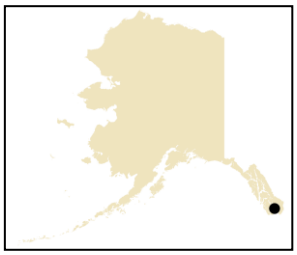
Ketchikan*(KETCH-ih-kan)*



People and Place

Location[1]

Ketchikan is located on the southwestern coast of Revillagigedo Island, near the southern boundary of Alaska. It is 235 miles south of Juneau and 90 miles north of Prince Rupert, British Columbia. The City encompasses 4.1 square miles of land and 0.8 square miles of water.[2] Ketchikan is a Home Rule City located in the Ketchikan Gateway Borough and the Ketchikan Recording District.

Demographic Profile[3]

In 2010, there were 8,050 residents, making Ketchikan the 10th largest City in Alaska. Overall between 1990 and 2010, the population declined by 2.6%. According to Alaska Department of Labor estimates, between 2000 and 2009, the population of permanent residents fell by 5.29%. However, population estimates from the U.S. Decennial Census' in 2000 and 2010 show a positive growth rate (Table 1), indicating that caution should be used when comparing the decennial and annual estimates.

Ketchikan is a racially diverse community. In 2010, 61% of the population identified as White, 17% identified as American Indian and Alaska Native, 11% as Asian, 1% as Black, and 10% identified with two or more races (Figure 1). Also in 2010, 4.4% of the population consider themselves to be Hispanic or Latino. The percentage of the population made up by White residents decreased over time, from 78.3% in 1990 to 60.7% in 2010, while the percentage made up of Asian residents increased from 4.9% in 1990 to 10.8% in 2010.

In 2010, the average household size was 2.4, a slight decline from 2.5 in 1990 and 3.1 in 2000. However, there has been a slight increase in the total number of households from 3,164 in 1990 to 3,197 in 2000, and 3,259 households in 2010. Of the 3,731 total housing units surveyed in 2010, 44.2% were owner-occupied, 43.2% were rented, and 12.7% were vacant or used only seasonally. In 2010, 193 people were estimated to be living in group quarters, representing an overall increase compared to 107 in 1990 and 182 in 2000.

[1] Alaska Dept. of Comm. 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] City area information updated by a Ketchikan city official during community review of this profile. Feedback received December 12, 2012.
[3] 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.

In a survey conducted by the AFSC in 2011, community leaders estimated that approximately 1,000 seasonal workers or transients are present in Ketchikan each year, with an annual population peak between May and September. They also reported that population fluctuations in Ketchikan are mostly driven by employment in fishing sectors. Tourism-related employment during the cruise season also contributes to an increase in Ketchikan's population.[4]

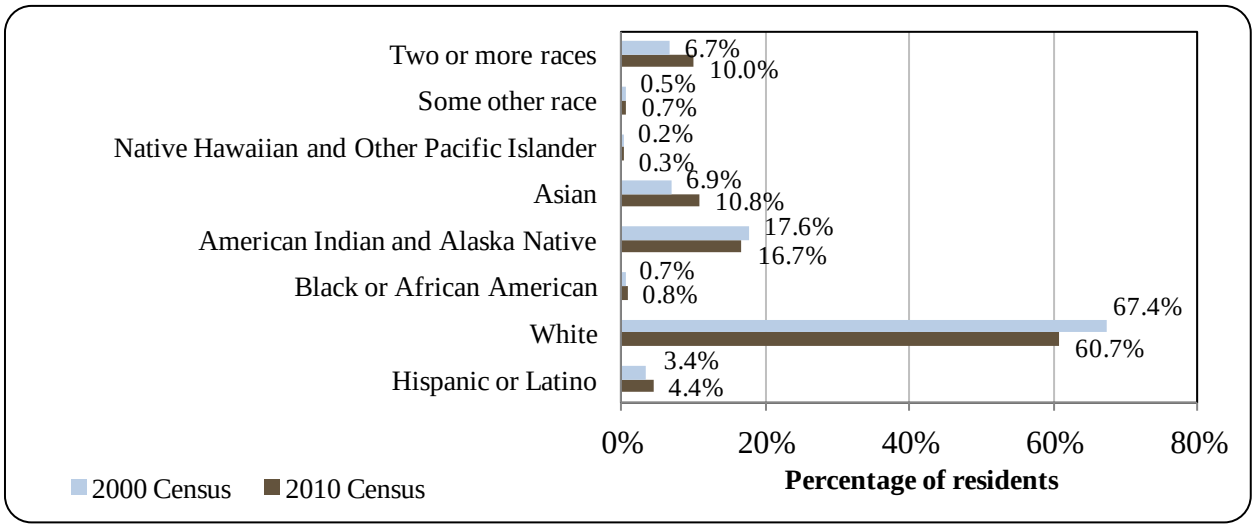
Table 1. Population in Ketchikan from 1990 to 2010 by Source.

Year	U.S. Decennial Census[1]	Alaska Dept. of Labor Estimate of Permanent Residents[2]
1990	8,263	-
2000	7,922	-
2001	-	8,458
2002	-	8,374
2003	-	7,979
2004	-	7,713
2005	-	7,687
2006	-	7,641
2007	-	7,644
2008	-	7,502
2009	-	7,503
2010	8,050	-

[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: 2000-2010.

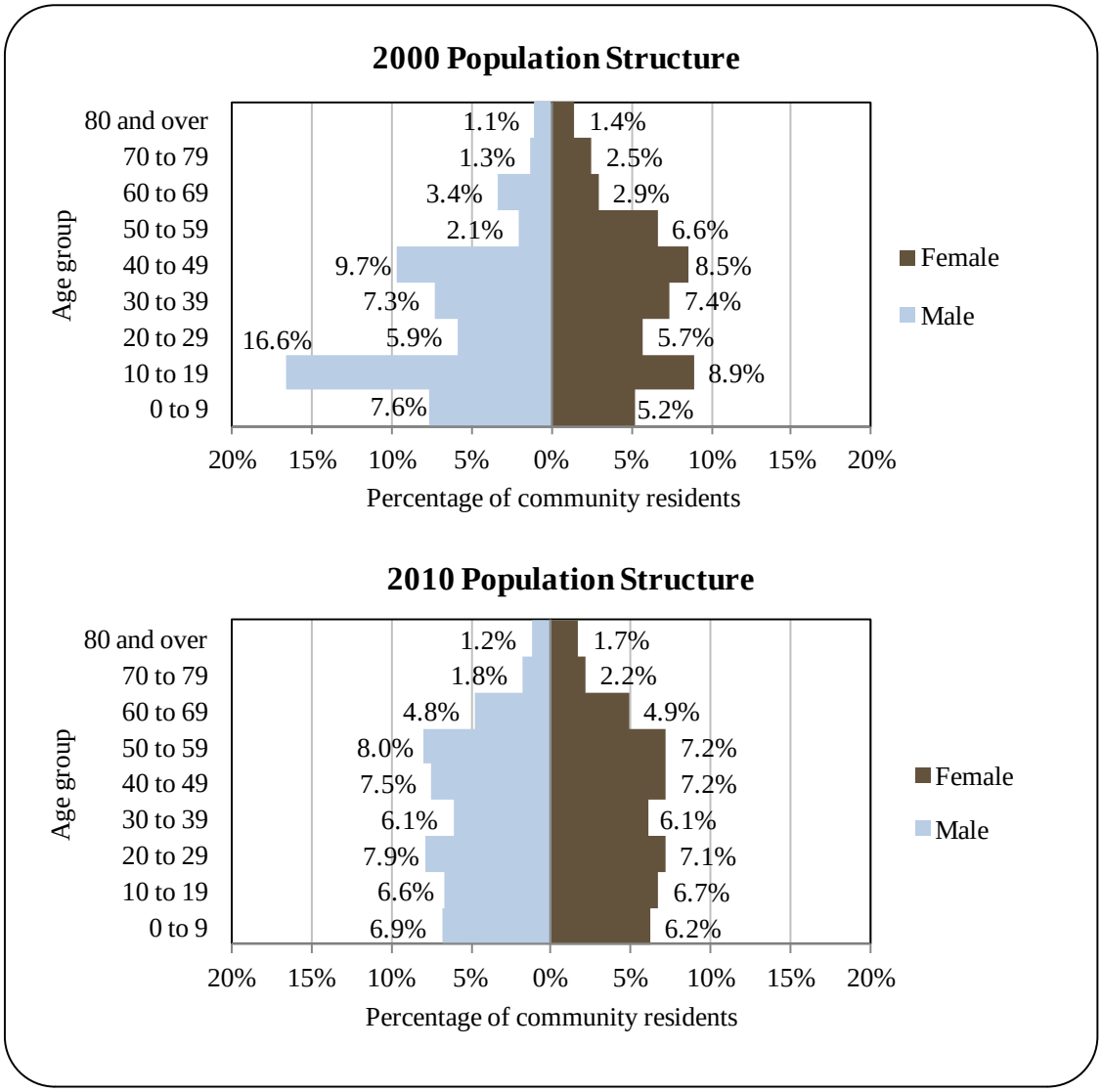


In 2010, the gender makeup of Ketchikan's population was relatively equal (50.8% male,

[4] Feedback received December 12, 2012 from a Ketchikan city official during community review of this profile.

49.2% female), slightly more balanced than the population of the state as a whole (52% male, 48% female. The median age was 37 years, very similar to the U.S. national average of 36.8 years and higher than the median age for Alaska, 33.8 years. The overall population structure of Ketchikan in 2010 is shown in Figure 1. There is a relatively even spread of males and females across each age category between ages 0 and 59, with relatively few people aged 60 or older.

Figure 2. Population Age Structure in Ketchikan in 2000 and 2010.



In terms of educational attainment, the U.S. Census' 2006-2010 American Community Survey (ACS)[5] estimated that 93% of Ketchikan residents aged 25 and over held a high school diploma or higher degree in 2010, compared to an estimated 90.7% of Alaskan residents overall. Also in 2009, 2% of the population had less than a 9th grade education, compared to 4% of Alaskan residents overall; 5% had a 9th to 12th grade education but no diploma, compared to 6% of Alaskan residents overall; 32% had some college but no degree, compared to 28% of Alaskan residents overall; 6% earned an Associate's degree, compared to 8% of Alaskan residents overall; 16% earned a Bachelor's degree, compared to 17% of Alaskan residents overall; and 6% earned a graduate or professional degree, compared to 10% of Alaskan residents overall.

History, Traditional Knowledge, and Culture

Ketchikan is located in ancestral territory of both the Tongass and the Cape Fox Tlingit. People from both of these kwaans[6] utilized Ketchikan Creek as a fish camp, known as "kitschk-hin," which means "creek of the thundering wings of an eagle."[7] The Cape Fox Kwaan, also known as *Sanyaa Kwaan*, historically utilized the Behm Canal area, inland of Revillagigedo Island. A primary village site was located at Cape Fox.[8] The Tongass Kwaan was originally known as the *Tanta Kwaan* or *Tanyatak Kwaan*. 'Tan', meaning sea lion, is the Tlingit name for Prince of Wales Island. 'Tanyatak Kwaan' means "people of the head part of the sea lion," meaning the southern tip of Prince of Wales Island.[9] The northward migration of the Haida people from British Columbia into the southern portion of Southeast Alaska permanently displaced the Tanta people around the 1700s.[10] The Tanta Tlingit moved eastward, and by the late 1800s, a primary village site was located on Tongass Island, across Nakat Bay from Cape Fox, near Dixon Entrance.[11]

Americans began to settle permanently in the area soon after the U.S. purchased Alaska from Russia in 1867. According to a diary kept by missionary Sheldon Jackson, a white settler

[5] While ACS estimates can provide a good snap shot 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.

[6] 'Kwaan' is a Tlingit socio-geographical term meaning "inhabitants of," literally a contraction of the Tlingit verb "to dwell." It is most commonly used to refer to a geographic region consisting of those areas controlled by clans or house groups residing in a single winter village or several closely situated winter villages (Source: Thornton, Thomas. 1997. "Know Your Place: The Organization of Tlingit Geographic Knowledge." *Ethnology*, Vol. 36, No. 4, pp. 295-307).

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

[8] Crippen, James A. 2012. *Tlingit kwaan, clan, and house list*. Retrieved September 10, 2012 from http://www.drangle.com/~james/tlingit/clan-list.html#taant'á k̲wáan.

[9] Olson, Richard. 1967. *Social Structure and Social Life of the Tlingit in Alaska*. University of California Press, Berkeley and Los Angeles. Retrieved September 10, 2012 from http://lucy.ukc.ac.uk/EthnoAtlas/Hmar/Mar_dir/XMarriage.4851.

[10] Langdon, Steven. 1977. *Technology, Ecology, and Economy: Fishing Systems in Southeast Alaska*. Unpublished Ph.D. dissertation, Stanford University, California. (Cited in Ratner, Nancy C., Peter Brown, James, Rowan, Donald Yates, Morgen Smith, Jesse A. Dizard, Amy Paige, and Michael F. Turek. 2006. *Local Knowledge, Customary Practices, and Harvest of Sockeye Salmon from the Klawock and Sarkar Rivers, Prince of Wales Island, Alaska.* Alaska Dept. of Fish and Game, Tech. Paper No. 308. Retrieved September 10, 2012 from http://www.subsistence.ADFG.state.ak.us/download/TPS/tp308.pdf.)

[11] See footnote 9.

named Mr. Morrison had a homestead along the Tongass Narrows in 1879. A community began to grow with increasing activity in commercial salmon processing. By 1884, one saltery had been constructed at Ketchikan Creek, and a second was built just north at Ward Cove.[12] In 1886, a cannery owned by Captain A.W. Bower from Astoria, OR, was relocated from Boca de Quadra Inlet to the Tongass Narrows, and was known as the Tongass Narrows Cannery. Unfortunately, the cannery was destroyed in a fire in 1889. Although the Tongass Narrows Cannery was not rebuilt, an employee named George Clark, along with an Irishman named Michael Martin, built a saltery north of the cannery site. Clark and Martin also opened a trading post/general store at the mouth of Ketchikan Creek.[13,14] According to some accounts, Mike Martin is considered the 'first resident of Ketchikan', and is said to have purchased 160 acres from Chief Kyan of the Tanta Kwaan.[15,16,17] This land is what became the township. The City was incorporated in 1900, making Ketchikan Alaska's first city.[18,19]

Four additional canneries had been built in Ketchikan by 1912, and the community continued to grow around the commercial fishing industry. Mining and timber activity also began to grow in the early 1900s. Gold and copper exploration briefly turned Ketchikan into a mining supply center. The Ketchikan Spruce Mills opened in 1903 to provide timber for local construction and salmon packing boxes. In 1954, a pulp mill was built at Ward Cove, providing continued economic growth in the community. The mill had a 50-year contract with the U.S. Forest Service which was not continued, and the mill closed in March of 1997.[20]

Today, commercial fishing and seafood processing continue to be primary economic drivers in Ketchikan, and the City is popularly known as the "Salmon Capital of the World". Timber and tourism are also important industries. The population of Ketchikan is ethnically diverse.[21] The Ketchikan Indian Community represents Native people of three groups: Tlingit, Haida, and Tsimshian.[22] Members of both the Tongass and Cape Fox Tlingit reside in Ketchikan, as well as nearby Saxman Native Village.[23]

[12] Welsh, Amanda A. 1999. *Hopkins Alley, Warren Street, & Harding Street Areas: Survey & Inventory Projects Report.* Retrieved September 12, 2012 from http://www.borough.ketchikan.ak.us/kgbftp/.
[13] Ibid.
[14] Kiffer, Dave. (2007). "Ketchikan took shape 120 years ago." *SitNews.us*. Retrieved September 10, 2012 from http://www.sitnews.us/Kiffer/TongassPacking/040707_tongass_packing.html.
[15] Ibid.
[16] Tongass Tribe. (n.d.). *Chief Kyan Totem Pole plaque*. Located in Ketchikan, Alaska.
[17] Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.
[18] Ibid.
[19] Explore North (n.d.). *Ketchikan – Alaska's First City*. Retrieved September 10, 2012 from http://explorenorth.com/alaska/ketchikan-intro.html.
[20] See footnote 17.
[21] Ibid.
[22] Ketchikan Indian Community website. 2012. *Culture & Heritage*. Retrieved September 10, 2012 from http://www.kictribe.org/community/culture/index.html.
[23] Alaska Dept. of Fish and Game, Division of Subsistence. 2003. *Briefing Materials Prepared for the Alaska Board of Fisheries Meeting, Sitka, Jan. 20-29, 2003*. Special Publication No. SP2003-001. Retrieved September 10, 2012 from http://www.subsistence.ADFG.state.ak.us/download/SPS/SP2_SP2003-001.pdf.

Natural Resources and Environment

Ketchikan has an oceanic climate greatly moderated by its maritime location. Winters are cool but far milder than what its latitude alone may suggest: January's high averages 38.4 °F (3.6 °C). Summers are mild, as the high temperature in August averages 64.4 °F (18.0 °C). Rainfall is common in Ketchikan, with an average of 137 inches per year, falling more heavily in autumn and winter.[24] The landscape is characterized by rugged terrain, with steep mountain slopes rising to over 3,000 feet within several miles of the coastline. The forest is typical of Southeast Alaska, made up primarily of Western hemlock, Sitka spruce, and cedar, as well as large areas of muskeg. Mammals and birds typical of the area include Sitka black-tailed deer, black bear, mountain goat, wolves, river otter, marten, mink, loon, bald eagle, trumpeter swan, Canada goose, and other common waterfowl. Currently no brown bears inhabit Revillagigedo Island. Fish species present in streams on the Island include pink, chum, coho, and sockeye salmon, steelhead and cutthroat trout, and Dolly Varden.[25]

The City of Ketchikan is adjacent to Tongass National Forest lands. Approximately 95% of Southeast Alaska is federal land, of which 80% is part of the National Forest. At 16.8 million acres, the Tongass is the largest National Forest in the U.S. It is managed to produce resource values, products, and services in a way that also sustains the diversity and productivity of ecosystems, including viable populations of native and some non-native species and their habitats, sustainable fish and wildlife populations, recreational opportunities, hunting, trapping and game viewing opportunities, aquatic habitat quality, scenic quality, and subsistence opportunities for rural residents.[26] National Forest land-use designations in the vicinity of Ketchikan include municipal watershed (manage to meet State water quality standards for domestic water quality supply), semi-remote recreation (provide for recreation and tourism in natural-appearing settings), special interest area (preserve areas with unique archaeological, historical, scenic, geological, botanical, or zoological value), timber production (manage area for industrial wood production), scenic viewshed (maintain scenic quality in areas viewed from popular land and marine travel routes and recreation areas, while permitting timber harvest), and modified landscape (provide for natural appearing landscapes while allowing timber harvest).[27]

Protected areas near Ketchikan include Misty Fiords National Monument and Wilderness, several roadless areas within the Tongass National Forest, and Dall Bay State Marine Park. Misty Fiords National Monument Wilderness is the largest wilderness area in the Tongass National Forest, totaling 2,142,234 acres on the mainland as well as the eastern shore of Revillgigedo Island. Misty Fiords National Monument is a smaller non-wilderness portion at the heart of the larger Misty Fiords District. The topography of the National Monument is characterized by deep valleys, steep slopes and sharp intervalley ridges formed by volcanoes and carved by glaciers. Cliffs and fjordsides rise thousands of feet from the water. Unique geological features are found within the Wilderness Area, such as mineral springs and volcanic lava flows. Wildlife commonly seen within Misty Fjords National Monument includes orcas and porpoises,

[24] See footnote 17.
[25] U.S. Forest Service. 2003. *Tongass Land Management Plan Revision: Final Supplemental Environmental Impact Statement. Roadless Area Evaluation for Wilderness Recommendations. Volume I: Final SEIS Appendix A, B, D, E.* Retrieved April 25, 2012 from http://www.tongass-seis.net/seis/pdf/Volume_I.pdf.
[26] U.S. Forest Service. (2008). *Tongass National Forest: Land and Resource Management Plan*. Retrieved March 29, 2012 from http://tongass-fpadjust.net/Documents/2008_Forest_Plan.pdf.
[27] U.S. Forest Service. 2003. *Map of Current Land Use Designations*. Tongass National Forest Land Management Plan Revision, Final SEIS. Retrieved May 8, 2012 from http://www.tongass-seis.net/pdf/lud.pdf.

mountain goats, and bears. The area receives very high visitation rates each year.[28,29]

Two roadless areas are located in close proximity to Ketchikan, including 30,941 acres on the southwest quarter of Revillgigedo Island (Revilla Roadless Area) and 38,978 acres on Gravina Island (Gravina Roadless Area). However, neither of these roadless areas contain areas of LUD II (land-use designation II), which would be "permanently managed in a roadless state to retain their wildland characteristics."[30] The status of roadless areas in the Tongass National Forest has been a controversial issue in recent years. The Roadless Area Conservation Rule (RACR) was instated in 2001, prohibiting road construction and timber harvesting in 58.5 million acres of roadless areas in the National Forest System. Lawsuits were filed following the RACR, and an exemption was granted for the Tongass National Forests in 2003. A coalition of Alaska Natives, recreation groups, and environmental groups filed a lawsuit in 2009 seeking to reinstate the rule, and on March 4, 2011, the Tongass Exemption was repealed. As of 2012, the RACR applies to roadless areas in the Tongass National Forest.[31]

In addition, Dall Bay State Marine Park is located at the southwest end of Gravina Island. The Marine Park covers 585 acres of tidelands.[32] Marine Parks are intended to protect habitat, and fishing activities are not limited within their boundaries.[33]

Mineral deposits in southern Southeast Alaska include platinum, nickel and associated metals on Duke Island, polymetallic (precious and base metals) and base metal deposits (copper, lead, zinc, with minor silver and barite) identified on Gravina and Prince of Wales Islands, as well as uranium and thorium deposits on southern Prince of Wales Island.[34] There are no existing mining claims on Duke Island. The southern end of Gravina Island has a long history of mineral exploration and gold mining, and there is a potential for future mine development on the Island.[35]

Natural hazards that have been identified as risks in the Ketchikan region include flooding, wildfire, earthquake, snow and avalanche, tsunami and seiche, severe weather, landslides, and erosion. A low risk of drought has also been identified in the region.[36]

Near the end of the Ketchikan pulp mill's operation, contamination was identified as a result of illegal dumping of harmful sludge and wastewater over a three year period. The waters near the Ward Cove plant were classified by the EPA as 'impaired'. Ketchikan Pulp Company, a subsidiary of Louisiana-Pacific Corp., pled guilty to dumping charges in February of 1995, and paid $6 million in settlement to clean up the affected site and over $3 million in civil penalties

[28] U.S. Forest Service, Tongass National Forest. (n.d.). *Misty Fjords National Monument Wilderness*. Retrieved April 25, 2012 from http://www.fs.fed.us/r10/tongass/forest_facts/resources/wilderness/Misty.pdf.
[29] See footnote 25.
[30] Ibid.
[31] U.S. Forest Service. (2011). *Status of Roadless Area Conservation Rule*. Retrieved September 11, 2012 from http://www.fs.fed.us/biology/resources/pubs/issuepapers/issuepaper_RoadlessRules-201108.pdf.
[32] Alaska Dept. of Natural Resources. (2011). *Dall Bay State Marine Park*. Retrieved April 25, 2012 from http://dnr.alaska.gov/parks/aspunits/marinepark/dallbay.htm.
[33] Alaska Dept. of Fish and Game, Marine Protected Areas Task Force. 2002. *Marine Protected Areas in Alaska: Recommendations for a Public Process.* Retrieved April 13, 2012 from http://www.adfg.alaska.gov/static/lands/protectedareas/pdfs/5j02-08.pdf.
[34] Alaska Dept. of Natural Resources. (2011). *Mineral Resources of Alaska Map*. Retrieved April 3, 2012 from http://commerce.alaska.gov/ded/dev/minerals/mining.htm.
[35] U.S. Forest Service. 2003. *Tongass Land Management Plan Revision: Supplemental Environmental Impact Statement. Roadless Area Evaluation for Wilderness Recommendations. Volume II: Appendix C – Part 1*. Retrieved April 3, 2012 from http://www.tongass-seis.net/seis/pdf/Volume_II.pdf.
[36] State of Alaska. 2002. *Hazard Mitigation Plan.* Retrieved February 8, 2012 from http://biotech.law.lsu.edu/blaw/DOD/manual/.%5CFull%20text%20documents%5CState%20Authorities%5CAla.%20SHMP.pdf.

for violation of the Clean Air Act and the Clean Water Act.[37,38] The Ward Cove mill site was given 'conditional closure' status in 2000, and is now safe for residential, industrial, or commercial use.[39] According to the Alaska Department of Environmental Conservation, there are no notable active environmental cleanup sites located in Ketchikan.[40]

Current Economy[41]

The growth of Ketchikan's population has always depended on the area's rich natural resources, including fish, timber, and minerals. In a survey conducted by the AFSC in 2011, community leaders reported local reliance on fishing, logging, mining, and other natural resource-based industries, including ecotourism and sport hunting and fishing. Throughout the 20th century, fish canneries and sawmills went through boom and bust cycles. The Ward Cove pulp mill closed in 1997, but several small timber companies continue to operate in Ketchikan.

Tourism is growing in importance. The city has become a major port-of-call for Alaska-bound cruise ships.[42] The number of cruise ship passengers that visit Ketchikan each year has steadily increased since 1998. That year, 523,108 passengers were estimated to disembark in Ketchikan, and by 2009, 937,419 passengers were estimated to have visited on cruise ships.[43] Many Ketchikan residents hold commercial fishing permits, or work in seafood processing and supporting industries. Recreational fisheries are a large source of seasonal employment in Ketchikan as well.[44]

Based on household surveys conducted for the 2006-2010 ACS,[45] in 2010, the per capita income in Ketchikan was estimated to be $27,016 and the median household income was estimated to be $51,983. This is an increase from per capita and median household income figures reported in 2000 ($22,484 and $45,802, respectively). However, when accounting for inflation by converting the 2000 values to 2010 dollars,[46] the 2010 estimates show a slight decline in income over time, from a real per capita income of $29,566 and real median household income of $60,229 in 2000. In 2010, Ketchikan ranked 85th of 305 Alaskan communities with per capita income data, and 118th in median household income, out of 299 Alaskan communities with household income data that year.

---

[37] U.S. Dept. of Justice. March 21, 1995. "Ketchikan Pulp Co. To Oay $3 Million In Civil Penalities." Press Release 95-155. Retrieved September 11, 2012 from http://www.justice.gov/opa/pr/Pre_96/March95/151.txt.html.
[38] U.S. Dept. of Justice. February 6, 1995. "Ketchikan Pulp Co. Pleads Guilty to Environmental Crimes." Press Release 95-1123. Retrieved September 11, 2012 from http://www.justice.gov/opa/pr/Pre_96/March95/123.txt.html.
[39] Alaska Dept. of Environmental Conservation. (2011). *Ketchikan Pulp Corporation Mill Site*. Retrieved September 11, 2012 from http://dec.alaska.gov/spar/csp/sites/kpc.htm
[40] Alaska Dept. of Environmental Conservation. *List of Contaminated Site Summaries By Region*. Retrieved September 11, 2012 from http://dec.alaska.gov/spar/csp/list.htm.
[41] Unless otherwise noted, all monetary data is reported in nominal values.
[42] Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.
[43] Ketchikan Visitors Bureau website. 2005. *Cruise Ship Statistics*. Retrieved September 10, 2012 from http://www.visit-ketchikan.com/About/VisitorStatistics.aspx.
[44] See footnote 42.
[45] 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.
[46] Inflation was calculated using the Anchorage Consumer Price Index for 2010 (retrieved January 5, 2012 from the Alaska Department of Labor, http://labor.alaska.gov/research/cpi/inflationcalc.htm).

Although Ketchikan's small population size may have prevented the ACS from accurately portraying economic conditions,[47] additional evidence for a decrease in per capita income is provided by economic data compiled by the Alaska Local and Regional Information (ALARI) database maintained by the Alaska Department of Labor and Workforce Development (DOLWD). If total wages reported in the ALARI database for 2010 are divided by the 2010 population reported by the U.S. Census, the resulting per capita income estimate for Ketchikan in 2010 is $14,329.[48,49] Despite estimates of a decline in income between 2000 and 2010, the community was not recognized as "distressed" by the Denali Commission in 2010.[50] It should be noted that both ACS and DOLWD data are based on wage earnings, and these income statistics do not take into account the value of subsistence within the local economy.

Based on the 2006-2010 ACS, in 2010, a slightly higher percentage of Ketchikan residents were estimated to be in the civilian labor force (70.8%) than in the civilian labor force statewide (68.8%). In the same year, approximately 10.8% of local residents were estimated to be living below the poverty line, just over the 9.5% poverty rate of Alaskan residents overall, and the unemployment rate was estimated to be 5.1%, similar to the statewide unemployment rate of 5.9%. An additional estimate of unemployment is based on the ALARI database, which indicates that the unemployment rate in 2010 was 14.6%, compared to a statewide unemployment rate estimate of 11.5%.[51]

Also based on the 2006-2010 ACS, a majority of the Ketchikan workforce (62.9%) was estimated to be employed in the private sector, along with 27.8% in the public sector, and 9.3% that were estimated to be self-employed. Of the 4,134 people aged 16 and over that were estimated to be employed in the civilian labor force, the greatest number was estimated to be working in educational services, health care and social assistance (19.7%), transportation, warehousing, and utilities (15.7%), retail trade (14.8%), arts, entertainment, recreation, accommodation, and food services (12.7%), public administration (7.5%), construction (6.6%), professional, scientific, management, and administrative and waste management services (5.4%), and manufacturing (4.9%) (Figure 3). In 2010, 1.1% of the Ketchikan civilian labor force was estimated to be employed in agriculture, forestry, fishing, hunting, and mining industries. However, the number of individuals employed in fishing and forestry occupations and industries may be underestimated in census statistics as fishermen or loggers may hold another job and characterize their employment accordingly.

An alternative estimate of employment is provided by economic data compiled in the ALARI database, which indicate that there were 3,616 employed residents in Ketchikan in 2010, of which 26.4% were employed in trade, transportation, and utilities occupations, 16.8% in local government, 11.4% in educational and health services, 10.7% in leisure and hospitality, 9.4% in state government, 6.4% in manufacturing, 5.8% in financial activities, 4.8% in construction, 3.5% in professional and business services, 1.5% in information, 1% in natural resources and

[47] While ACS estimates can provide a good snap shot 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.
[48] See footnote 45.
[49] 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/.
[50] Denali Commission. (2011). *Distressed Community Criteria 2011 Update*. Retrieved April 16, 2012 from www.denali.gov.
[51] See footnote 49.

mining, 0.1% in unknown industries, and 2.2% in other industries.[52] As with income statistics, it should also be noted that ACS and DOLWD employment statistics do not reflect residents' activity in the subsistence economy.

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

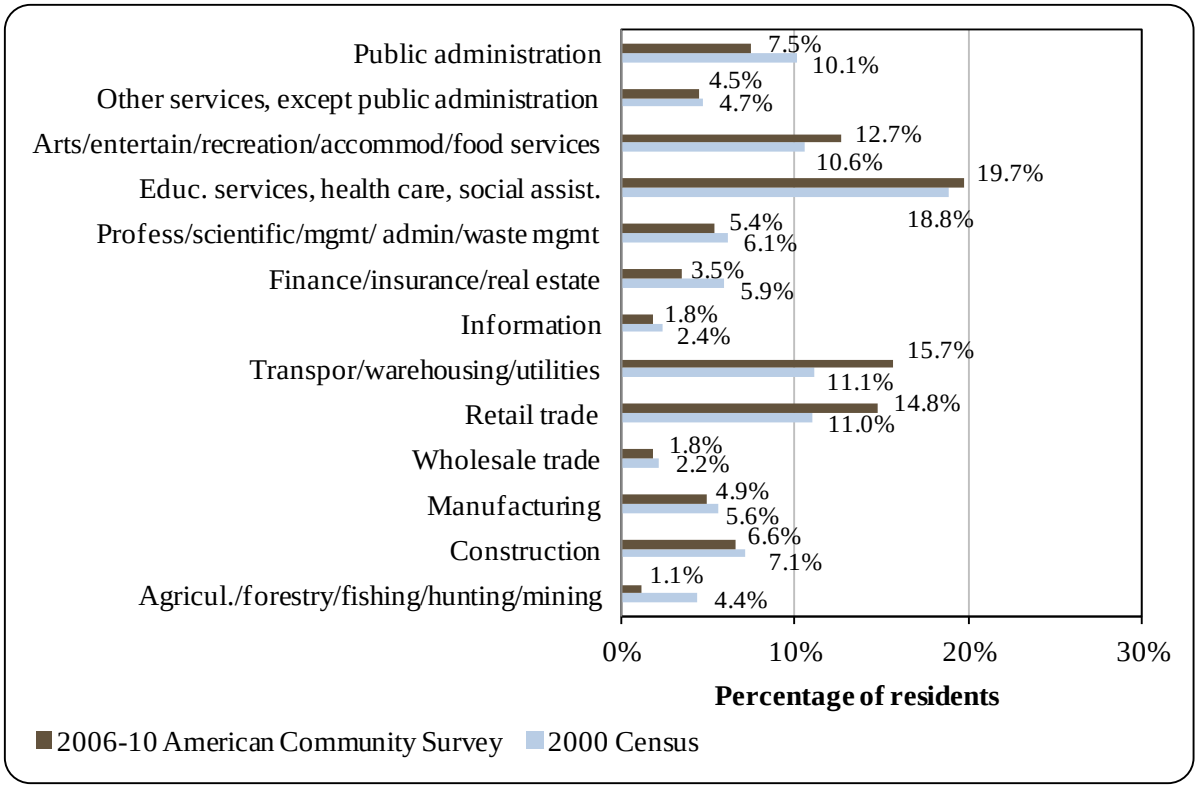
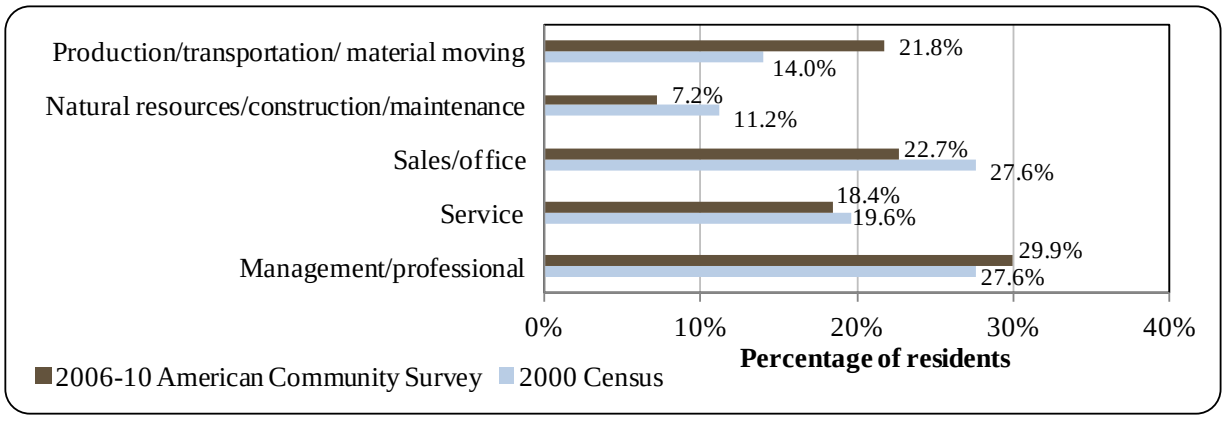


Figure 4. Local Employment by Occupation in 2000-2010, Ketchikan (U.S. Census).



[52] Ibid.

Governance

Ketchikan is a Home Rule City located in the Ketchikan Gateway Borough. The City was incorporated in 1900, making it the first city in Alaska.[53] It is important to note that, in addition to the office of the City of Ketchikan, offices of the Ketchikan Gateway Borough and the City of Saxman are also located in Ketchikan. Two federally-recognized Tribes – the Ketchikan Indian Community and the Organized Village of Saxman – also have offices in Ketchikan. The primarily Tlingit community of Saxman is located 2 miles south of Ketchikan. The history, cultures, and economies of Saxman and Ketchikan are highly intertwined.[54]

The City of Ketchikan has a "Council-Manager" form of government. Elected officials for the City include a seven-person city council including the Mayor. The City Manager serves as the Chief Administrative Officer. Together, the City and city-owned utilities (Ketchikan Public Utilities) employ approximately 320 employees.[55,56] Annual municipal revenue almost doubled between 2000 and 2010, from $49,780,610 in 2000 to $97,173,689 in 2010. Sales tax revenue made up an average of 12.5% of reported annual municipal revenue for those years in which data were reported. In addition, Ketchikan received between $165,000 and $200,000 per year in State Revenue Sharing contributions from 2000 to 2003, and Community Revenue Sharing contributions of over $470,000 per year in 2009 and 2010. Further information is presented in Table 2.

Various entities in Ketchikan received fisheries-related grants during the 2000-2010 period, including the City, the State of Alaska, Alaska Ship and Drydock company, and other private enterprises that carried out projects.[57] In 2000, grants included $5,657 from the Alaska Department of Community, Commerce, and Economic Development (DCCED)'s Division of Community and Regional Affairs (DCRA) for floating dock upgrades and $58,695 from the Alaska Department of Transportation and Public Facilities (DOT&PF) for new construction at the Alaska Marine Highway System ferry berth and mooring structures. In 2002, $3,938,000 was received from DOT&PF for south harbor bar improvements, $750,000 was received from the U.S. Army Corps of Engineers (COE) for water navigation, and $1,535,600 was received from the Alaska Industrial Development and Export Authority (AIDEA) for a shipyard shiplift. In 2003, and additional $750,000 was received from the COE for water navigation, and $300,000 was received from the U.S. Economic Development Agency (EDA) for a maritime study. In 2004, the DCRA awarded Ketchikan $1,435,000 for a cold storage and $100,000 for marine, harbor, and port improvements. In 2005, $100,000 came from DCRA for a harbor float electrical program. In 2006, the EDA provided $2,400,000 for 'shipyard uplands', and the AIDEA provided $2,204,400 for shipyard civil works. In 2007, $413,000 was received from the Denali Commission for Knudson Cove Harbor construction. In 2008, $1,000,000 was received from the EDA for a mariculture dock and training facility. In 2009, DCRA awarded $3,000,000 toward replacement of berths I and II at the Port of Ketchikan. Finally, in 2010, a grant of $25,262,200

[53] Explore North. (n.d.). *Ketchikan – Alaska's First City*. Retrieved September 10, 2012 from http://explorenorth.com/alaska/ketchikan-intro.html.
[54] Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.
[55] Ibid.
[56] Details on community governance provided by a Ketchikan city official during community review of this profile. Feedback received December 12, 2012.
[57] Details on grant recipients provided by a Ketchikan city official during community review of this profile. Feedback received December 12, 2012.

was received from DOT&PF for Ketchikan Shipyard marine dry-dock, and DCRA granted an additional $3,000,000 toward berth replacement. Fisheries-related grant totals are also presented in Table 2.

The Ketchikan Indian Community (KIC) was recognized as an Indian Tribe under the Indian Reorganization Act (IRA) of 1934, as amended for Alaska in 1936. It is governed by an eight-member Tribal Council elected by KIC members.[58] The Tribe was not included under the Alaska Native Claims Settlement Act (ANCSA), and did not receive title to lands through that process.[59] The KIC provides a variety of services to Native residents of Ketchikan, including housing, career, educational, and language programs, veterans assistance, and local health care.[60] It is also important to note that the Organized Village of Saxman was included under ANSCA, and received a land entitlement of 23,040 acres. The regional Native corporation representing the Native people of Southeast Alaska is Sealaska Corporation. The Native village corporation associated with the Organized Village of Saxman is the Cape Fox Corporation, with offices located in Ketchikan.[61]

Table 2. Selected Municipal, State, or Federal Revenue Streams for the Community of Ketchikan 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	$49,780,610	$4,690,474	$197,113	$64,352
2001	$52,427,851	$4,750,831	$176,462	n/a
2002	$53,517,100	$4,953,046	$178,926	$6,223,600
2003	$57,397,437	$4,832,084	$167,848	$1,050,000
2004	$66,503,598	$4,071,818	n/a	$1,535,000
2005	$61,292,805	$7,021,638	n/a	$100,000
2006	$70,378,764	$6,412,198	n/a	$4,604,400
2007	$79,197,945	$6,249,310	n/a	$413,000
2008	$85,952,238	$8,566,429	n/a	$1,000,000
2009	$79,716,222	$8,397,300	$ 459,935	$3,000,000
2010	$97,173,689	$8,007,987	$ 452,828	$28,262,200

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

[1] Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Financial Documents Delivery System*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm

[2] Alaska Dept. of Comm. and Econ. Dev. (n.d.). *Alaska Taxable (2000-2010)*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm

[3] Alaska Dept. of Rev. (n.d.). *(2000-2009) Taxes and Fees Annual Report*. Retrieved April 15, 2011 from 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 Dept. of Comm. and Rural Affairs. (n.d.). *Community Funding Database*. Retrieved at http://www.commerce.state.ak.us/dca/commdb/CF_Grants.htm. Data retrieved April 15, 2011.

[58] Ketchikan Indian Community. 2012. *About Us.* Retrieved September 11, 2012 from http://www.kictribe.org/about/index.html.

[59] See footnote 55.

[60] Ketchikan Indian Community. 2012. *Ketchikan Indian Community (KIC) Programs* and *Health Care Overview and History*. Retrieved September 11, 2012 from http://www.kictribe.org/index.html.

[61] See footnote 54.

Although the KIC was not included under ANCSA, the regional tribal non-profit association that was formed under ANCSA - the Central Council of the Tlingit and Haida Indian Tribes of Alaska (Central Council) – takes an active interest in the Native people of Ketchikan. In order to be eligible to enroll as a member of the Central Council, an individual must be of Tlingit and/or Haida descent, or be able to identify that they are a direct descendant from a tribally enrolled citizen of Central Council.[62] The Central Council was originally established to pursue Alaska Native land claims on behalf of the Tlingit and Haida people in an effort to retain a way of life strongly based on subsistence.[63] The Central Council is one of the 12 regional Alaska Native 501(c)(3) non-profit organizations that were identified under ANCSA and charged with naming incorporators to create regional for-profit corporations. Today, these regional Native associations receive federal funding to administer a broad range of services to villages in their regions.[64] Services include employment and training, education, family, elderly, and other community services.[65]

Ketchikan has the nearest offices of the Alaska Department of Fish and Game (ADF&G), the U.S. Forest Service, the Alaska Department of Natural Resources, and the U.S. Bureau of Citizenship and Immigration Services. An enforcement office of the National Marine Fisheries Service (NMFS) is also located in Ketchikan, while Juneau hosts the Alaska Regional Office of the NMFS, as well as the AFSC Auke Bay laboratories. Juneau also has the closest office of the DCCED.

Infrastructure

Connectivity and Transportation

Although there are no roads connecting Ketchikan to other cities, it has well established air and marine transportation infrastructure, making it a hub for southern Southeast Alaska. The Ketchikan International Airport has a paved, lighted 7,500 foot by 150 foot runway[66] and serves as a gateway for Alaska Airlines jet service to and from Seattle, Juneau, and Anchorage. It also serves as a bush carrier and charter aircraft hub for destinations such as Hyder, Metlakatla, and Prince of Wales Island communities.[67] As of June 2012, roundtrip airfare between Ketchikan and Anchorage was $461.[68] There are also four major floatplane landing facilities in Ketchikan.[69]

Ketchikan is the first major port of call in Alaska for vessels traveling north from Washington State and British Columbia. Ketchikan is a hub for the Alaska Marine Highway System (AMHS), receiving ferries traveling to and from Bellingham on the main Southeast

[62] Central Council website. (n.d.). *Enrollment Eligibility Requirements and Application Process*. Retrieved September 11, 2012 from http://www.ccthita.org/services/enrollment/forms/EnrollmentEligibilityRequirementsandApplicaitonProcess.pdf.
[63] Central Council. (n.d.) *Home Page*. Retrieved August 15, 2012 from http://www.ccthita.org/index.html.
[64] U.S. Government Accountability Office. 2005. *Alaska Native Villages: Report to Congressional Addressees and the Alaska Federation of Natives*. Retrieved February 7, 2012 from http://www.gao.gov/new.items/d05719.pdf.
[65] See footnote 63.
[66] Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.
[67] KetchikanAlaska.com. (2011). *Ketchikan Alaska Travel Information*. Retrieved September 10, 2012 from http://www.ketchikanalaska.com/travel.html.
[68] Airfare was averaged from prices found on travel websites, including http://www.travelocity.com (retrieved June 2004) and http://www.cheaptickets.com (retrieved October 2011).
[69] See footnote 66.

Alaska route. The AMHS also provides daily service between Ketchikan and Metlakatla in spring, summer, and fall months.[70] The Inter-Island Ferry Authority also provides daily passenger and vehicle ferry service between Ketchikan and Prince of Wales Island, with a port in Hollis.[71]

Facilities [72]

Water provided within the Ketchikan city limits is derived from a dam at Ketchikan Lake. In addition, the Ketchikan Gateway Borough operates a water treatment facility at Mountain Point south of the City which serves a small population outside the southern end of the city limits. The city water is chlorinated and filtered before being piped to all homes located within Ketchikan city limits. In addition, most homes outside of the city limits use rain catchment systems. The City owns a central sewage collection system with primary treatment, and a borough sewage treatment plant is located at Mountain Point. Ninety-eight percent of homes are fully plumbed. Electricity in Ketchikan comes primarily from hydroelectric facilities. Ketchikan Public Utilities purchases power from the state-owned Swan Lake Hydro Facility and owns three hydroelectric plants (Ketchikan, Beaver Falls, and Silvis), as well as two diesel-fueled plants. The Deer Mountain landfill has an incinerator, balefill system, recycling and resource re-use, and household hazardous waste collection events. The City also ships baled refuse out-of-state.[73]

Police services are provided by the City Police Department, as well as state troopers posted in Ketchikan. A State Superior Court and District Court are located in Ketchikan, as well as a correctional center. Fire and rescue services are provided by the Ketchikan Fire Department, as well as the South Tongass Fire / Emergency Medical Services (EMS) Division and the North Tongass Fire / EMS. Additional community facilities include the a civic center, an American Legion Hall, a Boys and Girls Club, a combined community pool and recreation / fitness center, a movie theater, 3 museums, and 12 libraries, including a new public library opening in January 2013.[74] In a survey conducted by the AFSC in 2011, community leaders also reported several large construction projects that are underway in Ketchikan, including the construction of a new library (opening January 2013), fire station (Completed July 2012), alternative energy projects, and upgrades to water and sewer pipelines. Additionally, Phase I of the rehabilitation / replacement of cruise ship berths I and II was completed in 2012. Phase II will be completed in May 2013. Community leaders also reported the presence of a food bank, soup kitchen, job placement services, and publicly subsidized housing in Ketchikan.

With regard to fisheries-related infrastructure, community leaders reported in the 2011 AFSC survey that port facilities in Ketchikan include a breakwater, a deep draft dock, five small-boat harbors, a dry dock, a ship repair yard, a boat launch, and a state ferry terminal. They indicated that there is approximately 28,500 feet of dock space available for permanent vessels to moor at, and approximately 10,500 feet of available dock space for transient vessels. Vessels up

[70] Alaska Marine Highway System. (2011). *Sailing Search*. Retrieved September 10, 2012 from https://www.dot.state.ak.us/oars/reservations/QuickSearchFM.amhsf.
[71] Alaska's Inter-Island Ferry Authority. (2010). *Welcome to Alaska's Inter-Island Ferry Authority*. Retrieved September 10, 2012 from http://www.interislandferry.com/.
[72] The facilities information provided in this section was updated by a Ketchikan city official during community review of the profile. Feedback was received December 12, 2012.
[73] See footnote 66.
[74] Ibid.

to 1,000 feet long can use moorage in Ketchikan. They also noted that fisherman in Ketchikan are seeking additional infrastructure, including a drive-down ramp. Construction was expected to begin in fall 2013.

In addition to infrastructure, in the 2011 AFSC survey, community leaders noted the presence of a wide variety of fisheries-related businesses and services in Ketchikan. These include fish processing plants and commercial cold storage facilities, fishing gear sales, repair, and storage, sales of ice, bait, tackle and fuel, boat repair services (electrical, welding, mechanical service, machine shop, and hydraulics), marine refrigeration, haulout facilities and tidal grids for vessels less than 60 tons and greater than 60 tons, dry dock storage, commercial and recreational fishing vessel moorage, sport fish lodges, fishing business attorneys, fishing-related bookkeeping, water and air taxi, and seaplane services. According to community leaders, Ketchikan residents travel to Seattle, Washington to access fisheries-related businesses and services not available locally.

Medical Services

Local hospitals or health clinics include Ketchikan General Hospital, Ketchikan Indian Community Tribal Health Clinic, and the U.S. Coast Guard (USCG) Ketchikan Dispensary. The Hospital is a qualified Acute Care facility and offers medevac service.[75] As of 2008, the medevac company, Guardian Flight, acquired a new helicopter that expanded the range of Ketchikan medevac services to Revillagigedo, Prince of Wales, Gravina and Annette Islands, Petersburg, Wrangell, Hyder, Stewart and Prince Rupert, given availability of a safe landing zone.[76] The USCG facility provides emergency support only and is a qualified Emergency Care Center. In addition, the Ketchikan Pioneers' Home and Island View Manor offer long term care services, and the Gateway Center for Human Services offers substance abuse services. Emergency services have marine, airport, floatplane, helicopter, and limited highway access. Emergency service is provided by 911 telephone service and volunteers.[77,78]

Educational Opportunities

As of 2011, there were 11 schools located in the Ketchikan, including 4 elementary schools, 2 Kindergarten through 12th grade schools, 1 middle school, 1 high school, and 3 mixed grade schools. There are a total of 2,248 students and 154 teachers in Ketchikan schools.[79]

In addition, the University of Alaska Southeast has a campus in Ketchikan. The campus was originally constructed in 1954 as Ketchikan Community College. In 1987, statewide restructuring of the University of Alaska brought the Ketchikan campus into a larger state-wide system. The Ketchikan campus offers programs in business and industry, as well as a core of

[75] Ibid.
[76] Anonymous. August 6, 2008. "New Helicopter will increase medevac service in Southeast." *Capital City Weekly*. Retrieved September 11, 2012 from http://www.capitalcityweekly.com/stories/080608/community_20080806009.shtml.
[77] Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.
[78] City of Ketchikan. 2004. *Medical Links.* Retrieved September 10, 2012 from http://www.city.ketchikan.ak.us/community_links/medical.html.
[79] Alaska Department of Education and Early Development. (2012). *Statistics and Reports*. Retrieved April 24, 2012 from http://eed.alaska.gov/stats/.

technical, maritime studies, and other vocational courses.[80]

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

Tlingit people of the Cape Fox and Tongass Kwaans have been harvesting fisheries resources in the Ketchikan area for centuries. Salmon were perhaps the most important resource for the Tlingit. Traditionally, fish trap, gaffs, and spears were used to catch salmon. Steelhead, herring, herring eggs, ooligans (eulachon), and Dolly Varden were also caught and eaten. The Tlingit also utilized marine mammals (e.g., seal), deepwater fish (e.g., halibut), marine invertebrates (e.g., 'gumboot' chitons), and sea plants (e.g., seaweed, beach asparagus and goose tongue). A system of property ownership was in place over harvesting places, including streams, halibut banks, berry patches, hunting areas, intertidal areas, and egg harvesting sites.[81,82] The modern community of Ketchikan was also founded on the abundance of salmon in its waters. That rich fishing tradition lives on today. Ketchikan's fishing grounds are some of the most fertile in the world, with massive runs of salmon migrating into the protected waters behind Prince of Wales Island, giving Ketchikan the nickname of "Salmon Capitol of the World."

Commercial harvest of salmon began in Southeast Alaska in the late 1870s.[83] The first reported salmon saltery on the Tongass Narrows was operated by a man named Snow, but limited details are available regarding its operation. In 1886, a cannery owned by Captain A.W. Bower from Astoria, OR, was relocated from Boca de Quadra Inlet to the Tongass Narrows, and was known as the Tongass Narrows Cannery. The cannery was destroyed in a fire in 1889 and was not rebuilt. However, another saltery was built the following year,[84] and by 1912, four additional canneries had been built. By 1936, seven canneries were in operation in Ketchikan.[85]

Today, Southeast Alaska salmon fisheries utilize purse seine, drift gillnet, troll, and set gillnet gear. The highest volume of salmon landings in the region are harvested by purse seine gear, although the species harvested are typically pink and chum, the salmon species with lowest ex-vessel value. Other salmon fisheries target the higher value species (i.e., sockeye, coho, and Chinook). Because of Southeast Alaska's proximity to British Columbia, as well as many trans-boundary rivers that cross from Canada into Alaskan waters, salmon management in the region is governed to a large degree by the Pacific Salmon Treaty. The Treaty was originally negotiated in 1985, and renegotiated in 1999 with increased emphasis on implementation of abundance-based

[80] Anonymous. (2010). *Universities Serving Ketchikan and Southeast Alaska*. Retrieved September 10, 2012 from http://www.ketchikanalaska.com/communityservices/universities.html.
[81] Alaska Native Heritage Center. (2008). *Eyak, Tlingit, Haidi & Tsimshian: Who We Are*. Retrieved November 23, 2011 from www.alaskanative.net/en/main_nav/education/culture_alaska/eyak.
[82] Brock, Mathew, Philippa Coiley-Kenner and the Sitka Tribe of Alaska. (2009). *A Compilation of Traditional Knowledge about the Fisheries of Southeast Alaska*. ADF&G Technical Paper No. 332. Retrieved March 30, 2012 from http://alaska.fws.gov/asm/pdf/fisheries/reports/04-652Final.pdf.
[83] Clark, McGregor, Mecum, Krasnowski and Carroll. 2006. "The Commercial Salmon Fishery in Alaska." *Alaska Fisheries Research Bulletin* 12(1):1-146. Alaska Dept. of Fish and Game. Retrieved January 4, 2012 from http://www.adfg.alaska.gov/static/home/library/PDFs/afrb/clarv12n1.pdf.
[84] Kiffer, Dave. (2007). "Ketchikan took shape 120 years ago." *SitNews.us*. Retrieved September 10, 2012 from http://www.sitnews.us/Kiffer/TongassPacking/040707_tongass_packing.html.
[85] Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

management strategies.[86] It is important to note that the state runs the Deer Mountain Hatchery on Ketchikan Creek, which contributes to populating the local salmon resource.[87]

In the 1880s, a commercial fishery began for halibut in the inside waters of Southeast Alaska. The U.S. and Canada signed the Convention for the Preservation of the Halibut Fishery of the North Pacific Ocean in 1923, and since the Convention took effect in 1924, Pacific halibut fisheries have been managed by the International Pacific Halibut Commission, earlier called the International Fisheries Commission.[88] Halibut fisheries are restricted to use of hook and line gear, although a limited number of halibut can be caught and retained as incidental catch in salmon troll fisheries and sablefish trap fisheries, as well as bycatch in a variety of fisheries using diverse gear types.[89,90]

Sablefish were first harvested in Southeast Alaska as bycatch in the halibut fishery.[91] By the 1930s, several state-managed sablefish fisheries began in Southeast inside waters, including a fishery in Clarence Strait and Dixon Entrance. Sablefish are harvested using longline or pot gear, and the state fisheries that take place in inside waters are managed independently of the federal fishery.[92]

In 1995, management of Alaskan halibut and sablefish fisheries shifted from limited entry to a system of Individual Fishing Quotas (IFQ). Motivations for the shift included overcapitalization, short seasons, and the derby-style fishery that led to loss of product quality and safety concerns. As a result of program implementation, the number of shareholders and total vessels participating in the halibut and sablefish fisheries declined substantially, and product quality has improved. This shift to catch shares has been controversial, raising concerns about equity of catch share allocation, reduced crew employment needs, and loss of quota from coastal communities to outside investors.[93]

Pacific cod and lingcod are also harvested in Southeast Alaska under state regulations, independent of federal fisheries for these species. Pacific cod fisheries utilize longline gear, while the Southeast Alaska lingcod fishery uses dinglebar troll gear, a salmon power troll gear modified with a heavy metal bar to fish for groundfish. Management of the Southeast Alaska lingcod fishery includes a winter closure for all users (except longliners) to protect nest-guarding males. Demersal rockfish are caught as bycatch in the halibut longline and trawl fisheries. A small directed fishery for flatfish (other than halibut) has also taken place in Southeast inside

[86] See footnote 83.
[87] See footnote 85.
[88] International Pacific Halibut Commission. 2006. *History*. Retrieved September 12, 2012 from http://www.iphc.int/publications/pamphlet/1IPHCHistoryPage.pdf.
[89] International Pacific Halibut Commission. 2012. *Pacific Halibut Fishery Regulations 2012.* Retrieved September 12, 2012 from http://www.iphc.int/publications/regs/2012iphcregs.pdf.
[90] Williams, Greg. (2010). "Halibut Bycatch limits in the 2010 Alaska groundfish fishery." *IPHC Report of Assessment and Research Activities*. Retrieved September 12, 2012 from http://www.iphc.washington.edu/publications/rara/2010/2010.299.Halibutbycatchlimitsinthe2010Alaskagroundfishfishery.pdf.
[91] Woodby, Doug, Dave Carlile, Shareef Siddeek, Fritz Funk, John H. Clark, and Lee Hulbert. 2005. *Commercial Fisheries of Alaska.* Alaska Dept. of Fish and Game, Special Publication No. 05-09. Retrieved December 29, 2011 from http://www.adfg.alaska.gov/FedAidPDFs/sp05-09.pdf.
[92] Sayer, Allison and Deidra Holum. September 2008. *The Southeast Alaska Southern Southeast Inside Sablefish Fishery Information Report with Outlook to the 2008 Fishery*. Alaska Dept. of Fish and Game, Fishery Management Report No. 08-44. Retrieved September 11, 2012 from http://www.sf.ADFG.state.ak.us/FedAidPDFs/fmr08-44.pdf.
[93] Fina, Mark. (2011). "Evolution of Catch Share Management: Lessons from Catch Share Management in the North Pacific." *Fisheries*, Vol. 36(4). Retrieved September 12, 2012 from http://www.fakr.noaa.gov/npfmc/PDFdocuments/catch_shares/Fina_CatchShare_411.pdf.

waters in recent decades, but effort has declined since 1999.[94]

State crab fisheries in Southeast Alaska target red, golden, and blue king crab, Tanner crab, and Dungeness crab.[95] The first commercial harvest of Dungeness crab in Southeast Alaska took place in the 1930s.[96] Harvests of king and Tanner crab were not reported in Southeast Alaska until the 1960s.[97,98] Dive fisheries for geoduck, sea cucumber, and sea urchin began to grow in Southeast Alaska in recent decades.[99] The impact of an increasing sea otter population in Southeast Alaska on stocks of Dungeness crab, sea cucumber, and sea urchin has led to significant economic losses in these fisheries in recent years.[100] It is also important to note that the waters between Annette and Gravina Islands are included in a Dive Fishery Research Control Area, and are closed year-round to harvest of sea cucumbers and sea urchins.[101]

The first northern shrimp (*Pandalus borealis*) trawl fishery began in Thomas Bay, approximately 100 miles north of Ketchikan, in 1915.[102] Although fisheries for this species also began in other areas of the state, the Southeast trawl fishery was the longest-lived and most stable fishery. The fishery peaked in the 1950s. Harvests began to decline in the late 1990s due to heavy competition from shrimp products originated in the Atlantic and the Pacific Northwest, and the market for northern shrimp finally collapsed with the closure of the only processing facility in Petersburg in the 2005-2006 season. Today, the Southeast Alaska shrimp trawl fishery is primarily directed toward sidestripe shrimp (*Pandalopsis dispar*), a larger and more valuable species.[103] A spot shrimp (*Pandalus platyceros*) fishery has also grown in Southeast Alaska since the 1990s.[104]

Herring fisheries began in Southeast Alaska in the 1880s, with original production oriented toward herring oil and herring meal. Catch of herring for bait began around 1900, and sac roe fisheries developed in the 1970s. In Southeast Alaska, bait herring fisheries take place during the winter each year, while roe is harvested in the spring. Bait and sac roe fisheries use

---

[94] See footnote 91.
[95] Ibid.
[96] Messmer, Adam, Gretchen Bishop, Chris Siddon, and Joe Stratman. November 2011. *2012 Report to the Board of Fisheries on Southeast Alaska/Yakutat Dungeness Crab Fisheries*. Alaska Dept. of Fish and Game Fishery Management Report No. 11-62. Retrieved September 12, 2012 from http://www.adfg.alaska.gov/FedAidpdfs/FMR11-62.pdf.
[97] Stratman, Joe, Gretchen Bishop, Adam Messmer, and Chris Siddon. November 2011. *2012 Report to the Board of Fisheries on Southeast Alaska/Yakutat Tanner Crab Fisheries.* Alaska Dept. of Fish and Game Fishery Management Report No. 11-57. Retrieved September 12, 2012 from http://www.adfg.alaska.gov/FedAidpdfs/FMR11-57.
[98] Stratman, Joe, Adam Messmer, Gretchen Bishop, Chris Siddon, and Andrew Olson. December 2011. *2012 Report to the Board of Fisheries on Southeast Alaska/Yakutat King Crab Fisheries.* Alaska Dept. of Fish and Game Fishery Management Report No. 11-57. Retrieved September 12, 2012 from http://www.adfg.alaska.gov/FedAidpdfs/FMR11-68.pdf.
[99] See footnote 91.
[100] McDowell Group. November 2011. *Sea Otter Impacts on Commercial Fisheries in Southeast Alaska*. Prepared for Southeast Alaska Regional Dive Fisheries Association. Retrieved September 11, 2012 from http://www.scribd.com/doc/74857876/MCDOWELL-GROUP-2011-Sea-Otter-Impacts-Report.
[101] Alaska Dept. of Fish and Game, Marine Protected Areas Task Force. 2002. *Marine Protected Areas in Alaska: Recommendations for a Public Process.* Retrieved April 13, 2012 from http://www.adfg.alaska.gov/static/lands/protectedareas/pdfs/5j02-08.pdf.
[102] Clark, McGregor, Mecum, Krasnowski and Carroll. 2006. "The Commercial Salmon Fishery in Alaska." *Alaska Fisheries Research Bulletin* 12(1):1-146. Alaska Dept. of Fish and Game. Retrieved January 4, 2012 from http://www.adfg.alaska.gov/static/home/library/PDFs/afrb/clarv12n1.pdf.
[103] Alaska Dept. of Fish and Game. 2012. *Northern Shrimp Species Description*. Retrieved April 2, 2012 from http://www.adfg.alaska.gov/index.cfm?ADFG=northernshrimp.printerfriendly.
[104] See footnote 91.

purse seine and set gillnet gear, and roe is also harvested in spawn-on-kelp closed-pound fisheries.[105] A "closed-pound" is a single, floating, rectangular frame structure with suspended webbing that is used to enclose herring long enough for them to spawn on kelp included in the enclosure.[106]

According to the 2011 AFSC survey, community leaders reported that Ketchikan does not participate directly in fisheries management processes in Alaska, but relies on regional organizations, including the Southeast Conference, to provide information on fisheries management issues. When asked to describe current challenges for Ketchikan's fishing economy, community leaders responded that upkeep of existing infrastructure and construction of desired new infrastructure are both challenges with limited funds. When asked to describe the effects of past policies or management actions on Ketchikan, community leaders responded that the shift to a catch share system in the halibut fishery and lower limits for charter trips have had the greatest negative impact. They expressed that this impact has been felt by fishermen, sport fish lodges, and also local air carriers who have seen a reduction in traffic to area lodges. Community leaders also expressed that fishermen are concerned about the Marine Mammal Protection Act, and feel they do not have input on management decisions over marine mammals.

Ketchikan is located in Pacific Halibut Fishery Regulatory Area 2C and Federal Statistical and Reporting Area 659. The closest federal Sablefish Regulatory Area is "Southeast Outside." Ketchikan is not eligible to participate in the Community Quota Entity program or the Community Development Quota program.

Processing Plants

Ketchikan is a popular center for fish processing and storage. In 2010, there were 9 shore-based processors and 76 fish buyers and tenders in Ketchikan. According to a survey of plant managers conducted by the AFSC in 2011, the recent boom in the local tourism industry has led to some difficulty for processing facilities to hire locally, suggesting that jobs related to tourism soak up the local labor force. According to the plant managers interviewed, this has led some local processors to rely heavily on employees from the Federal J-1 guestworker program. A J-1 visa is a non-immigrant visa issued by the U.S. to exchange visitors seeking work experience in the U.S.[107]

One of Alaska General Seafood's three Alaska processing plants is located in Ketchikan on Revillagigedo Island. The present Ketchikan facility dates back to 1905, and in the past it has been among the biggest salmon processing plants in Alaska. The plant burned down and was rebuilt in 1994. Ownership has transferred hands several times in its history and in 1999 three companies combined to form Alaska General Seafoods, the plant's present owner. The facility is open to harvest fish from the Southeast Alaskan salmon run between June and the end of September. The plant is a five-line cannery that processes all five species of salmon.[108] The plant

[105] Ibid.
[106] Alaska Dept. of Fish and Game. (2011). *2011 Southeast Alaska Herring Spawn-On-Kelp Pound Fishery Management Plan*. Regional Information Report No. 1J11-01. Retrieved April 2, 2012 from http://www.sf.ADFG.state.ak.us/FedAidpdfs/RIR.1J.2011.01.PDF.
[107] U.S. Dept. of State. (n.d.). *J-1 Visa Exchange Visitor Program: Programs*. Retrieved September 12, 2012 from http://j1visa.state.gov/programs/.
[108] Alaska Seafood Marketing Institute. (2011). *Suppliers Directory*. Retrieved October 17, 2011 from http://www.alaskaseafood.org/industry/suppliers/index.cfm.

employs up to 285 workers in July and August.[109]

In 1950, Can Alaska Seafoods Inc./E.C. Phillips and Sons Inc. built a waterfront processing facility in Ketchikan. All five species of wild Alaska salmon[110] are processed at the Ketchikan plant and the facility operates year round. During the summer and fall the plant employs between 200-250 workers to keep up with deliveries of halibut, sablefish, and salmon. Company housing is available on site for approximately 130 workers.[111]

Since 1987, Ketchikan has been home to a Trident Seafoods processing facility that produces approximately 500,000 cases of canned salmon per year. According to a survey of plant managers conducted by the AFSC in 2011, the facility operates from June until the end of September and exclusively processes and cans salmon. The product is primarily pink salmon. The plant manager also reported that the facility employs up to 80 workers in July and August and between 20 and 50 workers during the rest of the year.

In 2000, Gateway Seafood and Smokehouse opened and processes mainly sport caught fish, but also processes small quantities of commercial caught fish. They are a seasonal operation, open between late May and December, and employ between 15 and 20 workers from June through September.[112] Absolute Fresh Seafoods Inc. was founded in 2003 and is a family-owned operation based in Sitka. ADF&G's 2010 Intent to Operate list shows that Absolute Fresh Seafoods has fish processing operations in both Craig and Ketchikan, but no information about their facilities in either Craig or Ketchikan was available on the company website. Absolute Fresh Seafoods processes salmon (Chinook, coho), crab (king, Dungeness), spot prawns, and scallops.[113]

According to the AFSC community survey conducted in 2011, community leaders indicated that fish processors in Ketchikan are expanding operations as a result of local efforts to provide cost-effective services, especially low electrical costs.

Fisheries-Related Revenue

From 2000 to 2010, the City of Ketchikan received between $1,251,247 and $1,750,432 in fisheries-related revenue from selected taxes and fees. These revenue sources include the Fisheries Resource Landing Tax, a raw fish tax, and fees for fishing gear storage on public land. In the 2011 AFSC survey, community leaders indicated that harbor maintenance is at least partially funded by these revenue sources. Table 3 presents details of these selected aspects of community finances from 2000 to 2010.[114]

[109] Alaska General Seafoods. (n.d.). *Company profile*. Retrieved October 17, 2011 from http://www.akgen.com/locations/index_ketchikan.asp.
[110] See footnote 108.
[111] E.C. Phillips and Sons Inc. (n.d.).*Company profile*. Retrieved October 17, 2011from http://www.ecphillipsalaska.com.
[112] Gateway Seafood and Smokehouse. (n.d.).*Company profile*. Retrieved October 17, 2011 from http://www.gatewaysmokehouse.com.
[113] Absolute Fresh Seafoods. (n.d.).*Company profile*. Retrieved October 17, 2011 from http://www.absolutefreshseafoods.com/Pages/whoweare.html.
[114] 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

Ketchikan residents are highly involved in a majority of Alaskan commercial fisheries, including salmon, halibut, groundfish, sablefish, herring, crab, and 'other shellfish.' Between 2000 and 2010, they were active in these fisheries as permit and quota share account holders, crew license holders, and vessel owners. In addition, the community of Ketchikan is one of the leading processing communities in Alaska, ranking 5th in landings and 9th in ex-vessel revenue out of 67 Alaskan ports that received landings in 2010. That year, 76 fish buyers were present locally, and 8 shore-side processing facilities were in operation. The total net poundage of landings in 2010 was 96,286,216, almost 11 times the 2000 total landings of 8,858,581 net pounds. The ex-vessel value of landings increased by approximately 6 times over the same period indicating that the overall value of landings per pound diminished slightly between 2000 and 2010 (Table 5).

Although overall fisheries landings and revenue increased in Ketchikan between 2000 and 2010, the number of crew license holders and vessel owners showed a decreasing trend over the decade. In 2000, there were 482 crew license holders and 547 vessels were primarily owned by residents, and by 2010, 390 Ketchikan residents held crew licenses and 306 vessels were primarily owned by residents. The number of vessels homeported in the community also decreased, from 557 in 2000 to 355 in 2010. In contrast, the number of vessels landing catch in Ketchikan increased substantially over the period, from 420 in 2000 to 730 in 2010. These details of the commercial fishing sector in Ketchikan are presented in Table 5.

In a survey conducted by the AFSC in 2011, community leaders echoed the data reported above, indicating that there were more commercial fishing boats in Ketchikan in 2011 compared to five years earlier. Community leaders reported that a wide variety of commercial fishing vessels use Ketchikan as a base of operations during the fishing season, including many vessels over 125 feet in length. The most common gear types associated with vessels homeported in Ketchikan are purse seine, troll, gillnet, longline, and pots. They reported that the fleet also includes dive boats and tenders. Community leaders also reported that the peak of fishing activity takes place during summer months during salmon season, with salmon seine boats operating from June through September and salmon gillnetters operating from May through September.

In 2010, 558 residents of Ketchikan held a total of 829 state commercial fishing permits issued by the Commercial Fisheries Entry Commission (CFEC). Of these, 415 were salmon permits (50.1% of total CFEC permits), 204 were 'other shellfish' permits (24.6%), 89 were for herring (10.7%), 59 were for halibut (7.1%), 25 for groundfish (3%), 19 for sablefish (2.3%), and 18 for crab (2.2%). Also in 2010, 41 Ketchikan residents held a total of 44 federal License Limitation Permits (LLP) for groundfish and 27 individual held a total of 27 Federal Fisheries Permits (FFP). Permit numbers between 2000 and 2010 are presented in Table 4, and further details regarding state and federal permits are included below.

Of 415 salmon CFEC permits held by Ketchikan residents in 2010, 269 were statewide handtroll permits, 68 were for statewide power gurdy troll gear, 36 were for Southeast Alaska drift gillnet, 32 were Southeast Alaska purse seine permits, 4 were Bristol Bay drift gillnet permits, and 1 was held in the Yakutat set gillnet fishery. In addition, five 'special harvest area' (hatchery) permits were held in 2010. Overall, 37% of these salmon permits were actively fished in 2010. This overall percentage is affected by the low percentage of hand troll permits fished (15.6%) in 2010. The percentage of permits fished in other fisheries was much higher, with

88.9% of Southeast drift gillnet permits active in 2010, 76.5% of power gurdy troll permits active, 75% of Bristol Bay drift gillnet permits active, and 65.6% of Southeast purse seine permits actively fished that year. It is also important to note that a small number of salmon permits were held by Ketchikan residents in the Peninsula-Aleutians, Prince William Sound, and Kodiak purse seine fisheries in some years during the 2000-2010 period. The number of salmon permit holders and the total salmon permits held increased slightly between 2000 and 2010.

In 2010, 'other shellfish' CFEC permits were held in sea cucumber, geoduck, shrimp, and sea urchin fisheries. The greatest number (88) were held in the Southeast sea cucumber dive fishery, while 48 permits were held in Southeast geoduck dive fisheries (including fisheries for wild and farmed geoduck stocks), 44 Southeast shrimp pot gear permits were held, and 24 permits were held in the Southeast sea urchin dive fishery. Overall, 52% of these shellfish permits were actively fished in 2010. A slightly higher percentage of geoduck and sea cucumber permits were actively fished (64.6% and 59.1%, respectively) than shrimp or sea urchin permits (36% and 29%, respectively). It is important to note that Ketchikan residents also held permits in several additional 'other shellfish' fisheries in previous years of the 2000-2010 period. These included statewide clam permits (shovel and mechanical digger), octopi/squid permits associated with pot gear and dive gear, and occasional statewide sea urchin and sea cucumber permits, excluding the Southeast region. The number of 'other shellfish' permit holders and total 'other shellfish' permits held increased between 2000 and 2010, while the percentage of permits actively fished appears to have decreased slightly.

Of 89 total herring CFEC permits, 50 were held and 17 actively fished in the southern Southeast spawn on kelp fishery, 17 were held and 16 actively fished in the northern Southeast spawn on kelp fishery, and 18 were held and 9 actively fished in the Southeast roe and food/bait gillnet fishery. In addition, between one and three permits were held by Ketchikan residents in each of the following herring fisheries around the state in 2010: Norton Sound gillnet (three held, zero actively fished), Kodiak roe herring gillnet (two held, zero actively fished), Bristol bay roe herring gillnet (one held, not actively fished), Southeast bait/food purse seine (one held, not actively fished), Southeast bait/food closed pound fishery (one held, not actively fished), and Cook Inlet roe and food/bait purse seine (one held, not actively fished). The number of herring permits held by Ketchikan residents decreased between 2000 and 2010, while the number of permit holders did not show a consistent increasing or decreasing trend.

Of 59 halibut CFEC permits, a majority (57) were held in the statewide longline fishery using vessels under 60 feet in length, 1 was held in the statewide mechanical jig fishery, and 1 was held for statewide hand troll. Overall, 76% were actively fished in 2010. Both the number of halibut permits held and the number of permit holders decreased by approximately 40% between 2000 and 2010, while the percentage of permits actively fished remained relatively stable over the period.

Ketchikan's involvement in state groundfish fisheries showed a significant decreasing trend over the 2000-2010 period, from 46 permit holders holding 75 groundfish CFEC permits in 2000 to 18 permit holders holding 25 groundfish CFEC permits in 2010. The percentage of permits actively fished also declined, from 20% in 2000 to 8% by 2010. Of the 25 groundfish permits held in 2010, 15 were held in demersal shelf rockfish fisheries, 9 in fisheries for miscellaneous saltwater finfish, and 1 was held for lingcod. Demersal shelf rockfish permits were held in the Southeast longline fishery, including 12 for use on vessels under 60 feet and 2 for vessels over 60 feet in length, and the final permit was held in the Southeast hand troll/hand line fishery. Only 1 of these 12 demersal shelf rockfish permits was actively fished in 2010.

Miscellaneous saltwater finfish permits were associated with longline and hand troll gear for use in the Gulf of Alaska, and two for statewide use. Of nine total saltwater finfish permits, one was actively fished in 2010. The statewide lingcod permit was associated with dinglebar troll gear, and was not actively fished in 2010. It is important to note that a wider variety of groundfish permits were held by Ketchikan residents during earlier years of the 2000-2010 period, including demersal shelf rockfish permits associated with mechanical jig and dinglebar troll gear, and saltwater finfish permits associated with pot gear, dinglebar troll, and mechanical jig gear.

All of the 19 sablefish CFEC permits held in 2010 were held in fisheries using longline gear, including 8 for southern Southeast, 5 were for northern southeast, and 6 were for statewide use, excluding the Southeast region. Overall, 95% of sablefish permits were actively fished in 2010. The number of Ketchikan permit holders and the number of sablefish permits held decreased by one third between 2000 and 2010.

Of 18 crab CFEC permits held by Ketchikan residents in 2010, a majority were for Dungeness crab fisheries (15 held, 5 actively fished). In addition, one permit was held for southeast red/blue king or Tanner crab, and two were held in the Southeast Tanner crab pot fishery. All three of these permits were actively fished in 2010. The number of crab permits held and the number of permit holders both decreased by one-third between 2000 and 2010, and the percentage of total crab permits actively fished also declined slightly. The most common gear associated with these permits was pot gear, although several Dungeness crab permits were associated with ring nets or dive gear.

In addition to CFEC permits, Ketchikan residents also held federal License Limitation Program (LLP) permits in groundfish fisheries and Federal Fisheries Permits (FFP), while no crab LLPs were held by Ketchikan residents during the 2000-2010 period. Between 2000 and 2010, the number of groundfish LLPs held stayed relatively stable, fluctuating between 42 and 48 per year. The percentage of groundfish LLP permits actively fished declined slightly over the period, from 47% in 2000 to 38% in 2010. During the same period, the number of FFP permits held varied between 25 and 42, and did not show a consistent increasing or decreasing trend. The percentage of FFPs that were actively fished increased from 0% in 2000 to 63% in 2010. This information about federal permits is presented in Table 4, along with CFEC permit statistics.

In addition to state and federal permits, between 2000 and 2010, Ketchikan residents held quota share accounts and quota shares in federal catch share fisheries for halibut and sablefish, while no quota share account were held in the federal crab catch share fisheries. The number of halibut quota share account holders in Ketchikan was 118 in the year 2000, declining to 75 by 2010. The total number of quota shares held also decreased over the period, from 5,830,642 held in 2000 to 3,974,659 in 2010. The overall halibut Individual Fishing Quota (IFQ) allotment for account holders in Ketchikan initially increased to 33% higher than 2000 levels in 2005, before decreasing to 38% below 2000 levels by 2010. Information about federal halibut catch share participation is presented in Table 6. The number of sablefish quota share account holders in also decreased over the period, from 20 in 2000 to 9 account holders in 2010. The number of quota shares held also decreased, from 2,471,368 in 2000 to 1,396,553 in 2010. The overall sablefish IFQ allotment increased to 10% above 2000 levels in 2004, before decreasing to approximately 30% below 2000 levels in 2010. Information about federal sablefish catch share participation is presented in Table 7. Table 8 shows the lack of crab quota share accounts held in Ketchikan between 2005 and 2010.

Of the landings reported between 2000 and 2010, the species landed in the greatest volume in Ketchikan (of the data that can be reported) were salmon, ‘other shellfish’, and

halibut. All information about landings of finfish, herring, pollock, and sablefish in Ketchikan between 2000 and 2010 is considered confidential due to the small number of participants, and data for some years is considered confidential for Pacific cod, 'other groundfish', and halibut. On average between 2000 and 2010, 66,278,638 net pounds of salmon and 2,764,579 net pounds of 'other shellfish' were landed in Ketchikan, valued on average at $21,438,455 and $3,564,899, respectively, in ex-vessel revenue. For those years in which data can be reported for halibut, 'other groundfish', and Pacific cod, an average of 531,384 net pounds of halibut, 130,446 net pounds of 'other groundfish', and 13,446 net pounds of cod were landed. These landings were valued, on average, at $1,554,904, $90,795, and $4,668, respectively. Salmon landings accounted for approximately 86% of total ex-vessel value of landings in Ketchikan during the 2000-2010 period. It is also important to note that, although a lower percentage of total ex-vessel revenue was generated by halibut landings, the value of halibut in dollars/pounds landed was the highest of all landings that can be reported in Ketchikan. Information about landings and ex-vessel revenue in Ketchikan is presented in Table 9.

In addition to the landings delivered in Ketchikan by fishermen from many communities, landings and ex-vessel revenue earned by Ketchikan vessel owners is of note. Ketchikan vessel owners made deliveries in many locations around Alaska between 2000 and 2010. Information can be reported regarding their landings in all fisheries for all years, with the exception of finfish and pollock, for which information is considered confidential in all years due to the small number of participants. The fisheries with the greatest landings volumes by Ketchikan vessel owners were for salmon, herring, 'other shellfish', and halibut. On average between 2000 and 2010, Ketchikan vessel owners landed 21,769,041 net pounds of salmon, valued at $7,143,133 in ex-vessel revenue on average over the period. The next greatest volume of deliveries was herring, with an average of 2,504,936 net pounds landed per year, and average ex-vessel revenue of $1,136,578. 'Other shellfish' deliveries by Ketchikan vessel owners averaged 1,437,937 net pounds per year, with average ex-vessel revenue of $2,286,773. Halibut landings averaged 709,550 net pounds, for an average ex-vessel revenue of $2,235,935 per year. In addition, Ketchikan vessel owners landed, on average, 407,807 net pounds of crab, 356,510 net pounds of sablefish, 301,403 net pounds of Pacific cod, and 101,043 net pounds of 'other groundfish' per year. Although halibut and sablefish landings by Ketchikan vessel owners were not among the highest in terms of landed volume, these two species had the greatest average price per pound of all species during the 2000-2010 period. 'Other shellfish' was the third most lucrative in dollars/pound. Information about landings made by Ketchikan vessel owners is presented in Table 10.

Table 3. Known Fisheries-Related Revenue (in U.S. dollars) Received by the City of Ketchikan: 2000-2010.

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax[1]	$328,763	$253,049	$250,000	$141,7580	$142,925	$181,411	$194,279	$234,757	$254,398	$218,560	n/a
Shared Fisheries Business Tax[1]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fisheries Resource Landing Tax[1]	$310,113	$352,768	$264,438	$296,949	$156,072	$163,836	$202,800	$215,125	$246,374	$274,872	$230,017
Fuel transfer tax[2]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Extraterritorial fish tax[2]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bulk fuel transfers[1]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Boat hauls[2]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Harbor usage[2]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Port/dock usage[2]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fishing gear storage on public land[3]	$890,150	$892,750	$861,250	$901,600	$850,861	$906,000	$1,021,700	$1,102,145	$1,169,300	$1,257,000	$1,421,000
Marine fuel sales tax[3]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total fisheries-related revenue[4]	*$1,529,026*	*$1,498,567*	*$1,375,688*	*$2,616,129*	*$1,149,858*	*$1,251,247*	*$1,418,779*	*$1,552,027*	*$1,670,072*	*$1,750,432*	*$1,651,017*
Total municipal revenue[5]	*$49,780,610*	*$52,427,851*	*$53,517,100*	*$57,397,437*	*$66,503,598*	*$61,292,805*	*$70,378,764*	*$79,197,945*	*$85,952,238*	*$79,716,222*	*$97,173,689*

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

[1] Alaska Dept. of Comm. and Econ. Dev. (n.d.) *Alaska Taxable (2000-2010)*. Retrieved April 15, 2011 from http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm.

[2] Alaska Dept. of Comm. 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 financial statements. Alaska Dept. of Comm. 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, Ketchikan: 2000-2010.

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) [1]	Total permits	48	47	44	43	42	42	45	44	44	44	44
	Active permits	23	24	19	22	21	19	19	17	16	15	17
	% of permits fished	47%	51%	43%	51%	50%	45%	42%	38%	36%	34%	38%
	Total permit holders	45	45	41	40	39	39	42	41	41	41	41
Crab (LLP) [1]	Total permits	1	1	1	n/a	n/a	1	n/a	n/a	n/a	n/a	n/a
	Active permits	n/a	n/a	n/a	n/a	n/a	1	n/a	n/a	n/a	n/a	n/a
	% of permits fished	n/a	n/a	n/a	n/a	n/a	100%	n/a	n/a	n/a	n/a	n/a
	Total permit holders	1	1	1	n/a	n/a	1	n/a	n/a	n/a	n/a	n/a
Federal Fisheries Permits[1]	Total permits	34	34	35	25	25	26	27	42	42	26	27
	Fished permits	n/a	n/a	n/a	18	19	17	18	20	19	16	17
	% of permits fished	n/a	n/a	n/a	72%	76%	65%	67%	48%	45%	62%	63%
	Total permit holders	33	33	34	24	24	25	27	42	42	26	27
Crab (CFEC) [2]	Total permits	33	27	26	24	24	24	23	21	19	18	18
	Fished permits	21	16	16	17	14	12	9	11	9	9	8
	% of permits fished	64%	59%	62%	71%	58%	50%	39%	52%	47%	50%	44%
	Total permit holders	29	25	22	23	23	25	23	19	19	18	19
Other shellfish (CFEC) [2]	Total permits	195	223	183	190	187	186	204	198	200	200	204
	Fished permits	128	115	108	121	121	112	113	94	88	93	106
	% of permits fished	66%	52%	59%	64%	65%	60%	55%	47%	44%	47%	52%
	Total permit holders	133	148	143	144	140	136	151	146	147	152	152
Halibut (CFEC) [2]	Total permits	99	100	101	93	86	85	82	77	67	61	59
	Fished permits	77	69	78	72	66	62	67	61	49	42	45
	% of permits fished	78%	69%	77%	77%	77%	73%	82%	79%	73%	69%	76%
	Total permit holders	97	98	99	91	84	83	81	76	66	60	58
Herring (CFEC) [2]	Total permits	105	112	123	125	117	107	98	102	98	90	89
	Fished permits	40	49	63	75	77	51	33	43	57	60	48
	% of permits fished	38%	44%	51%	60%	66%	48%	34%	42%	58%	67%	54%
	Total permit holders	66	70	73	73	74	68	64	69	71	66	63

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) [2]	Total permits	31	29	29	24	25	26	26	25	22	16	19
	Fished permits	30	28	28	24	24	22	25	21	20	15	18
	% of permits fished	97%	97%	97%	100%	96%	85%	96%	84%	91%	94%	95%
	Total permit holders	29	26	24	22	23	24	24	20	22	19	20
Groundfish (CFEC) [2]	Total permits	75	69	66	63	61	56	43	33	31	25	25
	Fished permits	15	15	19	20	3	4	3	1	3	5	2
	% of permits fished	20%	22%	29%	32%	5%	7%	7%	3%	10%	20%	8%
	Total permit holders	46	50	44	44	39	40	29	24	23	17	18
Other Finfish (CFEC) [2]	Total permits	5	4	1	1	1	n/a	n/a	n/a	n/a	n/a	n/a
	Fished permits	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	% of permits fished	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Total permit holders	5	4	1	1	1	n/a	n/a	n/a	n/a	n/a	n/a
Salmon (CFEC) [2]	Total permits	392	392	398	393	385	406	414	406	413	409	415
	Fished permits	134	135	126	123	124	142	150	142	142	147	153
	% of permits fished	34%	34%	32%	31%	32%	35%	36%	35%	34%	36%	37%
	Total permit holders	373	376	385	377	370	382	383	378	386	382	391
Total CFEC Permits[2]	*Permits*	*935*	*956*	*927*	*913*	*886*	*890*	*890*	*862*	*850*	*819*	*829*
	Fished permits	*445*	*427*	*438*	*452*	*429*	*405*	*400*	*373*	*368*	*371*	*380*
	% of permits fished	*48%*	*45%*	*47%*	*50%*	*48%*	*46%*	*45%*	*43%*	*43%*	*45%*	*46%*
	Permit holders	*534*	*551*	*548*	*542*	*533*	*547*	*560*	*550*	*558*	*552*	*558*

Note: n/a indicates that no data was reported for that year. Cells showing – indicate that the data is considered confidential.

[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 Ketchikan: 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 Ketchikan[2]	Total Net Pounds Landed in Ketchikan[2,5]	Total Ex-Vessel Value of Landings in Ketchikan[2,5]
2000	482	80	11	352	557	420	8,858,581	$9,105,152
2001	445	74	11	356	562	537	25,609,399	$11,359,204
2002	408	44	7	349	543	504	79,797,790	$16,206,430
2003	364	49	12	323	529	490	90,361,239	$21,077,437
2004	337	86	12	326	526	647	91,333,538	$25,503,542
2005	331	87	8	261	386	636	99,337,024	$27,952,323
2006	326	81	8	249	358	542	53,964,154	$26,515,328
2007	338	69	6	237	341	576	81,492,684	$34,937,834
2008	323	79	6	241	347	617	71,967,235	$44,447,325
2009	352	70	7	238	352	666	82,843,311	$41,936,464
2010	390	76	9	237	355	730	96,286,216	$54,783,280

Note: n/a indicates that no data was reported for that year. Cells showing – indicate that the data is 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 Ketchikan: 2000-2010.

Year	Number of Halibut Quota Share Account Holders	Halibut Quota Shares Held	Halibut IFQ Allotment (Pounds)
2000	118	5,830,642	770,792
2001	117	5,881,458	835,421
2002	114	5,231,182	733,429
2003	113	5,068,334	706,555
2004	105	4,979,137	844,744
2005	100	4,675,364	820,916
2006	100	4,997,423	848,976
2007	92	4,779,551	680,481
2008	83	4,218,029	464,412
2009	81	4,154,257	380,598
2010	75	3,974,659	325,150

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 Ketchikan: 2000-2010.

Year	Number of Sablefish Quota Share Account Holders	Sablefish Quota Shares Held	Sablefish IFQ Allotment (Pounds)
2000	20	2,471,368	255,102
2001	17	2,577,151	248,230
2002	14	2,433,579	231,360
2003	12	1,856,288	194,462
2004	12	1,618,828	183,336
2005	11	1,530,489	168,446
2006	12	1,669,141	167,434
2007	11	1,535,221	152,258
2008	11	1,415,722	128,105
2009	10	1,397,173	110,109
2010	9	1,396,553	101,386

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 Ketchikan: 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 Ketchikan: 2000-2010.

	Total Net Pounds[1]										
	2000	***2001***	***2002***	***2003***	***2004***	***2005***	***2006***	***2007***	***2008***	***2009***	***2010***
Crab	0	0	0	0	0	0	0	0	0	0	0
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	638,784	780,806	606,247	566,325	550,031	450,828	492,311	388,230	308,897	--	--
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	207,140	202,617	180,435	168,523	86,364	84,733	91,695	91,060	--	84,662	108,133
Other Shellfish	3,088,929	3,368,396	4,173,968	4,475,465	3,643,615	2,694,893	2,209,243	1,973,899	1,351,003	1,811,467	1,619,486
Pacific Cod	25,517	--	10,257	--	--	--	4,563	--	--	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	3,967,094	20,372,857	73,902,682	83,892,388	85,463,733	95,180,217	48,847,374	78,201,314	68,815,849	78,615,500	91,806,010
Total[2]	*8,858,581*	*25,609,399*	*79,797,790*	*90,361,239*	*91,333,538*	*99,337,024*	*53,964,154*	*81,492,684*	*71,967,235*	*82,843,311*	*96,286,216*
	Ex-vessel Value (nominal U.S. dollars)										
	2000	***2001***	***2002***	***2003***	***2004***	***2005***	***2006***	***2007***	***2008***	***2009***	***2010***
Crab	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	$1,619,306	$1,682,965	$1,315,924	$1,617,546	$1,656,520	$1,344,521	$1,830,561	$1,631,906	$1,294,887	--	--
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	$170,430	$130,468	$149,282	$127,470	$58,255	$43,603	$59,827	$53,168	--	$53,713	$61,731
Other Shellfish	$4,294,158	$3,026,472	$2,365,506	$3,174,452	$4,138,337	$3,502,664	$3,751,374	$4,188,659	$2,104,216	$4,739,678	$3,928,368
Pacific Cod	$11,309	--	$1,862	--	--	--	$833	--	--	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	$1,303,662	$4,541,907	$10,928,385	$13,540,093	$17,922,999	$21,567,385	$19,182,354	$27,474,656	$38,362,693	$33,953,757	$47,045,119
Total[2]	*$9,105,152*	*$11,359,204*	*$16,206,430*	*$21,077,437*	*25,503,542*	*$27,952,323*	*$26,515,328*	*$34,937,834*	*$44,447,325*	*$41,936,464*	*$54,783,280*

Note: n/a indicates that no data was reported for that year. Cells showing – indicate that the data is 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 pounds 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, of Ketchikan residents: 2000-2010.

	Total Net Pounds[1]										
	2000	***2001***	***2002***	***2003***	***2004***	***2005***	***2006***	***2007***	***2008***	***2009***	***2010***
Crab	397,004	327,309	488,111	392,157	400,867	245,917	294,099	968,051	717,915	96,424	158,023
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	780,116	818,782	708,906	776,764	895,258	900,908	882,621	755,728	483,650	431,514	370,805
Herring	1,887,536	2,047,637	3,371,529	2,039,672	2,267,046	2,675,371	2,668,259	2,017,394	2,531,681	2,858,101	3,190,065
Other Groundfish	183,070	142,903	128,812	130,721	74,162	83,593	83,720	75,652	69,263	66,708	72,867
Other Shellfish	1,529,432	1,629,983	2,336,747	2,022,915	1,499,508	1,466,832	1,398,763	1,073,455	944,741	1,040,123	874,805
Pacific Cod	637,588	8,080	394,399	542,611	512,904	586,402	143,814	402,284	78,696	4,453	4,198
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	457,392	457,626	436,673	432,413	306,187	241,359	319,415	293,778	379,570	241,151	356,043
Salmon	15,623,820	26,149,208	19,214,227	26,704,378	29,169,268	30,373,516	17,343,352	24,634,430	14,167,852	19,154,523	16,924,872
Total[2]	*21,500,892*	*31,547,318*	*27,072,274*	*33,030,408*	*35,113,065*	*36,566,217*	*23,119,083*	*30,181,617*	*19,332,188*	*23,833,144*	*21,976,105*
	Ex-vessel Value (nominal U.S. dollars)										
	2000	***2001***	***2002***	***2003***	***2004***	***2005***	***2006***	***2007***	***2008***	***2009***	***2010***
Crab	$911,314	$721,865	$1,077,642	$1,001,577	$957,831	$483,386	$841,958	$2,051,309	$1,240,830	$181,956	$223,928
Finfish	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Halibut	$2,000,443	$1,741,489	$1,551,182	$2,216,932	$2,688,384	$2,744,543	$3,310,150	$3,243,852	$2,069,514	$1,319,020	$1,709,773
Herring	$551,628	$711,075	$1,446,590	$994,743	$1,024,575	$858,469	$822,019	$1,393,018	$1,845,138	$1,445,753	$1,409,343
Other Groundfish	$126,878	$96,899	$106,342	$98,855	$50,205	$53,014	$63,342	$46,584	$47,577	$45,130	$46,327
Other Shellfish	$1,883,049	$1,439,680	$1,471,701	$1,908,020	$2,411,266	$2,247,309	$2,508,389	$2,663,230	$2,056,484	$3,101,183	$3,464,197
Pacific Cod	$11,981,111	$12,609,087	$10,434,538	$12,322,064	$14,572,823	$14,349,613	$16,257,427	$19,646,591	$18,181,279	$15,598,013	$17,791,524
Pollock	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sablefish	$1,300,166	$1,267,884	$1,137,680	$1,173,720	$702,878	$597,416	$965,912	$900,644	$1,195,735	$754,341	$1,362,507
Salmon	$5,005,787	$6,627,777	$3,550,749	$4,766,014	$6,615,204	$7,182,696	$7,683,450	$9,141,641	$9,677,404	$8,749,123	$9,574,618
Total[2]	$11,952,223	$12,570,853	$10,426,178	$12,308,573	$14,552,549	$14,337,842	$16,220,428	$19,524,916	$18,066,922	$15,418,798	$17,671,015

Note: n/a indicates that no data was reported for that year. Cells showing – indicate that the data is 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 pounds refers to the landed weight recorded in fish tickets.

2 Totals only represent non-confidential data.

Recreational Fishing

Ketchikan is a large sportfishing hub, attracting fisherman from all over the world. In the 2011 AFSC survey, community leaders indicated that sportfishing is one of the key industries upon which the local economy depends. They noted that majority of local sport fishermen use private boats, while visitors primarily access sportfishing through charters. They also indicated that the most important sport species for fishermen out of Ketchikan include pink, chum, coho, and Chinook salmon, halibut, rockfish, crab, shrimp, and clams. Community leaders also noted that charter operators in Ketchikan have been negatively affected by declining halibut bag limits for fishing charters.

In 2010, there were 71 active sport fish businesses registered in Ketchikan, and 146 licensed sport fish guides were present. The number of businesses and guides remained relatively stable over the 2000-2010 period, with only a slight declining trend. A total of 5,403 sportfishing licenses were sold to residents of Ketchikan in 2010 (irrespective of the location of the point of sale). In comparison, a total of 33,183 sportfishing licenses were sold in the City of Ketchikan, indicating a large influx of visitors to Ketchikan that are participating in recreational fishing activities (Table 11).

Ketchikan is located within Alaska Sport Fishing Survey Area A. Looking at this regional scale between 2000 and 2010, there was significantly greater saltwater sportfishing activity than freshwater, although both were important. The following numbers of saltwater angler days were recorded: between 30 and 50 thousand non-Alaska resident angler days per year and between 26 and 57 thousand Alaska resident angler days per year. With regard to freshwater sportfishing, Alaska residents fished between 3,295 and 9,128 angler days per year, while non-Alaska resident sport fishermen fished between 3,370 and 5,920 angler days per year (Table 11).

The Alaska Statewide Harvest Survey[115] conducted by ADF&G between 2000 and 2010 noted the following species targeted by private anglers in Ketchikan: In saltwater, all five species of Pacific salmon as well as landlocked salmon were targeted, along with Dolly Varden, Pacific halibut, rockfish, lingcod, Pacific cod, and shark. The survey also noted sport harvest of Dungeness and Tanner crab, razor and hardshell clams, and shrimp by Ketchikan anglers in saltwater. In freshwater, Ketchikan anglers targeted all five species of Pacific salmon, rainbow trout, Dolly Varden char, cutthroat trout, Arctic grayling, and steelhead.

Kept/released statistics from charter logbook data reported by ADF&G[116] show that salmon were by far the most important species targeted during fishing charter trips out of Ketchikan between 2000 and 2010, with an average of 28,483 pink, 21,589 coho, 4,447 Chinook, 2,215 chum, 162 sockeye, and 21,464 'other salmon' kept per year. Pacific halibut and rockfish were the next most important charter species in terms of numbers, with an average of 7,655 Pacific halibut kept per year and an average of 6,886 total rockfish kept per year (including 1,783 pelagic rockfish, 1,550 yelloweye, and 3,552 'other rockfish' kept on average per year). Other species caught during charter trips out of Ketchikan were lingcod, sablefish, and shark. Species

[115] 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).

[116] Alaska Department of Fish and Game. (2011). *Alaska sport fish charter logbook database, 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.]

with the greatest release rates during charter fishing trips were, on average: 5,983 Chinook salmon released per year, with emphasis on release of smaller individuals, 2,620 Pacific halibut released per year, and 2,343 rockfish released per year (including pelagic, yelloweye, and other rockfish).

Table 11. Sport Fishing Trends, Ketchikan: 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 Ketchikan[2]
2000	76	169	6,035	25,686
2001	82	172	5,779	25,472
2002	82	190	5,594	30,235
2003	83	181	5,586	39,734
2004	80	192	5,626	42,344
2005	81	164	5,604	42,344
2006	88	201	5,281	36,870
2007	86	189	5,280	39,385
2008	81	182	5,262	38,477
2009	69	146	5,398	33,813
2010	71	146	5,403	33,183

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	40,452	42,813	3,550	9,128
2001	37,054	32,446	4,673	6,745
2002	40,723	38,219	5,920	6,156
2003	36,096	30,347	4,525	5,082
2004	49,461	42,810	3,370	7,892
2005	52,717	34,966	4,984	4,854
2006	42,931	28,490	4,724	3,295
2007	50,001	26,364	4,391	4,289
2008	47,189	31,542	4,344	5,350
2009	44,074	57,006	4,655	8,224
2010	37,842	27,676	3,456	4,398

[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).

Subsistence Fishing

Subsistence harvest of marine resources was historically the foundation of the way of life of the Tlingit people living in the Ketchikan area. Fish traps, gaffs, and spears were used to catch salmon, one of the most important subsistence resources for the Tlingit people. Steelhead, herring, herring eggs, ooligans (eulachon), and Dolly Varden were also caught and eaten. The Tlingit also utilized marine mammals (e.g., seal), deepwater fish (e.g., halibut), marine invertebrates (e.g., 'gumboot' chitons), and sea plants (e.g., seaweed, beach asparagus and goose tongue). A system of property ownership was in place over harvesting places, including streams, halibut banks, berry patches, hunting areas, intertidal areas, and egg harvesting sites.[117] [118],

Today, both Native and non-Native residents of Ketchikan continue to participate in subsistence harvest activities. According to the 2011 AFSC survey, community leaders reported that salmon, halibut, and crab are three of the most important subsistence resources utilized by local residents. In addition, eulachon continue to be an important subsistence resource for Native residents. During a 2010 Subsistence Regional Advisory Council meeting, residents expressed concern about declines of eulachon in the Ketchikan area. Tlingit from the Ketchikan area traditionally harvested eulachon from the Nass, Unuk, Klahini, and Chickamin Rivers. Several Ketchikan residents expressed concern about overharvest and closure of eulachon fisheries.[119]

Between 2000 and 2010, no information was reported by ADF&G regarding the percentage of households using different marine resources, or per capita harvest of subsistence resources by Ketchikan residents (Table 12). However, information is available from ADF&G regarding subsistence salmon permits and Subsistence Halibut Registration Certificates (SHARC) issued during the 2000-2010 period, and some information is also reported by various management agencies regarding subsistence harvest of marine mammals.

The number of subsistence salmon permits issued per year to Ketchikan households declined between 2000 and 2008, from 1,112 in the year 2000 to 235 in 2008. Sockeye salmon was the most heavily utilized species during this period, averaging 8,365 harvested per year. Significant numbers of pink and chum salmon were also harvested each year (averaging 1,255 and 1,220 per year, respectively), and a smaller number of coho and Chinook salmon were also harvested for subsistence purposes each year. This information about subsistence harvest of salmon is presented in Table 13.

Between 2003 and 2010, the number of Ketchikan residents that participated in the SHARC program varied between 603 and 1,098, and the number of SHARC cards returned each year varied between 127 and 239. The greatest subsistence harvest of halibut was reported in 2004, when 64,275 pounds of halibut were harvested on 239 SHARC cards (Table 14).

Some data are also available regarding marine mammal harvest by residents of Ketchikan between 2000 and 2010. According to data reported by the U.S. Fish and Wildlife Service and ADF&G, this harvest focused primarily on sea otter (average harvest of 38 per year) and harbor seal (average harvest of 71 per year), as well as a reported harvest of 2 sea lions in 2008. No

[117] Alaska Native Heritage Center. (2008). *Eyak, Tlingit, Haida & Tsimshian: Who We Are*. Retrieved November 23, 2011 from www.alaskanative.net/en/main_nav/education/culture_alaska/eyak.
[118] Brock, Mathew, Philippa Coiley-Kenner and the Sitka Tribe of Alaska. (2009). *A Compilation of Traditional Knowledge about the Fisheries of Southeast Alaska*. ADF&G Technical Paper No. 332. Retrieved March 30, 2012 from http://alaska.fws.gov/asm/pdf/fisheries/reports/04-652Final.pdf.
[119] Southeast Alaska Federal Subsistence Regional Advisory Council. (2010). "Meeting Minutes, Tuesday, March 16 through Thursday, March 18." In *Fisheries Meeting Materials, September 28-30, 2010, Hoonah*. Retrieved September 11, 2012 from http://alaska.fws.gov/asm/pdf/meetingbooks/sefall10/EntireBook.pdf.

information was reported by management agencies regarding harvest of beluga whale, walrus, or spotted seal between 2000 and 2010. Information about subsistence harvest of marine mammals by Ketchikan residents is presented in Table 15.

Additional Information

The City of Ketchikan originally received its name from the creek that flows through the City. The word Ketchikan comes from the Tlingit word, *Kichxáan*. The meaning of this name is not clear. It may mean "the river belonging to Kitschk," or possibly "thundering wings of an eagle."[120]

According to a story told by Tlingit elders Ester Shea, Emma Williams, and Mickey Denney, Ketchikan Creek was utilized for salmon subsistence by the Cape Fox Kwaan until a marriage between a Cape Fox and a Tongass Tlingit, when use of the Creek was given as a wedding gift to the Tongass Kwaan.[121]

Ketchikan is home to the world's largest collection of totem poles, which are found at Totem Bight State Historical Park north of the City, the Saxman Totem Park in Saxman, and in the Totem Heritage Center Museum in Ketchikan.[122]

[120] Sealaska Heritage Institute. (2009). *Curriculum Unit 5: Southeast Alaska Communities*. Retrieved March 30, 2012 from http://www.sealaskaheritage.org/programs/language_and_culture_curriculum.htm.
[121] Hoff, Don Jr. May 11, 2009. "Viewpoint: The Theft of Taan ta Kwaan Lands in Ketchikan." *SitNews.us*. Retrieved September 10, 2012 from http://www.sitnews.us/0509Viewpoints/051109_don_hoff_jr.html.
[122] Alaska Dept. of Comm. and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

Table 12. Subsistence Participation by Household and Species, Ketchikan: 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	n/a	n/a	n/a	n/a	n/a	n/a
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, Ketchikan: 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	1,112	964	394	2,486	148	1,780	20,856	n/a	n/a
2001	1,045	915	451	2,600	126	3,648	17,357	n/a	n/a
2002	763	673	410	1,388	98	2,438	10,025	n/a	n/a
2003	669	575	116	1,870	54	1,008	13,274	n/a	n/a
2004	334	290	75	1,159	11	513	3,699	n/a	n/a
2005	338	299	27	733	54	589	4,309	n/a	n/a
2006	328	279	215	428	11	345	2,773	n/a	n/a
2007	328	279	215	428	11	345	2,773	n/a	n/a
2008	235	182	6	171	68	282	870	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 was 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, Ketchikan: 2003-2010.

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	806	191	38,221
2004	967	239	64,275
2005	928	236	47,226
2006	1,056	212	42,819
2007	1,098	205	34,598
2008	701	186	39,441
2009	626	214	37,170
2010	603	127	37,364

Note: n/a indicates that no data was 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, Ketchikan: 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	15	n/a	n/a	n/a	112	n/a
2001	n/a	48	n/a	n/a	n/a	13	n/a
2002	n/a	11	n/a	n/a	n/a	123	n/a
2003	n/a	84	n/a	n/a	n/a	78	n/a
2004	n/a	73	n/a	n/a	n/a	60	n/a
2005	n/a	31	n/a	n/a	n/a	73	n/a
2006	n/a	35	n/a	n/a	n/a	38	n/a
2007	n/a	56	n/a	n/a	n/a	78	n/a
2008	n/a	13	n/a	n/a	2	67	n/a
2009	n/a	12	n/a	n/a	n/a	n/a	n/a
2010	n/a	41	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.