An Introduction to the Economy of Alaska

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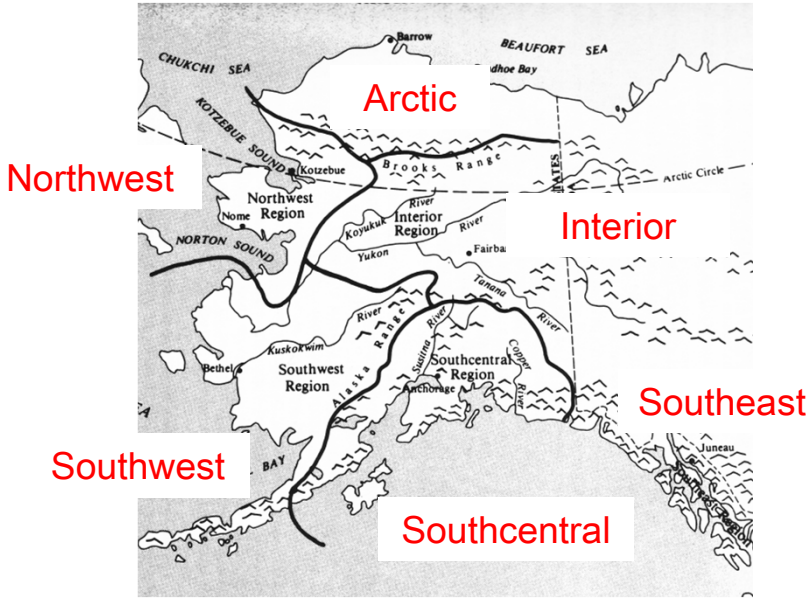
There is no single "Alaska economy." There are important economic differences between different regions of Alaska.

Alaska is a very large state. It is useful to think of Alaska in terms of six major regions: Southeast, Southcentral, Interior, Arctic, Northwest, and Southwest. These regions differ significantly with respect to their climate and natural resources—which contribute to significant differences in their economies.

One of the main things that different regions of Alaska have in common economically—whether they are remote busy villages or Anchorage—is their high level of dependence on state and federal spending.



Alaska's geography creates and constrains opportunities for Alaska's economy.

Alaska's geography—its location, climate, topography, and resources—have driven Alaska's economy in the past and define and constrain its opportunities for the future.

Alaska has abundant natural resources—oil, minerals, forests, fish. In the twentieth and twenty-first centuries, Alaska's strategic location has contributed to the role of the military and more recently the international air cargo industry. Another Alaska natural resource--its natural beauty—represents an increasingly important natural resource.

But Alaska's remoteness from major markets, cold climate, mountainous topography, and permafrost make Alaska a costly place to extract resources compared with other parts of the world.

In areas with permafrost, buildings like this facility at Prudhoe Bay need to be built on pilings to keep the permafrost underneath them from melting.

Alaska resource development—and who benefits from it—is driven by land ownership and the priorities of land owners.

Almost all land in Alaska is owned by the federal government, the state government, or Native corporations.

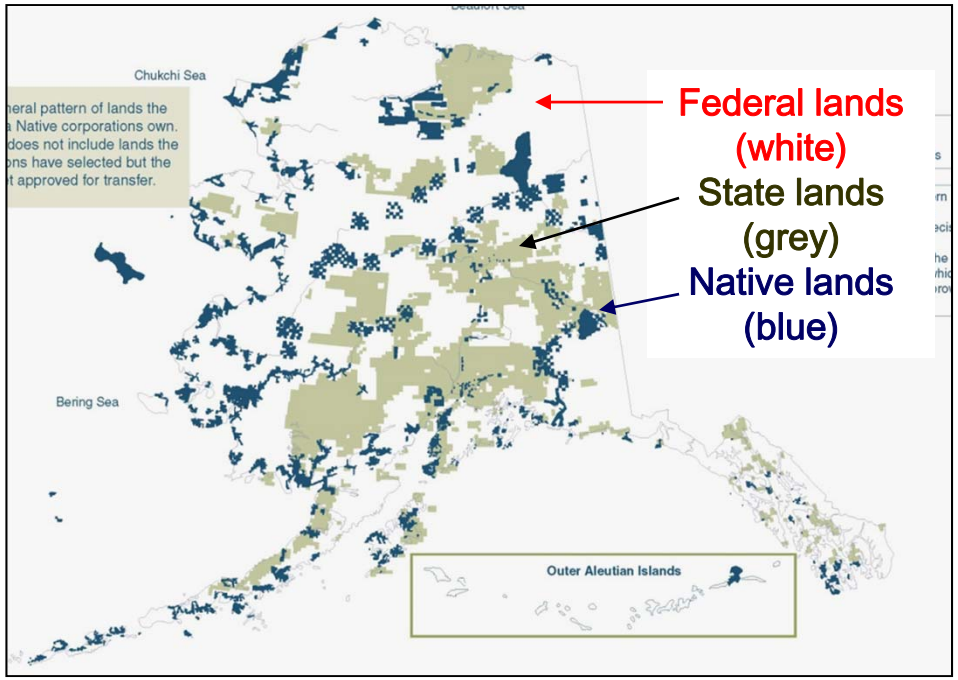
Different federal and state lands are managed by different agencies with different priorities ranging from preserving lands as wilderness to developing resources such as oil, timber and minerals. About 40% of Alaska is in federal conservation systems where resource development is somewhat restricted. About 15% is in "wilderness" where all resource development is restricted.

Except on Native lands, almost any kind of resource development in Alaska involves dealing with federal or state landowners. Native corporations also vary in their priorities for resource development.

Alaska Land Ownership

Federal government	59%
State government	28%
Native corporations*	12%
Other owners	1%

*Native corporations were created by the Alaska Native Claims Settlement Act of 1971. The shareholders of these corporations are Alaska Natives.



Alaska's population is about 710,000.

Alaska ranks 47th among U.S. States in population. Alaska's population is about 1/5 of Oregon's, 1/10 of Washington's, and 1/50 of California's. Alaska's population is about the same as that of the Akron, Ohio metropolitan area.

Alaska's population compared with other states

California	37 million
Washington	6.7 million
Oregon	3.8 million
Maine	1.3 million
Montana	989 thousand
Alaska	710 thousand
Vermont	626 thousand
Wyoming	564 thousand

Source: *Statistical Abstract of the United States, 2012.*
Data are estimated populations for 2010.

Alaska's population compared with selected metropolitan areas

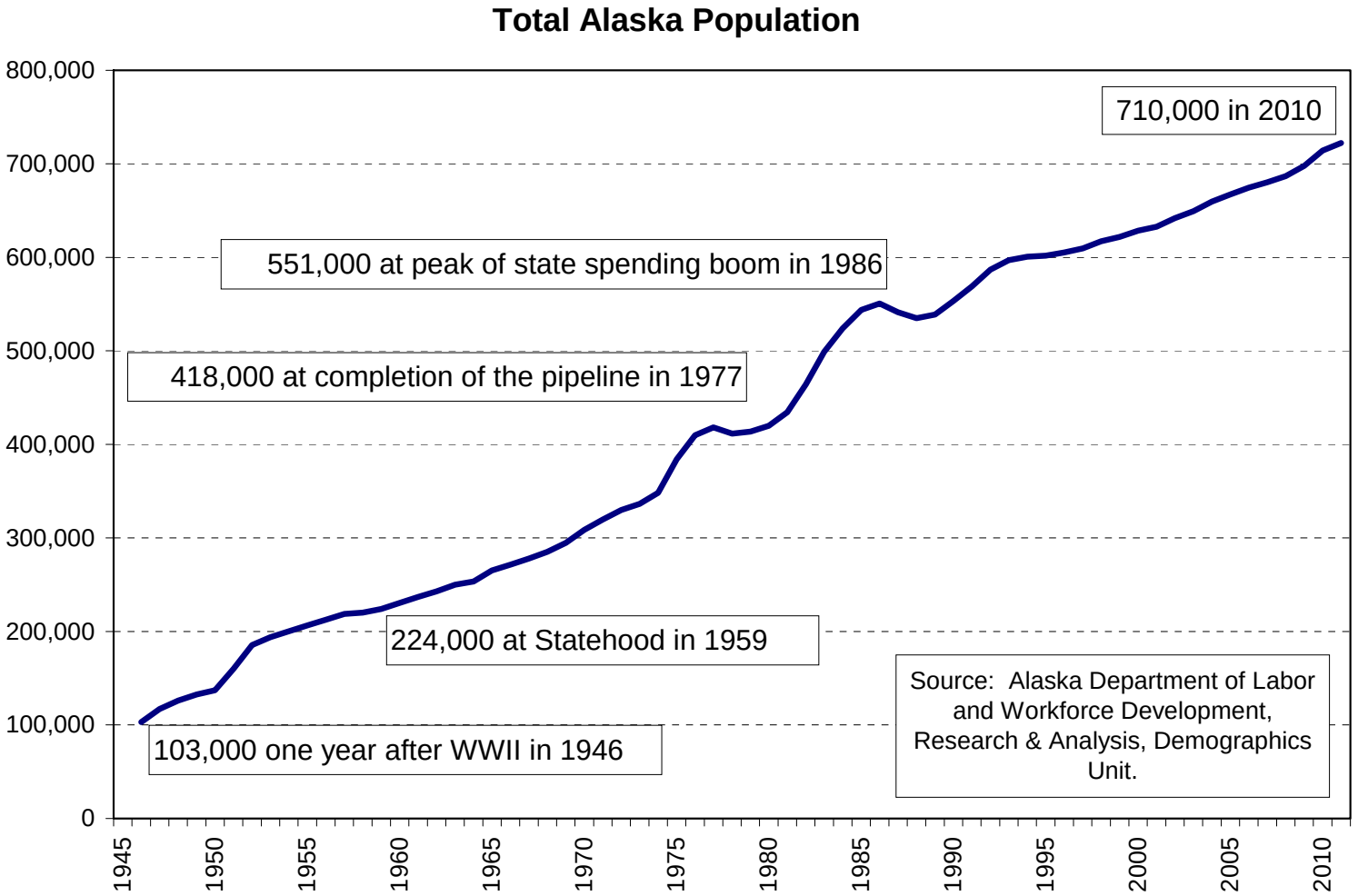
New York, NY	19 million
Seattle, WA	3.4 million
Akron, OH	703 thousand
Alaska	710 thousand

Alaska's population compared with selected countries

Finland	5.2 million
Norway	4.7 million
Alaska	710 thousand
Iceland	309 thousand

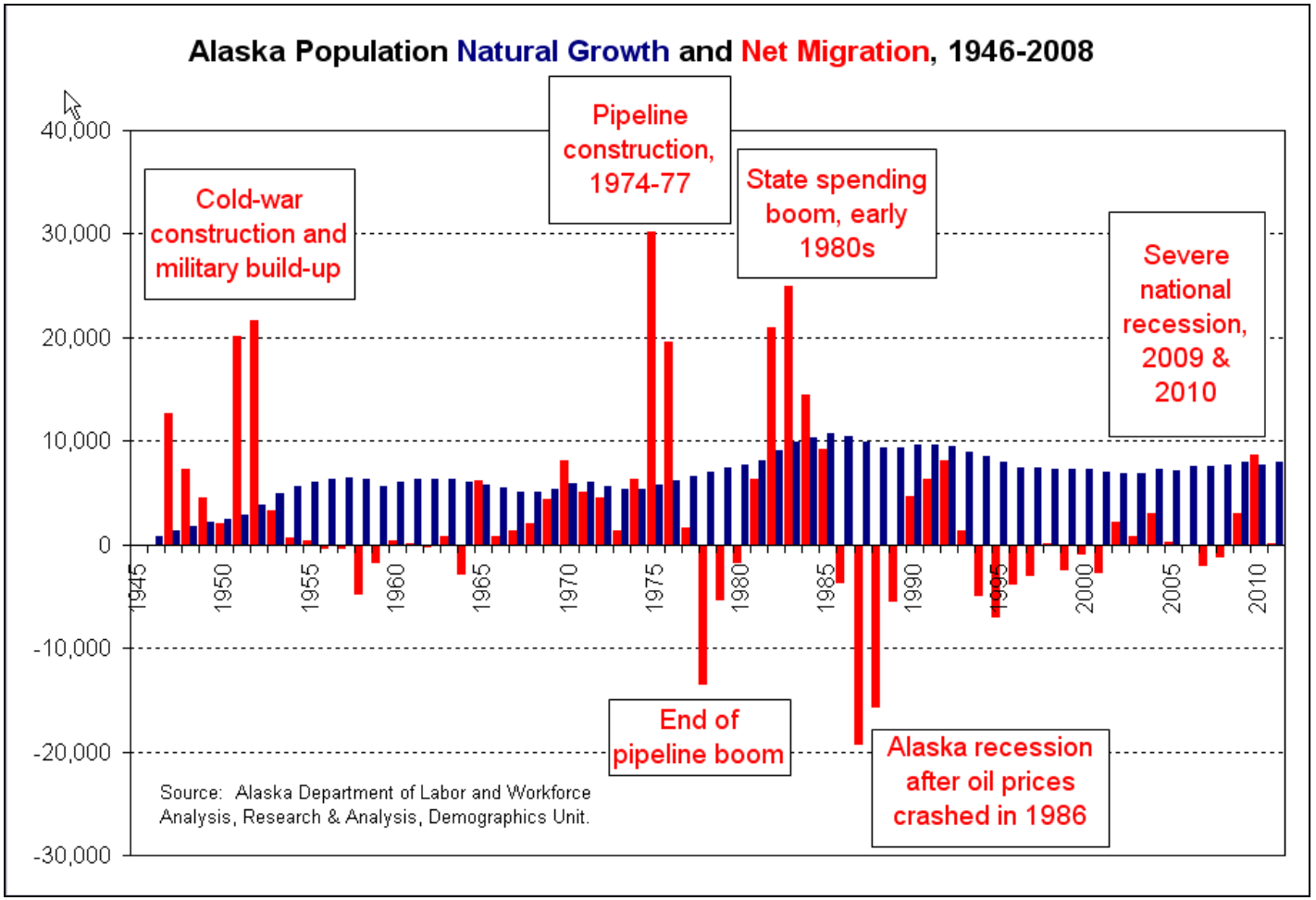
Alaska's population has grown dramatically since World War II.

Alaska's population grew rapidly from about 100,000 just after WWII to about 225,000 at Statehood in 1959, about 550,000 in 1986 and about 710,000 today. Growth has been slower since the mid-1990s.



Natural increase and migration drive changes in Alaska's population.

Alaska population change is the combined result of natural increase (births minus deaths) and net migration (people moving in minus people moving out.) Alaska's rapid population growth during the 1970s and early 1980s was driven by net in-migration: people moving to Alaska. The history of booms and busts in Alaska's economy can be seen by periods of net in-migration and periods of net-outmigration. Since the 1990s most of the growth in Alaska's population has been due to natural increase.

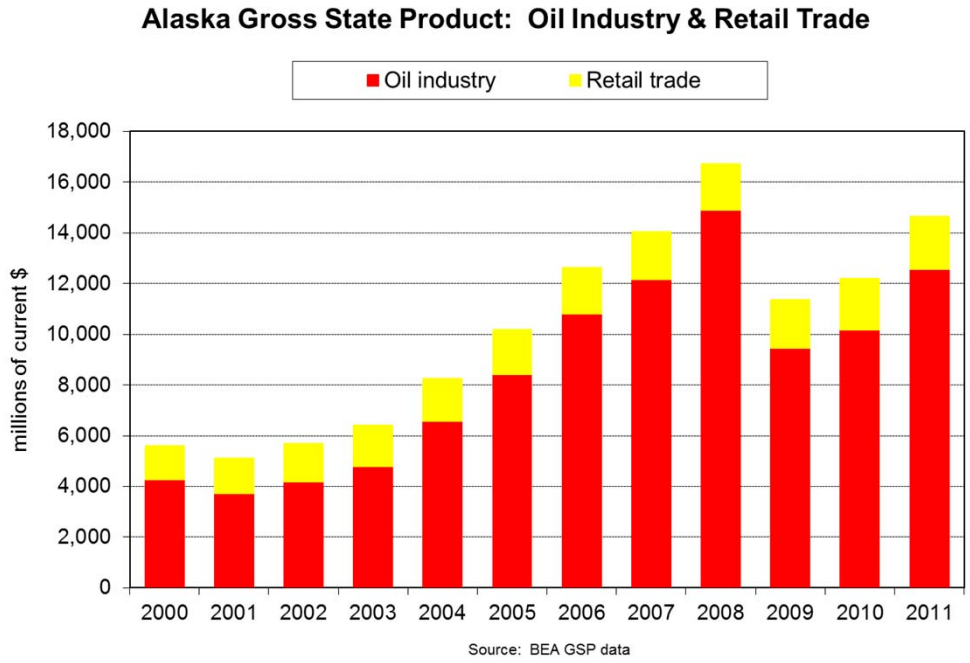


There is no single or best way to measure or describe Alaska's economy. Two frequently-used measures are:

- ***Employment:*** *How many people are employed.* Employment in Alaska is highly seasonal (many more people are employed in the summer than in the winter), so employment numbers are typically reported as *annual average* employment. Note that the state's official *wage and salary employment* data don't count several important kinds of work, including people who are self-employed, commercial fishermen (who are technically paid a share of their boat's catch and are considered self-employed), and people engaged in unpaid work at home (cooking, cleaning, child care, gardening, mowing the lawn) or in subsistence hunting and fishing.

- ***Gross State Product (GSP):*** *The estimated value of all goods and services produced in Alaska by the market sector of the economy.** The market sector of the economy is the part in which people work for pay. So Gross State Product (GSP) includes the value of what people produce in their paid work, but it excludes the value of unpaid work and subsistence hunting and fishing.

*Technically, Gross State Product (GSP) is calculated as the total value of goods and services produced in Alaska, minus the cost of inputs purchased from outside Alaska.



The relative importance of different industries to Alaska's economy depends on how you measure it.

Different measures give different pictures of the structure of Alaska's economy and the relative importance of different industries.

These two graphs show employment and Gross State Product in two important Alaska industries: the oil industry and the retail trade industry (stores). Look at the dramatic difference!

The retail trade industry employs far more people than the oil industry. But the oil industry contributes far more to Gross State Product!

Also, note how dramatically the contribution of the oil industry to Gross State Product changes from year to year. The growth from 2001 to 2008 was due to a dramatic increase in the price of oil. The decline in 2009 was due to a fall in both price and production. The rise from 2009 to 2011 was due to an increase in price.

This table shows selected major Alaska industries which account for about 2/3 of Alaska gross state product and employment. Much of this course will focus on these industries.

Major Alaska Industries

Industry	Gross state product ($ millions)	% of Gross State Product	Employment	% of Employment
TOTAL, ALL INDUSTRIES	**51,237**	**100%**	**450,038**	**100%**
GOVERNMENT	**9,480**	**19%**	**108,543**	**24%**
Federal government, total	5,019	10%	44,542	10%
State and local government	4,461	9%	64,001	14%
LARGE RESOURCE INDUSTRIES	**15,326**	**30%**	**30,096**	**7%**
Oil industry*	13,065	25%	4,171	1%
Seafood	933	2%	21,320	5%
Mining*	1,328	3%	4,605	1%
SELECTED OTHER INDUSTRIES	**9,479**	**19%**	**154,669**	**34%**
Transportation	2,136	4%	22,969	5%
Trade	3,094	6%	51,473	11%
Health Care	3,007	6%	47,799	11%
Accomodation and Food Services	1,242	2%	32,428	7%
OTHER INDUSTRIES	**16,952**	**33%**	**156,730**	**35%**

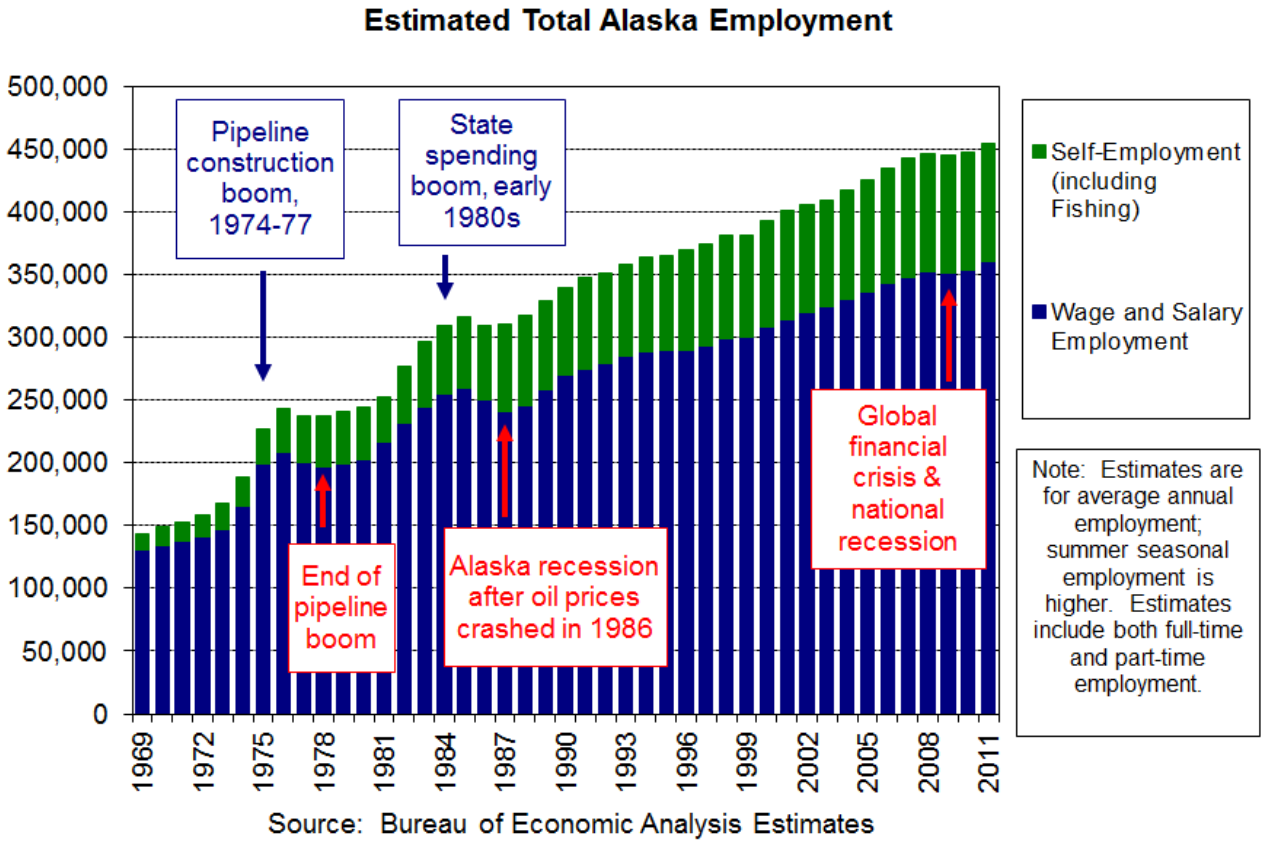
* Employment estimates include only employees of oil and mining companies and exclude contractors to these industries.

Source: Bureau of Economic Analysis, http://www.bea.gov/regional/.

Total Alaska employment is about 450,000.

Total wage and salary employment is about 350,000. Another 100,000 people are self-employed in Alaska (working for themselves in their own businesses). This includes commercial fishermen, who are not counted in regular wage and salary employment data.

Wage and salary employment has more than tripled since statehood, when employment was less than 100,000. There have been two periods when employment grew very rapidly: during the construction of the Trans-Alaska Pipeline (1974-77) and during the state spending boom of the early 1980s. Each of these periods was followed by a recession during which employment declined. Alaska employment growth slowed to almost zero after the national recession began in 2008.



Employment in Alaska's biggest industries is measured in the tens of thousands of jobs.

A quick indication of how "big" or significant an industry or project is for the Alaska economy is to look at how many people it employs. Job numbers in the tens of thousands are very big. Job numbers in the thousands are big. Job numbers in the hundreds are not very significant relative to the total economy.

Annual Average Employment in Selected Alaska Industries, 2011

Total Alaska employment*	454,000
Local government	38,400
Retail trade	44,000
Fishing	8,100
Food manufacturing (mostly fish processing)	10,800
Air transportation	6,100
Mining (excl. oil & gas)	4,800
Machinery manufacturing	130

*Note: Total includes both wage and salary employment as well as non-wage and salarlyemployment (proprietors). Data are "annual average" employment; seasonal employment may be much higher in industries such as fish processing.
Source: US Bureau of Economic Analysis estimates (Table SA25N), except for fishing employment estimates from Alaska Department of Labor and Workforce Development posted at: http://labor.alaska.gov/research/seafood/statewide/AKAvgMonthlyYr.pdf

Alaska's Gross State Product* was about $51 billion in 2011.

A quick indicator of how "big" or significant a dollar value is for the Alaska economy is to compare it with the size of total Gross State Product. Dollar values in the billions or hundreds of millions are "big." Dollar values in the tens of millions or millions are much less significant relative to the total economy.

The Scale of Alaska's Economy in Dollars: Some Relative Magnitudes

Alaska Gross State Product (GSP)	*2011*	$51.4 billion
Market Value of Alaska Permanent Fund	*6/30/12*	$43.4 billion
Total Alaska employee compensation	*2010*	$23.6 billion
Wellhead value of Alaska oil production	*FY12*	$22.4 billion
Total federal spending in Alaska	*FY08*	$9.4 billion

A million is NOT the same as a billion!!! A billion is 1000 million!
1,000,000 = 1 million
1,000,000,000 = 1 billion

**Gross State Product (GSP) is the total value of goods and services produced in Alaska, minus the cost of inputs purchased from outside Alaska.*

Alaska's economy may be divided into basic and support industries.

Basic and support industries are driven by different factors and grow or decline for different reasons.

Basic industries bring money into Alaska.

Oil and seafood are basic industries because they sell products to markets outside Alaska. Tourism is a basic industry because tourists spend money in Alaska. The federal government is a basic industry because the federal government spends money in Alaska.

Basic industries are affected by factors such as resource abundance, world market conditions, competition from other regions, federal spending, and federal and state resource management policies.

Support industries depend on spending of Alaska businesses and residents.

Retail trade, services, and local government are support industries.

Support industries are driven by basic sector income, and also by the extent to which Alaskans spend money in Alaska rather than Outside. Economists say the basic income is "multiplied" as it is re-spent within the Alaska economy, generating support income. As the Alaska economy grows, the share of money which is spent in Alaska grows, causing the support sector to grow.

There are two ways the Alaska economy can grow:

- By growing basic industries which bring money into Alaska
- By growing support industries (by growing the “multiplier” so that a greater share of money which comes into Alaska is spent in Alaska)

That’s why this course focuses on:

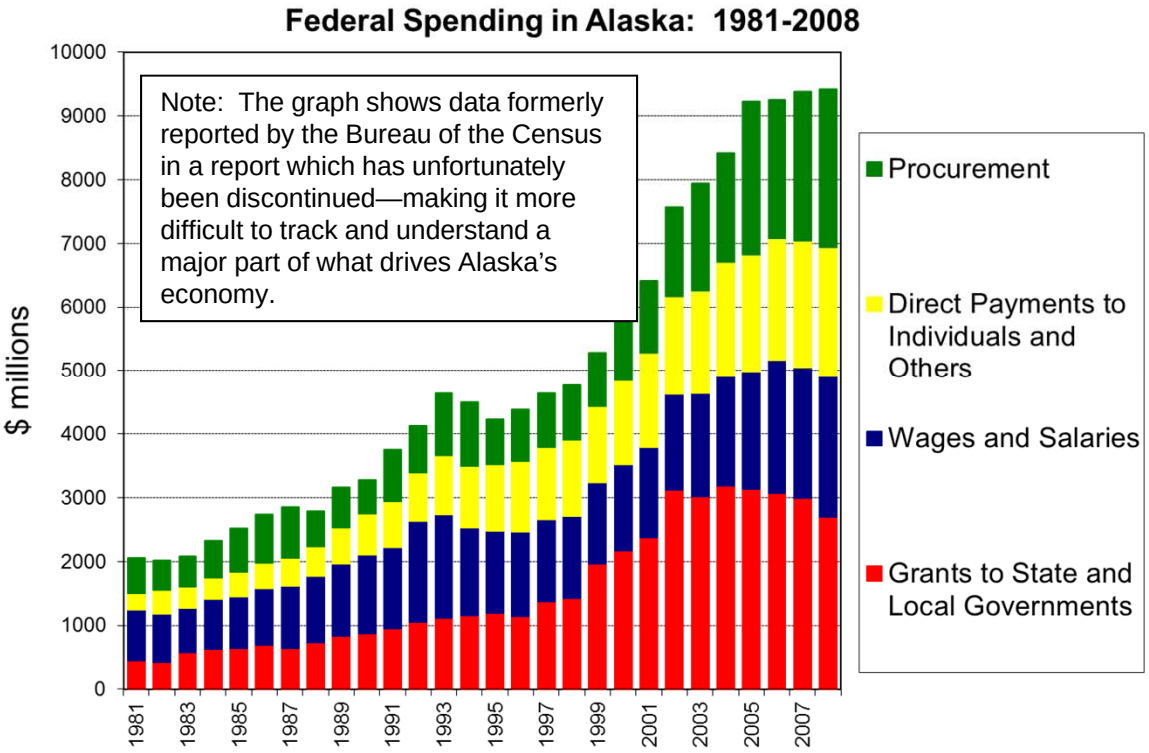
- The most important basic industries which bring money into Alaska
  - The federal government
  - Natural resource industries like oil, seafood and mining
  - Tourism, international air cargo
- The most important support industries which are driven by spending of Alaska state and local government, businesses and residents
  - State and local government
  - Transportation
  - Trade
  - Health care
  - Other services

Federal spending is extremely important to Alaska's economy.

The federal government spent more than $9 billion in Alaska in FY2008. Alaska ranks among the top U.S. states in federal expenditures per capita. Federal spending supports not just the military and federal civilian agencies, but also many other industries such as construction and health care. UAA Professor of Economics Scott Goldsmith has estimated that about 1/3 of Alaska jobs depend—directly or indirectly--on federal spending.

Examples of federal spending in Alaska in 2008 ($ million)

Military procurement contracts	1989
Salaries and wages	2206
Medical assistance program	693
Highway planning and construction	383
Airport improvement program	186
Indian housing block grants	80



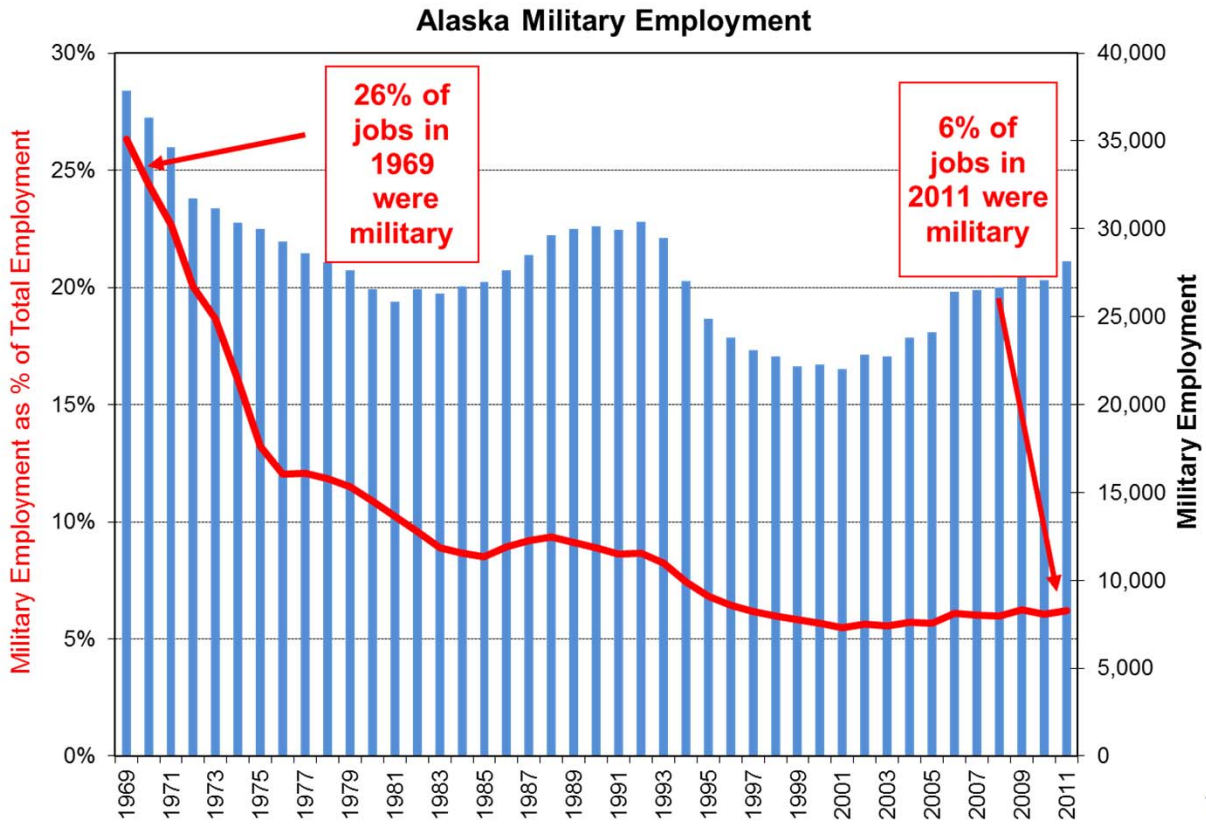
Former Alaska Senator Ted Stevens used his political skill and power as one of the most senior members of the Senate to greatly increase federal spending in Alaska. Future federal spending will probably decline because Alaska's congressional delegation no long has as much power, there is a lot of political pressure to cut total federal spending, and military spending is likely to decline as the US pulls out of Afghanistan. Because federal government spending plays such a big role in Alaska's economy, a potential decline in federal spending is a significant concern.

The military plays an important role in Alaska's economy.

The military has played an very important role in Alaska's history and economy. During World War II hundreds of thousands of troops were sent to Alaska. The army built the Alaska Highway and many other roads, airfields, and military bases, transforming Alaska's transportation infrastructure and economy. At statehood 35% of Alaska jobs were military. Since statehood, the number of military has declined, while the rest of the economy has grown. In 2011, there were about 28,000 military jobs in Alaska—representing about 6% of total jobs. With the deployments of many Alaska-based military units to Iraq and Afghanistan, in recent years Alaskans have become much more aware of the presence of the military in Alaska and their importance to our communities and economy.

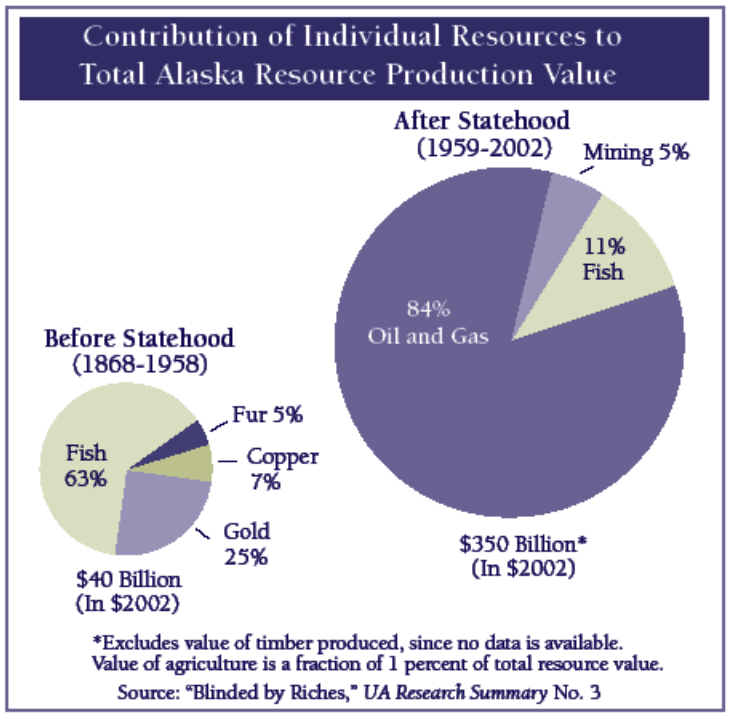
WWII: A wrecked P-38 in the Aleutians

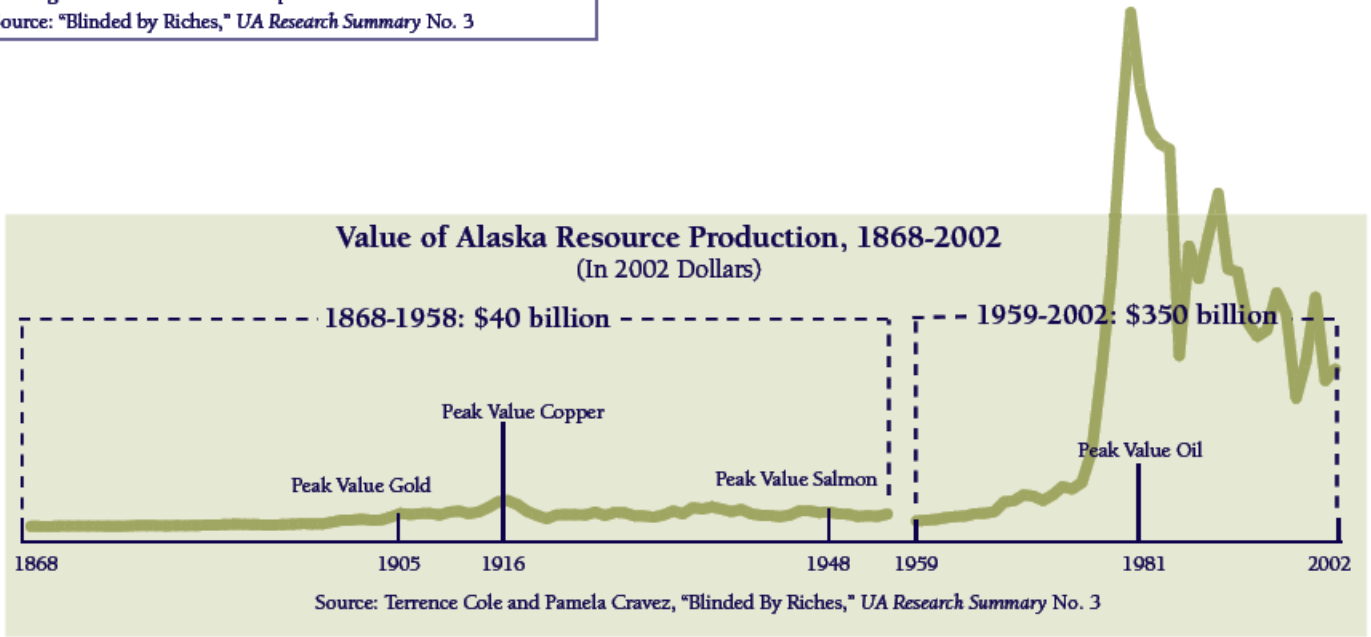
Eielson Air Force Base



Alaska's economy has always depended heavily on natural resources.

Before Alaska became a state in 1959, the fishing and mining industries—along with government—accounted for most of the jobs and income in Alaska, directly or indirectly. The discovery of oil on Alaska's North Slope in the 1960s drastically changed Alaska's economy. Alaska's oil production is so valuable that it now dominates Alaska's economy.





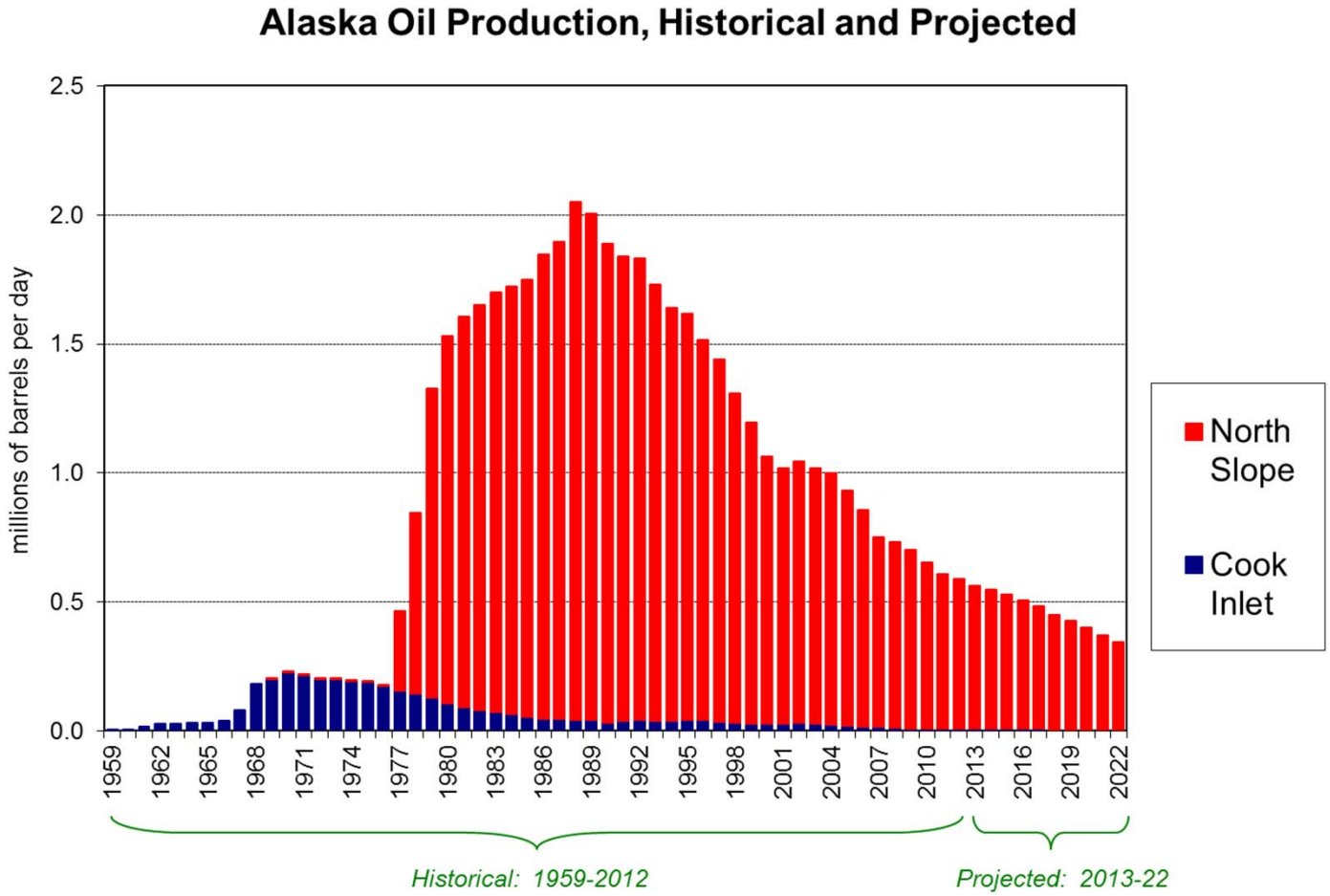
The oil industry is extremely important to Alaska's economy.

Along with federal spending, Alaska's economy is driven by the oil industry. Although only only a few thousand people are directly employed by oil companies, many more work in oil-related jobs such oilfield service activities, oilfield construction projects, and pipeline operations. The State of Alaska is extremely dependent on oil revenues, mostly from oil royalties and severance taxes which oil companies pay to the state. Oil accounts for about 85% of the "unrestricted" revenue available to the State for spending for general purposes. Thus the oil industry pays for a very large share of state government and local government employment. UAA Professor of Economics Scott Goldsmith has estimated that about 1/3 of Alaska jobs can be attributed—directly or indirectly—to the oil industry.

Prudhoe Bay, on Alaska's North Slope, is the largest oil field ever discovered in North America—and a huge industrial complex.

Alaska's oil production is declining.

Alaska oil production began with the Cook Inlet oil fields (near Anchorage!) in the 1960s. But it was the North Slope oil fields that made Alaska a major oil producer. North Slope oil production began after the Trans-Alaska Pipeline was completed in 1977, and grew very rapidly to a peak of about 2 million barrels per day in 1988. Production has since fallen by more than two-thirds, to less than 0.6 million barrels per day in 2012, as oil has been pumped out of the huge Prudhoe Bay and Kuparuk fields.

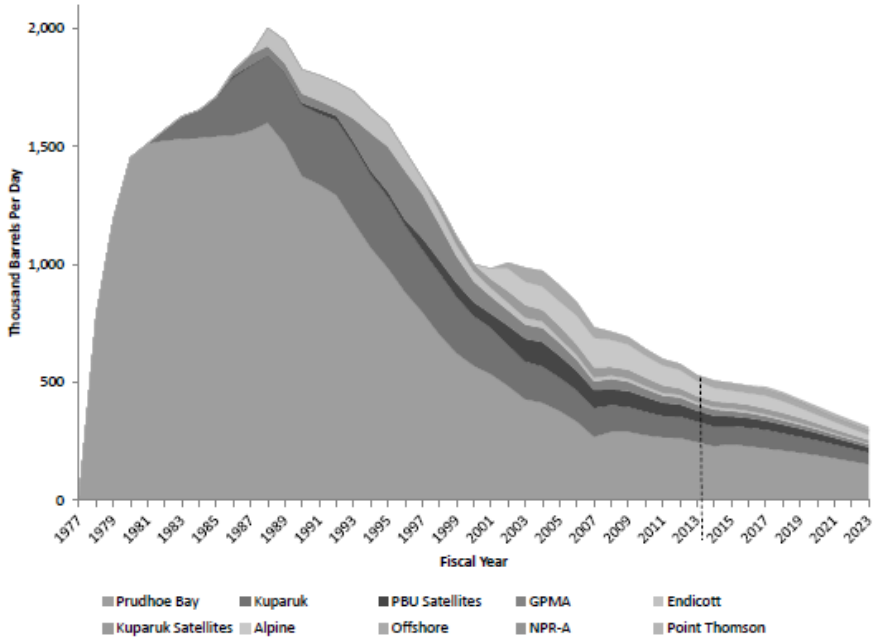


Alaska's oil production is likely to continue to decline.

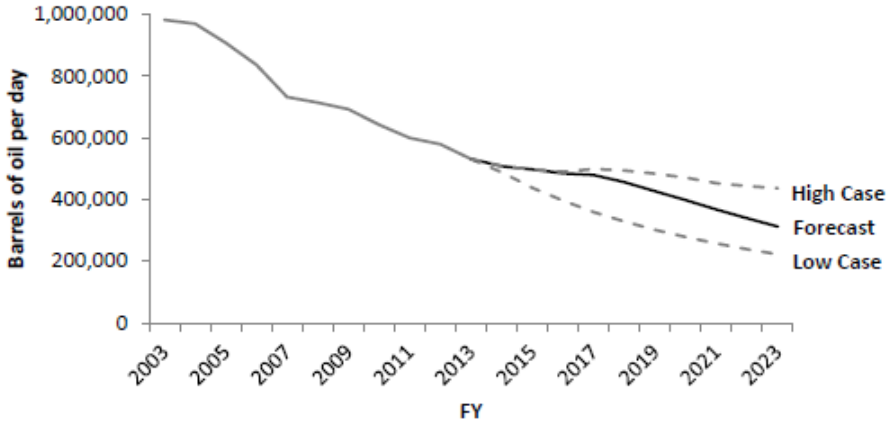
Production from new, smaller fields that are under development or are under evaluation for potential development is not expected to be enough to offset the continuing rapid decline in currently producing fields.

It's difficult to predict what future oil production may be. It depends on many uncertain factors including what new fields are discovered and developed.

North Slope Historical and Forecasted Oil Production, by Field



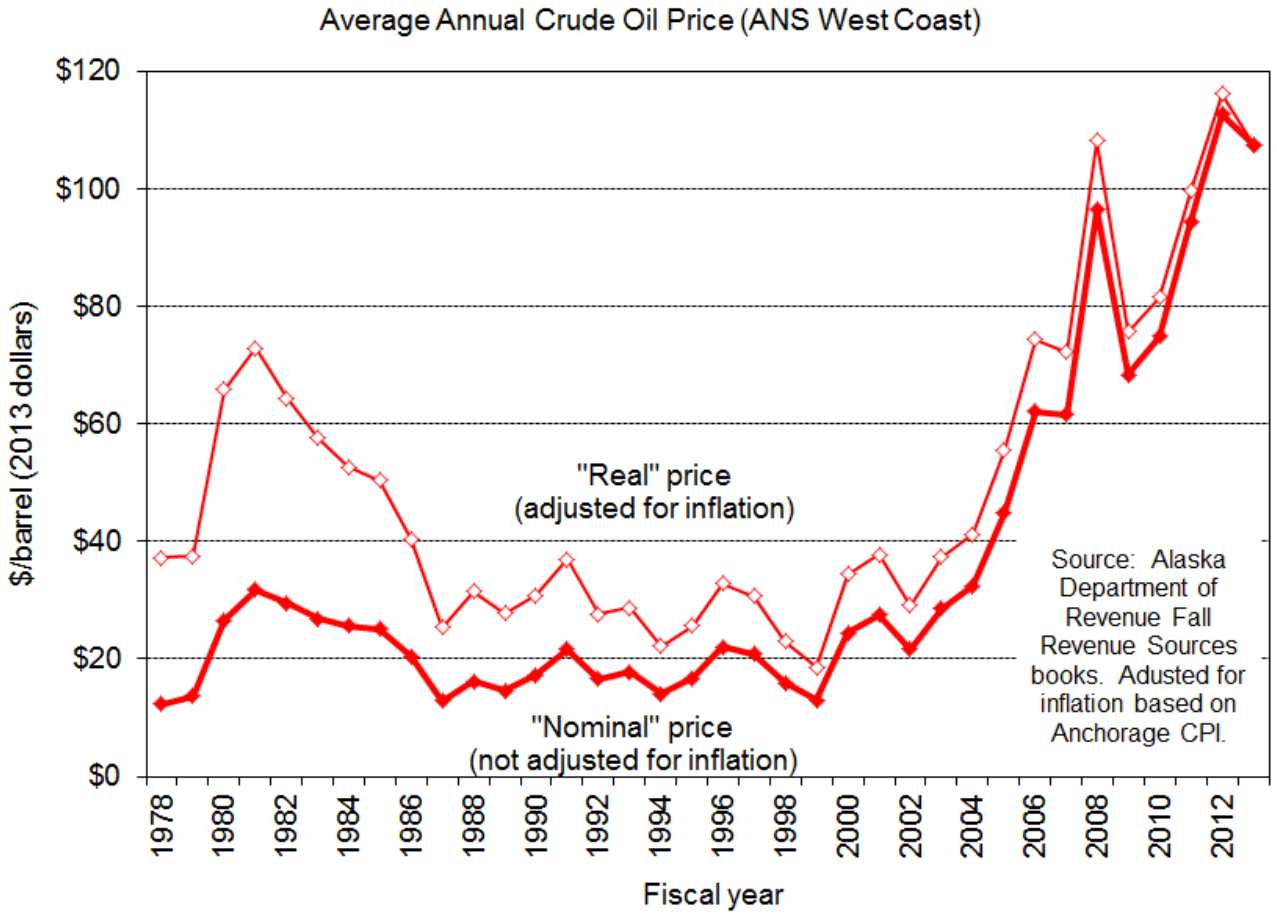
North Slope Forecasted Oil Production: Low, Forecast and High Cases



Source: Alaska Department of Revenue, Fall 2013 Revenue Forecast

Oil prices are among the most important factors affecting Alaska oil production, state revenues, and the Alaska economy.

- Oil prices directly affect how much revenue the State gets from the oil industry.
- Oil prices affect how profitable oil development is for the oil companies, and their willingness to invest in new development.

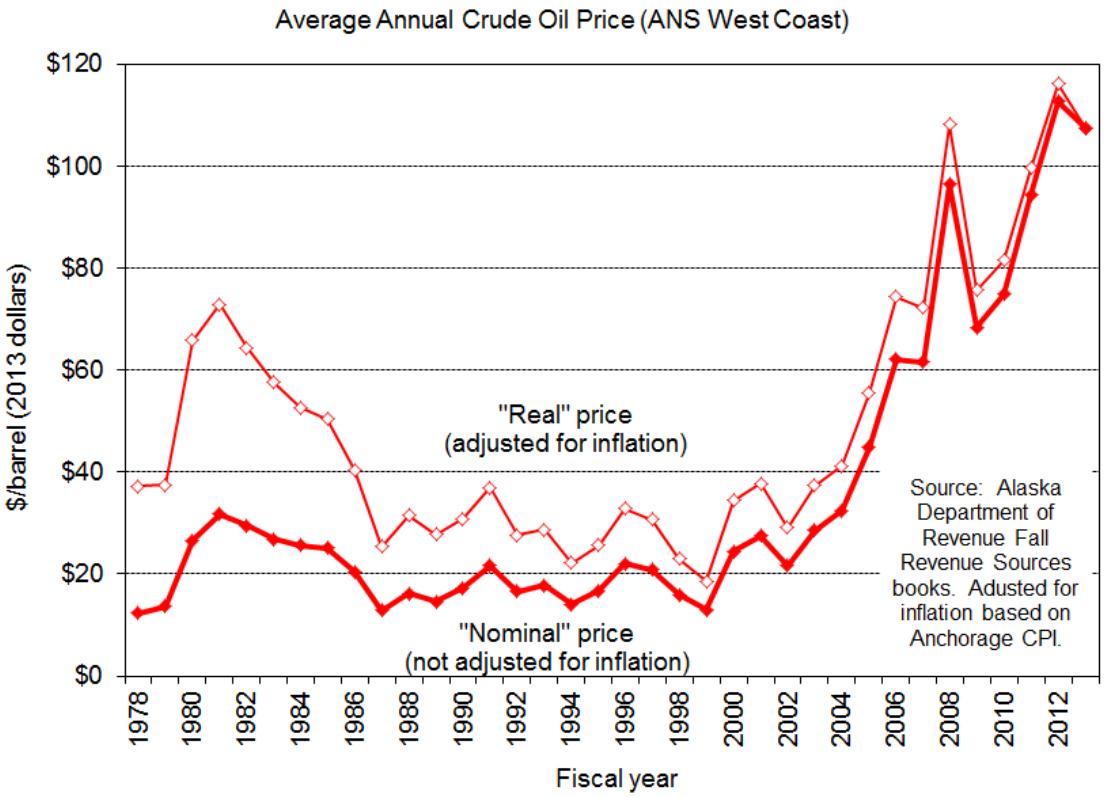


Oil prices are extremely volatile!

This graph shows how oil prices have changed since North Slope oil production began.

It's very difficult to predict future oil prices.

Historically, people have frequently predicted we have entered a new era of permanently higher oil prices. But historically, oil prices have fluctuated widely, and have been very difficult to predict. In the early 1980s, "real" oil prices (adjusted for inflation) were at record high levels. Many people assumed oil prices would stay high. But oil prices fell to very low levels by 1986, leading to a severe recession in Alaska. Then, after 2002, they rose dramatically again. The bottom line: Future oil prices are highly uncertain.

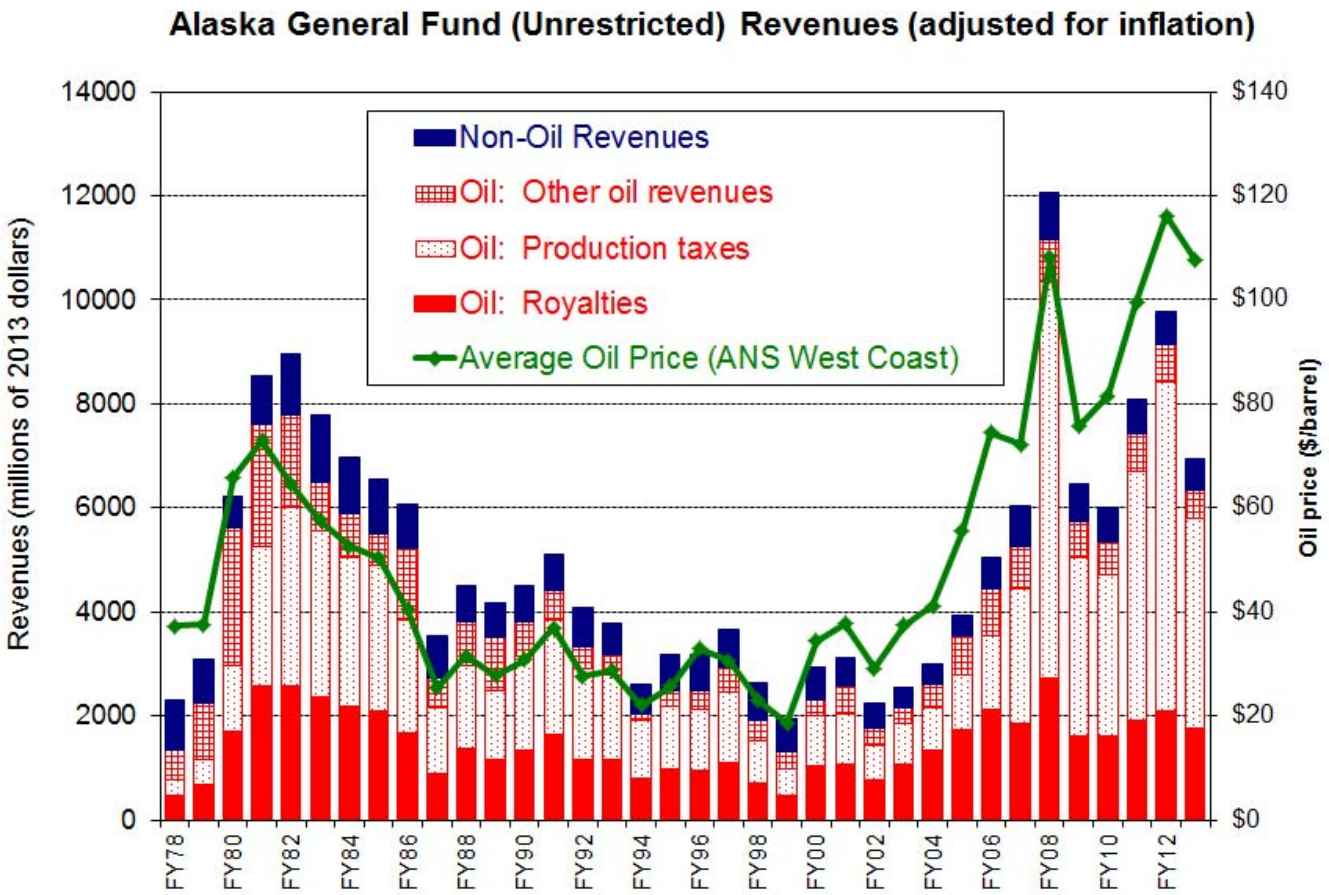


Oil prices are driven by both demand and supply! The sharp drop in oil prices in 2009 was caused by the sharp decline in demand due to a global economic recession. The current outlook for the global economy is highly uncertain.

Costs of alternative energy forms, such as natural gas, coal, and nuclear energy, set an upper limit on oil prices over the long-term.

The State of Alaska's oil revenues have fluctuated widely.

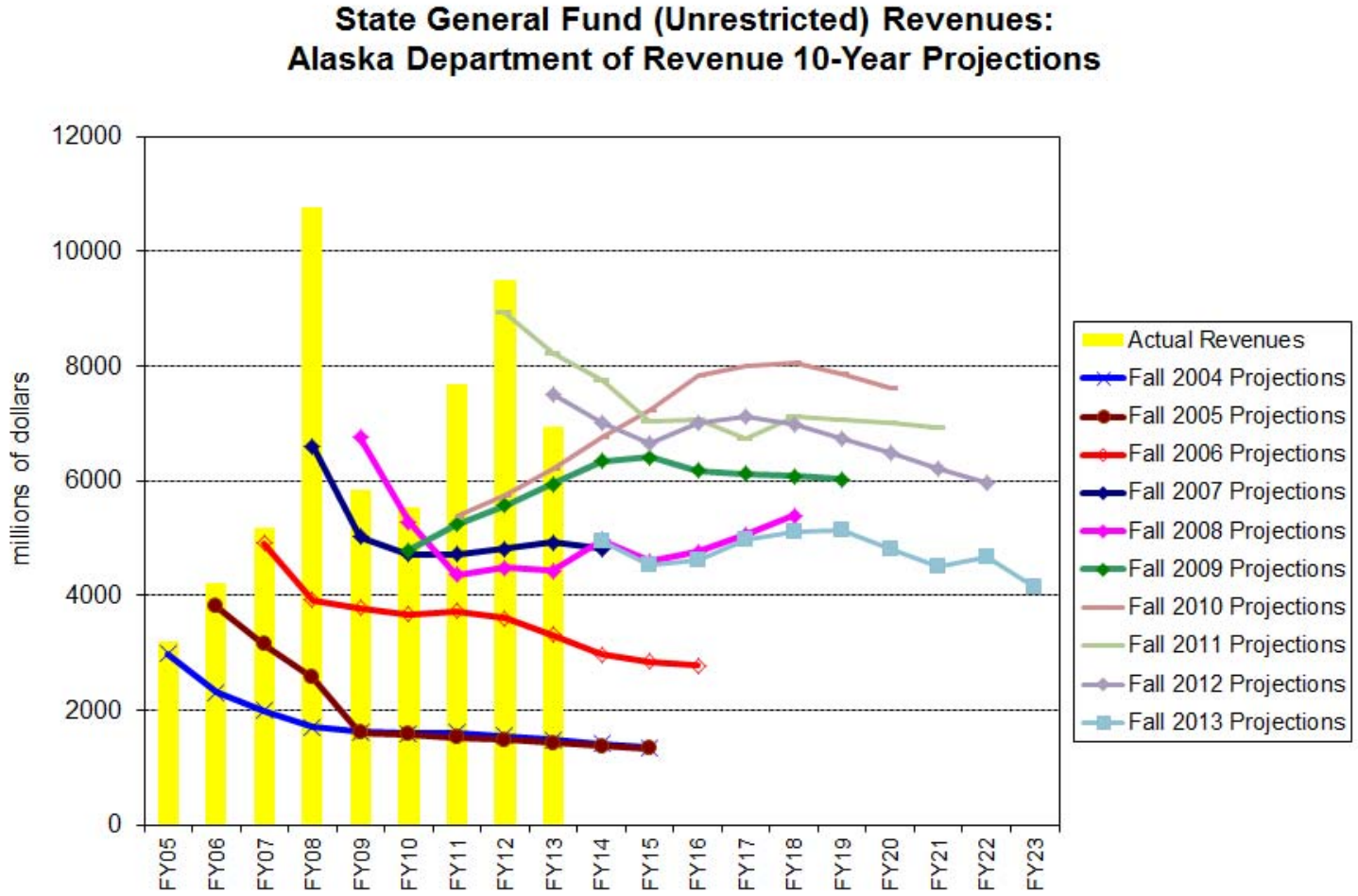
In the first five years of North Slope oil production (1978-1982) Alaska's oil revenues rose dramatically because both oil prices and oil production rose dramatically. A rapid growth in state spending led to a huge economic boom. Then oil revenues began a long period of decline, as oil prices declined and (after 1988) oil production also declined. The steep drop in state oil revenues in 1987 led to a sharp reduction in state spending and a severe recession in Alaska. Oil revenues fell even more during the late 1990s, leading to major concerns about the future of state revenues and the Alaska economy.



And then everything changed! Oil prices soared—and in the mid 2000s the state also increased production tax rates on the oil industry. Suddenly and unexpectedly, Alaska was rich again—with record oil revenues in 2008! Revenues dropped in 2009 and 2010—but then they rose to their second highest level ever in FY12—before falling sharply in FY13.

Projections of future state revenues really are highly uncertain!

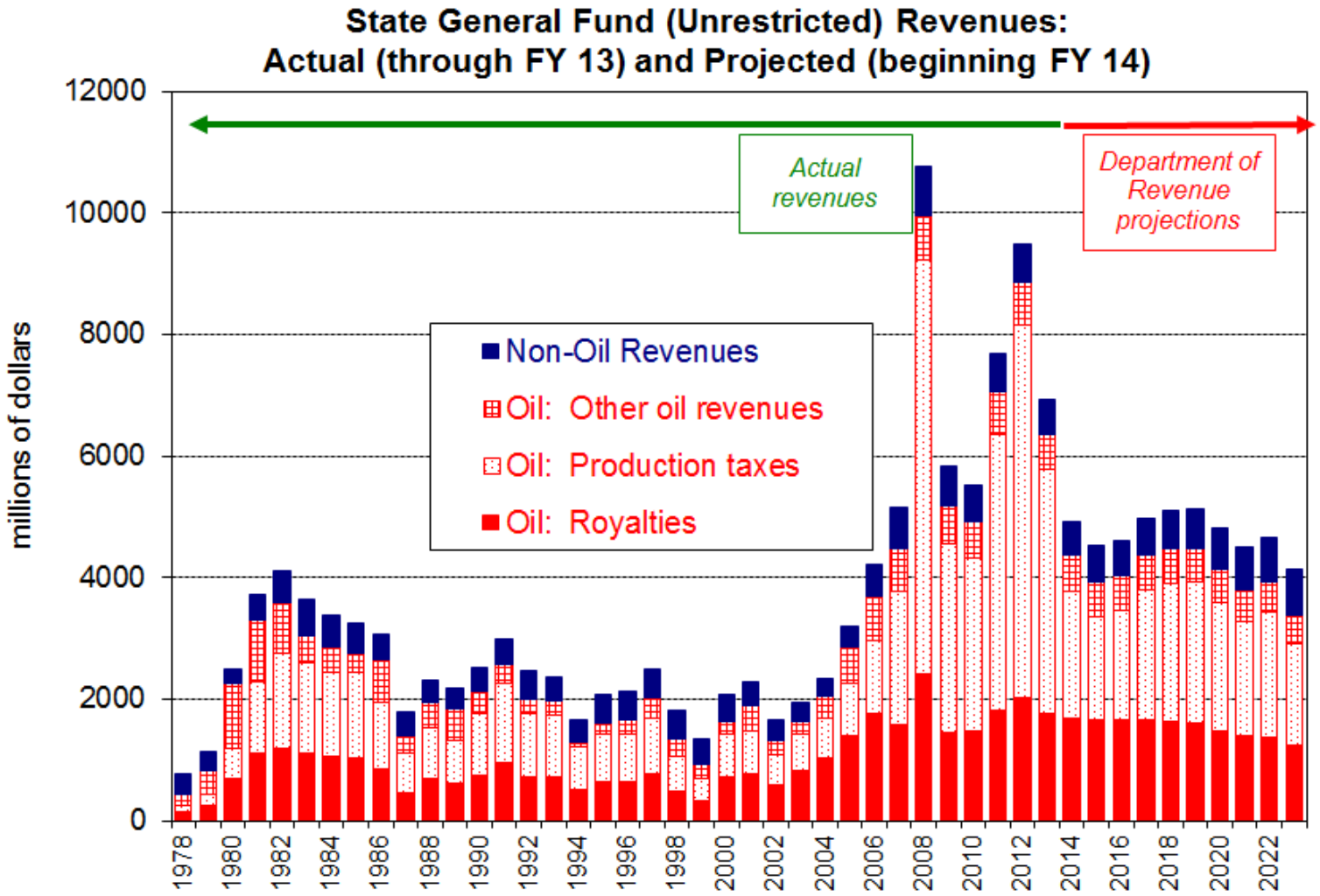
This graph shows the Department of Revenue's 10-year projections for state revenues for a ten-year period—and what actually happened. Note that the projections for the future changed widely from year to year! Note that usually the projections were usually (not always!) close to actual revenues for the year the projections are made in but they were usually way off by the second year of the projections.



Having lots of oil revenue is great—most states would love to have our oil revenue!

Bit it does make it hard to plan for the future, because the oil revenue varies so widely and is so hard to predict.

In the Fall of 2013, the Alaska Department of Revenue projected that state revenues would fall sharply in 2014, then stay relatively stable through 2019, then then begin declining. But what will actually happen is highly uncertain—because we don't know what will actually happen to oil prices or oil production.



Alaska's North Slope has very large natural gas resources—but no way yet to get them to market.

There are enormous natural gas resources on Alaska's North Slope—comparable in energy value to Alaska's oil resources. These gas resources have not been developed because there is no pipeline to bring them to market.

Over the past decade there was a lot of talk and excitement about building a gas pipeline. There was also been a lot of debate about where the pipeline should go. The two main options people talked about were a pipeline through Canada to the American midwest, or a pipeline to Valdez or another tidewater port, where the gas could be converted into liquified natural gas (LNG) and shipped to markets in Asia.

Then Lower 48 natural gas production increased dramatically due to the new shale gas technology. Natural gas prices fell sharply in the Lower 48. Not it seems very unlikely that a pipeline would be built though Canada to the American midwest, and most of the talk is about exporting LNG to Asia.

A gas pipeline is not a sure thing! Building a gas pipeline raises extremely complex economic, financial, political and legal issues. Building a gas pipeline would be extremely expensive—potentially more than $40 billion (about four-firths of the value of Alaska's Permanent Fund). Because of the high cost and the great uncertainty about future natural gas prices, developing North Slope natural gas in inherently risky. Anyone taking on this risk—the gas producers, the pipeline owners, gas customers, or the State—will want a large share of the profits. This makes it hard to reach a deal to build a pipeline.

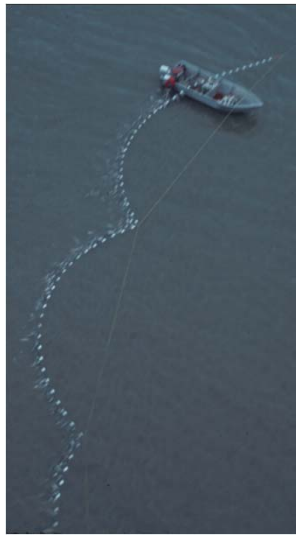
Exports of LNG from Alaska to Asian markets would face competition from many other potential lower-cost LNG suppliers, such as Russia, Indonesia and even the US lower 48 states. Some people argue that *no* gas pipeline option is economically viable: that there isn't any way to profitably develop North Slope natural gas resources at the moment.

Even if a gas pipeline is built, it will probably be at least ten years before construction would start.

Alaska Seafood Industry

Alaska's seafood industry is very large and very diverse. Many different kinds of boats—ranging from very small to very large—harvest many different kinds of fish. These are processed into many different kinds of products which are sold in markets all over the world. This makes it difficult to generalize about the Alaska seafood industry.

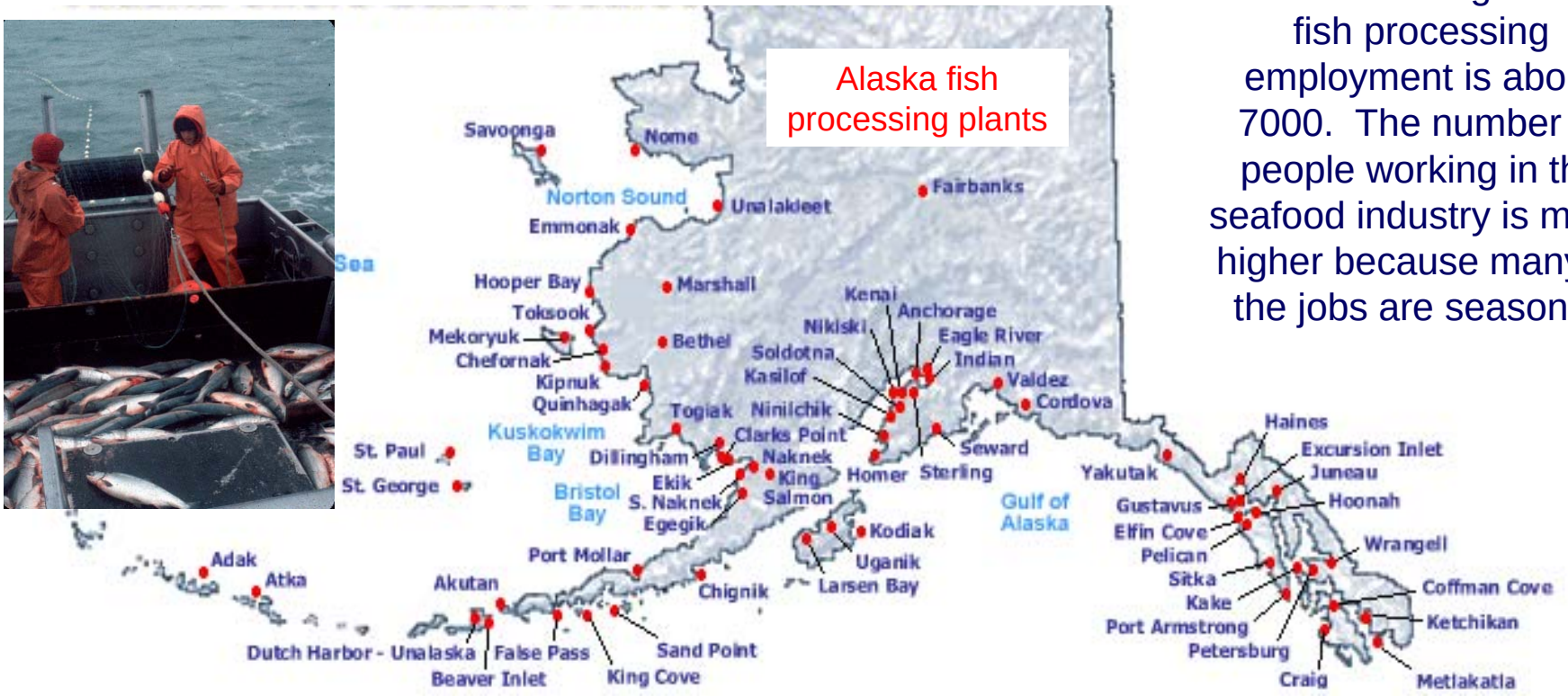
The most important species for the Alaska seafood industry—in terms of volume and value—are pollock, salmon, halibut and crab. There are important differences between these fisheries in resource conditions, market conditions, the types and scale of boats that are used, who participates in the fisheries, and who manages the fisheries.



Alaska Seafood Industry Economic Importance

Alaska's seafood industry is world-scale. The value of fish harvests was about $1.6 billion in 2010. About $2.2 billion in value was added in fish processing. The seafood industry is particularly important for rural Alaska. Fishing is the most important source of income, taxes, infrastructure and utilities for coastal communities--and an important part of Alaska culture. However, many fishermen and the majority of fish processing workers are non-residents, and most of the large companies in the seafood industry are based outside Alaska.

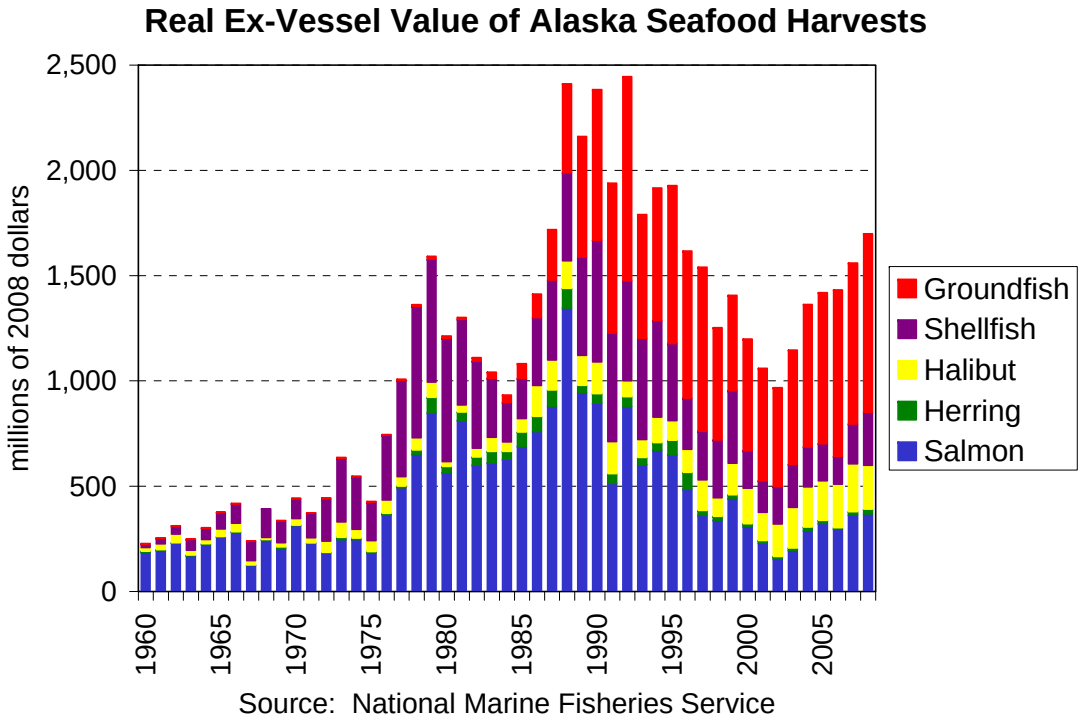
Average annual fishing employment is about 9000 and average annual fish processing employment is about 7000. The number of people working in the seafood industry is much higher because many of the jobs are seasonal.



Map source: Alaska Division of Community Advocacy web site: http://www.dced.state.ak.us/cbd/seafood/seafoodprocessors.htm.

Seafood Industry Challenges

Unlike many other places, most Alaska fish resources are healthy and not over-fished. However, falling prices caused a sharp decline in value during the 1990s, particularly in the salmon industry, which faced an economic crisis. Since 2002 prices and value have increased again. The management of many fisheries is being "restructured" to restrict the number of boats participating and to create fishing rights which may be bought and sold. Restructuring is very controversial, because it significantly affects who participates in and benefits from Alaska fisheries.



Source: National Marine Fisheries Service

Competition from salmon farming led to a sharp drop in salmon prices in the 1990s. Fish farming is growing rapidly worldwide, but is banned in Alaska.

Mining

Alaska has several large operating zinc, gold, silver and coal mines, and a number of smaller mines. Several very large mining prospects in southwestern Alaska, including the Pebble and Donlin Creek copper and gold deposits, are under evaluation and may be developed in the next few years. In 2010, the total annual value of Alaska mineral production was more than $3 billion. Total direct employment in mining was about 4000 jobs.

Although Alaska has significant mineral resources, high costs of extraction and transportation and volatile prices make it difficult for Alaska mining to compete in world markets, except for very large or rich deposits. State revenues from mining are only about 1% as high as state revenues from oil. However, mines are important local taxpayers in some parts of Alaska.

Red Dog Mine

The Red Dog mine, north of Kotzebue, is Alaska's largest mine and the world's largest zinc mine. The land is owned by an Alaska Native corporation, NANA Regional Corporation. The Red Dog mine employs about 500 people, many of them Alaska Natives who are shareholders of NANA.

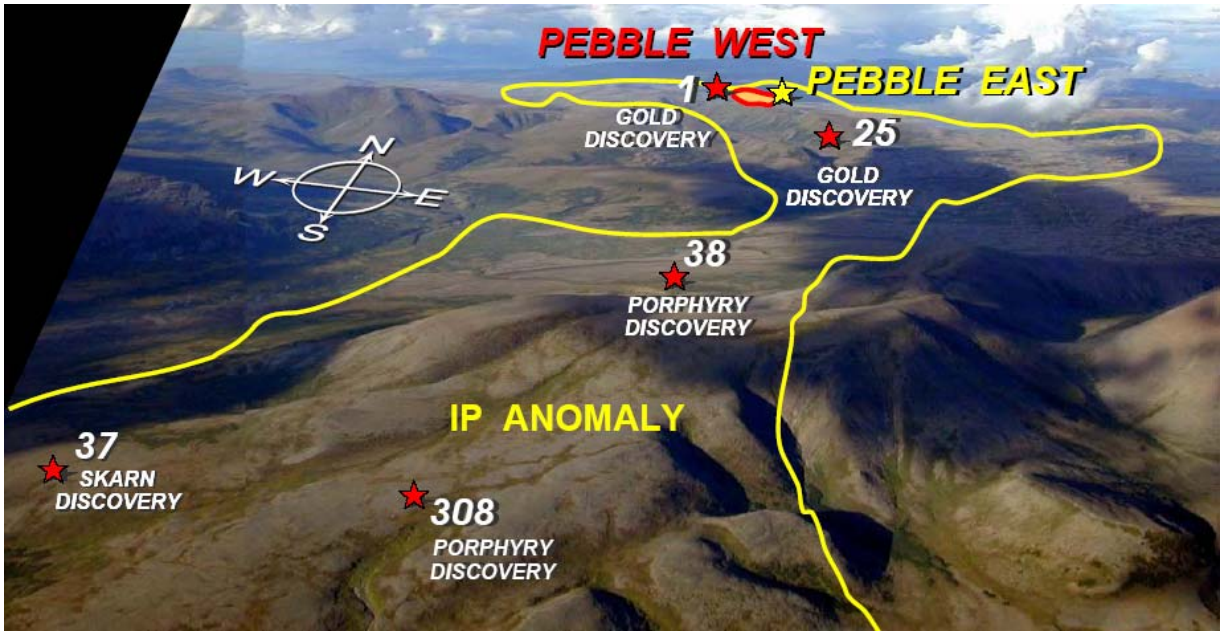
Fort Knox Mine

The Fort Knox mine, north of Fairbanks, is Alaska's largest operating gold mine.

The Pebble Mine

A major new potential mining project in Alaska is the proposed Pebble mine, which would develop copper and gold from a very large deposit in southwestern Alaska. The Pebble Partnership, a consortium of mining companies, is working to develop the project. This involves extensive studies and a long and complicating permitting process.

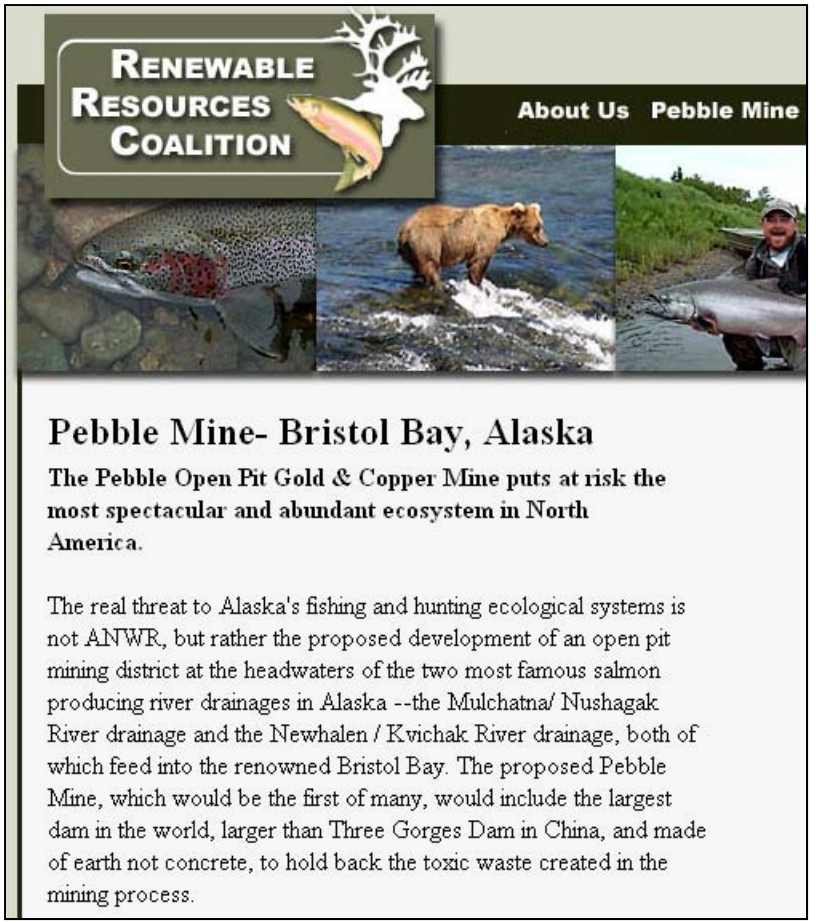
This Pebble mine is generating a lot of controversy—and is likely to generate more--because other resource values in this area, including fisheries and wilderness, are also very high. In particular, the Pebble project is in headwaters of Bristol Bay drainage—home to Alaska's most valuable salmon fishery and many sport-fishing lodges.



Source: Northern Dynasty Minerals Ltd presentation on Pebble project, downloaded March 14 2006 from: http://www.hdgold.com/i/ndm/NDM_Feb06_BMO_RAD.pdf

Conflict over Resource Development

The debate over the Pebble Mine is similar to many other debates which have occurred in Alaska's history between advocates of developing Alaska's resources and advocates of protecting Alaska's environment. These debates raise fundamental questions about what kind of future we want for Alaska, and whether or not we can develop our natural resources and also protect our environment. Alaska's constitution says that Alaska's resources are to be managed for the "maximum benefit" of Alaskans. But not all Alaskans agree about what "maximum benefits" means.

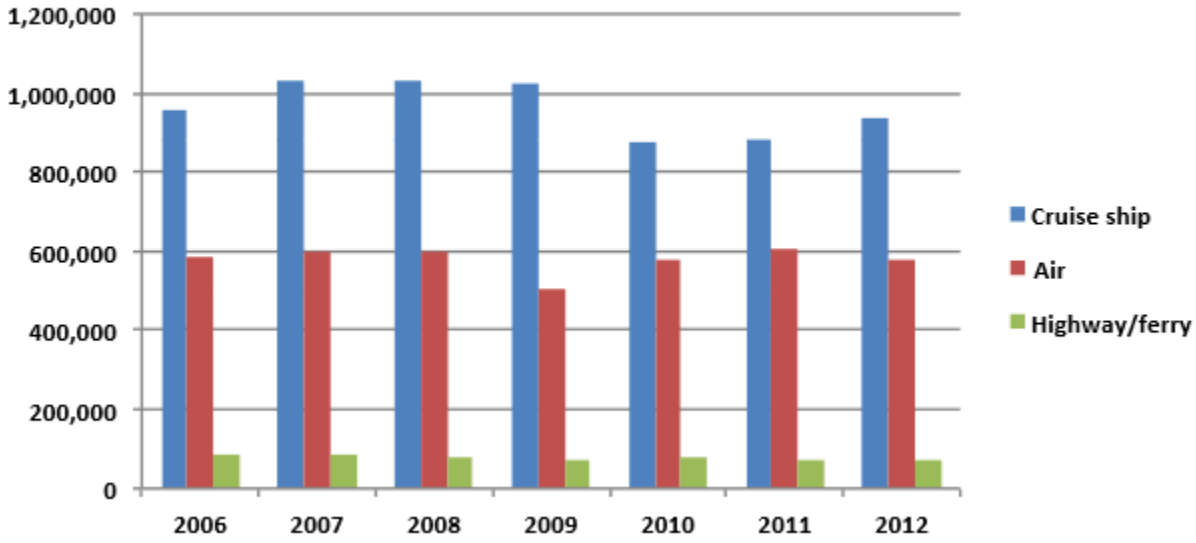


Here are two websites—one from an organization which opposes developing the Pebble mine and one which supports it.

Tourism

About 1.6 million visitors came to Alaska in the summer of 2012, more than half of them on cruise ships. Total employment attributable to tourism is estimated—by various methods—at about 25,000. The number of tourists visiting Alaska each year was growing steadily for many years until the recession caused a sharp drop in tourism in 2009. In the long-run, tourism is likely to continue to grow—creating demands for new facilities and recreational opportunities for visitors, as well as conflicts over crowding and land use.

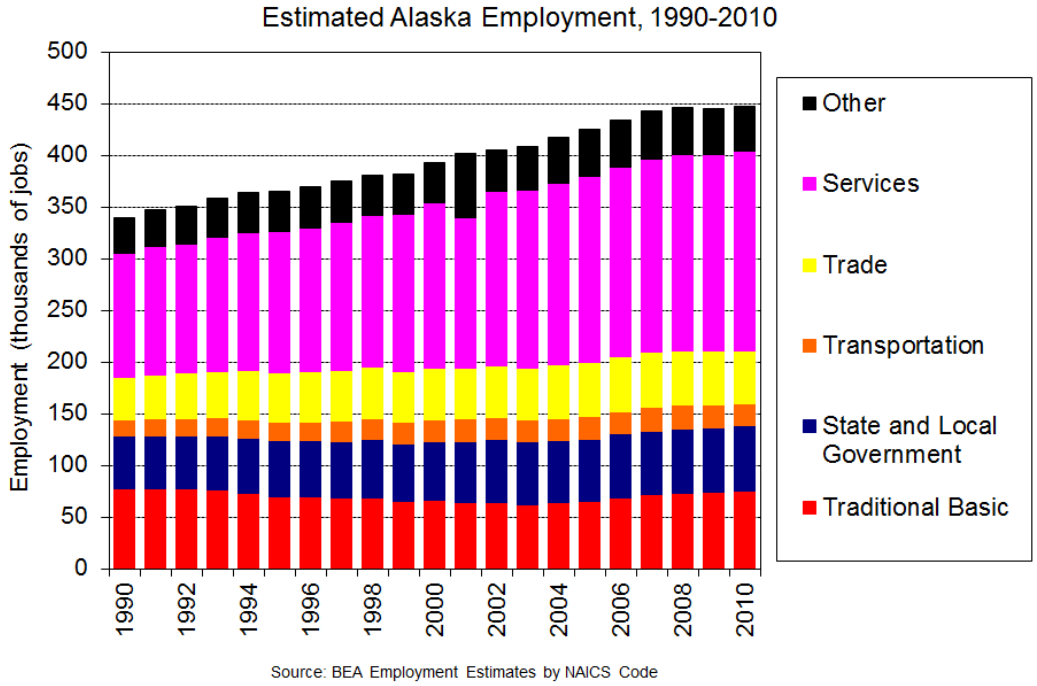
CHART 3. Visitor Volume, by Transportation Market, Summers 2006-2012



Source:Alaska Visitor Statistics Program VI Interim Visitor Volume Report, Summer 2012, http://commerce.alaska.gov/dnn/Portals/6/pub/TourismResearch/AVSP/AVSP_VI_2012_Summer.pdf

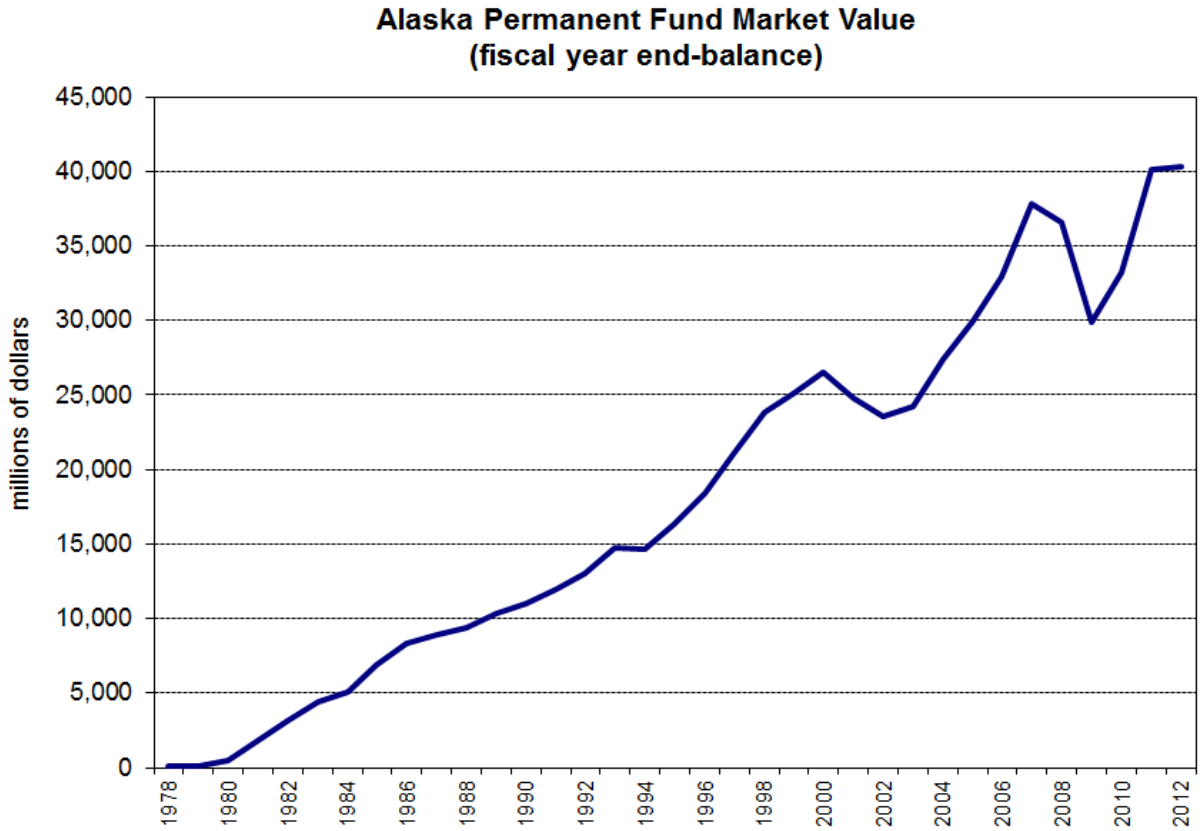
Trade and Services

Much of Alaska's employment growth over the past 40 years has come in support industries—particularly trade and services. Trade and service jobs now account for about half of total Alaska employment. Alaskans are much more likely to work in a retail store or a hospital than on an oil rig or a fishing boat. The growth in trade and services has led to a decline in average Alaska wages—because wages tend to be lower in trade and services than in other industries.



Alaska's Permanent Fund

In 1976, Alaskans voted for a constitutional amendment mandating that part of the state's oil revenues must be deposited in a Permanent Fund.* These Permanent Fund savings have been invested in a diversified portfolio of assets including stocks, bonds and real estate. With new deposits and growth in the value of investments, the total value of the Permanent Fund grew to $40 billion by 2012. The value of the Permanent Fund fell sharply in 2002 and 2009 due to market downturns, but rebounded quickly. We can't spend the principal of the Permanent Fund—only the realized earnings.** As the Permanent Fund has gotten bigger, these realized earnings have gotten bigger. Between 1998 and 2003, they exceeded the State's oil revenues.

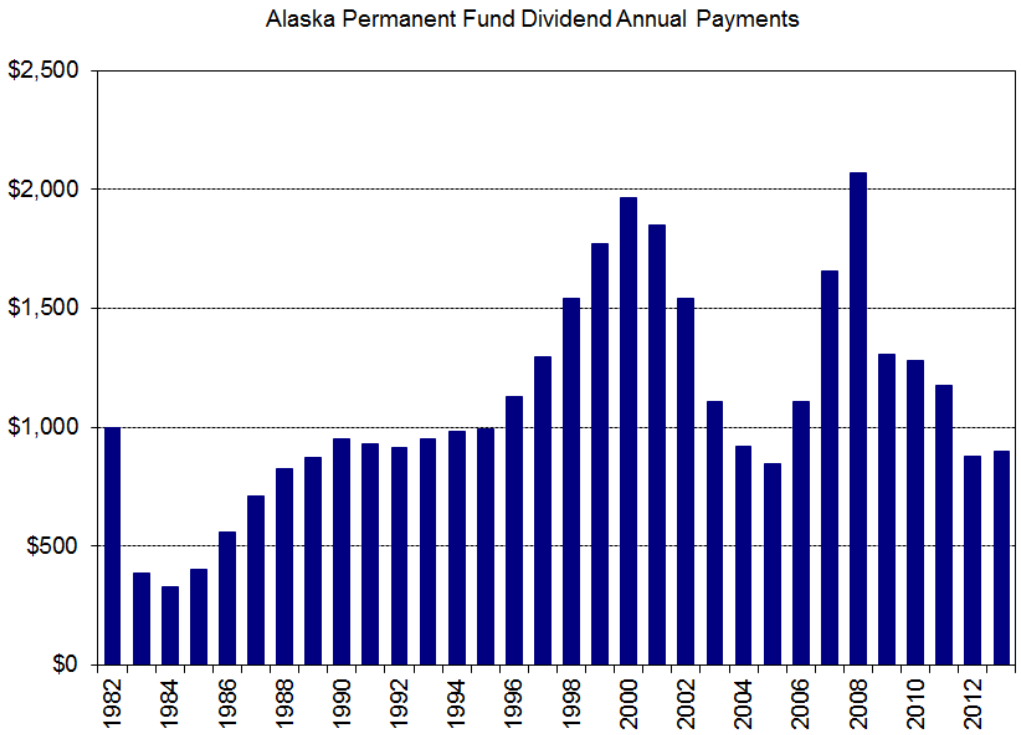


*The amendment requires that "at least 25 percent of all mineral lease rentals, royalties, royalty sales proceeds, federal mineral revenue-sharing payments and bonuses received by the state be placed in a permanent fund, the principal of which may only be used for income-producing investments."

**Realized earnings are stock dividends, bond interest, real estate rent and the income made or lost by the sale of any of these investment assets.

Permanent Fund Dividends

Beginning in 1982, the legislature began to distribute part of the realized earnings of the Permanent Fund to Alaskans as "Permanent Fund Dividends." After an initial $1000 payment to all Alaskans in 1982, Permanent Fund Dividend annual payment amounts have been based on a formula roughly equal to half of the Permanent Fund average realized earnings over the previous five years, divided by the number or eligible Alaskans. When the fund's stock, bond and real estate investments have done well, Permanent Fund dividends have gone up—and vice versa.



Source: Alaska Permanent Fund Corporation website

About half the realized earnings of the Permanent Fund are used for dividends and the other half have been kept in the fund for "inflation-proofing."

The Permanent Fund Dividend program is very popular among Alaskans. It means that Alaskans benefit directly from the past oil revenues and the Permanent Fund. But it also means that the money isn't available for other uses such as helping to pay for state government.

The Rural Alaska Economy

The economy of rural Alaska—particularly villages in western and interior Alaska—is very different from that of urban areas that account for most of Alaska's population. These population of "village Alaska" is overwhelmingly Alaska Native. Residents get much of their food from subsistence. Costs are very high, and basic infrastructure such as housing and water are far below the standards of urban Alaska. There are few jobs, and a very high share of jobs are in local government, education and health care. The economy is heavily dependent on federal and state transfers. A major economic challenge facing Alaska is how to create economic opportunities in these areas. There are no easy or obvious answers.

	Anchorage	Two Rural Census Areas	
		Wade Hampton	Yukon-Koyukuk
% Alaska Native (1999)	8.1%	94.7%	63.3%
Unemployment rate (2000)	4.7%	17.8%	15.4%
Adults Not In Labor Force (1990)	26.7%	44.3%	39.5%
Transfer payments per person (1999)	$4,000	$5,900	$7,100
% of population below poverty level (1997)	6.7%	39.4%	24.2%

Many Alaska villages are accessible only by small planes, boats or snowmachines. Freight costs are heavily subsidized by the U.S. Postal Service's "bypass mail" program.

Subsistence

Subsistence--Alaska's original economy--remains an important part of the economy of rural Alaska. People in rural Alaska get much of their food from subsistence. Subsistence is a vital part of Alaska Native culture. Subsistence is difficult to quantify: it doesn't show up in measures of Alaska's cash economy, such as employment or Gross State Product data. Subsistence faces challenges, including a limited resource base and growing demands from sport and commercial users. A longstanding and important political debate is continuing over the relative roles of the federal and state governments in Alaska subsistence policy.

Estimated annual wild food harvest (pounds per person)

Nome census area	519
Bethel census area	592

Subsistence harvesting of Beluga whales

Subsistence salmon drying

A woman at a subsistence "fish camp"—an important part of summer family life in much of village Alaska

Native Corporations

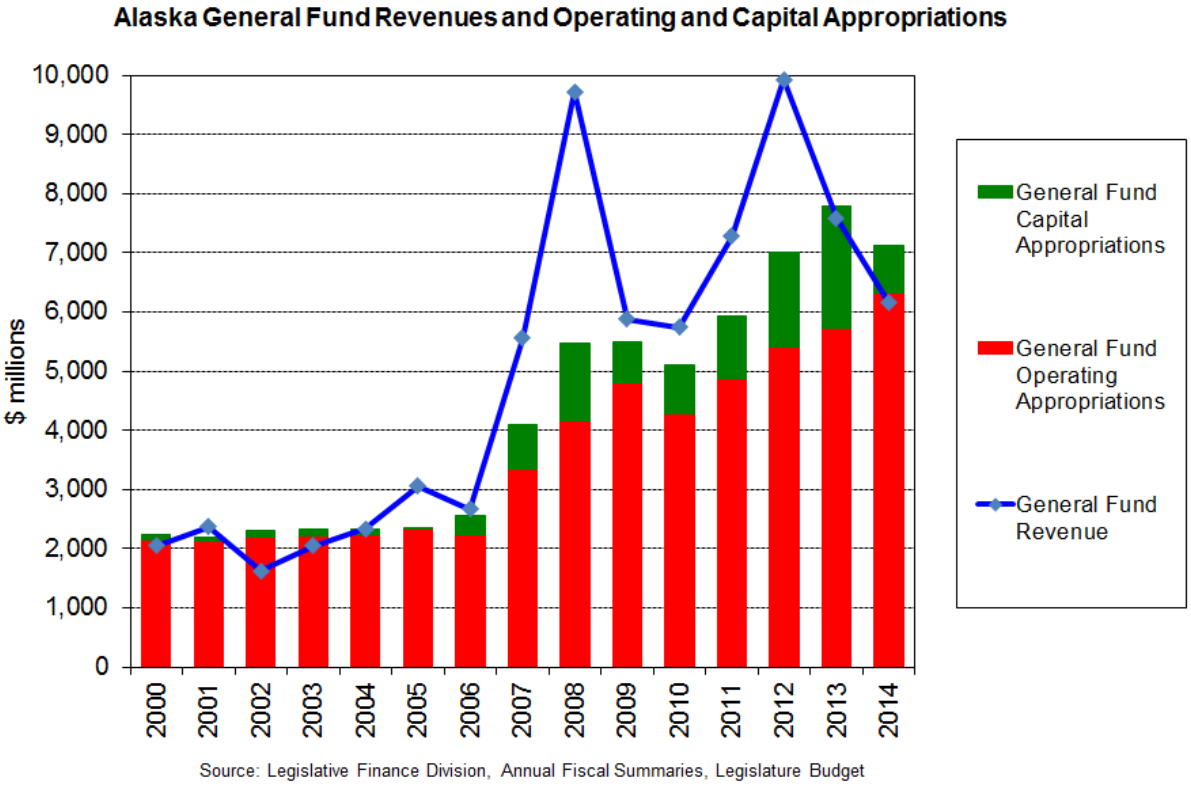
The Alaska Native Claims Settlement Act of 1971 (ANCSA) created both “regional” and “village” Native corporations. There is a regional Native corporation for each of twelve Alaska regions. Some of the regional Native corporations have become very large and profitable businesses with many subsidiaries in Alaska and other states. Some of the most financially successful Native corporations, such as Cook Inlet Regional Corporation (CIRI) and Arctic Slope Regional Corporation have paid large dividends to their shareholders. Others have not been as successful and have paid very small dividends. Even the most successful Native corporations have found it difficult to create jobs in rural Alaska.

Many of the regional corporations have large headquarters office buildings in Anchorage.

Spending as much as—or more than—we earn . . .

For most of the 1990s, the State of Alaska's expenditures were higher than its revenues. The State paid for the difference by taking money out of a special savings account that the legislature had put aside known as the Constitutional Budget Reserve Fund. Until several years ago, a lot of people worried about what we would do when that savings account ran out of money: it looked like we would have to cut back on state spending, raise taxes, or reduce dividends.

When oil prices and oil revenues increased dramatically the past few years, people stopped worrying about that problem. We started spending a lot more money—but we also saved a lot of money, particularly since 2007.



But people are worrying again. Oil revenues are going down—but cutting state spending won't be easy. When you hire more troopers and teachers and University faculty, give public employees pay raises, and build more public facilities that need to be maintained, it's hard to cut back.

So we are back with the same old problem of spending more than we are earning, and dipping into savings which could run out in a few years.

Alaska's Fiscal Challenge

Alaska faces a long-term fiscal problem. As Alaska's population grows, demands for State services will inevitably grow. To meet those growing demands, State spending would need to grow.

But at the same time, the oil revenues which have paid for most State services are likely to decline as oil production declines—regardless of what happens to oil prices.

Maybe oil revenues won't decline. Maybe we'll discover and develop major new oil fields, or maybe oil prices will keep on rising enough to make up for lower production in the past. But most people who know about Alaska's oil resources and oil markets think it's unlikely.

Maybe we could make up for declining oil revenues with revenues from other kinds of resource development, like natural gas or mining. But most people who know about these industries think it's very unlikely we could get anywhere near as much money from them as we've gotten from oil.

Alaska's investment earnings from the Permanent Fund could in theory become a new "permanent" source of state revenues. But Alaskans have come to expect that those earnings will be used to pay for Permanent Fund dividends—rather than for government.

We have a lot of money saved in other accounts besides the Permanent Fund, such as the Constitutional Budget Reserve Fund. If our oil revenues fall, we can support state spending for a while by drawing down those accounts—but not forever.

Alaskans pay significant property taxes and/or sales taxes to local governments which help support both local governments and their local schools. But Alaskans have been unwilling to accept broad-based taxes—such as income or sales taxes—to pay for the costs of State government. Basically, we get our State government for free (and we expect it to send us money in the form of dividends).

Here is Alaska's fiscal challenge. As oil revenues probably decline, we will probably face a difficult choice. Either we will have to reduce spending, impose broad-based taxes on Alaskans, use some or all of the Permanent Fund earnings to pay for state expenditures rather than dividends—or spend from the capital of the Permanent Fund (which would require a constitutional amendment). Most likely we'll do some of each.

No other state has both high oil revenues and a huge Permanent Fund. Most States would love to have Alaska's fiscal challenge. It is not an economic challenge but a political challenge.

The “Alaska Disconnect”

Alaska’s fiscal structure—specifically the fact that Alaskans do not pay any significant broad-based taxes—leads to a problem which has become known as the “Alaska Disconnect.”

If economic developments creates more jobs, Alaska’s population grows. As the population grows, Alaskans need more schools and teachers for their children and the other services that state and local governments provide.

Although the new Alaskans pay local sales and property taxes which support local services, they don’t pay broad-based state taxes to cover the cost of state-funded services such as education and roads.

The new jobs create new costs for the state but not corresponding new revenues. As a result, except for oil development (which pays high state taxes), many kinds of economic growth make the state’s financial situation more rather than less difficult.

Alaska Economic Development Challenges

Alaska is a high-cost place to do business. It's hard for many kind of economic activity to be competitive with places that have lower labor costs, better infrastructure, larger internal markets, and/or lower transportation costs to world markets. The economic activities in which Alaska can most easily compete, and which make up for most of Alaska's economy) include:

- Industries paid in part by the federal government
  - Construction (federally funded projects)
  - Heath care (federal health care grants)
- Industries producing natural resources in limited global supply
  - Oil, Seafood, Mining, Tourism
- Industries taking advantage of Alaska's location
  - International air cargo
- Industries producing for the Alaska market
  - Retail trade, Services

Promoting Alaska Economic Development

Alaskans and their politicians and long debated how to bring “economic development” to Alaska. But promoting economic development in remote high-cost places (like much of Alaska) is challenging. Not impossible—but difficult.

Governments can create jobs anywhere by spending money—and governments have done that throughout Alaska’s economic history. But that’s only possible if governments have money to spend. Jobs supported by state or federal spending are only as sustainable as state revenues and federal willingness to spend in Alaska.

The federal and state governments have a generally poor track record in creating sustainable, profitable private-sector industries in Alaska by spending money. Many government-funded projects, such as the Delta Barley and Point McKenzie Dairy agriculture projects, and the Alaska Seafood International plant in Anchorage, have ended in complete failure. Businesses which need government support to get started often (not always) need government support to keep going.

Spending money on infrastructure such as roads, ports and energy projects can help development by lowering the costs businesses face. Lowering transportation and energy costs isn’t necessarily enough to overcome other cost disadvantages of remoteness, low population, and a harsh climate.

Alaskans also exhibit conflict about whether they really want resource development. Almost every Alaska resource development opportunity—mining, logging, cruise ships, sport fishing lodges, fish farming—is opposed by at least some local residents or other resource users who prefer to keep things as they are.

The $50 million Alaska Seafood International Plant in Anchorage was sold to a church group for $25 million.

Alaska's economic future is uncertain.
There are positives, negatives and unknowns.

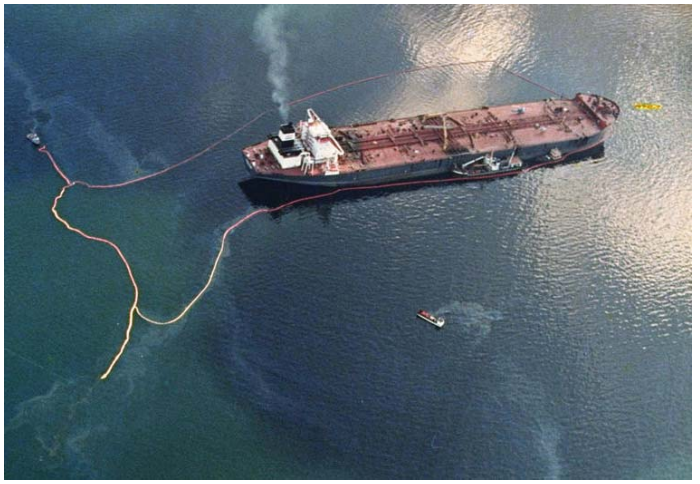
Positives include the potential for further development of Alaska's large and varied resource base (oil, natural gas, coal, minerals, fish and forests), the growing value of Alaska's scenic resources for tourism, the information revolution which is making it possible for companies and people based in Alaska to do business anywhere in the world, and the earnings of the Permanent Fund.

Negatives include declining oil production, the likelihood that federal spending in Alaska will decline significantly, and continued global competition from other natural resource producers.

We don't know how resource discoveries, market prices, and political and technological changes may affect Alaska's economic future.

Surprises

Many of the most important events which have changed Alaska's economy have been almost completely unexpected. Examples include World War II, the 1964 earthquake, the discovery of the giant Prudhoe Bay oil field, the Exxon Valdez oil spill, the dramatic rise in oil prices in 1979 and in the mid 2000s, and the recent world economic crisis.



There are probably more surprises in Alaska's future, which may have similarly unanticipated and dramatic effects. What will they be?

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