

Chignik (CHIG-nick)



People and Place

*Location*¹

The City of Chignik is located on Anchorage Bay on the south shore of the Alaska Peninsula. It lies 450 mi southwest of Anchorage and 260 mi southwest of Kodiak. The area encompasses 11.7 sq mi of land and 4.2 sq mi of water. Chignik was incorporated as a Second-class city in 1983 and is located in the Lake and Peninsula Borough.

*Demographic Profile*²

In 2010, there were 91 residents, ranking Chignik 254th of 352 Alaskan communities in terms of population size. Between 1990 and 2010, the population declined by 52%. Between 2000 and 2009, the population declined by 21.5% with an average annual growth rate of -0.89%, which was lower than the statewide average of 0.75%. However, there was a 15.2% increase in population between 2000 and 2010, and a 46.8% increase between the 2009 Alaska Department of Labor (DOL) estimate and 2010 U.S. Census figures, indicating a net growth in that decade. Information regarding population trends can be found in Table 1.

Chignik's racial composition is a mixture of Alutiiq and non-Natives. In 2010, 57.1% of the population identified themselves as American Indian or Alaska Native, compared to 60.8% in 2000; 34.1% identified themselves as White, compared to 31.6% in 2000; 3.3% identified themselves as Asian, compared to 2.5% in 2000; 4.4% identified themselves as two or more races, compared to 1.3% in 2000; and 1.1% identified themselves as some other race, compared to 1.3% in 2000. In addition, 1.1% of residents identified themselves as Hispanic or Latino, compared to 1.3% in 2000. Information regarding trends in Chignik's racial and ethnic composition can be found in Figure 1.

In 2010, the average household size was 2.22, compared to 3.4 in 1990 and 2.72 in 2000. Also in that year, there were 105 total household units, compared to 104 in 1990 and 80 in 2000. Of the households surveyed in 2010, 24.8% were owner-occupied, compared to 21.3% in 2000; 14.3% were renter-occupied, compared to 15% in 2000; 25.7% were vacant, compared to 11.3% in 2000; and 35.2% were occupied seasonally, compared to 52.5% in 2000. There were no reports of residents living in group quarters between 1990 and 2010.

¹ Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

² U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2000 (SF1 100% and SF3 sample data) and 2010 (Demographic Profile SF) Decennial Census and the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

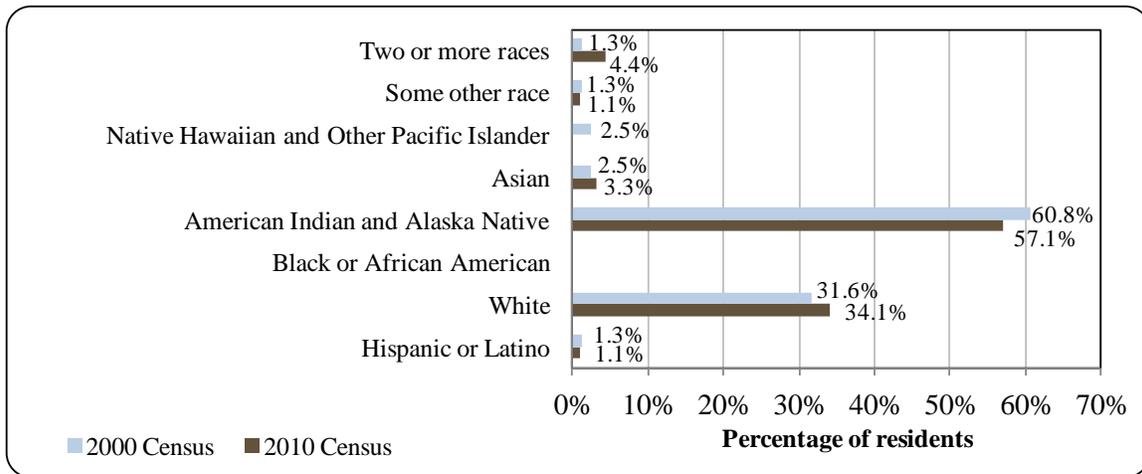
Table 1. Population in Chignik from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Department of Labor Estimate of Permanent Residents ²
1990	188	-
2000	79	-
2001	-	76
2002	-	77
2003	-	91
2004	-	92
2005	-	95
2006	-	83
2007	-	80
2008	-	59
2009	-	62
2010	91	-

¹ (1) U.S. Census Bureau (1990). *CP-1: General Population Characteristics of all places within Alaska*. Retrieved November 1, 2011 from <http://www.census.gov/prod/www/abs/decennial/1990.html>. (2) U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2000 (SF1 100% and SF3 sample data) and 2010 (Demographic Profile SF) Decennial Census and the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

² Alaska Department of Labor. (2011). *Current population estimates for Alaskan Communities*. Retrieved April 15, 2011, from <http://labor.alaska.gov/research/pop/popest.htm>.

Figure 1. Racial and Ethnic Composition, Chignik: 2000-2010 (U.S. Census).



Gender distribution was somewhat skewed in 2010 at 56.1% male and 43.9% female. This was more skewed than both the statewide distribution (52.1% male, 47.9% female) and 2000 distribution (53.2% male, 46.8% female). The median age that year was 45.3 years, which was markedly older than the statewide median of 32.7 years and 2000 median of 36.3 years; and indicative of an aging population.

The population structure was constrictive and highly irregular in both 2000 and 2010. High variability and attrition is likely attributed to the fact that many residents hold dual residency in either Kodiak or Anchorage, migrating to the larger cities in the winter when employment becomes scarce.³ In addition, Chignik is largely integrated with the surrounding communities of Chignik Lake and Chignik Lagoon, which may further confound both population structures.

In 2010, 24.2% of residents were under the age of 20, compared to 31.8% in 2000; 12.1% were over the age of 59, compared to 6.3% in 2000; 52.8% were between the ages of 30 and 59, compared to 50.6% in 2000; and 11.0% were between the ages of 20 and 29, compared to 11.4% in 2000.

Gender distribution by age cohort was less even in 2010 than in 2000, most male biases among most age ranges. In that year, the greatest absolute gender difference occurred within the 50 to 59 range (15.4% male, 9.9% female), followed by the 70 to 79 (2.2% male, 0.0% female) and 20 to 29 (6.6% male, 4.4% female) ranges. Of those three, the greatest relative gender difference occurred in the 70 to 79 range. Information regarding trends in Chignik's population structure can be found in Figure 2.

In terms of educational attainment, the U.S. Census' 2006-2010 American Community Survey (ACS)⁴ estimated that 54.1% of residents aged 25 and older held a high school diploma or higher degree in 2010, compared to an estimated 90.7% of Alaska residents overall. Also in that year, and estimated 39.2% of residents had less than a ninth grade education, compared to an estimated 3.5% of Alaska residents overall; an estimated 6.8% had a ninth to twelfth grade education but no diploma, compared to an estimated 5.8% of Alaska residents overall; an estimated 21.6% had some college but no degree, compared to an estimated 28.3% of Alaskan residents overall; an estimated 8.1% had an Associate's degree, compared to an estimated 8% of Alaskan residents overall; an estimated 6.8% had a Bachelor's degree, compared to an estimated 17.4% of Alaska residents overall; and an estimated 4.1% had a graduate or professional degree, compared to an estimated 9.6% of Alaska residents overall.

*History, Traditional Knowledge, and Culture*⁵

The Alaska Peninsula has been occupied for over 8,000 years, although there is limited evidence of occupation in the Chignik vicinity. The village of *Kalwak* is reported to have existed prior to Russian contact, although it was destroyed during the fur trade boom in the late eighteenth century. During the Russian occupation, many communities along the Gulf of Alaska became fragmented and by 1871, the Alaska Peninsula appeared to be almost abandoned. A 1976 study of the Chignik region found a large site affiliated with 4,000 year-old traditions in the area. Two surveys conducted in 1984 and 1996 also revealed a cluster of Native homes on the southwest side of Anchorage Bay.

³ Chignik Bay Tribal Council. (2006). *Chignik Bay Community Plan*. Retrieved January 24, 2012 from: <http://www.commerce.state.ak.us/dca/plans/ChignikBay-CP-2006.pdf>.

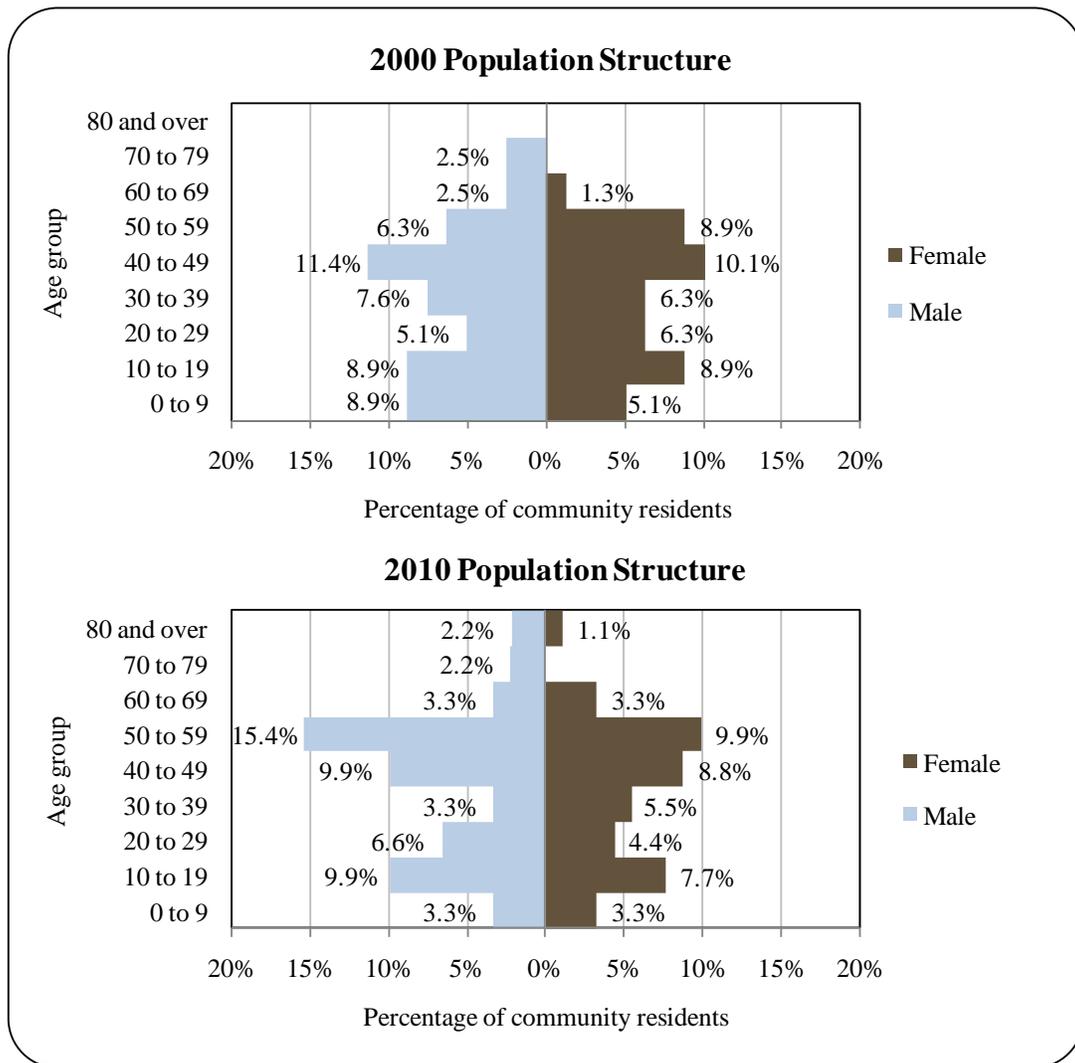
⁴ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

⁵ Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

Chignik, meaning “big wind,” was established in the late nineteenth century as a fishing village. During this time, supplies and workers were shipped in from San Francisco and in 1896 the Hume Company built a cannery on the eastern side of Anchorage Bay. A cannery on the town side was built in 1910 by Columbia River Packers, which later burned in 1976. Trident Seafoods currently owns the cannery, although NorQuest Seafoods (which sold the cannery to Trident) still operates it. A 1979 building inventory of the cannery indicated 56 facilities of possible historic significance. The original 1910 structure remains the oldest continuously operating seafood processing facility in Alaska.

Today, Chignik Bay continues to remain a community dependent on commercial and subsistence fisheries and seafood processing. It is part of a regional community network connected to Chignik Lake and Chignik Lagoon; with a combined population of 242 according to the 2010 Census.

Figure 2. Population Age Structure in Chignik Based on the 2000 and 2010 U.S. Decennial Census.



Natural Resources and Environment

The maritime climate of Chignik is characterized by cool summers and relatively warm, rainy winters. Summer temperatures range from 39 to 60 °F (4 to 16 °C). Winter temperatures range from 21 to 50 °F (-6 to 10 °C). Extreme temperatures, ranging from a low of -12 (-24 °C) to a high of 76 °F (24 °C), have been recorded. Precipitation averages 127 inches annually, with an average annual snowfall of 58 inches.⁶

Chignik is located in the Alaska Peninsula National Wildlife Refuge (APNWR). The geology and topography of the area is characterized by high relief mountainous slopes mantled with deposits of volcanic ash and cinders. Many depressions in the slopes contain muskeg. Brown and tan sandstone conglomerates dominate the landscape. Soils are relatively shallow and unproductive on the slopes, and primarily consist of well-drained ashy loams overlying sandy and cindery ash. Level areas consist of deeper, poorly drained organics with a thin layer of ash. Land within the community consists mostly of marshy wetlands, pebble rock, and sand. Vegetation is typical of western/Aleutian Alaska. Due to soil and climatic conditions, natural growing trees are rare and most vegetation consists of low shrubs, grasses, and dwarf alders and willow. Brackish marsh vegetation populates the low lying areas and wetlands. Wildflowers including dandelion, fireweed, iris, rose, lupine, and horsetail are also found throughout the area, as well as an abundance of wild berries.⁷

The APNWR provides habitat for many migratory and marine birds including mallards, shovel nose, canvas backs, pintails, common merganser, bufflehead, and gulls. Terrestrial wildlife includes brown bear, moose, caribou, wolf, wolverine, fox, river otter, and beaver. Fish present include all five species of Pacific salmon, Arctic grayling, Dolly Varden char, rainbow and lake trout, northern pike, and burbot. Marine mammals present include Steller sea lions, harbor seals, sea otters, and migratory whales.⁸ Mineral resources in the area include a copper and molybdenum deposit located at Bee Creek to the north, as well as coal deposits scattered throughout the region.⁹

Natural hazards in the area are similar to those on a regional level and include coastal flooding and erosion, storm surges, earthquakes, volcano eruptions, and tsunamis. There have been several historic earthquake and flooding events, and the community itself lies 40 mi west of the active volcano, Mt. Veniaminof.¹⁰ An active stratovolcano, eruption events were observed six times between 2002 and 2008.¹¹

According to the Alaska Department of Environmental Conservation, there were no significant environmental remediation sites active in the community in 2010.¹²

⁶ Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

⁷ Chignik Bay Tribal Council. (2006). *Chignik Bay Community Plan*. Retrieved January 24, 2012 from: <http://www.commerce.state.ak.us/dca/plans/ChignikBay-CP-2006.pdf>.

⁸ U.S. Fish and Wildlife Service. (n.d.). *Alaska Peninsula National Wildlife Refuge*. Retrieved January 24, 2012 from: <http://alaskapeninsula.fws.gov/wildlife.htm>.

⁹ Alaska Department of Economic Development. (n.d.). *Mineral Resources in Alaska*. Retrieved January 24, 2012 from: <http://commerce.alaska.gov/ded/dev/minerals/mining.htm>.

¹⁰ See footnote 7.

¹¹ Alaska Volcano Observatory (n.d.). *Veniaminof Reported Activity*. Retrieved January 9, 2013 from: <http://www.avo.alaska.edu/volcanoes/volcact.php?volcname=Veniaminof>.

¹² Alaska Department of Environmental Conservation. (n.d.). *Contaminated Sites Program*. Retrieved June 22, 2012 from: <http://dec.alaska.gov/spar/csp/list.htm>.

Current Economy¹³

Commercial fishing and subsistence activities are central parts of Chignik's economy. The commercial fishing and seafood processing sectors are major contributors to the local cash economy, although many of these jobs are seasonal and attract mostly temporary workers. Like most rural communities in Alaska, education, health care, and public administration are major sources of year round employment. Top employers¹⁴ for 2010 included Lake and Peninsula School District, Chignik Lake Village Council, and Bristol Bay Housing Authority, Health Corporation, and Native Association.

In 2010,¹⁵ the estimated per capita income in Chignik was \$16,377 and the estimated median household income was \$37,206, compared to \$16,166 and \$34,250 in 2000, respectively. However, after accounting for inflation by converting the 2000 values to 2010 dollars,¹⁶ the real per capita income (\$21,258) and median household income (\$45,038) indicate an overall decline in both individual and household earnings.¹⁷ In 2010, Chignik ranked 180th of 305 Alaskan communities from which per capita income was estimated, and 206th of 299 communities from which median household income was estimated.

Chignik's small population size may have prevented the ACS from accurately portraying economic conditions.¹⁸ A potentially more accurate understanding of per capita income is obtained through economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). According to the ALARI database, residents earned \$1.03 million in total wages in 2010.¹⁹ When matched with the population in 2010, the per capita income equals \$11,332 which suggests that caution should be used when comparing 2006-2010 ACS estimates with the 2000 Census.²⁰

According to 2006-2010 ACS estimates,²¹ 46.7% of residents aged 16 years and older were part of the civilian labor force in 2010. In that year, unemployment was estimated at 2.8%, compared to 5.9% statewide; and 4.9% of residents were estimated to be living below the poverty level, compared to 9.5% statewide. Of those employed, an estimated 23.4% worked in the private sector and an estimated 76.6% worked in the public sector.

By industry, most (55.3%) employed residents were estimated to work in the public administration sector in 2010; followed by education, health care, and social assistance sectors

¹³ Unless otherwise noted, all monetary data are reported in nominal values.

¹⁴ Alaska Department of Labor and Workforce Development (n.d.). Alaska Local and Regional Information Database. Retrieved April 23, 2012 from <http://live.laborstats.alaska.gov/alari/>.

¹⁵ U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

¹⁶ Inflation was calculated using the Anchorage Consumer Price Index for 2000 and 2010 (retrieved January 5, 2012 from the Alaska Department of Labor, <http://labor.alaska.gov/research/cpi/inflationcalc.htm>).

¹⁷ While American Community Survey (ACS) estimates can provide a good snapshot estimate for larger populations, smaller populations can be misrepresented by ACS estimates if demographic information is not collected from a representative sample of the population. This is especially problematic for Alaskan communities with small populations that have a low probability of being adequately sampled.

¹⁸ Ibid.

¹⁹ ALARI estimates based on wages reported for unemployment insurance purposes. Estimates do not include self-employed or federally employed residents.

²⁰ See footnote 14.

²¹ See footnote 15.

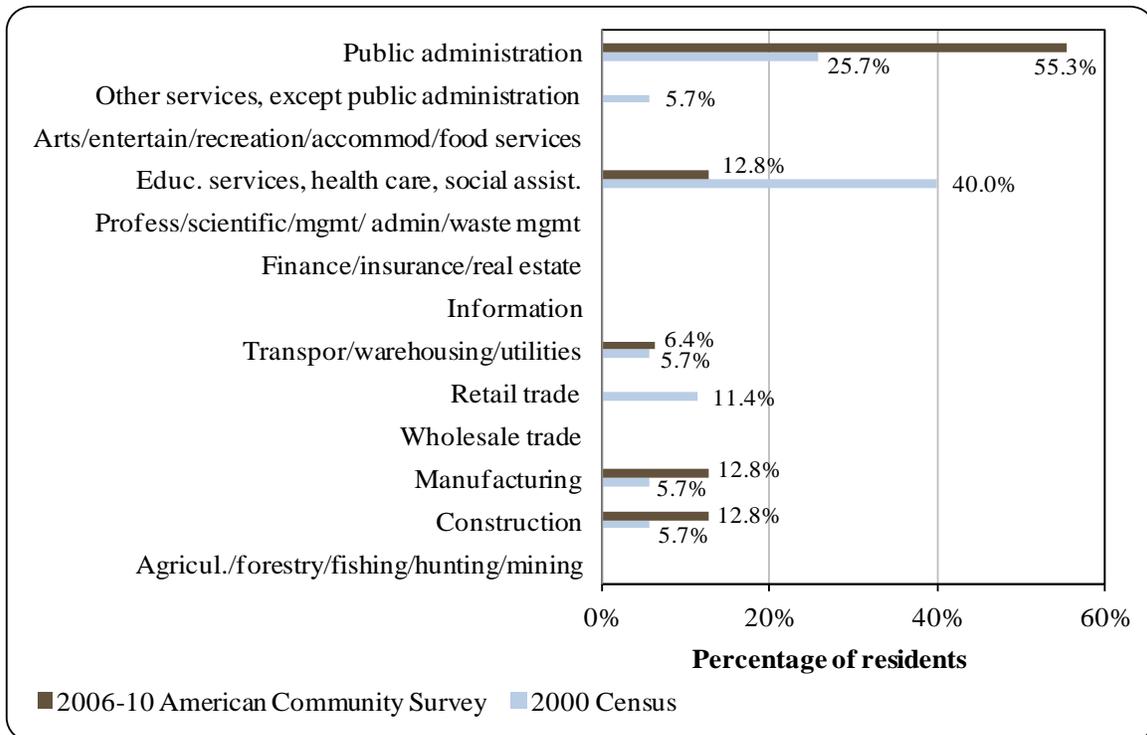
(12.8%) manufacturing sectors (12.8%); construction sectors (12.8%); and transportation, warehousing, and utility sectors (6.4%). By occupation type, most (42.6%) employed residents were estimated to hold sales or office positions that year; followed by management or professional positions (23.4%); production, transportation, or material moving positions (17.0%); natural resources, construction, or maintenance positions (14.9%); and service positions (2.1%).

Between 2000 and 2010, there were several major proportional shifts in employment by industry sector, most notably within the public administration and education, health care and social assistance sectors; In addition, the proportion of sales and office occupations saw a dramatic increase from 17.1% in 2000 to 42.6% 2010, while service occupations declined steeply from 28.6% to 2.1%. It should be noted that large variations in employment data may be attributed either to shifts in economic conditions resulting from a transient population, or ACS sampling errors. Information regarding employment trends can be found in Figure 3 and 4.

No individuals characterized themselves as working in natural resource based occupations or industries that include fishing. However, given the data reported in the *Commercial Fishing* section below, the number of individuals employed in the farming, fishing, and forestry industries may be underestimated by census statistics as fishermen may hold another job and characterize their employment accordingly.

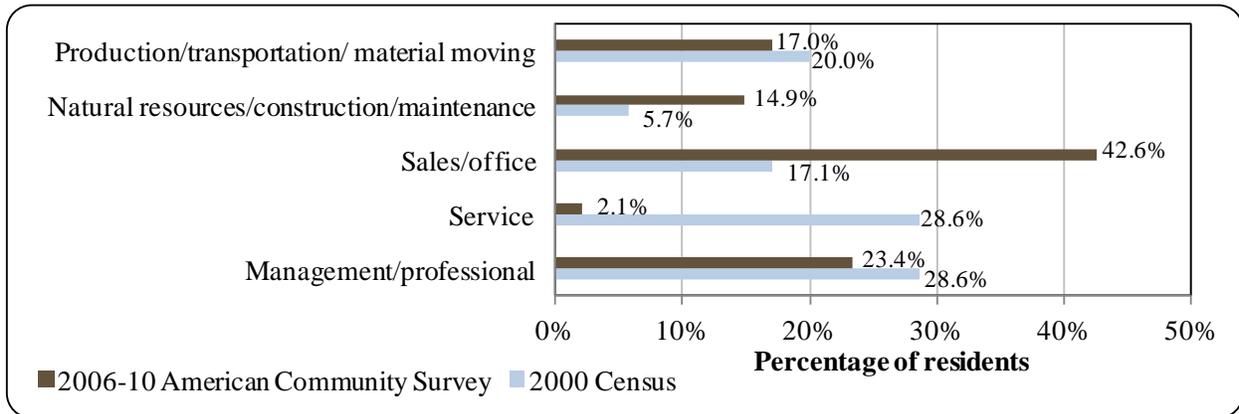
An alternative estimate of employment is provided by the ALARI database. According to 2010 ALARI estimates,²² most (52.6%) of employed residents worked in local government sectors; followed by education and health service sectors (10.5%); and other unspecified sectors (10.5%).

Figure 3. Local Employment by Industry in 2000-2010, Chignik (U.S. Census).



²² See footnote 14.

Figure 4. Local Employment by Occupation in 2000-2010, Chignik (U.S. Census).



Governance

Chignik is a Second-class city with a mayoral form of government. It has a seven-member city council, five-member school board, and four municipal employees. In addition, there is a U.S. Bureau of Indian Affairs recognized Tribal government (Chignik Bay Tribal Council) and Alaska Native Claims Settlement Act (ANCSA) chartered Native village corporation (Far West, Incorporated). The regional ANCSA chartered corporation representing Chignik is the Bristol Bay Native Corporation. The community has a local Alaska Department of Fish and Game (ADF&G) office open during the summer. The closest permanent ADF&G office is located in Sand Point, 105 mi to the southwest. The closest National Marine Fisheries Services (NMFS) office is located in Kodiak, 260 mi to the northeast; and the closest U.S. Bureau of Citizenship and Immigration Services office is located in Anchorage, 450 mi northeast.

In 2010, the municipality administered a 3% fish tax; however, the Lake and Peninsula Borough administers an additional 2% Raw Fish tax, 6% accommodations tax, \$3.00 Guide tax, and \$1.00 Lodge Guide tax. In 2010, there was \$1.15 million in total municipal revenues, compared to \$1.21 million in 2000. Revenues peaked in 2009 at \$1.42 million, and were at their lowest in 2005 at \$961,753. Chignik received \$99,109 in state allocated Community Revenue Sharing in 2010, accounted for approximately 8.6% of municipal revenues. In 2000, the community received \$26,242 in State Revenue Sharing, which accounted for approximately 2.2% of total revenues. Between 2000 and 2010, Chignik received over \$12.2 million in fisheries related grants. Projects funded by these grants included harbor dredging, seafood processing projects, dock improvements, construction of a breakwater and small harbor, and port facilities improvements. Information regarding municipal revenue trends can be found in Table 2.

Infrastructure

*Connectivity and Transportation*²³

Chignik is accessible by air and sea. There is a state-owned 2,600-ft long by 60-ft wide gravel runway and a seaplane base. Regular flights run from King Salmon and Port Heiden. Barge services arrive weekly from late spring through early fall and monthly during the remainder of the year. The state ferry operates bi-monthly from Kodiak between May and October. A 600-ft privately-owned dock and boat haul-out are available. A breakwater, 110-slip small boat harbor, and public dock are under development. ATVs and skiffs are the primary means of local transportation. There is a strong regional interest in constructing roads between Chignik, Chignik Lagoon, Chignik Lake, and the city landfill. The price of roundtrip airfare between Chignik and Anchorage in June 2012 was \$960.²⁴

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Chignik from 2000 to 2010.

Year	Total Municipal Revenue ¹	Sales Tax Revenue ²	State/Community Revenue Sharing ^{3,4}	Fisheries-Related Grants (State and Federal) ⁵
2000	\$1,213,519	n/a	\$26,242	\$25,000
2001	\$1,321,777	n/a	\$25,264	\$3,325,000
2002	\$1,251,393	n/a	\$25,263	\$175,075
2003	\$1,069,864	n/a	\$25,428	\$7,500,000
2004	\$1,168,627	n/a	-	\$213,370
2005	\$961,753	n/a	-	n/a
2006	\$966,626	n/a	-	n/a
2007	\$965,673	n/a	-	n/a
2008	\$1,073,390	n/a	-	n/a
2009	\$1,420,955	n/a	\$99,010	\$1,000,000
2010	\$1,152,553	n/a	\$99,109	n/a

¹ Alaska Department of Community and Rural Affairs. (n.d.). *Financial Documents Delivery System*. Retrieved April 15, 2011 from

http://www.commerce.state.ak.us/dca/commfin/CF_FinRec.cfm.

² Alaska Department of Community and Economic Development (n.d.). *Alaska Taxable (2000-2010)*. Retrieved April 15, 2011 from

http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm.

³ Alaska Department of Rev. (n.d.). *(2000-2009) Taxes and Fees Annual Report*. Retrieved April 15, 2011 from <https://www.tax.state.ak.us>.

⁴ The State Revenue Sharing program ceased in 2003 and was replaced by the Community Revenue Sharing program starting in 2009.

⁵ Alaska Department of Community and Rural Affairs. (n.d.). *Community Funding Database*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_Grants.htm.

²³ Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

²⁴ Airfare was calculated using lowest fare. Source: <http://www.travelocity.com> (retrieved November 22, 2011).

Facilities^{25,26}

The municipality provides basic utilities including diesel power, water and sewer, and waste disposal. Water is supplied by Indian Creek, which has a dam and a reservoir. Water is treated and piped into all 60 homes and the school. A well is available for back-up water supply. Piped sewage is collected in community septic tanks, and wastewater is discharged via ocean outfall lines; approximately 45 homes are served. The remainder use individual septic tanks. All homes are completely plumbed. The municipal landfill currently serves both private residences and the local cannery and needs to be updated in order to extend its lifespan. Long distance telephone services are provided by ACS, AT&T, and GCI. Internet service is provided by GCI. The city fuel tank farm has four 32,000 gallon storage tanks and one 6,000 gallon dispensing tank

The city offers cable television services via a satellite system. Current infrastructure is strung along telephone poles, and service is often interrupted by storms. Public safety and emergency response is handled by the local volunteer fire department and Village Public Safety Officer. The community hall offers space for recreation, community gatherings, and cultural events. Additional public facilities include a post office, church, and subsistence building.

Beginning in 2006, the community was in the development and proposal phase of several extensive port improvement projects aimed at developing Chignik as a regional marine transportation and cargo hub. A small boat harbor and breakwater was approved for funding in 2001 and construction and dredging was completed in 2005. As of 2010, the two docks located in Chignik were privately owned by Trident Seafoods and NorQuest Seafoods. The city is interested in constructing a seven acre public dock on public waterfront land for commercial and industrial uses. Proposed facilities and services for placement around the dock would include container shipping and short-term storage, inbound cargo storage, outside storage for seine skiffs and fishing gear, a vehicle staging area, fuel delivery and vessel fueling, travel lift and vessel haulout, a vessel repair facility, a machine shop, a marine-related rental shop, and other marine-oriented businesses.

Medical Services

Chignik Bay Sub Regional Health Clinic is a qualified Emergency Care Center and Community Health Aid Program (CHAP) site.²⁷ Services currently offered include primary medical care, emergency and trauma, behavioral health, dental, diagnostic imaging, and pharmacy.²⁸

²⁵ See footnote 23.

²⁶ Chignik Bay Tribal Council. (2006). *Chignik Bay Community Plan*. Retrieved January 24, 2012 from: <http://www.commerce.state.ak.us/dca/plans/ChignikBay-CP-2006.pdf>.

²⁷ See footnote 23.

²⁸ Ibid.

*Educational Opportunities*²⁹

Chignik Bay School offers preschool through 12th grade instruction. As of 2011 there were 20 students enrolled and 2 teachers employed.

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Historical involvement in north pacific fisheries dates back over 8,000 years of human occupation in the area; however, commercial fishing didn't take root in the area until the end of the nineteenth century when the first seafood processor began salting, packing, and shipping salmon.³⁰

The Chignik Management Area (CMA) is located on south side of the Alaska Peninsula and is the site of one of the earliest salmon fisheries in Alaska. By 1878, two canneries were processing the region's abundant sockeye salmon resource from Chignik Lagoon, one more began operation in Anchorage Bay by Chignik in 1896, and by 1910 the Columbia River Packers Association had built a cannery at Indian River (on Anchorage Bay). Canneries continued to proliferate throughout the region between 1890 and 1910, with additional canneries being established near Ivanof Bay, and in Anchorage Bay. By 1911, the Columbia River Packing Company (later renamed Columbia Ward Fisheries) began operations on the north side of Chignik Lagoon, and operated there until 1990. By 1992, Aleutian Dragon Fisheries, and Chignik Pride Fisheries operated the only two remaining processing plants in the area, and both were located in Chignik Bay. Seafood processed mostly included all five species of Pacific salmon, Pacific cod; while smaller quantities of octopus, sablefish, red snapper, pollock, and herring were also processed. Chignik canneries began processing shrimp in the 1970s, king crab in the early 1980s. and Tanner crab by 1987.³¹

All five species of Pacific salmon are harvested commercially within the CMA, of which sockeye salmon are primarily targeted. In 2010, Chinook harvests within CMA totaled 10,380 fish, sockeye harvests totaled 1.38 million fish, coho harvests totaled 159,198 fish, pink harvests totaled 489,781 fish, and chum harvests totaled 581,329 fish. Total ex-vessel value of the CMA salmon harvest in 2010 was approximately \$14.34 million.³² Ex-vessel value for Chignik salmon peaked in 1987 and 1988 at more than \$25 million, and decreased steadily to a low of approximately \$5 million between 2002 and 2006.³³

²⁹ Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from <http://eed.alaska.gov/stats/>.

³⁰ Chignik Bay Tribal Council. Retrieved January 25, 2012 from: <http://www.chignikbay.com/economicstrends.asp>

³¹ Hutchinson-Scarborough, L., and J. A. Fall. (1996). *An Overview of Subsistence Salmon and Other Subsistence Fisheries of the Chignik Management Area, Alaska Peninsula, Southwest Alaska*. Alaska Dep. of Fish and Game. Tech. Paper No. 230. Retrieved January 10, 2013 from: <http://www.subsistence.adfg.state.ak.us/download/TPS/tp230.pdf>.

³² Anderson, T. J., and N. W. Nichols. (2010). *Chignik Management Area Salmon and Herring Annual Management Report, 2010*. Alaska Dep. of Fish and Game. Fishery Management Report No. 10-48. Retrieved January 10, 2013 from: <http://www.adfg.alaska.gov/FedAidPDFs/FMR10-48.pdf>.

³³ Knapp, G. (2007). *The Chignik Salmon Cooperative: A Case Study of Allocation to a Voluntary Self-Governance Organization*. University of Alaska, Anchorage. Retrieved January 9, 2013 from: http://www.iser.uaa.alaska.edu/people/knapp/personal/pubs/Knapp_Chignik_Salmon_Coop--Case_Study_of_Allocation_to_a_Voluntary_Self_Governance_Organization.pdf.

Managed by emergency order, herring harvests typically occur from April 15 through June 30 for the sac roe season, and from August 15 through February 28 for the food and bait season. However, no commercial herring harvest occurred in 2010 due to low industry interest. The last commercial herring harvest occurred in 1996.³⁴

Groundfish species targeted for both state and federal fisheries include Pacific cod, sablefish, lingcod, black rockfish, dark rockfish, and walleye pollock. In 2010, Pacific cod and walleye pollock comprised the largest volume of groundfish harvested in state fisheries within the Chignik area. Pacific cod are managed as a single Gulf of Alaska (GOA) stock, with the state managing parallel fisheries within state waters. In 2010, the total Acceptable Biological Catch for GOA Pacific cod was 174.38 million lbs. In that year, 59.16 million lbs of Pacific cod was taken from the western GOA, of which 56% was harvested from state waters. In the Chignik Area, pot gear vessels were allocated 8.51 million lbs, while jig gear vessels were allocated 946,040 lbs. The total Pacific cod harvest that year was 9.15 million lbs taken by 16 vessels, valued at \$2.19 million ex-vessel. In 2010, Black rockfish harvests in the Chignik Area was capped at 100,000 lbs. Only one vessel participated in the fishery that year. Skates are typically harvested incidentally while fishing for other targeted species, and fall under the assemblage of “other species” which include sharks, sculpins, squid, and octopi. Growing Asian markets for skates has increased interest in skates, which at times can be more valuable than other targeted species. Because of overfishing concerns, NMFS placed skates in bycatch status in 2006, while ADF&G discontinued directed harvests in state waters. State directed sablefish fisheries existed within Kodiak and Chignik areas in 2002, but have since been restricted to bycatch harvests. In 2010, sablefish bycatch harvests in state waters around Kodiak, Chignik, and the South Peninsula Eastern Districted totaled 17,924 lbs. Lingcod harvests are also strictly managed within the Kodiak and Chignik areas. Again, most lingcod is harvested as bycatch, and retention typically remains below 100,000 lbs annually within the western GOA. During 2008, lingcod harvests spiked to 521,257 lbs due to increased retention by trawl vessels. Lingcod harvests declined to 97,281 lbs in 2009 and 67,429 lbs in 2010. Walleye pollock harvests totaled 101.6 million lbs in the central GOA, and 57.1 million lbs in the western GOA. In the western GOA, 58% of the total pollock harvest occurred within state waters.³⁵

Historically, commercial red king crab, Tanner crab, grooved Tanner crab, Dungeness crab, Pandalid shrimp, red sea cucumber, and giant Pacific octopus harvests have occurred along the Alaska Peninsula. Most shellfish stocks are depressed, and commercial fisheries for red king crab and shrimp have not occurred since 1982. The Chignik Tanner crab fishery began in 1968, when 21,100 lbs were harvested and peaked in 1975 when 11 million lbs were harvested. Commercial fishing was closed in 1990 to allow depressed stocks to recover, and reopened during the 2004 and 2005 seasons. No Tanner crab fisheries occurred within the Chignik District between 2006 and 2010. Dungeness crab is harvested within the Chignik District, although participation in the fishery is low with less than three vessels reporting landings in 2010. Shrimp fishing within the Chignik District began in 1968, and harvests peaked in 1976 at 27 million lbs. Stocks crashed shortly after, and by 1981 only 71,000 lbs were harvested. Since then, all inshore waters within the Chignik District have remained closed. While commercial fishing is permitted

³⁴ See footnote 32.

³⁵ Stichert, M. A., K. Phillips, and P. Converse. (2011). *Annual Management Report fo Groundfish Fisheries in the Kodiak, Chignik, and South Alaska Peninsula Management Areas, 2010*. Alaska Dep. of Fish and Game. Fishery Management Report No. 11-44. Retrieved January 10, 2013 from: <http://www.adfg.alaska.gov/FedAidPDFs/FMR11-44.pdf>.

in some areas within the Chignik area, there was no fishing effort for shrimp within the Chignik District in 2010. Commercial sea cucumber harvests began in the Kodiak and Chignik districts in 1991 following an increase in market demand. Limits for eviscerated product was set at 25,000 lbs for the Chignik District in 2010 and fishing effort was limited. Demand for octopus increased during the 1990s, and are harvested alongside targeted species. In 2010, incidental harvests totaled 270,067 lbs from both state and federal waters.³⁶

In 2002, the Alaska Board of Fisheries implemented an experimental program that allocated a percentage of the Chignik sockeye salmon harvest to a harvesting cooperative, while creating a separate, “independent” fishery for non-cooperative vessels. The Chignik Salmon Cooperative originally grew from anger over ex-vessel prices offered by processing plants. In 1991, this anger led to local seiners striking. Following the strike, the Chignik Seiners Association continued discussions over the formation of a cooperative as a way to increase the overall profitability and lower overhead costs within the Chignik sockeye salmon fishery.³⁷ Fishing cooperatives had been formed previously in other fisheries as a method of voluntary self-management which would complement existing limited entry systems. It was believed that cooperatives would increase local access to markets, operating efficiency, and overall profitability.³⁸ In the case of the Chignik cooperative, members would be selected as harvesters, tenders, or inactive members. Profits would then be split equally among members. Between 2002 and 2005, over three-quarters of salmon permit holders living in Chignik became members of the Chignik Salmon Cooperative. Following the formation of the Cooperative, relations with local seafood processors became strained. With control over almost 70% of the salmon harvest, the Cooperative gained greater influence within the market than independent fishermen had previously held. Two salmon processing plants owned by Trident Seafoods and Norquest Seafoods operated in nearby Chignik Bay. Trident Seafoods and the Cooperative were unable to come to a purchasing agreement, and Trident decided close its plant in 2004. Despite being regarded as largely successful by most permit holders, the Chignik Salmon Cooperative ended in 2006 after the Alaska Supreme Court determined that the cooperative broke Alaska Limited Entry law.³⁹

Today, the Chignik region as a whole participates heavily in commercial sockeye salmon, halibut, and groundfish fisheries; with Chignik Bay acting as a central hub for seafood processing. In addition, subsistence fishing provides an important economic and cultural foundation for residents. The community is eligible for participation in the Community Quota Entity (CQE) program, although they have yet to form a non-profit corporation. The impetus for the CQE program followed the implementation of the halibut and sablefish Individual Fishing Quota (IFQ) program in 1995. The IFQ program restructured fixed gear halibut and sablefish fisheries into a catch share program which issued transferable quota shares that allocated and

³⁶ Sagalkin, N. and K. Spalinger. (2011). *Annual Management Report for Shellfish Fisheries in the Kodiak, Chignik, and Alaska Peninsula Areas, 2010*. Alaska Dep. of Fish and Game. Fishery Management Report No. 11-43. Retrieved January 10, 2013 from: <http://www.adfg.alaska.gov/FedAidPDFs/FMR11-43.pdf>.

³⁷ Knapp, G. (2007). *The Chignik Salmon Cooperative: A Case Study of Allocation to a Voluntary Self-Governance Organization*. University of Alaska, Anchorage. Retrieved January 9, 2013 from: http://www.iser.uaa.alaska.edu/people/knapp/personal/pubs/Knapp_Chignik_Salmon_Coop--Case_Study_of_Allocation_to_a_Voluntary_Self_Governance_Organization.pdf.

³⁸ Deacon, R. T., D. P. Parker, and C. Costello. (2008). *The Efficiency Gains from Coordinating Effort in a Fishery: Evidence from the Chignik Salmon Cooperative*. University of California, Santa Barbara. Retrieved January 9, 2013 from: http://econ.ucsd.edu/CEE/papers/Chignik%20II%2012_4.pdf

³⁹ See footnote 37.

apportionment of the annual Total Allowable Catch to eligible vessels and processors. Although the IFQ program resulted in many benefits to fishermen, processors, and support businesses, an unintended consequence was that many quota holders in smaller Alaskan communities either transferred quota outside the community or moved out themselves. In addition, as quota became increasingly valuable, entry into halibut or sablefish fisheries became difficult. In many cases, it was more profitable for small-scale operators to sell or lease their quota rather than fish it due to low profit margins and high quota value. These factors lead to decreased participation in communities traditionally dependent on the halibut or sablefish fisheries. To address this issue, the North Pacific Fishery Management Council implemented the CQE program in 2005. Under the program, eligible communities could form a non-profit corporation to purchase and manage quota share on their behalf.⁴⁰

Chignik is located in Federal Reporting Area 620, International Pacific Halibut Commission (IPHC) Regulatory Area 3B, and the Central GOA Sablefish Regulatory District.

Processing Plants

Trident Seafoods Corporation's Chignik Plant is located in Chignik. Trident Seafoods was founded in 1973, and by the year 2000 was employing 4,000 people annually throughout Alaska and the Pacific Northwest. Throughout Alaska, Trident processes cod, pollock and crab in the winter and herring and salmon in the summer. The Chignik facility provides room and board at a nominal cost, as well as free air transportation to Chignik from Seattle and back to its seafood processing employees.⁴¹

Fisheries-Related Revenue

Between 2000 and 2010, Chignik received revenue from raw-fish taxes, Shared Fisheries Business taxes, Fisheries Resource Landing taxes, and harbor usage fees. In addition, the Lake and Peninsula Borough received revenue from raw-fish taxes. In 2010, fisheries-related revenue totaled \$178,557, compared to \$410,446 in 2000. Fisheries-related revenues peaked in 2001 at \$715,582. Information regarding fisheries-related revenue trends can be found in Table 3.

It should be noted that a direct comparison between fisheries-related revenue and total municipal revenue cannot reliably be made as not all fisheries-related revenue sources are included in the municipal budget.

Commercial Fishing

In 2010, 14 residents, or 15% of the population, held a total of 24 commercial fishing permits issued by the Commercial Fisheries Entry Commission (CFEC). In 2000, 19 residents held 36 CFEC permits. Of the CFEC permits issued in 2010, 54% were for salmon, compared to 33% in 2000; 25% were for groundfish, compared to 33% in 2000; 13% were for halibut, compared to 14% in 2000; and 8% were for crab and "other" shellfish, compared to 6% in 2000. In addition, 5 residents held 6 groundfish License Limitation Program (LLP) permits; and 1

⁴⁰ North Pacific Fishery Management Council (2010). *Review of the Community Quota Entity (CQE) Program under the Halibut/Sablefish IFQ Program*. Retrieved October 23, 2012 from: <http://www.fakr.noaa.gov/npfmc/PDFdocuments/halibut/CQEreport210.pdf>.

⁴¹ Trident Seafoods (n.d.) *Trident Seafoods*. Retrieved from: <http://tridentseafoods.com/>.

resident held 1 Federal Fisheries Permit (FFP) in 2010; although none of those permits were actively fished. Finally, residents held 128,220 shares of halibut quota on 1 account in 2010, compared to 218,539 shares held on 4 accounts in 2000. No residents held crab or sablefish quota between 2010 and when the programs began.

Residents held 24 commercial crew licenses in 2010, compared to 36 in 2000. In addition, residents held majority ownership of 22 vessels that year, compared to 31 in 2000. Of the CFEC permits held in 2010, 50% were actively fished, compared to 56% in 2000. This varied by fishery with 69% of salmon permits being fished, and 0% of crab and other shellfish permits being fished. Fisheries prosecuted by Chignik residents in 2010 included: statewide longline halibut, GOA pot gear miscellaneous saltwater finfish, and Alaska Peninsula drift gillnet salmon.⁴²

Landings made in Chignik in 2010 are considered confidential. A total of 15.60 million lbs were landed in Chignik in 2009, representing an ex-vessel total value of \$9.91 million; however, information on individual species landed between 2000 and 2010 is mostly confidential. In 2004, 4.79 million lbs of salmon was landed in the community with an ex-vessel value of \$4.37 million, compared to 8.23 million lbs valued at \$5.39 million in 2002; representing a \$0.21 increase in ex-vessel price per pound after adjusting for inflation.⁴³ In 2010, Chignik ranked 20th of 67 Alaskan communities in terms of pounds landed, and 21st in terms of ex-vessel revenue.

In 2010, residents landed 1.71 million lbs of salmon valued at \$1.13 million ex-vessel, compared 1.48 million lbs valued at \$1.17 million ex-vessel in 2000; a decline of \$0.44 per pound after accounting for inflation.⁴⁴ However, residents landing Pacific cod in 2008 saw an increase of \$0.18 per pound ex-vessel from 2000 after accounting for inflation.⁴⁵ Information regarding commercial fishing trends can be found in Tables 4 through 10.

⁴² Alaska Commercial Fisheries Entry Commission. 2011. Alaska commercial fishing permits, permit holders, and vessel licenses, 2000 – 2010. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

⁴³ Inflation calculated using Producer Price Index for unprocessed and packaged fish, Bureau of Labor Statistics, <http://www.bls.gov/ppi/#data>.

⁴⁴ Ibid.

⁴⁵ Ibid.

Table 3. Known Fisheries-Related Revenue (in U.S. Dollars) Received by the Community of Chignik: 2000-2010.

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	\$92,046	\$235,538	\$126,568	\$82,644	\$61,500	\$76,649	\$42,355	\$44,623	\$55,867	\$58,779	\$58,000
Shared Fisheries Business Tax ¹	\$96,248	\$239,487	\$130,059	\$85,201	\$54,345	\$79,611	\$43,471	\$46,101	\$57,716	\$62,488	\$68,777
Fisheries Resource Landing Tax ¹	n/a	n/a	n/a	\$17	n/a						
Fuel transfer tax ²	n/a										
Extraterritorial fish tax ²	n/a										
Bulk fuel transfers ¹	n/a										
Boat hauls ²	n/a										
Harbor usage ²	\$222,152	\$240,557	\$215,000	n/a	n/a	\$123,000	\$3,720	\$69,420	\$54,750	\$58,125	\$51,780
Port/dock usage ²	n/a										
Fishing gear storage on public land ³	n/a										
Marine fuel sales tax ³	n/a										
<i>Total fisheries-related revenue</i> ⁴	<i>\$410,446</i>	<i>\$715,582</i>	<i>\$471,627</i>	<i>\$167,862</i>	<i>\$115,845</i>	<i>\$279,260</i>	<i>\$89,545</i>	<i>\$160,144</i>	<i>\$168,333</i>	<i>\$179,392</i>	<i>\$178,557</i>
<i>Total municipal revenue</i> ⁵	<i>\$1.21 M</i>	<i>\$1.32 M</i>	<i>\$1.25 M</i>	<i>\$1.07 M</i>	<i>\$1.17 M</i>	<i>\$961,753</i>	<i>\$966,626</i>	<i>\$965,673</i>	<i>\$1.07 M</i>	<i>\$1.42 M</i>	<i>\$1.15 M</i>

Note: n/a indicates that no data were reported for that year.

¹ Alaska Department of Community and Economic Development. (n.d.) *Alaska Taxable (2000-2010)*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm.

² Alaska Department of Community and Rural Affairs. (n.d.) *Financial Documents Delivery System*. Retrieved April 15, 2011 at http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

³ Reported by community leaders in a survey conducted by the AFSC in 2011.

⁴ Total fisheries related revenue represents a sum of all known revenue sources in the previous rows.

⁵ Total municipal revenue represents the total revenue that the city reports each year in its municipal budget. Alaska Department of Community and Rural Affairs. (n.d.) *Financial Documents Delivery System*. Retrieved April 15, 2011 at http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

Table 4. Permits and Permit Holders by Species, Chignik: 2000-2010.

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	6	5	6	6	6	6	6	6	6	6	6
	Active permits	3	2	0	2	2	2	2	2	2	1	0
	% of permits fished	50%	40%	0%	33%	33%	33%	33%	33%	33%	16%	0%
	Total permit holders	5	4	5	5	5	5	5	5	5	5	5
Crab (LLP) ¹	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Active permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Federal Fisheries Permits ¹	Total permits	2	2	2	3	3	3	1	1	1	1	1
	Fished permits	0	0	0	3	2	2	1	1	1	0	0
	% of permits fished	0%	0%	0%	100%	67%	67%	100%	100%	100%	0%	0%
	Total permit holders	2	2	2	3	3	3	1	1	1	1	1
Crab (CFEC) ²	Total permits	1	2	0	0	0	10	8	2	2	1	1
	Fished permits	0	0	0	0	0	3	2	1	1	0	0
	% of permits fished	0%	0%	n/a	n/a	n/a	30%	25%	50%	50%	0%	0%
	Total permit holders	1	1	0	0	0	6	5	2	2	1	1
Other shellfish (CFEC) ²	Total permits	1	1	1	3	3	3	1	1	1	1	1
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Total permit holders	1	1	1	2	2	3	1	1	1	1	1
Halibut (CFEC) ²	Total permits	5	5	5	4	4	4	4	4	4	4	3
	Fished permits	4	4	5	4	3	4	4	4	4	3	1
	% of permits fished	80%	80%	100%	100%	75%	100%	100%	100%	100%	75%	33%
	Total permit holders	5	5	5	4	4	4	4	4	4	4	3
Herring (CFEC) ²	Total permits	5	9	3	3	2	2	0	0	0	0	0
	Fished permits	1	1	0	0	0	0	0	0	0	0	0
	% of permits fished	20%	11%	0%	0%	0%	0%	n/a	n/a	n/a	n/a	n/a
	Total permit holders	4	4	2	2	1	1	0	0	0	0	0

Table 4 cont'd. Permits and Permit Holders by Species, Chignik: 2000-2010.

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Groundfish (CFEC) ²	Total permits	12	11	12	14	11	11	8	6	6	5	6
	Fished permits	3	5	2	7	5	7	3	4	4	1	2
	% of permits fished	25%	45%	17%	50%	45%	64%	38%	67%	67%	20%	33%
	Total permit holders	10	9	9	10	7	8	7	6	6	5	6
Other Finfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Salmon (CFEC) ²	Total permits	12	13	11	12	12	11	10	10	10	11	13
	Fished permits	12	12	4	5	5	11	3	5	7	7	9
	% of permits fished	100%	92%	36%	42%	42%	100%	30%	50%	70%	64%	69%
	Total permit holders	13	13	11	13	12	11	10	10	11	12	13
<i>Total CFEC Permits²</i>	<i>Permits</i>	<i>36</i>	<i>41</i>	<i>32</i>	<i>36</i>	<i>32</i>	<i>41</i>	<i>31</i>	<i>23</i>	<i>23</i>	<i>22</i>	<i>24</i>
	<i>Fished permits</i>	<i>20</i>	<i>22</i>	<i>11</i>	<i>16</i>	<i>13</i>	<i>25</i>	<i>12</i>	<i>14</i>	<i>16</i>	<i>11</i>	<i>12</i>
	<i>% of permits fished</i>	<i>56%</i>	<i>54%</i>	<i>34%</i>	<i>44%</i>	<i>41%</i>	<i>61%</i>	<i>39%</i>	<i>61%</i>	<i>70%</i>	<i>50%</i>	<i>50%</i>
	<i>Permit holders</i>	<i>19</i>	<i>16</i>	<i>14</i>	<i>18</i>	<i>14</i>	<i>15</i>	<i>14</i>	<i>14</i>	<i>15</i>	<i>15</i>	<i>14</i>

¹ National Marine Fisheries Service. 2011. Data on Limited Liability Permits, Alaska Federal Processor Permits (FPP), Federal Fisheries Permits (FFP), and Permit holders. NMFS Alaska Regional Office. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

² Alaska Commercial Fisheries Entry Commission. 2011. Alaska commercial fishing permits, permit holders, and vessel licenses, 2000 – 2010. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

Table 5. Characteristics Of The Commercial Fishing Sector In Chignik: 2000-2010.

Year	Crew License Holders ¹	Count Of All Fish Buyers ²	Count Of Shore-Side Processing Facilities ³	Vessels Primarily Owned By Residents ⁴	Vessels Homeported ⁴	Vessels Landing Catch In Chignik ²	Total Net Lbs Landed In Chignik ^{2,5}	Total Ex-Vessel Value Of Landings In Chignik ^{2,5}
2000	36	2	2	31	83	101	--	--
2001	52	3	2	31	77	98	--	--
2002	9	5	2	30	69	46	8,505,387	\$5,919,782
2003	25	2	2	29	65	71	--	--
2004	8	4	2	22	61	93	5,293,332	\$5,629,393
2005	17	3	2	18	54	53	--	--
2006	32	1	2	21	56	56	--	--
2007	19	1	1	17	53	58	--	--
2008	23	2	1	18	53	56	--	--
2009	22	4	1	18	55	60	15,595,633	\$9,971,058
2010	24	3	1	22	62	65	--	--

Note: Cells showing "--" indicate that the data are considered confidential.

¹ Alaska Department of Fish and Game. 2011. Alaska sport fish and crew license holders, 2000 – 2010. ADF&G Division of Administrative Services. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

² Alaska Department of Fish and Game, and Alaska Commercial Fisheries Entry Commission. 2011. Alaska fish ticket data. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

³ Alaska Department of Fish and Game. (2011). Data on Alaska fish processors. ADF&G Division of Commercial Fisheries. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

⁴ Alaska Commercial Fisheries Entry Commission. 2011. Alaska commercial fishing permits, permit holders, and vessel licenses, 2000 – 2010. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

⁵ Totals only represent non-confidential data.

Table 6. Halibut Catch Share Program Participation by Residents of Chignik: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (pounds)
2000	4	218,539	60,615
2001	2	74,536	22,525
2002	3	76,165	23,541
2003	2	128,220	40,522
2004	2	128,220	36,902
2005	2	128,220	31,073
2006	2	128,220	25,661
2007	2	128,220	21,810
2008	2	128,220	25,784
2009	1	128,220	25,784
2010	1	128,220	23,418

Source: National Marine Fisheries Service. 2011. Alaska Individual Fishing Quota (IFQ) permit data. NMFS Alaska Regional Office. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

Table 7. Sablefish Catch Share Program Participation by Residents of Chignik: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (pounds)
2000	0	0	0
2001	0	0	0
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0

Source: National Marine Fisheries Service. 2011. Alaska Individual Fishing Quota (IFQ) permit data. NMFS Alaska Regional Office. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

Table 8. Bering Sea and Aleutian Island Crab Catch Share Program Participation by Residents of Chignik: 2000-2010.

Year	Number of Crab Quota Share Account Holders	Crab Quota Shares Held	Crab IFQ Allotment (pounds)
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0

Source: National Marine Fisheries Service. 2011. Alaska Individual Fishing Quota (IFQ) permit data. NMFS Alaska Regional Office. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

Table 9. Landed Pounds and Ex-vessel Revenue, by Species, in Chignik: 2000-2010.

	<i>Total Net Pounds¹</i>										
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Crab	0	0	0	0	0	0	0	0	0	0	0
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	--	--	--	--	--	--	--	--	--	--	--
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	--	--	--	--	--	--	--	--	--	--	--
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	--	--	--	--	--	--	--	--	--	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	--	--	8,233,008	--	4,785,219	--	--	--	--	--	--
<i>Total²</i>	--	--	8,233,008	--	4,785,219	--	--	--	--	--	--
	<i>Ex-vessel Value (nominal U.S. dollars)</i>										
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Crab	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	--	--	--	--	--	--	--	--	--	--	--
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	--	--	--	--	--	--	--	--	--	--	--
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	--	--	--	--	--	--	--	--	--	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	--	--	\$5,393,924	--	\$4,373,478	--	--	--	--	--	--
<i>Total²</i>	--	--	\$5,393,924	--	\$4,373,478	--	--	--	--	--	--

Note: Cells showing "--" indicate that the data are considered confidential.

Source: Alaska Department of Fish and Game, and Alaska Commercial Fisheries Entry Commission. 2011. Alaska fish ticket data. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

¹ Net lbs refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

Table 10. Landed Pounds and Ex-vessel Revenue, by Species, by Chignik Residents: 2000-2010.

	<i>Total Net Pounds¹</i>										
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Crab	--	--	--	--	--	--	--	--	--	--	--
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	--	--	--	--	--	--	--	--	--	--	--
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	--	--	--	--	--	--	--	--	--	--	--
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	246,690	421,704	--	483,972	826,684	1,322,554	1,080,807	696,587	296,092	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	1,475,563	1,771,713	--	1,596,836	606,863	886,931	1,579,434	--	1,875,820	1,749,124	1,713,624
<i>Total²</i>	<i>1,722,253</i>	<i>2,193,417</i>	--	<i>2,080,808</i>	<i>1,433,547</i>	<i>2,209,485</i>	<i>2,660,241</i>	<i>696,587</i>	<i>2,171,912</i>	<i>1,749,124</i>	<i>1,713,624</i>
	<i>Ex-vessel Value (nominal U.S. dollars)</i>										
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Crab	--	--	--	--	--	--	--	--	--	--	--
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	--	--	--	--	--	--	--	--	--	--	--
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	--	--	--	--	--	--	--	--	--	--	--
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	\$76,474	\$116,851	--	\$130,895	\$198,250	\$342,008	\$395,575	\$322,580	\$169,120	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	\$1,165,987	\$903,829	--	\$823,197	\$568,538	\$727,155	\$658,765	--	\$1,041,463	\$1,076,938	\$1,128,337
<i>Total²</i>	<i>\$1,242,461</i>	<i>\$1,020,679</i>	--	<i>\$954,091</i>	<i>\$766,788</i>	<i>\$1,069,162</i>	<i>\$1,054,340</i>	<i>\$322,580</i>	<i>\$1,210,583</i>	<i>\$1,076,938</i>	<i>\$1,128,337</i>

Note: Cells showing "--" indicate that the data are considered confidential.

Source: Alaska Department of Fish and Game, and Alaska Commercial Fisheries Entry Commission. 2011. Alaska fish ticket data. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

¹ Net lbs refers to the landed weight recorded in fish tickets.

² Totals only represent non-confidential data.

Recreational Fishing

Only a few residents hold sportfishing licenses in the community, and non-Alaska resident sportfishing is somewhat limited due to Chignik's remote location. Sportfishing licenses were not sold in the community between 2000 and 2007, and a total of 9 were sold in 2010. In addition, 7 sportfishing licenses were sold to residents in 2010, compared to 18 in 2000. There were no active sport fish guide businesses registered in 2010, although 1 was registered in 2009 and in 2005. One resident held a sport fish guide license in 2010.

Chignik is located within the Alaska Peninsula and Aleutian Islands ADF&G Harvest Survey Area which includes all Alaskan waters, including drainages, between Cape Douglas and the community of Naknek. In 2010, angler days fished totaled 5,297 for saltwater fisheries and 33,635 for freshwater fisheries, compared to 10,534 and 44,976 in 2000, respectively. In that year, non-Alaskan resident anglers accounted for 38.4% of saltwater and 58.4% of freshwater angler days fished, compared to 15.8% and 39.5% in 2000, respectively. According to ADF&G Harvest Survey data, private anglers in Chignik target king salmon. In 2007, ADF&G reported 4 charter operators in the harvest survey area. In that year, charter vessels kept 10 coho salmon, 154 halibut, 5 lingcod, and 68 pelagic rockfish. Information regarding sportfishing trends can be found in Table 11.

Subsistence Fishing

Subsistence is an important part of life in Chignik, as many year-round residents rely on subsistence and personal use fisheries to supplement their incomes when employment is scarce. In addition, as with many rural communities in Alaska, subsistence activities are a source of social and cultural cohesion, reinforcing lifestyles and traditions important to village life. In a 2003 ADF&G survey of subsistence participation by household and species, 82% of households were found to participate in salmon subsistence, 95% in halibut subsistence, 7% in marine mammal subsistence, 66% in marine invertebrate subsistence, and 34% other non-salmon fish subsistence. Subsistence harvesting in pounds per capita that year was 281.5. According to the ADF&G *Community Subsistence Information System*,⁴⁶ residents of Chignik have used and/or harvested chitons, butter clams, Dungeness crab, limpets, octopus, littleneck clams, pinkneck clams, sea urchin, Tanner crab, cockles, harbor seal, Steller sea lion, black rockfish, Dolly Varden, lingcod, Pacific cod, rainbow trout, red rockfish, sablefish, steelhead and walleye pollock.

Of the species reported by ADF&G in Table 13, sockeye salmon were harvested the most, followed by coho salmon. In 2008, residents reported harvesting 929 salmon, compared to 1,558 in 2000. Reported salmon harvests peaked in 2007 at 2,389 fish. In 2010, 10 residents held Subsistence Halibut Registration Certificates (SHARC), compared to 21 in 2000. In that year, an estimated 560 lbs of halibut was harvested on 2 SHARC, compared to an estimated 12,878 lbs harvested with 19 SHARC in 2000. Halibut harvests peaked in 2000. Data on marine mammal subsistence harvests is limited. Between 2000 and 2008, an estimated 14 harbor seals were harvested. Information regarding subsistence trends can be found in Tables 12 through 15.

⁴⁶ Alaska Department of Fish and Game. 2011. Community Subsistence Information System (CSIS). ADF&G Division of Subsistence. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. <http://www.adfg.alaska.gov/sb/CSIS/> (Accessed February 2011).

Table 11. Sport Fishing Trends, Chignik: 2000-2010.

Year	Active Sport Fish Guide Businesses ¹	Sport Fish Guide Licenses ¹	Sport Fishing Licenses Sold to residents ²	Sport Fishing Licenses Sold in Chignik ²
2000	0	0	18	0
2001	0	0	22	0
2002	0	1	11	0
2003	0	0	22	0
2004	0	0	6	0
2005	0	0	18	0
2006	0	0	7	0
2007	0	0	10	13
2008	0	1	17	15
2009	0	0	8	11
2010	0	1	7	9

Year	Saltwater		Freshwater	
	Angler Days Fished – Non-Residents ³	Angler Days Fished – Alaska Residents ³	Angler Days Fished – Non-Residents ³	Angler Days Fished – Alaska Residents ³
2000	1,664	8,870	17,749	27,227
2001	1,760	3,939	16,840	14,350
2002	4,126	5,210	15,865	18,417
2003	1,603	4,333	16,557	11,878
2004	1,948	12,721	18,813	19,360
2005	3,585	5,129	14,130	12,038
2006	2,809	4,392	22,323	8,830
2007	2,588	9,356	20,371	15,870
2008	3,436	4,298	21,797	10,207
2009	3,488	3,815	18,996	16,020
2010	2,036	3,261	19,643	13,992

¹ Alaska Department of Fish and Game. 2011. Alaska sport fish guide licenses and businesses, 2000 – 2010. ADF&G Division of Administrative Services. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

² Alaska Department of Fish and Game. 2011. Alaska sport fish and crew license holders, 2000 – 2010. ADF&G Division of Administrative Services. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. [URL not publicly available as some information is confidential.]

³ Alaska Department of Fish and Game. 2011. Alaska Sport Fishing Survey results, 2000 – 2010. ADF&G Division of Sport Fish, Alaska Statewide Harvest Survey project. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. <http://www.adfg.alaska.gov/sf/sportfishingsurvey/> (Accessed September 2011).

Table 12. Subsistence Participation by Household and Species, Chignik: 2000-2010.

Year	% Households Participating In Salmon Subsistence	% Households Participating In Halibut Subsistence	% Households Participating In Marine Mammal Subsistence	% Households Participating In Marine Invertebrate Subsistence	% Households Participating In Non-Salmon Fish Subsistence	Per Capita Subsistence Harvest (Pounds)
2000	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	n/a	n/a	n/a	n/a
2002	n/a	n/a	n/a	n/a	n/a	n/a
2003	82%	95%	7%	66%	34%	281.5
2004	n/a	n/a	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a	n/a	n/a
2007	n/a	n/a	n/a	n/a	n/a	n/a
2008	n/a	n/a	n/a	n/a	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a

Note: n/a indicates that no data were reported for that year.

Source: Alaska Department of Fish and Game. 2011. Community Subsistence Information System (CSIS). ADF&G Division of Subsistence. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. <http://www.adfg.alaska.gov/sb/CSIS/> (Accessed February 2011).

Table 13. Subsistence Fishing Participation for Salmon, Marine Invertebrates, and Non-Salmon Fish, Chignik: 2000-2010.

Year	Subsistence Salmon Permits Issued ¹	Salmon Permits Returned ¹	Chinook Salmon Harvested ¹	Chum Salmon Harvested ¹	Coho Salmon Harvested ¹	Pink Salmon Harvested ¹	Sockeye Salmon Harvested ¹	Lbs of Marine Inverts ²	Lbs of Non-Salmon Fish ²
2000	13	16	n/a	125	173	87	1,173	n/a	n/a
2001	12	11	4	22	12	32	758	n/a	n/a
2002	17	15	9	n/a	170	n/a	1,306	n/a	n/a
2003	22	21	88	6	136	12	1,796	1,626	2,829
2004	16	10	19	n/a	163	n/a	306	n/a	n/a
2005	22	21	25	24	158	61	1,266	n/a	n/a
2006	8	4	6	n/a	8	n/a	534	n/a	n/a
2007	15	9	35	n/a	542	n/a	1,792	n/a	n/a
2008	11	7	2	2	36	55	834	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Note: n/a indicates that no data were reported for that year.

¹ Fall, J.A., C. Brown, N. Braem, J.J. Simon, W.E. Simeone, D.L. Holen, L. Naves, L. Hutchinson-Scarborough, T. Lemons, and T.M. Krieg. 2011, revised. Alaska subsistence salmon fisheries 2008 annual report. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 359, Anchorage. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle.

² Alaska Department of Fish and Game. 2011. Community Subsistence Information System (CSIS). ADF&G Division of Subsistence. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle. <http://www.adfg.alaska.gov/sb/CSIS/> (Accessed February 2011).

Table 14. Subsistence Halibut Fishing Participation, Chignik: 2003-2010.

Year	SHARC Issued	SHARC Fished	SHARC Halibut Lbs Harvested
2003	21	19	12,878
2004	30	18	4,434
2005	31	19	4,641
2006	31	22	4,051
2007	27	12	2,684
2008	16	9	5,130
2009	13	3	283
2010	10	2	560

Note: n/a indicates that no data were reported for that year.

Source: Fall, J.A. and D. Koster. 2011. Subsistence harvests of Pacific halibut in Alaska, 2009. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 357, Anchorage. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle.

Table 15. Subsistence Harvests of Marine Mammal Resources, Chignik: 2000-2010.

Year	# of Beluga Whales ¹	# of Sea Otters ²	# of Walrus ²	# of Polar Bears ²	# of Steller Sea Lions ³	# of Harbor Seals ³	# of Spotted Seals ³
2000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2002	n/a	n/a	n/a	n/a	n/a	1	n/a
2003	n/a	n/a	n/a	n/a	n/a	3	n/a
2004	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2005	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2006	n/a	n/a	n/a	n/a	n/a	4	n/a
2007	n/a	n/a	n/a	n/a	n/a	4	n/a
2008	n/a	n/a	n/a	n/a	n/a	2	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Note: n/a indicates that no data were reported for that year.

¹ Frost, K.J., and R.S. Suydam. 2010. Subsistence harvest of beluga or white whales (*Delphinapterus leucas*) in northern and western Alaska, 1987–2006. *J. Cetacean Res. Manage.* 11(3): 293–299. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle.

² U.S. Fish and Wildlife Service. 2011. Marking, Tagging and Reporting Program data bases for northern sea otter, Pacific walrus and polar bear. Office of Marine Mammals Management. Anchorage, Alaska. Data compiled by Alaska Fisheries Information Network for Alaska Fisheries Science Center, Seattle.

³ Wolfe, R.J., Fall, J.A. and M. Riedel. 2009. The subsistence harvest of harbor seals and sea lions by Alaska Natives in 2008. Alaska Native Harbor Seal Commission and Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 347, Anchorage.