

Barrow (BARE-row)



People and Place

*Location*¹

Barrow, the northernmost community in the United States, is located on the Chukchi Sea coast, 10 mi south of Point Barrow, from which it takes its name; and 725 mi northwest of Anchorage. The area encompasses 18.4 sq mi of land and 2.9 sq mi of water. Barrow was incorporated as a Fourth-class city in 1958. Today, the community is a First-class city and North Slope Borough seat.

Demographic Profile^{2,3}

In 2010, there were 4,212 residents, ranking Barrow 27th of 352 Alaskan communities in terms of population size. Between 1990 and 2010, the population grew by 21.4%. Between 2000 and 2009, the population fell by 10.1% with an average annual growth rate of -0.97%; which was somewhat lower than the statewide average of 0.75% and indicative of recovering growth following a steady decline between 2000 and 2007. According to a survey conducted by NOAA's Alaska Fisheries Science Center (AFSC) in 2011, community leaders reported that the permanent population was estimated at 4,380 based on a household survey. In addition the estimated number of seasonal or transient workers living in Barrow was 30 to 50. Seasonal employment is primarily driven by construction projects in the area, and the seasonal population depends on when projects are available. Population peaks are not at all driven by employment in the fishing sectors, but rather by construction and tourism. Information regarding population trends can be found in Table 1.

Barrow's racial composition is relatively diverse, with a majority Inupiat Eskimo population. In 2010, 61.2% of residents identified themselves as American Indian and Alaska Native, compared to 57.2% in 2000. Also in that year, 16.9% the population identified themselves as White, compared to 21.8% in 2000; 9.1% identified themselves as Asian, compared to 9.4% in 2000; 8.7% identified themselves as two or more races, compared to 8.5% in 2000; 2.4% identified themselves as Native Hawaiian and Other Pacific Islander, compared to 1.4% in 2000; 1.0% identified themselves as Black or African American, compared to 1.0% in 2000; and 0.8% of the identified themselves as some other race, compared to 0.7% in 2000. In addition, 3.1% of residents identified themselves as Hispanic or Latino, compared to 3.3% in 2000. Information regarding racial and ethnic composition can be found in Figure 1.

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

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

³ Alaska Department of Labor. 2011. Current population estimates for Alaskan Communities. Retrieved April 15, 2011, from <http://labor.alaska.gov/research/pop/popest.htm>.

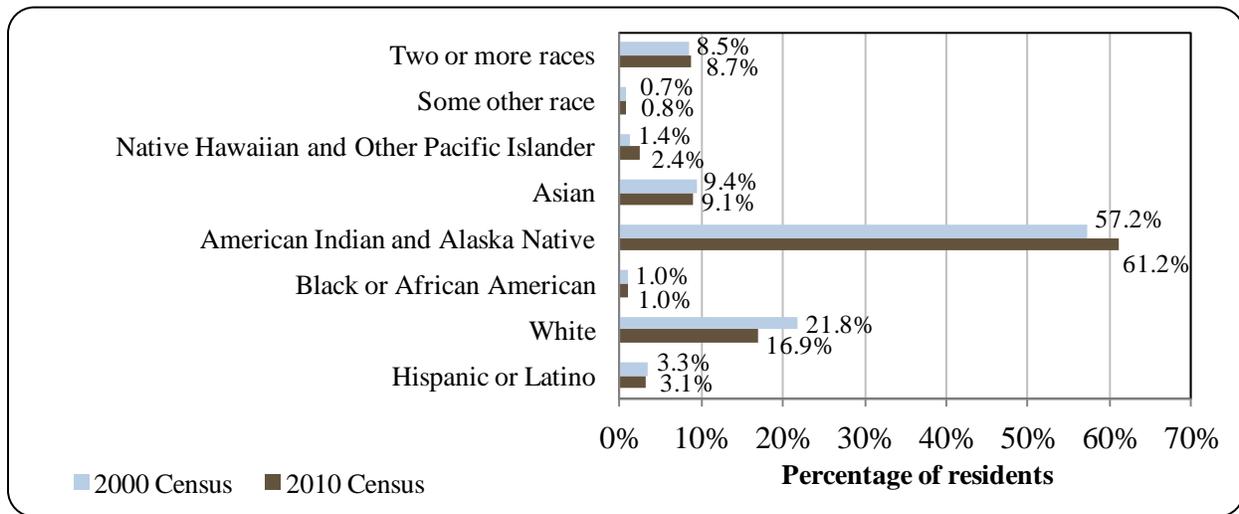
Table 1. Population in Barrow from 1990 to 2010 by Source.

Year	U.S. Decennial Census ¹	Alaska Department of Labor Estimate of Permanent Residents ²
1990	3,469	-
2000	4,581	-
2001	-	4,443
2002	-	4,436
2003	-	4,412
2004	-	4,369
2005	-	4,180
2006	-	4,069
2007	-	4,036
2008	-	4,051
2009	-	4,119
2010	4,212	-

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, Barrow: 2000-2010 (U.S. Census).

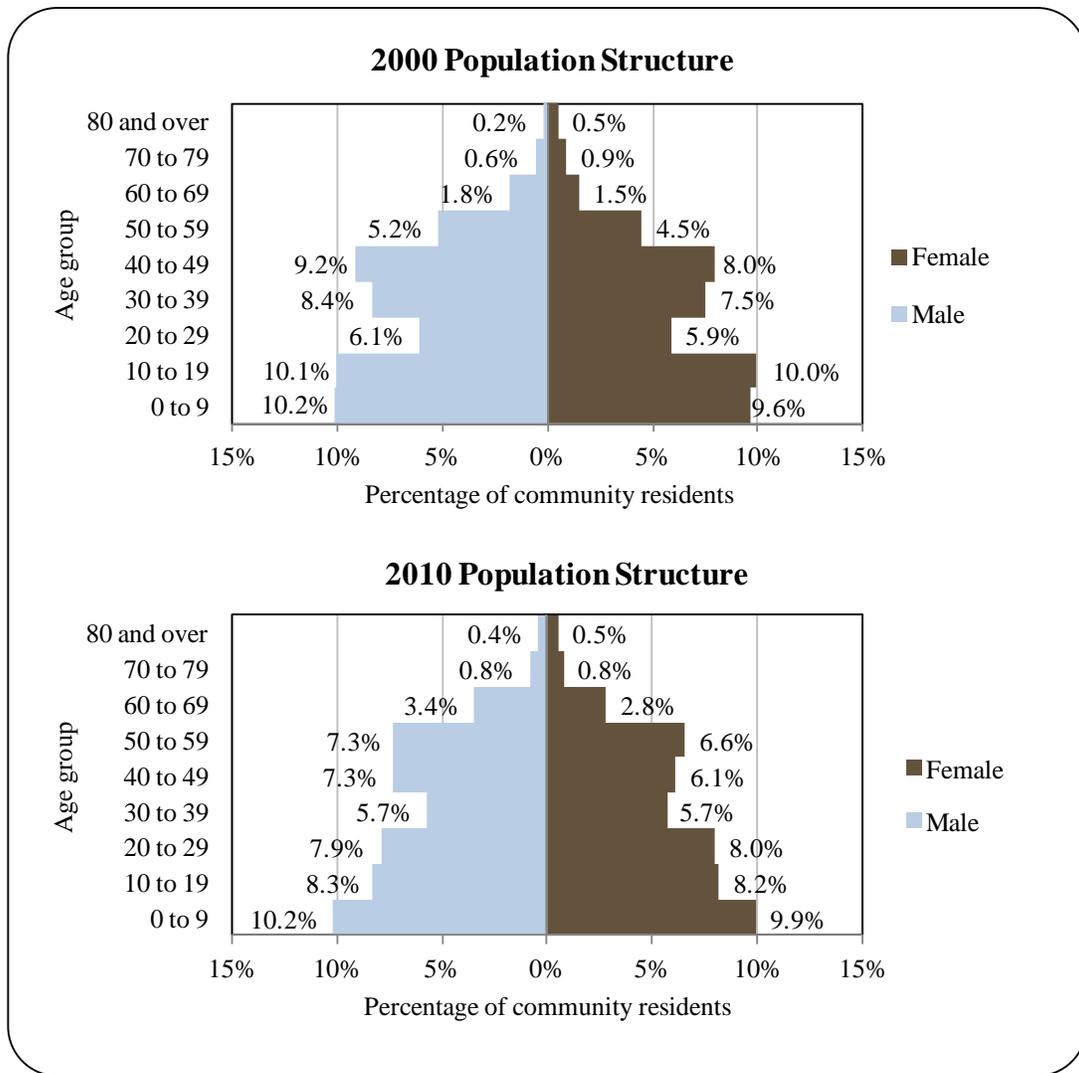


In 2010, the average household size was 3.26, compared to 3.2 in 1990 and 3.91 in 2000. In that same year there were 1,554 total housing units, compared to 1,184 in 1990 and 1,620 in 2000. Of the households surveyed in 2010, 33.8% were owner-occupied, compared to 34.5% in 2000; 48.5% were renter-occupied, compared to 50.1% in 2000; 12.3% were vacant, compared to 12.9% in 2000; and 5.3% were occupied seasonally, compared to 2.5% in 2000. In 2010, there were 34 people living in group quarters, compared to 13 in 1990 and 95 in 2000.

Gender distribution in 2010 was relatively even at 51.4% male, and 48.6% female. This was similar to both the distribution statewide (52.0% male, 48.0% female) and distribution in 2000 (51.7% male, 48.3% female). The median age that year was 28.0 years, which was somewhat younger than the statewide median of 33.8 years and similar to the 2000 median of 28.8 years.

Overall, the population structure in both 2010 and 2000 was expansive. In addition, cohorts maintained their overall structure as they aged, indicating a stable population. In 2010, 36.6% of residents were under the age of 20, compared to 39.9% in 2000; 8.7% were over the age of 59, compared to 5.5% in 2000; 38.7% were between the ages of 30 and 59, compared to 42.8% in 2000; and 15.9% were between the ages of 20 and 29, compared to 12.0% in 2000.

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



Gender distribution by age cohort was more even in 2010 than in 2000. In that year, the greatest absolute gender difference occurred in the 40 to 49 range (7.3% male, 6.1% female), followed by the 50 to 59 (7.3% male, 6.6% female) and 60 to 69 (3.4% male, 2.8% female) ranges. Of those three, the greatest relative difference occurred in the 60 to 69 range. Information regarding trends in Barrow's population structure can be found in Figure 2.

In terms of educational attainment, the U.S. Census' 2006-2010 American Community Survey (ACS)⁴ estimated that 80.2% of residents aged 25 and older held a high school diploma or higher degree in 2010, compared to an estimated 90.7% of Alaska residents overall. Also in that year, an estimated 7.1% had less than a ninth grade education, compared to an estimated 3.5% of Alaska residents overall; an estimated 12.7% had a ninth to twelfth grade education but no diploma, compared to an estimated 5.8% of Alaska residents overall; an estimated 25.1% had some college but no degree, compared to an estimated 28.3% of Alaska residents overall; an estimated 3.2% held an Associate's degree, compared to an estimated 8.0% of Alaska residents overall; an estimated 7.2% held a Bachelor's degree, compared to an estimated 17.4% of Alaska residents overall; and an estimated 10.9% held a graduate or professional degree, compared to an estimated 9.6% of Alaska residents overall.

*History, Traditional Knowledge, and Culture*⁵

While human habitation in the arctic can be traced to as early as 8,000 years ago, archaeological sites indicate habitation in the Barrow area from around 1,600 to 1,000 years ago. Inupiat traditionally depended on subsistence marine mammal hunting, supplemented by inland hunting and fishing. Archaeological remains of 16 dwelling mounds from the Birnirk culture exist today. Barrow was named for Sir John Barrow, the second Secretary of the British Admiralty. The city's Eskimo name is Ukpeagvik ("place where owls are hunted"). In 1881, the U.S. Army established a meteorological and magnetic research station near Barrow. The Cape Smyth Whaling and Trading Station was constructed there in 1893. A Presbyterian church was established in 1899, and a post office was opened in 1901. Exploration of the Naval Petroleum Reserve Number 4 (now National Petroleum Reserve in Alaska, NPR-A) began in 1946. The Naval Arctic Research Laboratory, 3 mi north of Barrow, soon followed. The city was incorporated in 1958. Formation of the North Slope Borough in 1972 and the Arctic Slope Regional Corporation, as well as construction of the Prudhoe Bay oilfields and Trans-Alaska Pipeline, have each contributed to the development of Barrow. Today, tax revenues from the North Slope oil fields fund borough-wide services. The sale of alcohol is prohibited.

Barrow has one property listed on the National Register of Historic Places (NRHP). The Cape Smyth Whaling and Tradition Station is a nineteenth-century American-built frame structure located around Point Barrow. In its day, it played a significant role in early commerce in the region as a whaling and fur-trading post.⁶

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

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

⁶ National Park Service. (n.d.) *National Register of Historic Places*. Retrieved December 29, 2011 from: <http://nrhp.focus.nps.gov/natregsearchresult.do?fullresult=true&recordid=0>.

Archaeological sites along the coast from Kotzebue to Barrow include Walakpa, Point Hope, and Cape Krusenstern. Birnirk houses and artifacts are nearly identical to those of the historic Inupiat people. Tool assemblages include ivory harpoon heads, flakes and blades, ulus, tool handles, and composite tool parts. Dwellings include semi-subterranean winter houses.⁷

Natural Resources and Environment

The climate of Barrow is arctic. Annual precipitation is light, averaging 5 inches, and annual snowfall is 20 inches. Temperatures range from -56 to 78 °F (-49 to 26 °C), with an average temperature of 40 °F (4 °C) during summer. The sun does not set between May 10th and August 2nd each summer and does not rise between Nov. 18th and January 24th each winter. The daily low temperature is below freezing for 324 days of the year. Prevailing winds are easterly and average 12 mph. The Chukchi Sea is typically ice-free from mid-June through October.⁸

The coastal landscape surrounding Barrow is characterized by bays and inlets, lagoons with barrier islands, gravel and sandy shores, basins, shallow lakes, and deltas.⁹ Coastal plains are characterized by low terraces, floodplains, shallow lakes, and streams. Peat bluffs run about 40 mi southwest of Barrow's coastline. Soils are generally poorly drained sandy loams, peats, and marine sediments. The permafrost layer generally ranges from 650 to 1,300 ft deep. Coastal plains ecoregions are characterized broadly as nearshore wet tundra and river floodplains. Vegetation is extremely limited within these coastal areas, where grasses prevail. Upland areas closer to the Brooks Range to the south consist of dwarf shrubs and sedges.¹⁰ Wildlife present in the North Slope region include many species of freshwater and marine fish, migratory birds, and terrestrial and marine mammals. Marine and freshwater fish species include arctic cisco, burbot, broad whitefish, arctic grayling, humpback whitefish, least cisco, pink, Chinook, and chum salmon, Dolly Varden char, round whitefish, four-horned sculpin, rainbow smelt, northern pike, arctic cod, capelin, arctic char, and lake trout.¹¹ Terrestrial mammals on the North Slope include caribou, polar bear, arctic fox, red fox, snowshoe hare, moose, black bear, grizzly bear, beaver, muskrat, lynx, mink, marten, land otter, weasel, wolverine, coyote, wolf, and Alaska tiny shrew.^{12,13} Aquatic mammals include bowhead whales, gray whales, minke whales, humpback whales, beluga whales, narwhal, bearded seal, ringed seal, spotted seal, ribbon seal, and Pacific walrus.¹⁴

Natural resources in the area include the expansive North Slope oil and gas fields, as well as several offshore oil and gas fields in the Beaufort and Chukchi seas. Production in the North Slope area began in the 1970s and reached a production rate of 2.2 million barrels per day by

⁷ U.S. Fish and Wildlife Service. (2011). Arctic Refuge Draft Comprehensive Conservation Plan. Retrieved December 30, 2011 from: http://arctic.fws.gov/pdf/ccp/06_Arctic_CH4_050911.pdf.

⁸ See footnote 5.

⁹ See footnote 7.

¹⁰ Ibid.

¹¹ George, C. (2008). *Common Subsistence Fish of the North-Slope*. Retrieved December 30, 2011 from: <http://www.north-slope.org/departments/wildlife/>.

¹² See footnote 7.

¹³ City of Barrow. (1970). *Barrow Plan*. Retrieved December 30, 2011 from: <http://www.commerce.state.ak.us/dca/plans/Barrow-CP-1970.pdf>.

¹⁴ Alaska Department of Fish and Game. (n.d.). *Wildlife Action Plan: Appendix 4 – Marine Mammals*. Retrieved December 30, 2011 from: http://www.adfg.alaska.gov/static/species/wildlife_action_plan/appendix4_marine_mammals.pdf.

1988. However, by 2007 production had declined to 720,000 barrels per day representing approximately 14% of U.S. domestic production at that time. By the end of 2007, the North Slope oil fields had produced 15.7 billion barrels of oil, with about 6.1 billion barrels of economically recoverable oil remaining. As of 2009, gas reserves of the North Slope were estimated at approximately 35 trillion cu ft. However, long-term (2005 to 2050) optimistic assumptions estimate the total amount of economically recoverable oil to total 35 to 36 billion barrels and economically recoverable gas to total 137 trillion cu ft. However, these projections are contingent on the opening of Area 1002 of the Arctic National Wildlife Refuge (ANWR) to extraction.¹⁵

Natural hazards in the area include extensive coastal erosion due climate change and human impacts. Large amounts of gravel were removed from Barrow's shoreline during the 1960s in order to support local construction. This removal resulted in the destabilization of shorelines and subsequent erosion. In addition, shorter periods of ice-cover in the Beaufort and Chukchi seas have resulted in greater and prolonged impacts of storm surges and general tidal forces on coastlines.¹⁶ Peat bluffs often experience the most rapid rate of erosion.¹⁷

Current Economy¹⁸

Barrow is the economic center of the North Slope Borough (the city's primary employer) and numerous businesses provide support services to oil field operations. State and federal agencies also provide employment. The midnight sun has attracted tourism, and arts and crafts provide some cash income. Many residents rely upon subsistence food sources; whale, seal, polar bear, walrus, duck, caribou, grayling, and whitefish are harvested from the coast or nearby rivers and lakes.¹⁹ In a survey conducted by the AFSC in 2011, community leaders reported that Barrow's economy is reliant on oil and gas exploration and extraction. Top employers in 2010²⁰ were North Slope Borough, North Slope Borough School, Arctic Slope Native Assoc., Native Village of Barrow, Ilisagvik College, Ukpeagvik Inupiat Corp., City of Barrow, Barrow Utilities, Harpoon Construction Group, and AK Commercial Co.

In 2010,²¹ the estimates per capita income was \$25,528 and the estimates median household income was \$78,250, compared to \$22,902 and \$67,097 in 2000, respectively. However, after adjusting for inflation by converting 2000 values to 2010 dollars,²² the real per capita income (\$30,116) and real median household income (\$88,232) indicate a decline in both individual and household incomes. However, it should be noted that data are based on wage earnings and does not take into account the value of subsistence within the local economy. In

¹⁵ U.S. Department of Energy. (2009). *Alaska North Slope Oil and Gas: A Promising Future or an Area in Decline?* Retrieved December 30, 2011 from: http://www.netl.doe.gov/technologies/oil-gas/publications/AEO/ANS_Potential.pdf.

¹⁶ See footnote 13.

¹⁷ See footnote 7.

¹⁸ Unless otherwise noted, all monetary data are reported in nominal values.

¹⁹ See footnote 5.

²⁰ 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/>.

²¹ U.S. Census Bureau (n.d.). *Profile of selected social, economic and housing characteristics of all places within Alaska*. Datasets utilized include the 2010 American Community Survey 5-year estimates. Retrieved November 1, 2011 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

²² Inflation was calculated using the Anchorage Consumer Price Index for 2000 and 2010 (retrieved January 5, 2012 from the Alaska Department of Labor, <http://labor.alaska.gov/research/cpi/inflationcalc.htm>).

2010, Barrow ranked 100th of 305 Alaskan communities from which per capita income was estimates, and 27th of 299 Alaskan communities from which median household income was estimated.

According 2006-2010 ACS estimates, 66.8% of residents aged 16 and older were part of the civilian labor force in 2010. In that year, unemployment was estimated at 14.3%, compared to 5.9% statewide; and an estimated 14.5% of residents were living below the poverty level, compared to an estimated 9.5% of Alaska residents overall. Of those employed in 2010, an estimated 37.9% worked in the private sector, an estimated 60.4% worked in the public sector, and an estimated 1.7% were self-employed.

Barrow supported a diverse economy in 2010. By industry, most (27.1%) employed residents were estimated to work in public administration sectors; followed by education services, health care, and social assistance sectors (26.4%) and transportation, warehousing, and utilities sectors (9.0%). By occupation type, most (41.6%) employed residents were estimated to hold management or professional positions; followed by sales or offices positions (24.8%); service positions (20.9%); production, transportation, or material moving positions (7.1%); and natural resources, construction, or maintenance positions (5.6%). An estimated 4.1% of employed residents worked in agriculture, forestry, fishing, hunting, and mining sectors; although the proportion of employment derived from fisheries sectors cannot be determined. Between 2000 and 2010, there was a significant proportional decline in education services, health care, and social assistance sectors; while there were increases in public administration, professional, scientific, management, administrative, waste management, arts, entertainment, recreation, accommodations, and food service sectors. Information regarding employment trends can be found in Figures 3 and 4.

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

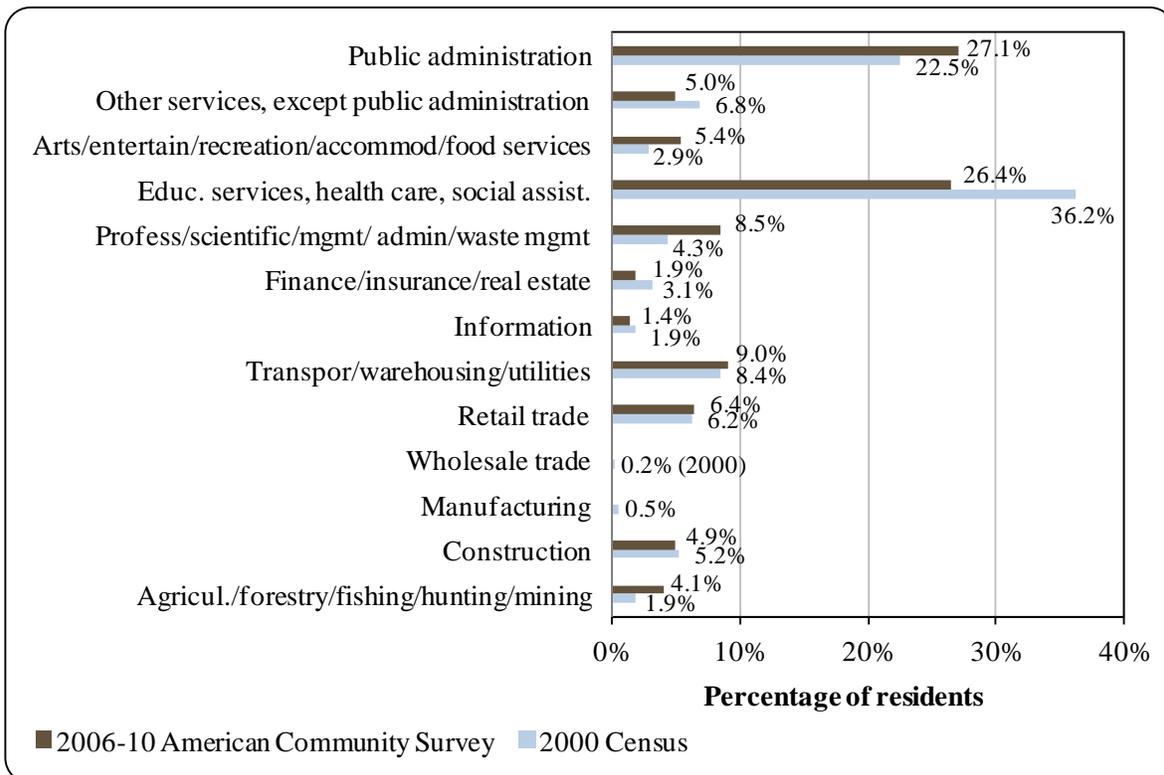
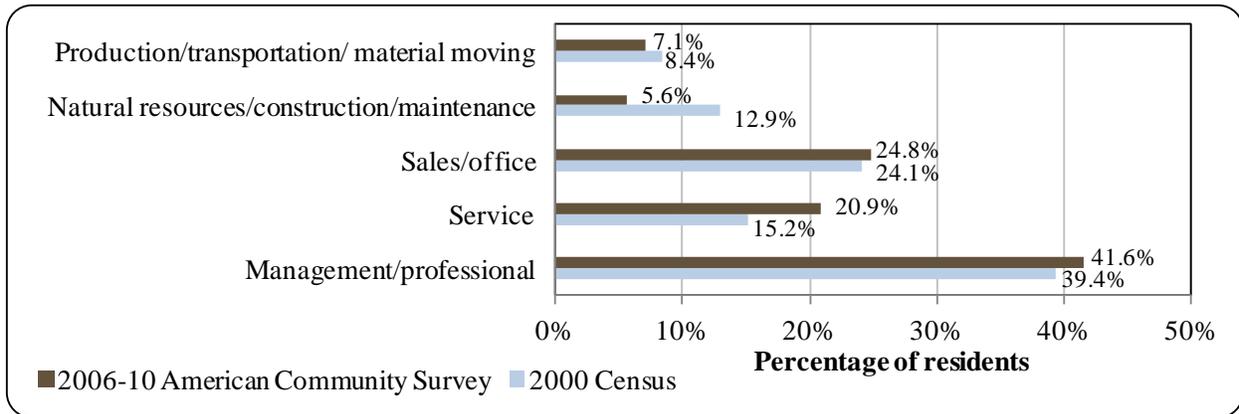


Figure 4. Local Employment by Occupation in 2000-2010, Barrow (U.S. Census).



According to the Alaska Local and Regional Information (ALARI) network compiled by the Alaska Department of Labor and Workforce Development (DOLWD),²³ most (54.1%) employed residents were estimated to work in local government sectors; followed by trade, transportation, and utilities sectors (9.0%); and professional and business service sectors (8.5%).

Governance

Barrow is a First-class city with a mayoral form of government. In addition, there is a U.S. Bureau of Indian Affairs (BIA) recognized Tribal government (Native Village of Barrow), and Alaska Native Claims Settlement Act (ANCSA) chartered Native village corporation (Ukpeagvik Inupiat Corporation). The regional ANCSA Native corporation representing Barrow is the Arctic Slope Regional Corporation. Other organizations located in the community include the Alaska Eskimo Whaling Commission, the Inupiat Community of Arctic Slope, and the North Slope Borough seat. The Alaska Department of Fish and Game (ADF&G) maintains an office in Barrow. The closest U.S. Bureau of Citizenship and Immigration Services (BCIS) office is located in Fairbanks, 500 mi southeast. The closest National Marine Fisheries Service (NMFS) office is located in Anchorage 725 mi southwest.

In 2010, the borough administered an 18.5 mills property tax, and the city administered a 5% accommodations tax, \$1 tobacco tax, and 3% alcohol tax. Total municipal revenues increase by 76.3% between 2000 and 2010 (after adjusting for inflation²⁴), thanks in large part to increases in the city’s general fund and outside grants awarded. In 2010, most locally generated revenue came from tobacco taxes, property taxes, sales taxes, property leases, Barrow sales tax distribution center, and gaming revenues. Outside revenue came chiefly from Community Revenue Sharing, grants, and payments in lieu of taxes. In that same year, the community was allocated \$301,812 in state allocated Community Revenue Sharing accounting for 8.0% of the municipal budget, compared to 1.7% from State Revenue Sharing in 2000. Between 2000 and 2010, Barrow received several state and federal fisheries-related grants including \$4.0 million for several boat ramp projects, \$1.25 million for several fish inventory, harvest, and health

²³ See footnote 20.

²⁴ Inflation calculated using Anchorage CPI from Alaska DOL: <http://labor.alaska.gov/research/cpi/cpi.htm>.

monitoring projects, and \$109,000 for harbor upgrades. Information regarding community finances can be found in Table 2.

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

Year	Total Municipal Revenue ¹	Sales Tax Revenue ²	State/Community Revenue Sharing ^{3,4}	Fisheries-Related Grants (State and Federal) ⁵
2000	\$1,666,477	\$0	\$28,217	\$1,250,000
2001	\$1,678,279	\$0	\$28,217	\$1,000,000
2002	\$1,643,953	\$0	\$26,500	\$209,000
2003	\$1,573,133	\$0	\$26,500	n/a
2004	\$1,381,242	\$0	-	\$956,620
2005	\$2,221,776	\$0	-	n/a
2006	\$1,521,623	\$0	-	n/a
2007	\$3,552,092	\$0	\$309,957	n/a
2008	\$4,835,833	\$0	\$265,968	n/a
2009	\$4,694,038	\$0	\$304,923	n/a
2010	\$3,799,695	\$0	\$302,812	\$2,000,000

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

¹ Alaska Department of Community and Rural Affairs. (n.d.). *Financial Documents Delivery System*. Retrieved at http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm. Data retrieved April 15, 2011.

² Alaska Department of Community and Economic Development. (n.d.). *Alaska Taxable (2000-2010)*. Retrieved at http://www.commerce.state.ak.us/dca/osa/osa_summary.cfm. Data retrieved April 15, 2011.

³ Alaska Department of Rev. (n.d.). *(2000-2009) Taxes and Fees Annual Report*. Accessed at www.tax.state.ak.us. Data retrieved April 15, 2011.

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

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

Infrastructure

Connectivity and Transportation

Regularly-scheduled jet services provide Barrow's only year-round access. The state-owned Wiley Post-Will Rogers Memorial Airport serves as the regional transportation center for the borough. The airport has a 6,500-ft long by 150-ft wide asphalt runway. Marine and land transportation provide seasonal access.²⁵ Roundtrip airfare between Barrow and Anchorage in June 2012 was \$566.²⁶

²⁵ Alaska Department of Community and Rural Affairs. (n.d.). *Community Database Online*. Retrieved October 17, 2011 from http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.htm.

²⁶ Airfare was calculated using lowest fare. Source: <http://www.travelocity.com> (retrieved November 22, 2011).

Facilities

Water is derived from a dam on Isatkoak Lagoon and is stored in a tank. Most residents have piped water. Funds have been requested to serve remaining houses and to construct a second water reservoir. The member-owned Barrow Utilities & Electric Cooperative operates the water and sewage treatment plants, generates and distributes electric power, and distributes piped natural gas for home heating. The North Slope Borough provides all other utilities. Refuse collection services are provided by the North Slope Borough. The Barrow Power Plant is fueled by natural gas. Businesses and services include several hotels, consulting and contracting services, internet services, community services, a church, and a restaurant.²⁷ Public safety services are provided by Borough policy and local state troopers. Fire and rescue services are provided by Borough volunteer fire department. Judicial services are provided by a local state magistrate. Additional public facilities include a youth center, community center, senior center, school gym, movie theater, museum, and one public and four school libraries.

In a survey conducted by the AFSC in 2011, community leaders reported that local infrastructure completed in the past 10 years includes sewage treatment facilities, and a new landfill. Infrastructure currently in progress or planned includes, harbor access roads, harbor dredging, broadband internet expansion, new dock space, community center/library expansion, and recreation center expansion. Currently there is no dock space available for permanent or temporary public moorage. Facilities are capable of handling regulated vessels including offshore rescue vessels, fuel barges, and container vessels. While there are no fisheries-related businesses or services in the community, a seafood processor is in the planning stages. Additional public services provided by the community include medical services, food bank, job placement services, public library, and a recreation center.

*Medical Services*²⁸

There are both a hospital and a clinic in the community providing primary health care, acute care, and emergency care, and are Community Health Aid Program sites. Specialized care includes a substance abuse treatment center, and mental health services.

*Educational Opportunities*²⁹

There are four schools operated through the borough school district. Barrow High School offers 9th through 12th grade instruction, and had 218 students enrolled and 19 teachers as of 2011. Eben Hopson Middle School offers 6th through 8th grade instruction, and had 202 students enrolled and 16 teachers as of 2011. Fred Ipalook Elementary offers preschool through 5th grade instruction, and had 638 students enrolled and 34 teachers as of 2011. Kiita Learning Community offers 6th through 12th grade instruction, and had 53 students enrolled and 5 teachers as of 2011. Iisagvik College offers associate degrees and certificates in a range of vocational, health services, art, and business fields.

²⁷ City of Barrow. (n.d.). Retrieved December 30, 2011 from: <http://www.cityofbarrow.org/content/view/13/19/>.

²⁸ See footnote 25.

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

Involvement in North Pacific Fisheries

History and Evolution of Fisheries

History of fisheries participation in the Barrow area dates back to almost 2,000 years ago, with the early Birnirk and Thule traditions. By 1867, commercial whaling was taking place along the Barrow coast, until markets declined in 1915. The introduction of outside whaling fleets radically changed traditional subsistence practices with the introduction of repeater rifles, and subsistence harvests rapidly increased.³⁰ Today, participation is limited mostly to subsistence and recreational fisheries. Commercial fishing is extremely limited in both the Beaufort and Chukchi Seas as the current Arctic Fishery Management Plan (FMP) allows only several small fisheries occurring in state waters.³¹ Barrow is located in the Arctic Management Area for federal management. In a survey conducted by the AFSC in 2011, community leaders reported while there is no commercial fishing within the community, subsistence fishing is practiced from June through September. In addition, the community participates in fisheries management through the support of research organizations including the Barrow Arctic Science Consortium (BASC) and the National Science Foundation (NSF). Other local advocacy organizations include the Barrow Whaling Captains Association and Alaska Eskimo Whaling Commission.

Processing Plants

According to the 2010 Alaska Department of Fish and Game's Intent to Operate list, Barrow does not have a registered processing plant. The closest seafood processing facility is located in Nome.

Fisheries-Related Revenue

Between 2000 and 2010, there were no reports of fisheries-related revenue being collected in either Barrow or the North Slope Borough (Table 3).

Commercial Fishing

Commercial fishing is prohibited in federally regulated waters within the Arctic Management Area. Only in state regulated waters are their limited commercial fisheries, none of which were prosecuted in 2010 by residents of Barrow.³² In 2010, 5 residents held a total of 7 permits issued by the Commercial Fisheries Entry Commission (CFEC), compared to 7 residents holding 8 CFEC permits in 2000 (Table 4). Salmon permits made up 71% while "other" shellfish permits made up the remaining CFEC permits issued that year. In 2000, 100% of CFEC were for salmon. Of the CFEC permits issued in 2010, a total of 71% were actively fished, compared to 63% in 2000. This varied by species from 100% of shellfish permits to 60% of salmon permits

³⁰ City of Barrow. (1970). *Barrow Plan*. Retrieved December 30, 2011 from: <http://www.commerce.state.ak.us/dca/plans/Barrow-CP-1970.pdf>.

³¹ North Pacific Fishery Management Council. (2009). *Arctic Fishery Management Plan*. Retrieved January 3, 2012 from: <http://www.fakr.noaa.gov/npfmc/PDFdocuments/fmp/Arctic/ArcticFMP.pdf>

³² Commercial Fisheries Entry Commission. (2010). *Preliminary Permit Activity for 2010*. Retrieved January 3, 2012 from: <http://www.cfec.state.ak.us/gpbycen/2010/185392.htm>

being fished that year. In 2010, salmon CFEC permits were fished in the Yakutat, Cook Inlet, and Bristol Bay set-gillnet fisheries. “Other” shellfish CFEC permits were fished in the southeast sea cucumber fishery. Between 2000 and 2010, no residents held Federal Fisheries Permits (FFPs) or License Limitation Program (LLP) permits (Table 4). In addition, no residents held quota share for halibut, sablefish, or crab between 2010 and when the programs began. In 2010, four residents held commercial crew licenses, compared to six in 2000. In addition, residents held majority ownership of three vessels that year, compared to two in 2000. No landings were reported in Barrow between 2000 and 2010 and landings made by residents of Barrow are considered confidential (Tables 5 through 10).

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

Revenue source	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Raw fish tax ¹	n/a										
Shared Fisheries Business Tax ¹	n/a										
Fisheries Resource Landing Tax ¹	n/a										
Fuel transfer tax ²	n/a										
Extraterritorial fish tax ²	n/a										
Bulk fuel transfers ¹	n/a										
Boat hauls ²	n/a										
Harbor usage ²	n/a										
Port/dock usage ²	n/a										
Fishing gear storage on public land ³	n/a										
Marine fuel sales tax ³	n/a										
<i>Total fisheries-related revenue</i> ⁴	<i>n/a</i>										
<i>Total municipal revenue</i> ⁵	<i>\$1.67 M</i>	<i>\$1.68 M</i>	<i>\$1.64 M</i>	<i>\$1.57 M</i>	<i>\$1.38 M</i>	<i>\$2.22 M</i>	<i>\$1.52 M</i>	<i>\$3.55 M</i>	<i>\$4.84 M</i>	<i>\$4.69 M</i>	<i>\$3.80 M</i>

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

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

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

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

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

⁵ Total municipal revenue represents the total revenue that the city brings in each year from all sources, including fisheries-related revenue streams. Alaska Department of Community and Rural Affairs. (n.d.) *Financial Documents Delivery System*. Retrieved April 15, 2011 at http://www.commerce.state.ak.us/dcra/commfin/CF_FinRec.cfm.

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Groundfish (LLP) ¹	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Active permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Crab (LLP) ¹	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Active permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Federal Fisheries Permits ¹	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Crab (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Other shellfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	2
	Fished permits	0	0	0	0	0	0	0	0	0	0	2
	% of permits fished	n/a	100%									
	Total permit holders	0	0	0	0	0	0	0	0	0	0	1
Halibut (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Herring (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0

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

Species		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sablefish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Groundfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Other Finfish (CFEC) ²	Total permits	0	0	0	0	0	0	0	0	0	0	0
	Fished permits	0	0	0	0	0	0	0	0	0	0	0
	% of permits fished	n/a										
	Total permit holders	0	0	0	0	0	0	0	0	0	0	0
Salmon (CFEC) ²	Total permits	8	7	6	6	7	7	8	8	7	6	5
	Fished permits	5	3	1	2	4	4	4	4	3	5	3
	% of permits fished	63%	43%	17%	33%	57%	57%	50%	50%	43%	83%	60%
	Total permit holders	7	6	5	5	6	7	7	9	7	6	4
<i>Total CFEC Permits²</i>	<i>Permits</i>	8	7	6	6	7	7	8	8	7	6	7
	<i>Fished permits</i>	5	3	1	2	4	4	4	4	3	5	5
	<i>% of permits fished</i>	63%	43%	17%	33%	57%	57%	50%	50%	43%	83%	71%
	<i>Permit holders</i>	7	6	5	5	6	7	7	9	7	6	5

¹National 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.]

²Alaska 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 Barrow: 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 Barrow ²	Total Net Pounds Landed In Barrow ^{2,5}	Total Ex-Vessel Value Of Landings In Barrow ^{2,5}
2000	6	0	0	2	0	0	0	\$0
2001	6	0	0	1	0	0	0	\$0
2002	4	0	0	2	0	0	0	\$0
2003	4	0	0	2	1	0	0	\$0
2004	6	0	0	2	0	0	0	\$0
2005	6	0	0	1	0	0	0	\$0
2006	7	0	0	3	0	0	0	\$0
2007	6	0	0	2	0	0	0	\$0
2008	6	0	0	2	0	0	0	\$0
2009	5	0	0	2	0	0	0	\$0
2010	4	0	0	3	0	0	0	\$0

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 Barrow: 2000-2010.

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

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

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

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

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

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

	<i>Total Net Pounds¹</i>										
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Crab	0	0	0	0	0	0	0	0	0	0	0
Finfish	0	0	0	0	0	0	0	0	0	0	0
Halibut	0	0	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0
Other Groundfish	0	0	0	0	0	0	0	0	0	0	0
Other Shellfish	0	0	0	0	0	0	0	0	0	0	0
Pacific Cod	0	0	0	0	0	0	0	0	0	0	0
Pollock	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0
<i>Total²</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
	<i>Ex-vessel Value (nominal U.S. dollars)</i>										
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>
Crab	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Finfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Halibut	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Herring	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Groundfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Shellfish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pacific Cod	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pollock	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sablefish	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Salmon	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<i>Total²</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>

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

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

² Totals only represent non-confidential data.

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

	<i>Total Net Pounds¹</i>										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	--	--	--	--	--	--	--	--	--	--	--
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	--	--	--	--	--	--	--	--	--	--	--
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	--	--	--	--	--	--	--	--	--	--	--
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	--	--	--	--	--	--	--	--	--	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	--	--	--	--	--	--	--	--	--	--	--
<i>Total²</i>	--	--	--	--	--	--	--	--	--	--	--
	<i>Ex-vessel Value (nominal U.S. dollars)</i>										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Crab	--	--	--	--	--	--	--	--	--	--	--
Finfish	--	--	--	--	--	--	--	--	--	--	--
Halibut	--	--	--	--	--	--	--	--	--	--	--
Herring	--	--	--	--	--	--	--	--	--	--	--
Other Groundfish	--	--	--	--	--	--	--	--	--	--	--
Other Shellfish	--	--	--	--	--	--	--	--	--	--	--
Pacific Cod	--	--	--	--	--	--	--	--	--	--	--
Pollock	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Salmon	--	--	--	--	--	--	--	--	--	--	--
<i>Total²</i>	--	--	--	--	--	--	--	--	--	--	--

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

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

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

² Totals only represent non-confidential data.

Recreational Fishing

One sport fish guide business was active in Barrow in 2000 and 2004-2005, although it is not clear whether it was the same business in each of those years. Sport fish guide licenses were held between 2000 and 2005, although numbers were low. In 2010, 108 sportfishing licenses were sold in the community and a total of 314 residents held sportfishing licenses, compared to 74 and 238 in 2000, respectively. The number of sportfishing licenses sold to residents peaked in 2010, and was at its lowest in 2008 (228).

The community is located in the North Slope-Brooks Range ADF&G Harvest Survey Area which includes all Alaskan waters, including drainages flowing into the Beaufort and Chukchi seas, north of the Brooks Range and east of Point Hope. Reports on total saltwater angler days fished between 2000 and 2010 are limited and trends are difficult to determine. In 2010, there were a total of 4,384 freshwater angler days fished, compared to 3,996 in 2000. In that year, non-Alaska residents accounted for 30.1% of freshwater angler days fished, compared to 13.1% in 2000. There is no kept/released charter information available for Barrow.

According to ADF&G Harvest Survey data, species targeted by private anglers in the area include all five species of Pacific salmon, rainbow trout, Dolly Varden char, whitefish, burbot, arctic grayling, Pacific halibut, rockfish, and razor clams. In a survey conducted by the AFSC in 2011, community leaders reported that recreational fishing within the community mainly targets Dolly Varden char, and pink and chum salmon. Sportfishing by residents is typically done by private vessel. Information regarding recreational fishing trends can be found in Table 11.

Subsistence Fishing

Subsistence fishing is an important part of Barrow's identity, culture, and economy. In a survey conducted by the AFSC in 2011, community leaders reported that species harvested include bowhead whale, seal, walrus, beluga whale, salmon, whitefish, and arctic grayling. Rod and reel, gill net, and jigging are techniques used to harvest fish in the summer, while gill nets and jigs are used in the winter.³³ Whale hunts are a central part of Barrow's identity, and a focal point of cohesion and reciprocity within the community.³⁴ According to the ADF&G *Community Subsistence Information System*,³⁵ species which Barrow residents harvest or use include bearded seal, bowhead whale, ringed seal, spotted seal, Arctic char, Arctic cod, Bering cisco, broad whitefish, burbot, capelin, flounder, grayling, humpback whitefish, lake trout, least cisco, northern pike, rainbow smelt, round whitefish, saffron cod, and sculpin. Information on subsistence participation is limited, and data regarding the percentage of households participating in subsistence activities are unavailable.

³³ North Pacific Fishery Management Council. (2009). *Arctic Fishery Management Plan*. Retrieved January 3, 2012 from: <http://www.fakr.noaa.gov/npfmc/PDFdocuments/fmp/Arctic/ArcticFMP.pdf>

³⁴ Field Notes. (n.d.). *Barrow Whaling*. Retrieved from: <http://www.polarfield.com/blog/barrow-whaling/>.

³⁵ 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).

Of the species listed by ADF&G in Table 13, sockeye salmon were harvested the most, followed by Chinook, coho, and chum salmon. In 2008, residents reported harvesting 742 salmon, compared to 231 in 2000. Salmon harvests peaked in 2005 when residents reported harvesting 780 fish. One Subsistence Halibut Registration Certificate (SHARC) between 2006 and 2010 although harvests were only reported in 2010. In that year, an estimated 800 lbs of halibut was harvested on 1 SHARC. Between 2000 and 2010, an estimated 43 beluga whales, 265 walrus, and 161 polar bears were harvested. Beluga whale harvests peaked in 2007 at an estimated 15 whales. Walrus harvests peaked in 2003 at an estimated 52 walrus. Polar bear harvests peaked in 2002 at an estimated 27 bears. Data on Steller sea lion, harbor seal, and spotted seal harvests are unavailable. Information regarding subsistence trend can be found in Tables 12 through 15.

Table 11. Sport Fishing Trends, Barrow: 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 Barrow ²
2000	1	2	238	74
2001	0	1	242	80
2002	0	1	240	58
2003	1	2	240	40
2004	1	2	240	46
2005	1	1	256	55
2006	0	0	243	50
2007	0	0	242	41
2008	0	0	228	49
2009	0	0	252	82
2010	0	0	314	108

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	n/a	743	523	3,473
2001	n/a	635	715	4,682
2002	11	547	819	3,393
2003	15	67	594	2,034
2004	n/a	96	1,131	2,084
2005	n/a	n/a	2,183	2,169
2006	18	341	495	2,609
2007	n/a	83	733	3,338
2008	140	n/a	990	4,469
2009	n/a	n/a	1,505	2,400
2010	n/a	n/a	1,319	3,065

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

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

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

Table 12. Subsistence Participation by Household and Species, Barrow: 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, Barrow: 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	15	12	10	n/a	n/a	n/a	221	n/a	n/a
2001	15	13	17	n/a	n/a	n/a	382	n/a	n/a
2002	13	7	5	n/a	n/a	n/a	343	n/a	n/a
2003	11	11	14	n/a	n/a	n/a	322	n/a	n/a
2004	21	16	34	5	n/a	n/a	340	n/a	n/a
2005	13	10	192	n/a	75	n/a	513	n/a	n/a
2006	9	6	3	n/a	5	n/a	123	n/a	n/a
2007	7	6	41	n/a	5	n/a	251	n/a	n/a
2008	11	10	154	n/a	10	n/a	578	n/a	n/a
2009	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2010	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Year	SHARC Issued	SHARC Cards Fished	SHARC Halibut Lbs Harvested
2003	n/a	n/a	n/a
2004	n/a	n/a	n/a
2005	n/a	n/a	n/a
2006	1	n/a	n/a
2007	1	n/a	n/a
2008	1	n/a	n/a
2009	1	n/a	n/a
2010	1	1	800

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

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

Table 15. Subsistence Harvests of Marine Mammal Resources, Barrow: 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	1	n/a	17	12	n/a	n/a	n/a
2001	1	n/a	36	16	n/a	n/a	n/a
2002	1	n/a	42	27	n/a	n/a	n/a
2003	2	n/a	52	23	n/a	n/a	n/a
2004	1	n/a	48	8	n/a	n/a	n/a
2005	7	n/a	13	19	n/a	n/a	n/a
2006	1	n/a	8	19	n/a	n/a	n/a
2007	15	n/a	14	12	n/a	n/a	n/a
2008	10	n/a	24	11	n/a	n/a	n/a
2009	2	n/a	10	8	n/a	n/a	n/a
2010	2	n/a	1	6	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.