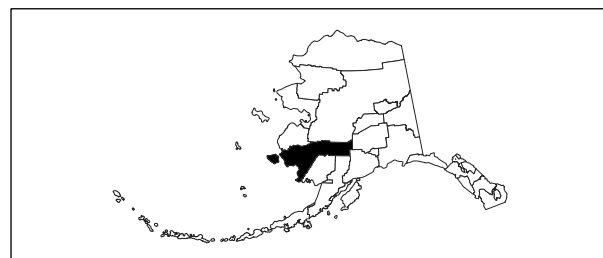


Home to the largest rural community in Alaska

The Bethel Census Area,¹ an area about the size of Kentucky, is in the Yukon-Kuskokwim Delta, a large coastal plain with 900 miles of shoreline along the Bering Sea in Southwestern Alaska where the Yup'ik Eskimo have lived for 3,000 years.

The city of Bethel,² with nearly a third of the census area's population, is the hub for 56 villages, 36 of which fall in the Bethel Census Area (see Exhibits 1 and 2); the rest are in its neighbors to the north, the Wade Hampton and Yukon-Koyukuk census areas. Bethel sits on the Kuskokwim River, 40 miles from the Bering Sea, and 400 air miles west of Anchorage. It is Alaska's largest rural community off the road



system, and it is the regional center for transportation, retail trade, and medical and government services.

With 16,940 people, the census area has a small seasonal economic base focused on natural resources, particularly salmon and herring roe, and a cultural tradition of subsistence hunting and fishing. Government jobs, including public education and village organizations, account for almost 50 percent of the region's payroll jobs.³

The western half of the census area⁴ is in the Yukon Delta National Wildlife Refuge, the second-largest wildlife refuge in the country. The refuge supports one of the largest aggregations of water birds in the world, according to the U.S. Fish & Wildlife Service, which oversees the refuge.

Historically, caribou were abundant in the Yukon-Kuskokwim Delta – their numbers peaked in the 1860s – but with the exception of small remnant herds, they had disappeared. Yet in recent years, up to 40,000 caribou from the Mulchatna herd have migrated onto eastern parts of the refuge in the fall and winter, according to Fish & Wildlife.

¹ A census area is the U.S. Census Bureau's name for a county equivalent. The area in Alaska that is outside boroughs and the Anchorage municipality is divided into census areas.

² All references in this article to "Bethel" are to the city of Bethel.

³ Payroll jobs, also called wage and salary jobs, do not include the self-employed, including fishermen.

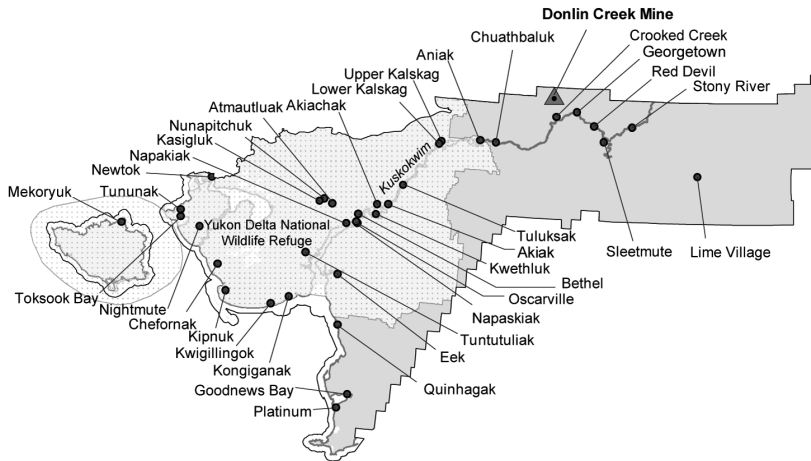
⁴ Nearly all the Wade Hampton Census Area is also within the refuge.

1 Bethel Census Area Communities Population, 2008

	2008 Population Estimate		2008 Population Estimate
Bethel Census Area Total			16,940
Akiachak	659	Mekoryuk	195
Akiak	341	Napaskiak	348
Aniak	494	Napaskiak	435
Atmautluak	306	Newtok	357
Bethel	5,665	Nightmute	249
Chefornak	470	Nunapitchuk	540
Chuathbaluk	88	Oscarville	95
Crooked Creek	132	Platinum	47
Eek	272	Quinhagak	661
Georgetown	3	Red Devil	48
Goodnews Bay	225	Sleetmute	70
Kasigluk	578	Stony River	51
Kipnuk	696	Toksook Bay	605
Kongiganak	445	Tuluksak	500
Kwethluk	741	Tuntutuliak	417
Kwigillingok	352	Tununak	332
Lime Village	15	Upper Kalskag	235
Lower Kalskag	256	Balance of Census Area	17

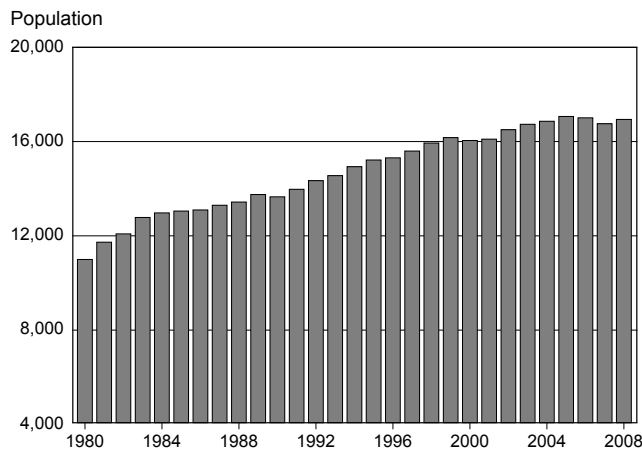
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section, Demographics Unit

2 The Bethel Census Area Alaska, 2009



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

3 Decades of Steady Growth Bethel Census Area Population, 1980 to 2008



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

Bethel was settled by the Yup'ik. They called the village "Mumtrekhlogamute," meaning "Smoke-house People."

Russian explorers encountered the Yup'ik in the 1800s. By 1880, what is now Bethel became an Alaska Commercial Company Trading Post and that year the U.S. Census counted 41 people. The Moravian Church set up a mission in the area in 1884. By 1905, there was a post office, and Bethel began growing into the regional hub it is today.

The city was incorporated in 1957 and its 2008 population was 5,665. The Bethel Census Area's

population has also grown but recently began leveling off. From 1980 to 2008, it grew by an average annual rate of 1.6 percent, reaching 16,940 in 2008. (See Exhibit 3.)

The largest employer

Local government employment in the area dwarfs all other industries. Forty-one percent of all jobs and 33 percent of all wages in 2008 came from jobs for local governments, which include city and tribal government, and public schools. (See Exhibit 4.)

Jobs in the census area's three K-12 school districts – the Lower Kuskokwim, Yupiit and Kuspuk – made up 48 percent of all local government employment in 2008, and the Lower Kuskokwim School District was the census area's largest employer. (See Exhibit 5.) The census area had 398 teaching assistants in 2008, making that occupation the largest.

Healing is big business

Health care makes up the largest slice of all private employment and wages in the census area – 16 percent of employment and 25 percent of wages in 2008.

The Yukon-Kuskokwim Health Corporation, a federally recognized Indian Health Service provider, is the largest private employer in the area and was the 16th largest in the state in 2008. (See Exhibit 5.) As an Indian Health Service provider, most of the services provided to patients are paid for by the federal government.

YKHC runs the 50-bed Yukon-Kuskokwim Delta Regional Hospital in Bethel, a 100,000-square-foot acute care medical facility, and five regional clinics – in Aniak and Toksook Bay in the Bethel Census Area, and in Emmonak, St. Mary's and Hooper Bay in the Wade Hampton Census Area. YKHC also runs the Community Health Aide Program that provides primary health care in 47 village clinics in the Y-K Delta, 30 of which are in the Bethel Census Area.

In 2008, YKHC generated 93 percent of all health care employment in the Bethel Census

Area and 96 percent of all health care wages.

Not a Wal-Mart in sight

Retail trade is the census area's second-largest private industry, representing 10 percent of all employment and 5 percent of all wages. Thirty-six percent of the census area's retail trade is in Bethel, which has the two largest retail employers, Alaska Commercial Company and Swanson's.⁵

Thirty-nine retail stores do business in the outlying villages. Native village corporations⁶ own most of the retail stores in the villages. For instance, Nunapitchuk Limited, a village corporation, owns the store in Nunapitchuk, the largest of the stores in the villages. An AC store in Aniak is the only chain store in the census area outside Bethel.

Planes, barges and ice-road truckers

Goods often travel by several forms of transportation – barge, air, truck or even four-wheeler – before they get to their final destination. For example, building materials for a village school may be barged to Bethel, trucked from the city dock to the airport, flown by small cargo plane to the village airport, and then transported by a four-wheeler and trailer to the worksite.

Transportation made up 6 percent of the census area's employment in 2008 and 7 percent of its wages. It is the third-largest private industry in the census area.

Eighty-nine percent of the census area's transportation jobs are in Bethel, and air transportation makes up most of it. The Bethel Airport, the hub for flights carrying people and cargo to and from Y-K Delta villages, is Alaska's third-busiest airport.

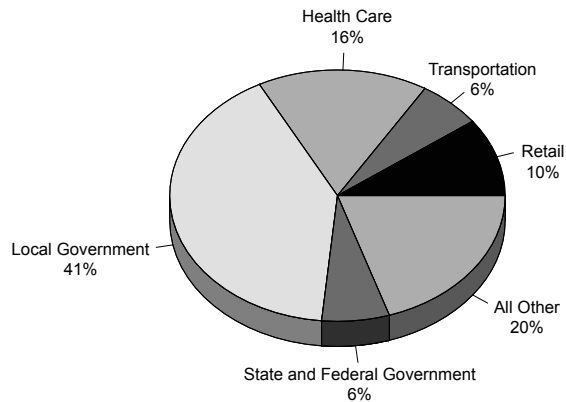
Water and trucking transportation are also important. Before freeze-up, fuel is barged up the

⁵ AC, as locals call it, sells groceries and general merchandise; Swanson's and its subsidiaries sell everything from boats, four-wheelers and lumber to groceries.

⁶ As far as regional Native corporations, Calista Corp.'s region covers the Bethel and Wade Hampton census areas. Calista is the second largest of the 13 regional corporations established under the Alaska Native Claims Settlement Act of 1971. Calista's 56 original villages are organized in 46 for-profit village corporations, each with surface estate ownership, according to Calista.

Local Government is Big 4

Share of employment by industry, 2008



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

Government is a Major Employer 5

Bethel Census Area's top 10 employers, 2008

Employer	Average Monthly Employment ¹
Lower Kuskokwim School District	1,000 to 1,249
Yukon-Kuskokwim Health Corporation	1,000 to 1,249
Association of Village Council Presidents	250 to 499
AVCP Regional Housing Authority ²	100 to 249
Kuspuk School District	"
Coastal Villages Seafoods Inc.	"
City of Bethel	"
Swanson's	50 to 99
Alaska Commercial Company	"
Hageland Aviation Services	"

¹ These are ranges that a company's or organization's specific employment number falls into; the ranking is based on the specific employment number. If two employers had the same number of employees, they were ranked by unrounded employment.

² The acronym AVCP stands for Association of Village Council Presidents.
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Kuskokwim River to communities and stored in large tanks. Goods are often barged to a village once or twice a year. After the Kuskokwim freezes, an ice-road is plowed, and it is used by trucking companies delivering goods to villages along the river and by private citizens moving between communities.

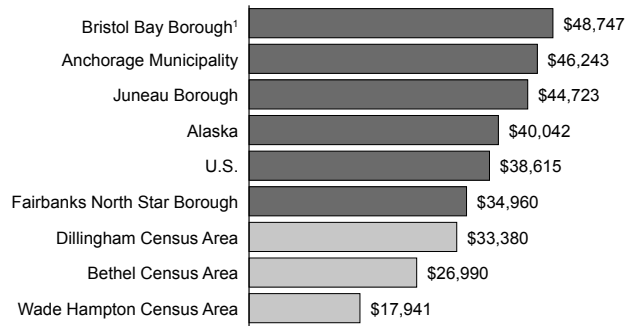
Fishing fills nets and wallets

Fishing, both commercial and subsistence, is an integral part of life in Bethel and the other communities in the census area, as well as in the rest of the Y-K Delta.

After a precipitous drop in the late 1990s, the number of commercial permits fished

6 Incomes Low in Southwest Alaska

Per capita income, 2007



¹ The Bristol Bay Borough, small in size compared to most of the state's other boroughs, has only three communities: Naknek, King Salmon and South Naknek.

Source: U.S. Department of Commerce, Bureau of Economic Analysis

in the census area has hovered around 700 each year – a 40 percent drop from the peak in 1995. Though declining salmon stocks, combined with low salmon prices and high operating costs, have meant fewer people fish their driftnet permits, many permit holders have held onto their permits in hopes of better times.

The area's Community Development Quota group, the Coastal Villages Region Fund, has had a much more profitable decade. Begun in 1992, the Western Alaska CDQ Program is a federal fisheries program⁷ that allocates a percentage of all Bering Sea and Aleutian Islands quotas for pollock, halibut, Pacific cod, crab and bycatch species to eligible communities to generate income to promote fisheries-related economic development in Western Alaska. There are six CDQ groups that include 65 communities within 50 miles of the Bering Sea coastline. The communities are the shareholders, not individuals.

Seventeen of the 20 communities that make up the Coastal Villages Region Fund are in the Bethel Census Area.⁸ Looking at the 2009 season, for example, CVRF said 500 permit holders delivered 4 million pounds of salmon to its subsidiary, Coastal Villages Seafoods, earning \$1.8

⁷ The National Oceanic and Atmospheric Administration's National Marine Fisheries Service oversees the program, which was granted perpetuity status during the 1996 reauthorization of the Magnuson-Stevens Act.

⁸ The remaining three communities are in the Wade Hampton Census Area.

million; 170 permit holders delivered 310,000 pounds of halibut and earned \$750,000.⁹

CVRF opened a regional fish processing plant in Platinum in July; it processed 2.3 million pounds of salmon purchased from 530 permit holders last summer, and the plant employed 154 people, 130 from the CVRF region. The Platinum plant and CVRF's Quinhagak plant processed 4 million pounds total last summer. Coastal Villages Seafoods owns five tenders, two barges and charters others. It also operated halibut plants in six villages last summer.¹⁰

CVRF will finish building two "fisheries support centers" using local labor in 2009,¹¹ adding to the 14 that are already operating in villages. At support centers, people can apply for jobs and scholarships, get training, get welding and repairs for their boats, have space for meetings, and even use bunk space if necessary.

Subsistence

In all the communities, subsistence fishing, hunting, trapping and gathering play a pivotal role.

Communities in the Bethel Census Area consumed 9.48 million pounds of subsistence resources in 2000, according to one study.¹² The average annual subsistence harvest was 598 pounds per person – the fourth-highest for a borough or census area in the state.

For Bethel, it was 260 pounds per person, compared to 400 to 800 pounds for villages in the census area.

King, or chinook, chum, coho and sockeye salmon and herring roe are important subsistence staples, along with moose, bear, caribou, seal meat and seal oil. Reindeer are taken on

⁹ CVRF discusses the season in its Coastal Villages Seafoods Preliminary Report 2009 in the *Neqsurtet Nepiit*, the group's Summer 2009 newsletter. Aside from Coastal Villages Seafoods, CVRF has subsidiaries for groundfish, crab, Pacific cod and pollock.

¹⁰ The six are Cheforak, Kipnuk, Mekoryuk, Toksook, Tununak, and in the Wade Hampton Census Area, Hooper Bay.

¹¹ CVRF says its payroll during peak construction was \$58,000 a month.

¹² Alaska Department of Natural Resources, Division of Oil and Gas, Holitna Basin exploration license, 2006

Nunivak Island, and musk oxen on Nunivak and Nelson Island.

Other subsistence resources include waterfowl, eggs from nesting birds, whitefish, sheefish, blackfish, pike, clams, snowshoe hares, beavers and berries. Natives use subsistence resources to make baskets, dolls and carved ivory, among other things, to use or sell.

High poverty, high costs, low income

The Bethel Census Area's poverty rate has been around 21 percent since 2000, about 12 percent higher than the state as a whole.

The census area also generates only about one payroll job for every three people who live there. Statewide, the ratio is close to one payroll job for every two people.

The monthly unemployment rates in 2008 were as high as 16 percent and the average per capita income in 2007 was \$26,990, compared to \$40,042 for the whole state. (See Exhibit 6.)

The high cost of living in the area compounds the difficulties for those with low incomes. A recent McDowell Group study indicates that living in the Bethel/Dillingham area costs 49 percent more than living in Anchorage.¹³ (See Exhibit 7.)

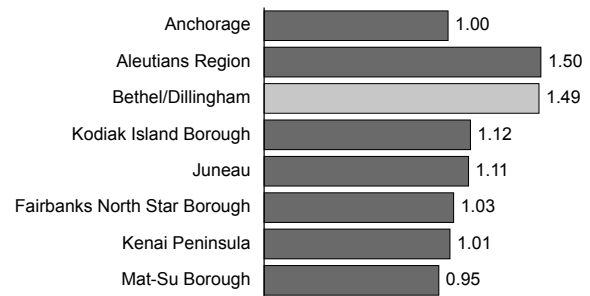
The Bethel Census Area's average annual wages of \$33,190 ranked 21st out of the state's 29 boroughs and census areas in 2008. Statewide, they were \$45,350. Private-sector jobs earned \$35,360, and state and federal jobs earned even more – \$59,930 and \$49,860. Jobs with the census area's largest job sector, local government, earned the least, \$26,630.¹⁴

When looking at poverty rates, it is important to remember that they are strictly income-based, and ignore the subsistence economy. The traditional subsistence lifestyle sidesteps the need to

¹³ The study is called the Alaska Geographic Differential Study 2008.

¹⁴ Many of the local government jobs in the census area are public administration jobs with traditional, village and tribal councils. The wages for the census area's public administration jobs were the third-lowest of all boroughs and census areas in the state in 2008, possibly due to more part-time jobs.

A High-Cost Place to Live Geographic cost differentials, Alaska 2008



Note: Anchorage was used as the base city and assigned a value of 1.00 from which comparisons of the other areas could be made. For example, Mat-Su's index number of 0.95 means that living costs there are 5 percent lower than in Anchorage; the Bethel/Dillingham region's 1.49 index number means costs there are 49 percent higher than in Anchorage.

Source: McDowell Group, Alaska Geographic Differential Study 2008

pay money for all food, which comes at a high cost in rural Alaska. As a result, income-based poverty levels may not represent the same reduced quality of living that they would in an urban setting.

A young Yup'ik population

The Bethel Census Area has the largest Native population, mostly Yup'ik, in the state outside Anchorage.

Eighty-two percent of the census area's population in 2006¹⁵ was Native and 15 percent was white, while 18 percent of the statewide population was Native and 72 percent was white.

Fifty-nine percent of the census area's population was 18 or younger in 2008, compared to 29 percent statewide. The census area's median age is 23.5, the state's third-lowest after the Wade Hampton Census Area (19.4) and Northwest Arctic Borough (22.6).

The Bethel Census Area had the state's fifth-highest birthrate, with 26.3 births per 1,000 people; the statewide rate was 16.6. Consistently high birthrates – well above 20 percent – have served to offset population losses from other fac-

¹⁵ The most recent year for which data are available. This population section is based on the Alaska Department of Labor and Workforce Development's 2006 and 2008 population estimates: 2006 for race and 2008 for ages and birthrates.

tors. More people moved out of the census area than into it during the 2002 to 2008 period.

Gold and fish in the future?

The Donlin Creek Mine project, located roughly 175 miles northeast of Bethel, contains one of the world's largest deposits of gold, according to its owners, NovaGold Resources and Barrick Gold Corp. They have said the mine could be

operational as early as 2015, it would create 400 to 500 jobs and it would run for at least 20 years.

That project, along with the Coastal Villages Region Fund's projects – including the new fish processing plant in Platinum – while not solving all the Bethel Census Area's employment woes, indicate that the possibility for more jobs in the future is real.

Commercial Fishing – One of the Most Dangerous Occupations

Historically, commercial fishing is one of the most dangerous occupations in Alaska and the U.S. as a whole. The fatality rate for commercial fishermen is 30 times greater than the rate of all U.S. workers.

U.S. Coast Guard data show that 75 percent of all commercial fishing deaths are the result of fishermen unexpectedly finding themselves in the water and facing death by drowning or hypothermia.

Of the occurrences that lead to water fatalities, about 75 percent are from flooding, fire and capsizing, and 25 percent are from falls overboard.

Coast Guard data also indicate that when commercial fishermen properly utilize immersion suits, their chance of survival increases by more than 200 percent.

Therefore, it's essential that every crew member has a serviceable and properly fitting immersion suit on board, and that boat masters regularly conduct drills requiring everyone to put on the immersion suits.

Other major factors that affect fatal accident rates include crew training, alcohol use, fatigue, working alone, equipment maintenance, vessel stability and operating in heavy weather.

Safety consultants with the Alaska Department of Labor and Workforce Development's Occupational Safety and Health are available to provide free advice and tools to help reduce workplace injuries. AKOSH is within the Labor Standards and Safety Division. For more information, call (800) 656-4972.