,162	n/a	n/a
Payroll	\$44,434,797	\$44,907,103	\$46,273,642	\$54,044,398	\$52,112,172	\$54,822,261	\$59,028,487	\$14,593,690
Average Monthly Earnings	\$2,272	\$2,154	\$2,306	\$2,591	\$2,243	\$2,488	\$2,488	\$216
Total Wage and Salary Employment <sup>3</sup>	1,630	1,737	1,672	1,738	1,936	1,836	1,978	348
Agriculture, Forestry, Fishing <sup>4</sup> and Hunting	4	3	2	2	2	1	1	-3
Construction	0	0	0	2	0	0	1	1
Manufacturing	1,080	1,176	1,102	1,163	1,369	1,305	1,459	379
Seafood Processing	1,080	1,176	1,102	1,163	1,369	1,305	1,459	379
Trade, Transportation, Utilities	75	77	84	83	84	76	72	-3
Wholesale	8	7	8	8	6	7	4	-4
Retail	42	38	43	45	46	37	24	-18
Transportation, Warehousing, Utilities	25	32	33	30	32	32	44	19
Information	6	5	3	2	3	2	3	-3
Financial Activities	48	57	53	30	29	31	30	-18
Professional and Business Services	17	14	15	13	12	10	12	-5
Educational <sup>5</sup> and Health Services	65	67	63	68	69	70	64	-1
Leisure and Hospitality	9	9	9	41	34	33	35	26
Other Services	9	13	23	29	27	19	15	6
Government	317	316	318	305	307	289	286	-31
Federal Government <sup>6</sup>	24	23	23	25	25	25	23	-1
State Government <sup>7</sup>	17	17	17	17	17	18	17	0
Local Government <sup>8</sup>	276	276	278	263	265	246	247	-29

Note: The abbreviation n/a means not available.

<sup>1</sup> Employment and earnings statistics differ from the Quarterly Census of Employment and Earnings Reports of 2000 to 2006 due to corrections in subsequent years.

<sup>2</sup> Gross harvest earnings represent annual harvest values.

<sup>3</sup> Excludes the self-employed, fishermen and private household workers

<sup>4</sup> This category excludes nearly all fishermen and their crew. 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>5</sup> Private education only

<sup>6</sup> Excludes the uniformed military

<sup>7</sup> Includes the University of Alaska

<sup>8</sup> Includes public school systems

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

fishing effort. In 2005, 50 local fishermen went crabbing and in 2006 only 15 placed pots. How the program will affect longterm local earnings isn't clear yet.

## Commercial fishing earnings have hardly made strides

Local fishermen and their crews earned \$25 million in 2005,<sup>5</sup> which was down 3 percent from what they earned in 2000 and 13 percent from what they earned 20 years ago. This underscores the challenges local fishing families face to eke out a living.

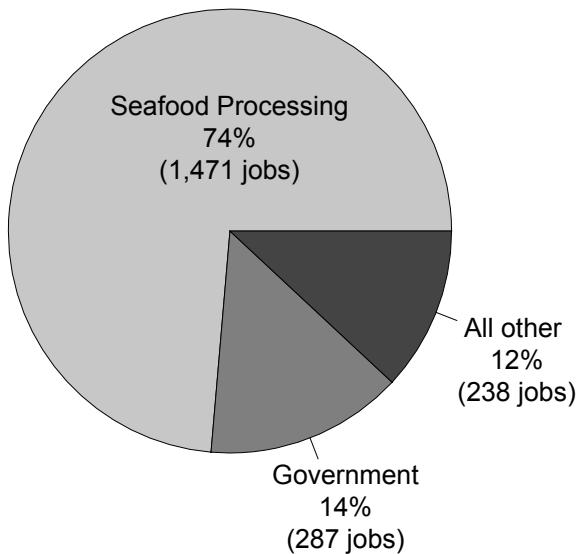
<sup>5</sup> The year 2005 is the most recent year for which data are currently available.

The cost of doing business for commercial fishermen has also increased. The borough, like other areas in Alaska, is a high-cost area because of its remote location; most supplies arrive by barge or are delivered by air to individual communities. Recent escalating energy prices have caused surges in the cost of living as well.

Justine Gundersen, Nelson Lagoon's tribal administrator who fishes commercially, was quoted in a borough press release in May: "During the 1980s, salmon was worth more than \$2.50 per pound and fuel was about a dollar per gallon. Now salmon sells for 55 cents a pound and gasoline is about \$5 per gallon in our region."

# 5 Seafood Processing Dominates Aleutians East Borough, 2006

## Wage and Salary Employment in 2006



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

The 2007 salmon harvest, though, turned into a good season. An abundant catch, coupled with a better first-price offering for sockeye salmon, lifted the spirits of area fishermen. The first-price offering hovered between 60 cents and 68 cents a pound, according to fishermen.

### Seafood workers dominate the wage and salary work force

The seafood processing industry is a big part of the borough's employment. Seventy-four percent of the jobs in the borough in 2006 were in seafood processing. (See Exhibits 4 and 5.)

In spite of the seafood processing industry's overwhelming impact on job counts, hardly any income earned by seafood workers remains in the region. More than 92 percent of the borough's seafood workers in 2005<sup>6</sup> were nonresidents and they earned \$45 million in wages that year.<sup>7</sup>

<sup>6</sup> The year 2005 is the most recent year for which data are currently available.

<sup>7</sup> According to the Department of Labor's Nonresidents Working in Alaska 2005, which was published in January 2007

Just like in the old days, the seafood processing industry surrounds itself with a self-supporting economy. Nearly all needed supplies come from Washington state, where the two major seafood processing companies – Peter Pan and Trident – are headquartered. A long established practice, the industry provides housing, food and other personal care products to its work force.

Therefore, there's little economic interaction between seafood workers and local residents. Two segregated but parallel economies have coexisted for a long time in communities such as King Cove, Sand Point and Akutan. For example, in Akutan, which has a resident population of 741, the Trident plant can house as many as 825 employees at the height of the season.

Boroughwide, the public sector, or government, is the second-largest employer. It represented 14 percent (286 jobs) of the borough's wage and salary jobs in 2006. The majority of those jobs are in local government, and most of local government's jobs are with the schools. (See Exhibit 5.)

After the public sector, the remaining 233 private-sector jobs in the borough's six communities<sup>8</sup> primarily support the local commercial fishermen and their crews, and the traditional community, where residents lead subsistence lifestyles that are supplemented with cash economies, mostly stemming from fish.

Between 2000 and 2006, the number of jobs in the borough grew by 348, and nearly all of them can be attributed to the seafood processing industry. (See Exhibit 4.) In fact, the rest of the economy was losing jobs while seafood processing was adding positions.

### The future

The residents of the Aleutians East Borough are striving for new economic development to improve their economy. Plans include adding to the seafood industry infrastructure, expanding seafood processing operations, improving transportation and developing an oil and gas industry.

<sup>8</sup> Belkofski, the Alaska Native Village Statistical Area listed in Exhibit 1, is not included in the six.

## Local investment in seafood processing could help the fleet

The Aleutian Pribilof Island Community Development Association, a regional nonprofit development group, owns fishing quotas for pollock, cod, sablefish and numerous other species, and has harvesting rights for halibut and crab. The organization is made up of the fishermen associations representing three Aleutians East Borough communities, Akutan, False Pass and Nelson Lagoon, plus Atka, Nikolski and St. George.<sup>9</sup>

The organization uses the revenue from its fishing and processing operations to build and refurbish infrastructure such as docks in its member communities, and acquire seafood-related businesses, fishing vessels, and fishing and processing rights, among other things.

APICDA officials say the organization plans to expand operations and create processing facilities in False Pass and Nelson Lagoon. New processing facilities benefit fishermen by giving them more options to sell their catch.

## Improved transportation establishes commuter traffic

Complicated transportation has long been an obstacle for residents. The transportation problem between King Cove and Cold Bay has received attention because, even though the communities are only 27 land miles apart, air or water travel is required to get between the two. Long and ongoing discussions center on a road link, which many feel is crucial because Cold Bay, the smaller community, has an accessible airport with a 10,420-foot paved runway that can accommodate large jets, and King Cove, the larger community, has a seafood processing center, yet inclement weather frequently grounds air traffic and isolates the community.

A proposed but controversial road would pass through the federally protected Izembek National Wildlife Refuge. A proposed land swap between the federal and state governments and

the King Cove Corporation, a village corporation, could be a solution. Meanwhile, an alternative transportation link has been established: a 93-foot hovercraft, owned by the borough, now ferries people and vehicles – including medical evacuations to Anchorage via Cold Bay – for a 20-minute waterway commute between the two shores.

## Once more, the focus shifts to oil and gas development

Long before statehood, geologists discovered the hydrocarbon potential in Bristol Bay and the northern coastal plain of the Aleutians East Borough. Early drilling in 1902, however, was disappointing and exploration interest faded for several decades. Interest picked up in the 1960s and 1970s; 26 oil wells had been drilled by 1985, when the latest one went in. Oil and gas development in the region was halted with the Exxon Valdez oil spill in 1989.

Recent resource evaluation led to renewed interest and the State of Alaska, as owner of the subsurface mineral estate, sold leases totaling \$1.1 million to two bidders in an October 2005 sale and sold another \$39,000 lease to a sole bidder in a February 2007 sale. Additional state-sponsored lease sales are planned. The federal government recently lifted its drilling ban and plans to offer offshore acreage for lease as early as 2011, pending environmental reviews.

## In summary

Although the fish-dependent economy of the Aleutians East Borough has struggled in the last decade, development plans exist to bring about a turnaround. If those plans are successful and the fisheries recover, the population loss of year-round residents should end; the population might even grow. Improved transportation would resolve some of the isolation problems, establishing economic links with the outside world. Other economic incentives, such as payroll job growth and sufficient earnings from fish harvesting, might also entice Aleutians East Borough residents and the next generation to stay, maintaining their way of life and cultural traditions in the place where their ancestors lived.

<sup>9</sup> The Unalaska Native Fishermen's Association is a non-voting member of APICDA, according to APICDA's Web site.