

When the North Slope is home

The people, history, and economy outside of Prudhoe Bay

By **CONOR BELL**

Hundreds of millions of years ago, shale, sandstone, and other organic matter was deposited on the northern coast of Alaska, washing in with the tides or sliding off the mountain ranges. These substances lay dormant, compressing into oil over time.

It was the discovery of this massive oil deposit at Prudhoe Bay in 1968 that brought the North Slope's people and geology to the world stage and changed the course of Alaska's future, ushering in the construction of the Trans-Alaska Oil Pipeline and bringing in a flood of outside workers and interests.

But there's more to the history and economy of the North Slope, which is home to a people whose ancestors have over thousands of years developed a culture adapted to one of the world's harshest inhabited climates, and who live largely outside oil's sphere.

Vast but sparsely inhabited

The North Slope Borough encompasses 95,000



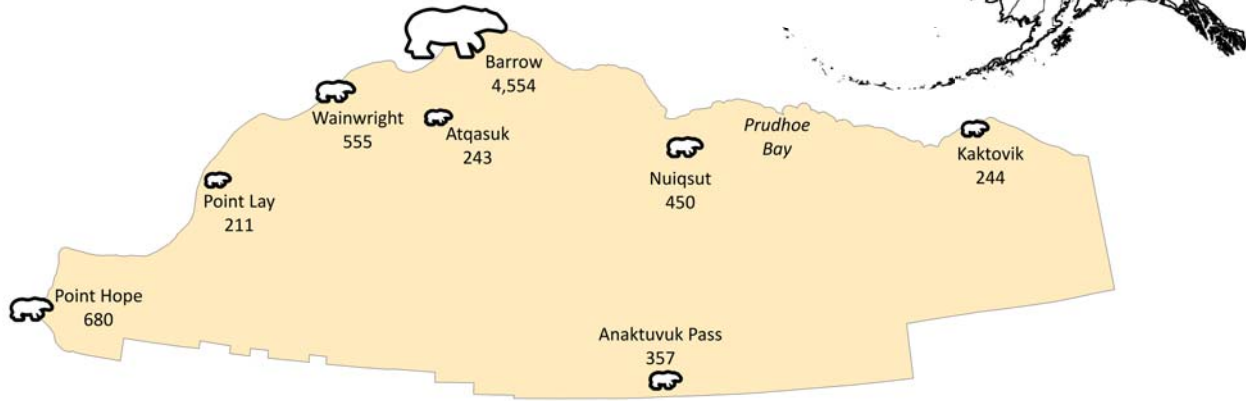
Above, salmon hangs out to dry in Kaktovik. Photo by Flickr user Judith Slein

square miles, beginning along Alaska's northern coast and stretching inland. It's the nation's largest organized county-equivalent by area at almost five times the size of San Bernadino County, the largest outside of Alaska.

In 2015, the borough had just one resident for every 13 square miles. Barrow, its hub and the northernmost city in the United States, has over half the

1 North Slope Communities and Populations

2015



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

area's population of 7,305. (See Exhibit 1.)

The other communities are more removed from oil-related activity and rely largely on subsistence. Roads are scarce and expensive to develop and maintain due to permafrost, and locals use snowmachines and four-wheelers for transportation. But while North Slope village life is remote and steeped in traditional practices, all of the smaller communities have modern amenities, including electricity and public water and sewer.

Most residents have strong historical ties to the region. About 70 percent are Alaska Native, mainly Inupiat, with the smaller villages often over 90 percent Native.

Historically, few people have relocated to the area, so most population growth has come from high birth rates (see Exhibit 2), which are common in rural Alaska. As a result, the population is younger than the state as a whole, at a 2015 median of 29 years in Barrow versus 35 statewide.

A storied past

Inupiat ancestors migrated from Siberia around 20,000 years ago, crossing the Bering land bridge in search of resources. The migration was gradual, and the original inhabitants may have lingered between continents for thousands of years.

Originally, they lived mostly off caribou and seal, but around 500 C.E. the coastal

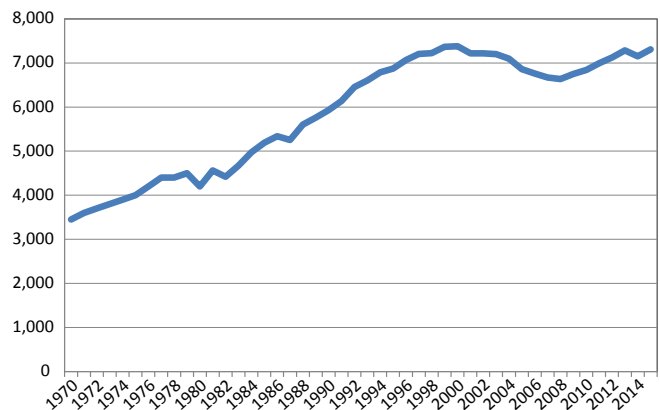
populations began hunting whales — another resource that would transform the area in the coming centuries. Early crews would shoot a whale with a harpoon attached to airbags, lance off its fluke, retreat, and track the giant mammal through its death throes: a dangerous process that carried prestige as crews distributed their catch throughout their communities.

Although Northern Inupiat were one of the last Alaska Native groups to come into contact with Europeans, they had western tools and products well before any ships arrived. The earliest voyagers to the Arctic were

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Growth Through High Birth Rates

NORTH SLOPE RESIDENT POPULATION, 1970 TO 2015



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



Above, an x-band scanning ARM precipitation radar at the Barrow Arctic Research Center. Photo by ARM Climate Research Facility

shocked when villagers asked to trade for tobacco and iron.

Slope communities had obtained goods from outlying villages through a network of trade fairs throughout Alaska, where European products were available via Siberians who had arrived by boat. This allowed villages to benefit from each other's differing skills and natural resource access. The fairs also created temporary truces between tribes that had otherwise antagonistic relationships, though trading disputes occasionally prompted violence.

European whalers transform the economy

The first contact with Europeans came when British ships attempted to cross the Northwest Passage. When explorers reached the northern Alaska coast in the mid-19th century, an estimated 3,500 Inupiat lived along the North Slope. Soon after, European whalers began trading with the Inupiat in Ukpiagvik, which is now Barrow.

The Europeans introduced cash, paying thousands of dollars for whale baleen and oil. Money made the exchange of goods more flexible, both with European traders and other villagers. Many subsistence whaling crews converted to for-profit enterprises, and locals worked as deckhands on European ships.

By the early 20th century, whale populations had been depleted. Whaling ships stopped arriving, and residents returned to subsistence, albeit with fewer natural resources.

European intervention on the North Slope was less authoritarian than Russian settlements further south. However, the explorers brought new diseases that devastated the villages. In 1900, Barrow had an influenza outbreak that killed more than 200 people. Two years later, a measles epidemic killed 100. Europeans also introduced alcohol to the North Slope, which had lasting health and social consequences.

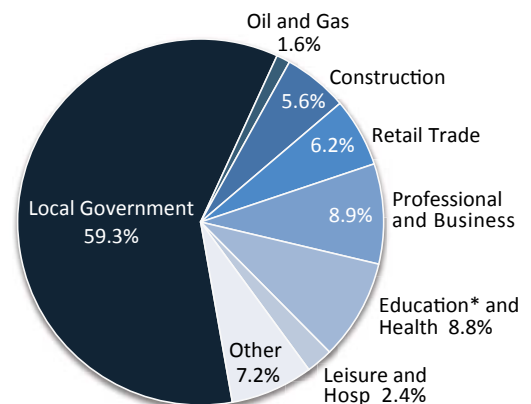
Oil changes everything

After commercial whaling dwindled, the North Slope returned to relative obscurity until the Cold War, when the Air Force built a

White Alice communication site near Point Hope as part of a statewide radar network designed to detect Soviet threats. Conflict between Alaska Natives and the federal government over land and resources began to ramp up.

In 1960, the U.S. Atomic Energy Commission proposed

3 Most Work in Government NORTH SLOPE BOROUGH RESIDENTS, 2014

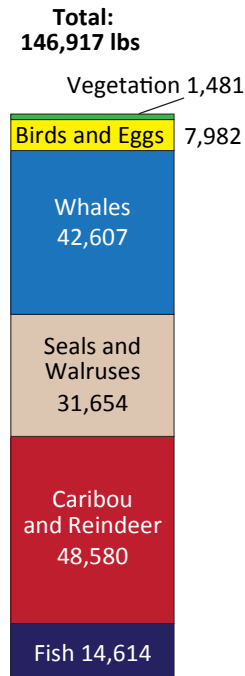


*Barrow has a small private college, Iġisaġvik College, that has around 250 students. Iġisaġvik is one of the city's major employers.
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

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Importance of Subsistence

EXAMPLE VILLAGE:
POINT LAY, 2012,* IN LBS



Est. lbs harvested

*Most recent data for North Slope
Source: Alaska Department of Fish and Game

clearing out a harbor near Point Hope using nuclear bombs. Residents along the northern coast successfully fought the project, and in the process formed Inupiat Patoit, the first Inupiat political organization.

While oil's presence had been noticed around the time of the Northwest Passage exploration, the extent of the opportunity wasn't widely apparent until 1968, when the oil company ARCO found a giant deposit in Prudhoe Bay.

The stakes were suddenly much higher. Realizing that transporting oil by road, air, or sea was impractical, three oil companies entered a joint venture to construct a pipeline from Prudhoe Bay to Valdez. Alaska held a land lease sale in 1969, bringing in \$900 million.

The planned pipeline route crossed tribal lands, granting Native groups greater bargaining power and prompting oil companies to help lobby for Native settlements. The Alaska Native Claims Settlement Act of 1971 distributed \$1 billion and 40 million acres of land to 12 regional corporations. A 13th corporation, made up of Alaska Natives living outside the state, received

The challenge of counting workers at Prudhoe Bay

Though the majority of people on the North Slope at any given time are in Prudhoe Bay, almost no one lives there year-round, and they aren't considered residents. Workers fly in to complete their shifts, and there are no neighborhoods or apartment complexes.

That makes counting permanent residents a challenge. The U.S. Census relies on self-reporting, and many workers staying in group quarters at Prudhoe Bay reported it was their "usual residence" in 2010, though almost none did in the previous census. As a result, Prudhoe Bay, which the census gave a population of 5 in 2000, had 2,174 reported residents in 2010.

While Slope employment grew considerably during the period, there is no evidence of workers taking up permanent residence. That increase should therefore be viewed as a statistical anomaly rather than true population growth.

money but no land.

North Slope Inupiat created the Arctic Slope Regional Corporation, or ASRC, which became heavily involved in leasing land to oil companies. Today, ASRC continues to focus on energy as well as federal contracting, generating \$2.6 billion in revenue during 2014. Its annual average dividend to shareholders hit a high of \$10,000 in 2013, but has fallen to an average of \$5,000 because the corporation is heavily invested in oil support industries and has been hit by lower prices and dwindling production.

Two years after creating ASRC, residents formed the North Slope Borough, which granted residents more political power and self-determination as well as the ability to levy property taxes on oil companies.

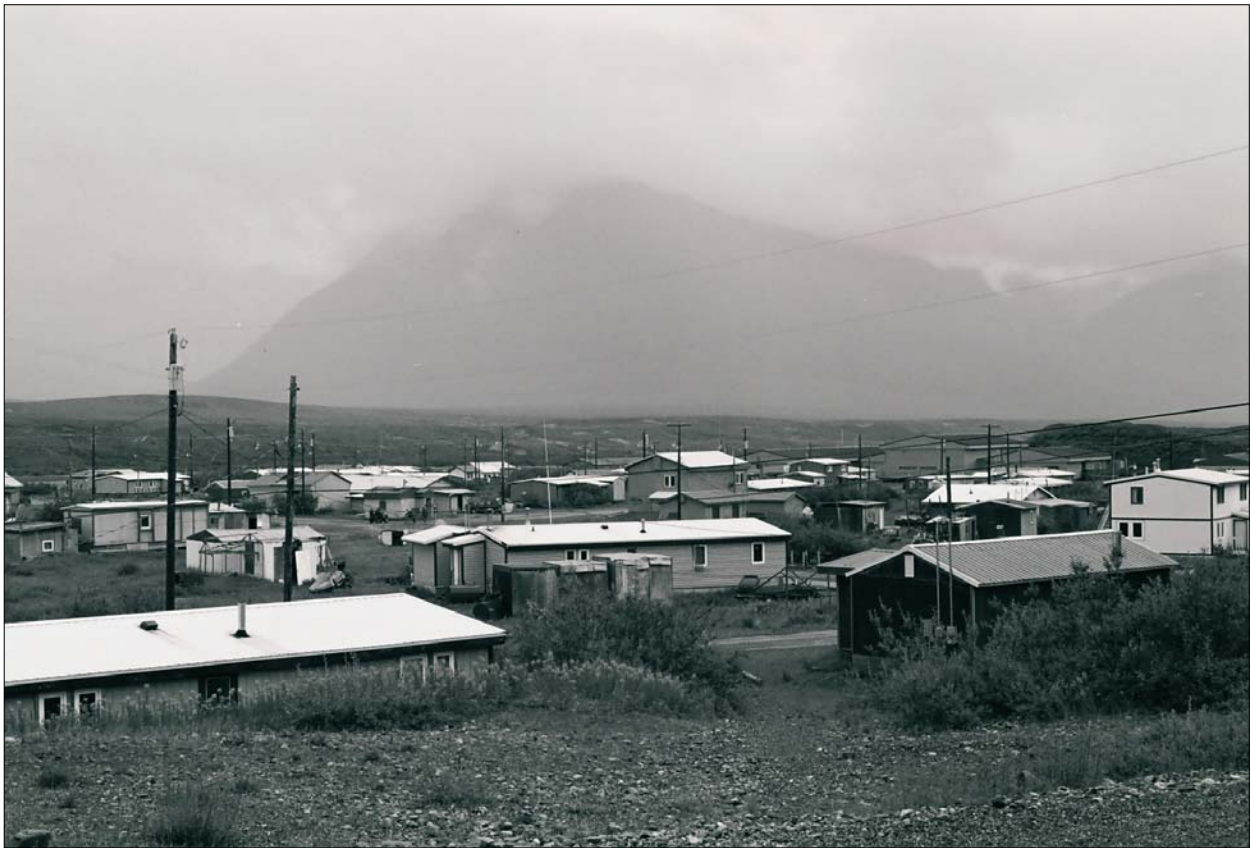
Pipeline construction was slow to ramp up because of the long permitting process, but in 1975, North Slope employment tripled.

While some residents feel they weren't sufficiently compensated for activity on land that was historically theirs, others oppose development altogether.

Offshore drilling and the prospect of drilling in the Arctic National Wildlife Refuge, located east of Prudhoe Bay, have stoked heated debates in Washington for years over tradeoffs between conservation and economics.

Most locals not part of oil industry

While the development of Prudhoe Bay proved to be



Above, the town of Anaktuvuk Pass. Photo by Flickr user Ian Turner

the biggest economic event in Alaska's history, oil extraction occurs far away from most residents, and few participate directly.

Only 14 percent of people who worked in the borough during 2014 were North Slope residents. More than 20,000 people commuted to the North Slope in 2014 to work in jobs directly and indirectly related to oil and gas. Of those, 40 percent came from outside of Alaska, and most of the remaining 60 percent were from Anchorage or the Matanuska-Susitna Borough.

Oil industry jobs tend to be high-paying. Those from outside the borough who worked all four quarters in 2014 earned an average of \$108,600. Companies pay higher wages to entice workers to the harsh conditions and isolation of Prudhoe Bay. While engineers and oil field managers are some of the highest earners in the state, even service workers such as cooks and janitors make much more on the North Slope than they would in Anchorage or Fairbanks.

However, residents who did work in Prudhoe Bay made much less on average than those commuting in from elsewhere — residents tended to work fewer quarters and were also more likely to be in the lower-paying occupations.

Fifty-nine percent of the borough's working residents were in local government in 2014 (see Exhibit 3), and there is approximately one government job for every four year-round residents. Over 80 percent of these jobs are in Barrow, the borough seat.

Barrow also has a small private college, Iḷisaġvik, and a visitor industry supported by tourists as well as scientists researching the Arctic. The flow of travelers allows for more jobs in restaurants, hotels, and stores than similar-sized communities would otherwise be able to sustain.

The value of subsistence

In addition to ASRC shares, residents benefit from oil through higher tax revenues, allowing for better public facilities and more local government employment. But per capita personal income is below both state and national levels, and living on the North Slope isn't cheap. High transportation costs and a limited customer base make goods significantly more expensive. For example, in January 2016, gas was \$6.50 a gallon in Barrow and \$8.85 in Anaktuvuk Pass.

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began in December of 1984 and continued for 46 additional months. Between 1984 and 1988, the sector lost an average of 1,800 jobs, or 9 percent.

Other private industries weren't hit so hard

The largest and least coherent service-providing sector at the time was called services and miscellaneous, and it comprised accommodations, professional and business services, education and health services, and "local services" — an eclectic group made up of providers like mechanics, hairdressers, and dog groomers.

This hodgepodge of employers wasn't hit as hard, largely because it was propped up by a relatively stable health care industry. Losses began in April of 1986 and continued for just 18 months.

Like the mining industry, losses were spread across two calendar years, which understates the impacts when looking at average annual employment losses; they amounted to 3 percent in 1986 and 1987.

Losses peaked in December 1986 with an 8 percent decline from the prior December. These losses were driven mostly by oil-related employers such as engineering and geophysical service companies.

Government was buoyed by federal agency growth

The sudden loss of oil revenues in the 1980s, which

like today funded the bulk of Alaska's discretionary state government spending, sent state and local government budgets reeling. Unlike today, though, the state hadn't amassed savings accounts to weather the storm, and state capital and operating budgets were slashed.

State government employment started to fall in August of 1986 and fell through January of 1988. Average losses from 1985 to 1986 were small at just over 1 percent, but by 1987 average annual employment was down 7 percent.

Local government job losses were less severe, at less than 1 percent in 1986 and 3 percent in 1987, but lasted for 23 months.

Federal civilian employment had been on a slow downward path through the first half of the 1980s, but this trend reversed in 1986, providing some respite during the recession. The prior decline was mostly from federal agencies transferring services to state and private control in the early 1980s, and by the time Alaska's recession hit, the transfers were complete and federal agencies resumed growth at a normal pace.

Active duty military personnel levels also grew through the recession, providing another small buffer against otherwise poor economic conditions.

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NORTH SLOPE

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Personal income doesn't account for subsistence, which is significant culturally and economically. The Alaska Department of Fish and Game surveys villages throughout Alaska to estimate subsistence, although a village can go decades without updated data. Point Lay is the most recent subject on the North Slope, surveyed in 2012. Its 211 residents harvested almost 150,000 pounds of plants and ani-

mals (see Exhibit 4), which came out to almost two pounds per person per day.

All of the communities rely heavily on whales, seals, and walrus, with the exception of Anaktuvuk Pass. Anaktuvuk Pass is the only inland community, located 150 miles from the ocean. While harvesting caribou is common in other villages, it provides nearly 80 percent of the subsistence poundage in Anaktuvuk Pass.

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