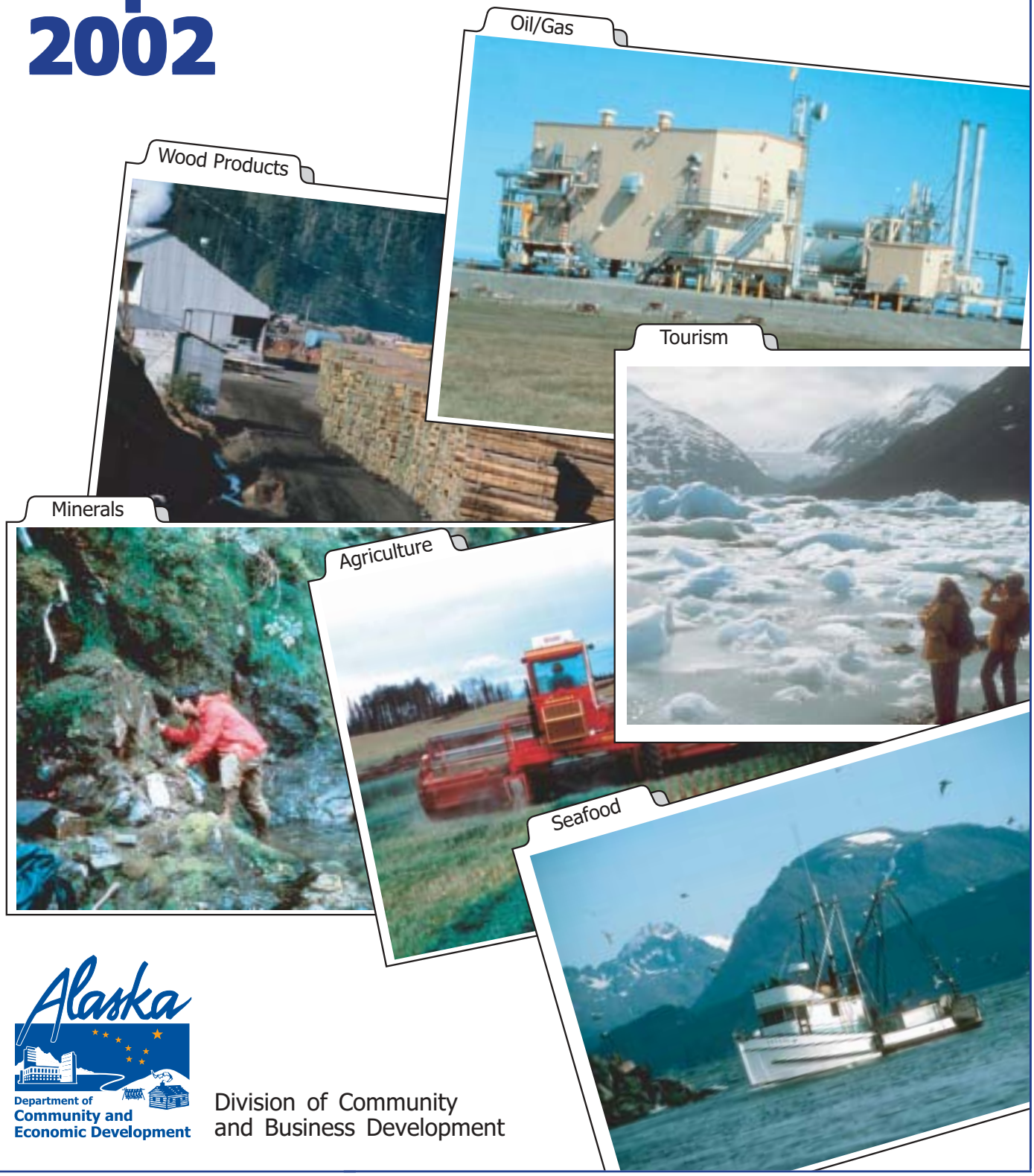
# Alaska Economic Performance Report 2002




Department of Community and Economic Development

Division of Community and Business Development

# Alaska Economic Performance Report

STATE OF ALASKA

Department of Community
and Economic Development

**Division of Community
and Business Development**
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The contents of the performance report are extracted from the
Alaska Economic Information System (AEIS) that can be found online at
http://www.dced.state.ak.us/cbd/AEIS/AEIS_Home.htm.

November 2002

# Letter of Introduction

The Division of Community and Business Development is pleased to present the 2002 Alaska Economic Performance Report. This report, once produced annually in the former Department of Commerce and Economic Development, has been produced sporadically in recent years. It is our intent to restore the performance report as an annual publication, available both in print and on the internet.

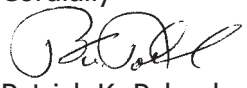
This report is based on the most current data available for the various economic sectors and labor force characteristics. Most of the data reflects the 2000 – 2001 time frame. Where possible, this data is supplemented in the text by more current anecdotal information regarding recent economic activity.

The contents of the performance report are extracted from the Alaska Economic Information System (AEIS). The AEIS describes and analyzes the Alaska economy by industry at the census area level, and contains statewide industry and economic overviews. Designed to serve as a "one-stop" information and development tool for residents, policy makers and investors, the AEIS provides a solid platform for annual preparation of the economic performance report.

The Alaska Economic Information System and the Alaska Economic Performance Report help fulfill the Division's mission to promote community and business development. Accurate and timely economic information is invaluable for making effective business and policy decisions, developing economic development strategies and identifying economic opportunities and issues.

I look forward to hearing your thoughts and comments on the report. Please do not hesitate to contact me or my staff at any time.

Cordially



Patrick K. Poland
Director, DCBD

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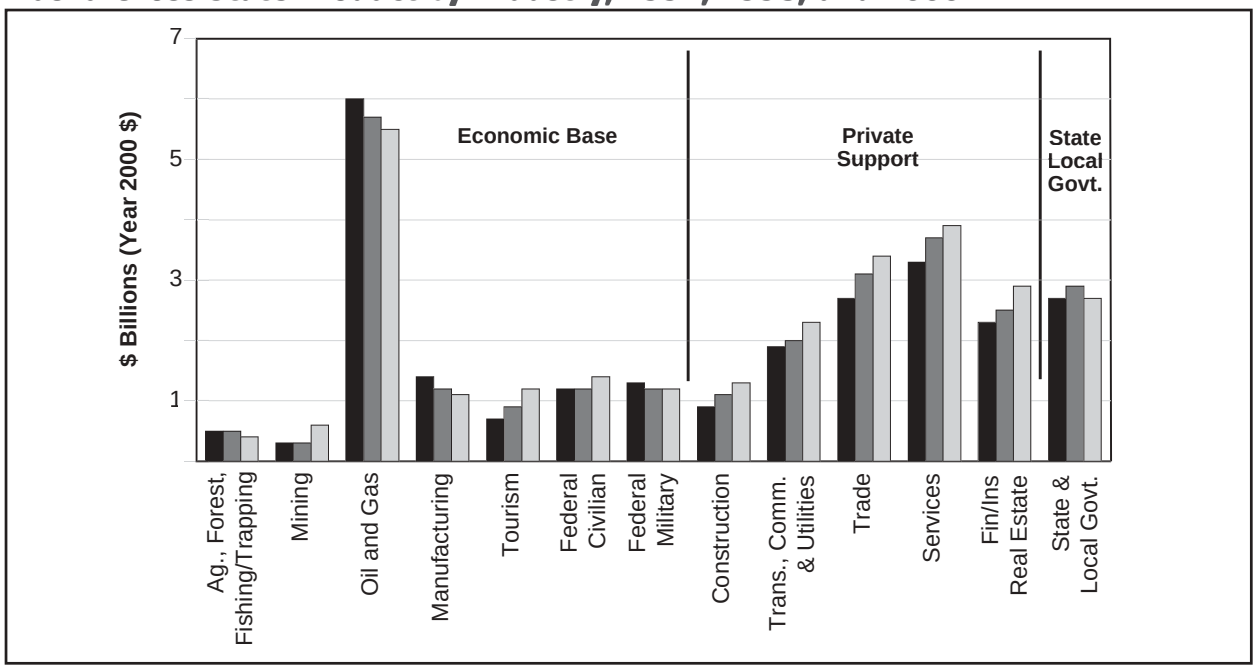
# Overview of the Alaska State Economy

The Alaska economy is based on its natural resources: oil, gas, seafood, scenic beauty, minerals and timber. The oil and gas sector dominates the economic base, accounting for 49% of the business that creates new wealth. In 2000, oil production was about 57% of the peak production year of 1991 and is expected to stabilize at about 50% of peak production until at least 2010. Seafood exports have been hurt by competition with farmed salmon and poor Pacific Rim market conditions. Timber industry exports have also suffered from these poor market conditions. In spite of these setbacks, the Alaska economy has remained essentially stable.

For the purposes of this report, the Alaska economy is divided into three sectors: the economic base, private support and state/local government. There is an emphasis on the economic base since it creates or brings new wealth to the state. Traditionally, Alaska's economic base is oil and gas extraction, seafood processing, non-resident tourism, mining, timber processing, agriculture and federal government. The private support sector provides services to the economic base industries as well as the general public. This sector includes construction, transportation, communication, utilities, retail trade, services, finance, insurance and real estate. To make a distinction between private and public entities that serve the general public, a third sector has been created for state and local government.

As shown in the chart below, sectors of the economic base that are growing include mining, non-resident tourism and civilian federal government. Oil and gas production still dominates the economic base, but is decreasing in importance. The economy is growing most rapidly in the private support sector, which includes services, retail trade, transportation, communications, utilities and construction. This growth is primarily the result of growth in annual Permanent Fund Dividends, Native Corporation business activity and spending on capital improvement projects. Retail trade and

**Alaska Gross State Product by Industry, 1991, 1995, and 2000**




*Source: BEA and DCED*

services in the private support sector now exceed oil and gas by 6%. In the government sector, state spending has been decreasing, while local government spending has been increasing.

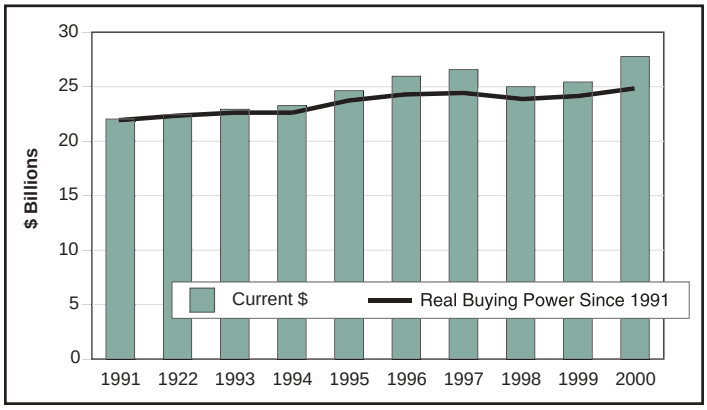
## Gross State Product

Gross state product (GSP) is one of the best overall measures of economic performance. GSP is the value added to all goods and services produced in Alaska. Value is added as products move from one processing stage to the next. For example, trees are harvested, logs are made into lumber and the lumber is used to build a house. At each stage value is added. In 2000, Gross State Product (GSP) was $27.7 billion, up from 22 billion in 1991. As indicated in the chart above, adjusted for inflation, GSP increased 10% from 1991 to 2000.

The chart on the right shows the distribution of GSP by sector in 2000. While oil and gas continue to dominate the economic scene, emerging economic sectors creating new wealth around the state include non-resident tourism, mining and the federal government. The drop in manufacturing is primarily due to declines in timber and salmon industries. The contribution towards GSP in all of the private support sectors is increasing. This includes construction, transportation, communications, retail trade, services and finance/insurance/ real estate (FIRE). Growth in these sectors is primarily due to increased capital project spending, the Permanent Fund dividend and Native Corporation investments. State and local government are relatively stable with increases in local spending offsetting decreases in state spending.

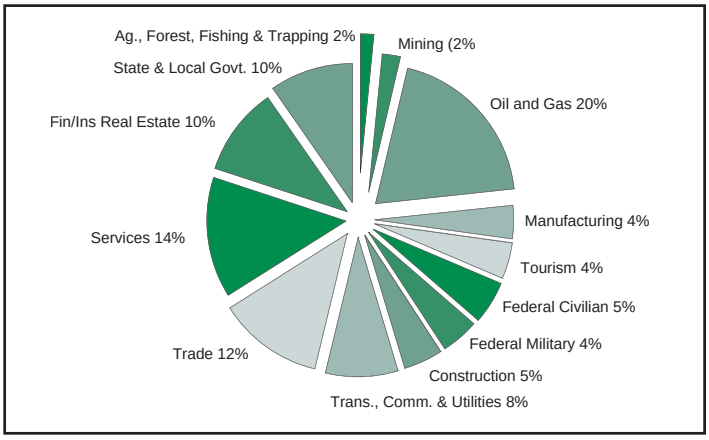
Gross State Product in Alaska and other western states has consistently increased since 1991. However, the figure on the previous page shows that Alaska's share of the regional and national GSP is decreasing. Alaska's share of the western states' regional

### Alaska Gross State Product



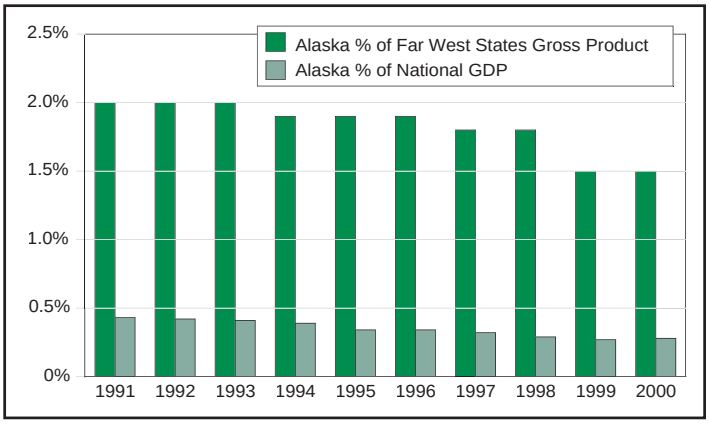

*Source: Bureau of Economic Analysis*

### Distribution of Alaska GSP 2000




*Source: Bureau of Economic Analysis*

### Alaska Gross State Product as a Percentage of Far Western States Gross Product and U.S. Gross Domestic Product



gross product decreased from 2.0% in 1991 to 1.5% in 2000. Alaska's share of the U.S. National Gross Domestic Product fell from 0.4% in 1991 to 0.3% in 2000.

## Population

Alaska's population in 2000 was 626,932, an increase of over 10% from 1991. The largest part of this growth occurred in the "railbelt" urban centers of Anchorage and the Matanuska-Susitna Borough. The Matanuska-Susitna area is experiencing the state's fastest population growth, with a 6% increase from 1999 to 2000.

Populations have decreased in the Aleutians West, Bristol Bay, Wrangell-Petersburg, Ketchikan Gateway and Prince of Wales-Outer Ketchikan census areas. These decreases follow military base closures and declines in the timber and salmon industries.

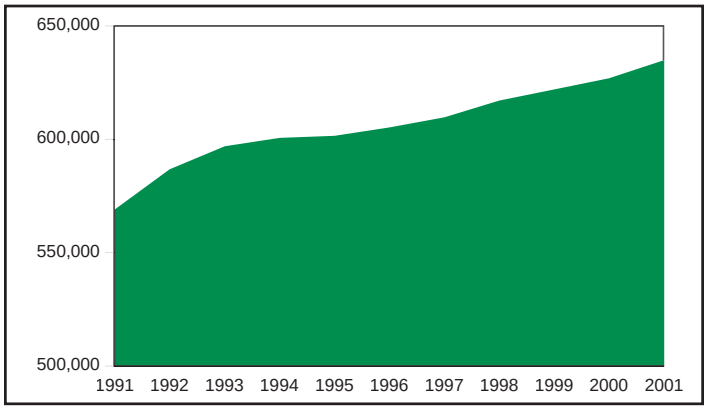
Population change is a function of birth rates, death rates and net migration (in-migrants minus out-migrants). Alaska's birth rate in 2000 was 16.2 births per 1,000 population and is higher than the national average of 15.3 births. The figures below show that birth rates have been decreasing since 1991 and out-migration has been generally slowing since 1994. During the 1990s, high birth rates in Alaska offset both death rates and net out-migration.

## Employment and Earnings

In 2000, the annual average wage and salary employment as reported by the state unemployment insurance program was 280,500 jobs, 6,300 more jobs than in 1999. In addition, an estimated 27,600 jobs were held by Alaska residents in commercial fishing, offshore seafood processing, and by non-residents in the tourism industry who were not included in unemployment insurance reporting.

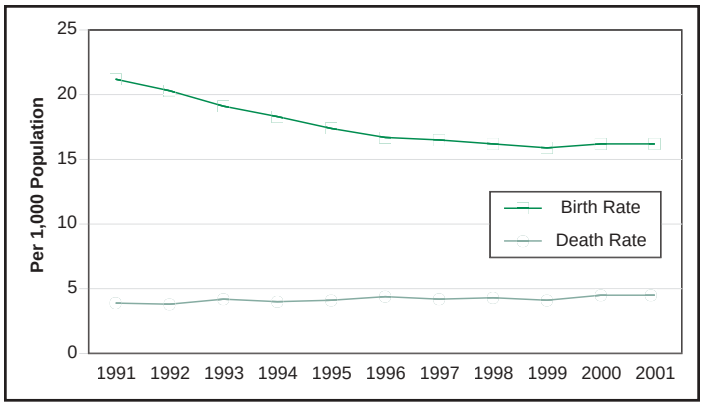
Between 1999 and 2000, about 6,100 jobs were added to Alaska's economy, a growth

**Alaska's Population, 1991-2001**



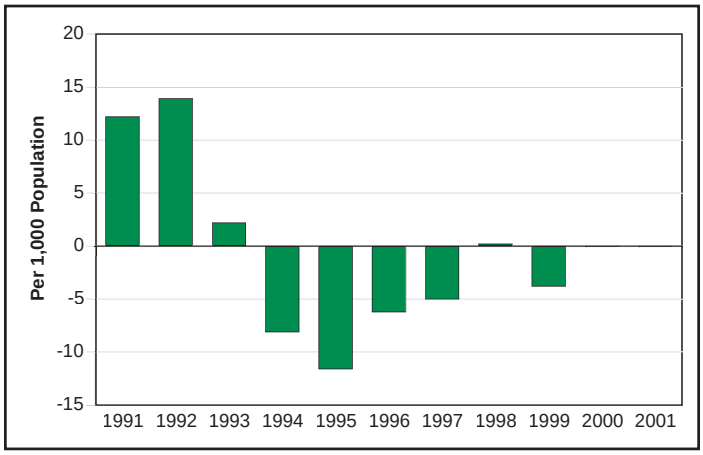

*Source: Alaska Department of Labor, Workforce Development*

**Alaska Birth and Death Rates**




*Source: Alaska Department of Labor, Workforce Development*

**Alaska Net Migration, 1991-2001**



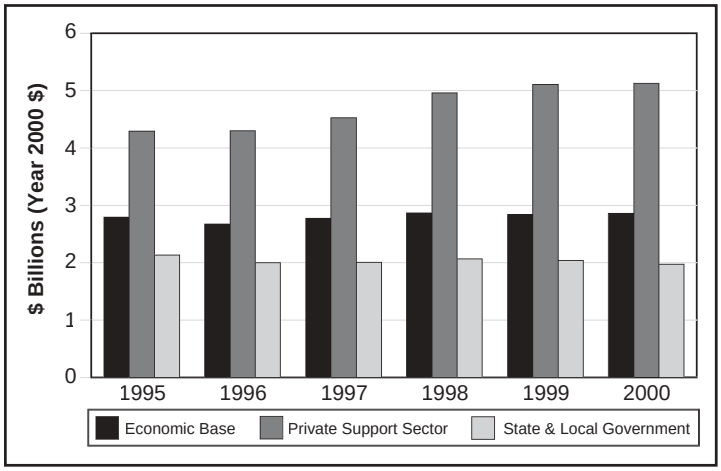

*Source: Alaska Department of Labor, Workforce Development*

of 2%. Services saw the greatest gain with 1,900 more jobs, followed by oil and gas (760 jobs), transportation (630 jobs) and communications (620 jobs). The largest employment growth rates include cable TV services (268%), oil and gas field services (17%), health services (10%), hotels and other lodging (9%), business services (9%) and water transportation (8%).

For the first time since 1995, there was a decrease in retail and wholesale trade employment (-460 jobs). This decline was in response to the prolonged decreases in the state's oil, timber and salmon industries. 'Additionally, a major factor governing retail trade - consumer confidence - is down at the national level. From 1999 to 2000, there were 480 fewer manufacturing jobs and 360 less federal jobs.

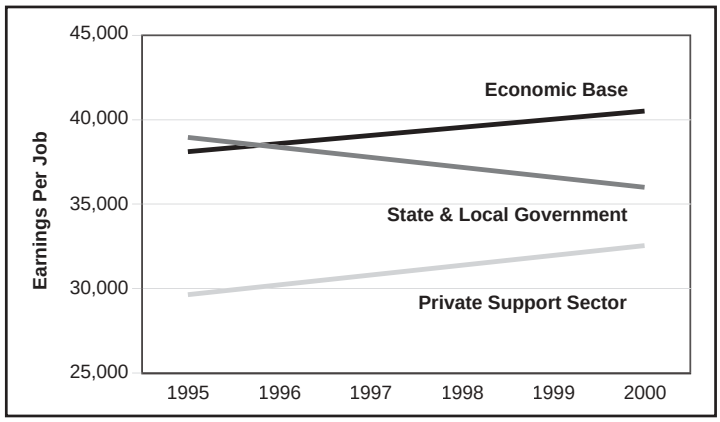
Employment earnings for 2000 are estimated at $9.92 billion, slightly down from the inflation-adjusted $9.95 billion in 1999. After adjusting for inflation, the trends of earnings per job since 1996 are strongly positive for the economic base and the private support sector and negative for state and local government. For the economic base, the upward trend signifies that, while jobs have been lost, the remaining workforce is significantly improving its economic position.

**Personal Income, Alaska Statewide**




*Source: Alaska Department of Labor, Workforce Development*

**Trends in Average Earnings Per Job, Alaska Statewide**

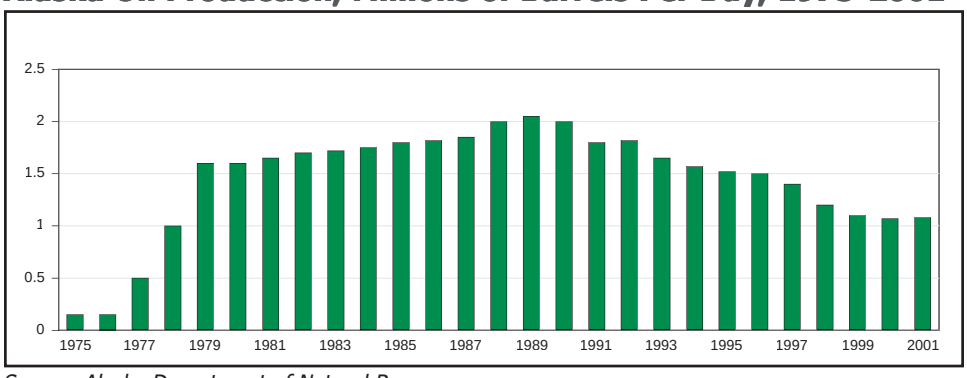



*Source: Alaska Department of Labor, Workforce Development*

## Alaska's Economic Outlook

Reduced crude oil production remains one of the key issues in Alaska's economic outlook. Alaska oil production is now half the peak volume of about 2 million barrels per day in 1989. Statewide oil production is expected to stabilize

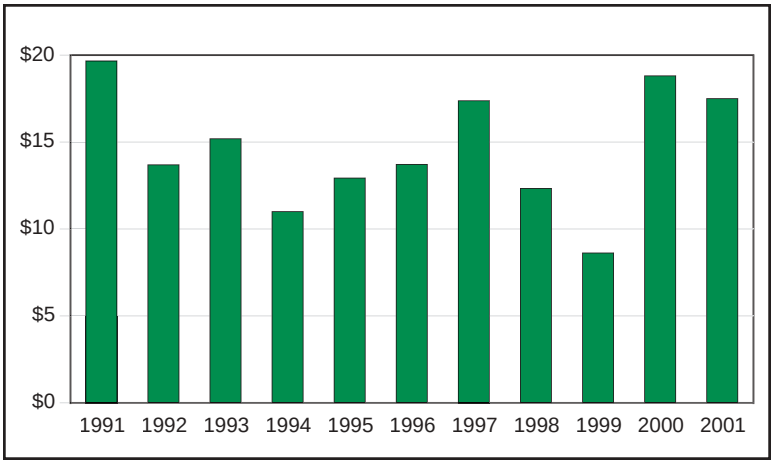
**Alaska Oil Production, Millions of Barrels Per Day, 1975-2001**




*Source: Alaska Department of Natural Resources*

at around 1 million barrels per day at least through the year 2010. Because crude oil is such an essential part of Alaska's economy, less oil production has a large impact on the dollars circulating in the economy.

**Alaska North Slope Spot Oil Prices, $ Per Barrel, 1991-2001**




*Source: Alaska Department of Natural Resources*

Alaska State government relies on oil revenues for over half of its total revenue sources. Oil prices have been very volatile in recent years, creating state revenue "shortages" and "windfalls." Average North Slope spot oil prices hit a low of $8.64 per barrel in 1999 and bounced back to $18.62 and $17.50 in 2000 and 2001, respectively. Despite volatile prices, declining oil production has had greater impact on state revenues. Reduced state oil revenues have been offset in recent years by appropriating surplus funds from the Alaska Constitutional Budget Reserve (the state's "rainy day" account) and making reductions in general fund spending. However, at current depletion rates the Budget Reserve may be exhausted as early as 2004, which could lead to annual state budget deficits of more than $1 billion.

Significant weakness in the Alaska salmon industry has impacted the state's basic economy. In 2000 and 2001, salmon catch numbers were lower than average in western Alaska, which, together with falling prices, had a devastating impact on many local economies. Worldwide production of farmed salmon and an oversupply of wild salmon from other countries are outpacing the demand for Alaska salmon. Until balance between supply and demand is achieved, Alaska salmon fishermen and processors will face an uncertain future at best. To better compete, the average quality of Alaska's wild salmon products must improve, domestic markets need to be developed and marketing efforts need to be greatly expanded. Alaska salmon was once the biggest portion of the state's seafood sector, but was surpassed by groundfish in 2000. The 2000 ex-vessel value of the North Pacific groundfish industry was estimated to be $388 million, while salmon was valued at $263 million.

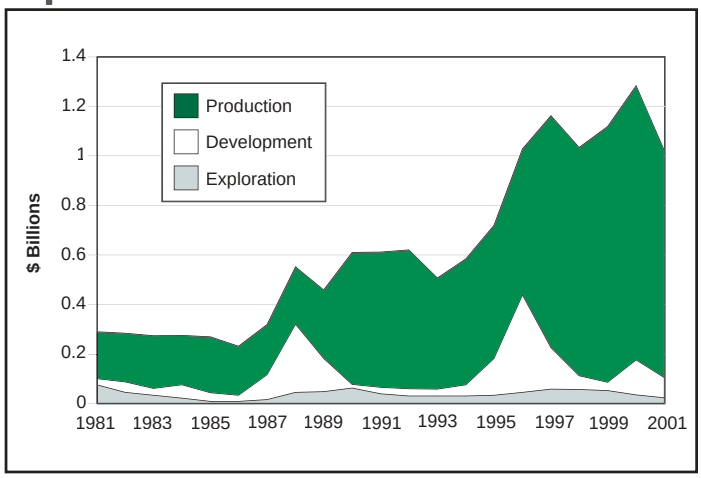
Another Alaska economic sector experiencing contraction is the forest products industry. Most Asian export markets are demonstrating a downturn in timber demand. Pulp mills in Sitka and Ketchikan closed in 1993 and 1997, respectively. The Tongass Land Use Management Plan (TLMP) reduced annual allowable harvest levels to 150 million board feet (mmbf); however, actual harvest rates have been well below this limit. A court-ordered, supplemental environmental impact statement is to evaluate roadless areas for wilderness protection. The U.S. Forest Service's draft record of decision is for no wilderness additions to the Tongass National Forest. In contrast, the Forest Service is recommending wilderness protection for 1.4 million acres in the Chugach National Forest, which now totals 5.4 million acres. Sealaska Corp. is testing the economic feasibility of utilizing wood waste from Ketchikan area mills for Ethanol production. Gateway Forest Products' veneer mill in Ketchikan failed to recover from bankruptcy, but the Ketchikan Gateway Borough has purchased the mill.

The Alaska mineral industry produced $917 million in mineral commodities in 2001, representing a decrease of 17% from the previous year. The decline was, in part, due to less production of zinc and rock, but was mainly due to record low prices for most metals, including gold, silver, and zinc. The figure on the right shows expenditures for mineral exploration, development and production from 1981 to 2000. As in the past few years, zinc was the most valuable metal produced, with a gross value of $508 million, representing 65% of the total metal value, followed by gold ($149 million; 19%), silver ($73 million; 9%), and lead ($56 million; 7%). Exploration expenditures in Alaska continued a decline that began in 1998, decreasing 33% from the $34.9 million in 2000 to $23.4 million in 2001. Nevertheless there are several large projects that promise of development, including the Pogo gold property near Big Delta, the Donlin Creek gold project in the Bethel area, and continuing discoveries near the Red Dog Mine.

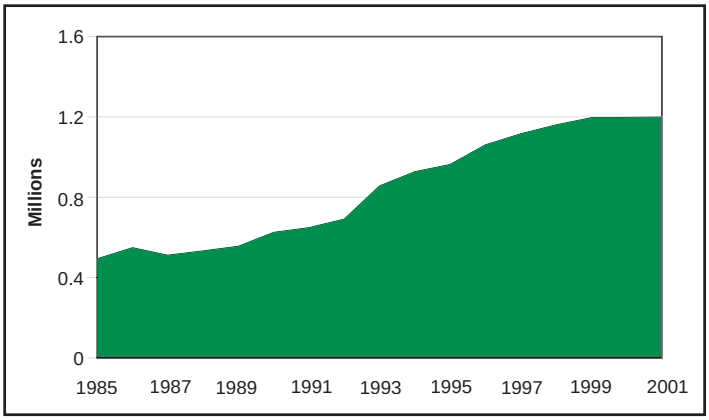
Tourism remains strong in spite of a general slowdown in travel due to world economic conditions and aftermath of the events of 9/11. An estimated 1.46 million visitors came to Alaska between October 2000 and September 2001. Cruise ship traffic is still growing strong, an estimated annual average of 11.6% between 1999 and 2001. Direct spending by non-resident visitors was estimated at $1.6 billion for the 2000-2001 season. The figure on the previous page shows the increase in summer arrivals for non-resident tourists from 1985-2001.

The figure to the right shows Alaska's top commodities exported from 1999 to 2001. Exports from Alaska totaled $2.42 billion in 2001, 2% less than 2000 and 6% less than 1999. The figure on the right shows the values for Alaska's top exports in 1999, 2000 and 2001. Alaska's top export products

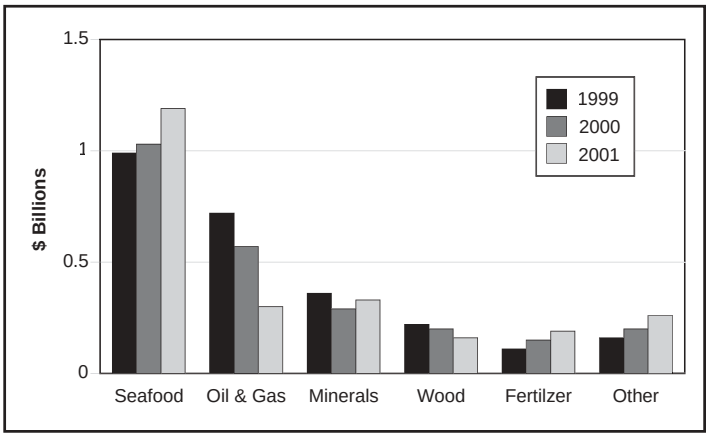
## Alaska Mineral Industry, Expenditure and Production Value




## Non-Resident Tourism, Summer Arrivals




## Total Value of Alaska Exports By Product, 1999, 2000, and 2001




*Source: DCED, Division of International Trade and Market Development*

include fish and seafood products, crude oil, natural gas and its by-products and minerals, such as lead, zinc, and coal. Top export markets are Japan, Korea, Canada, Germany, Belgium, China, Mexico and Taiwan.

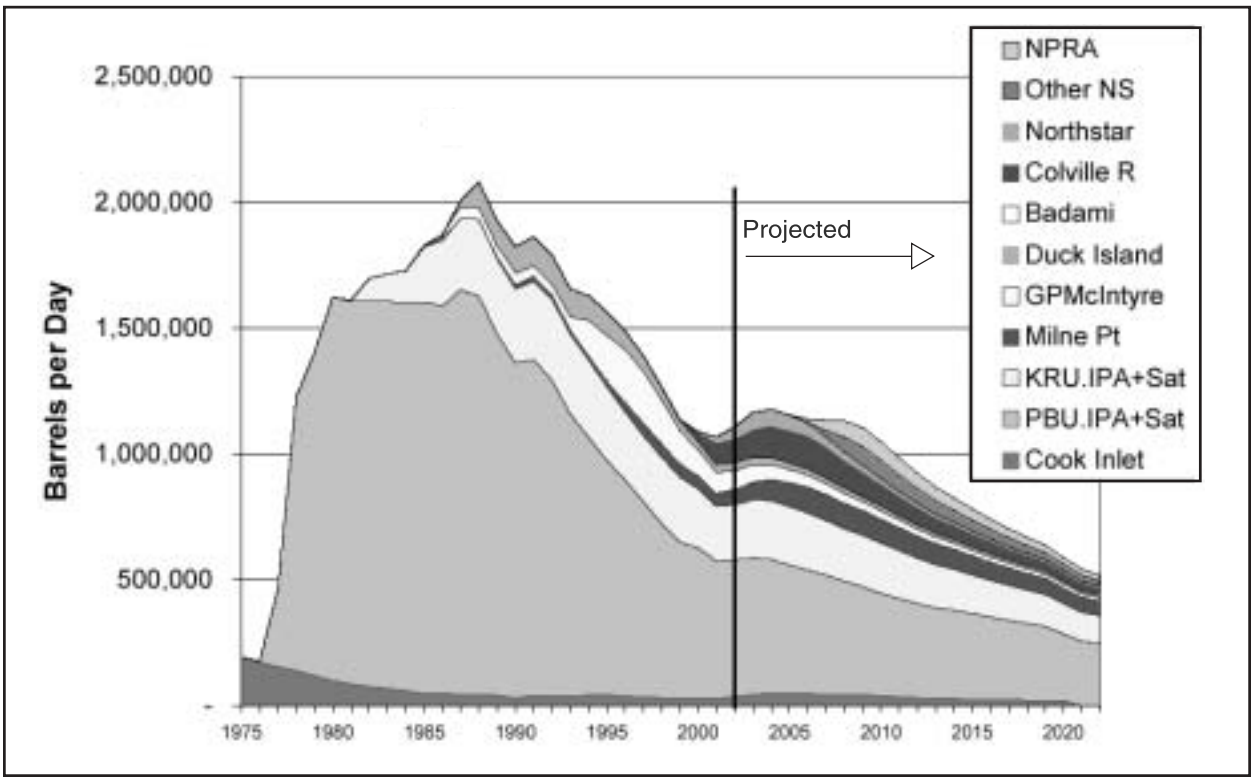
## Summary

Alaska faces challenges as it works to strengthen and diversify its economy. Nonetheless, Alaskans should remain optimistic about the future. Alaska's economy continues to add jobs and maintain historically low unemployment rates. Despite the volatility of oil prices throughout the 1990s, Alaska's economy has shown unprecedented stability, with 10 consecutive years of employment growth. This stability stems from long-term oil production, diversification of the economic base and greater import substitution in the retail trade and services sectors. Alaska now has many different thriving industries such as hard rock mining, air cargo, tourism, oil field services, medical services and construction. There is $25 billion in the Alaska Permanent Fund. The state possesses vast oil, fish and timber resources, as well as a strategic commercial location relative to the growing Pacific Rim economies. Alaska also is home to some of the world's most beautiful natural attractions. The challenges are to find a balance between development and preservation, and to meet increasing global competition in the world marketplace.

# Oil and Gas industry

The oil and gas industry includes the exploration, development and production of oil and gas products. This industry also includes oil and gas field services and pipeline transportation. In Alaska, the oil and gas industry is a major employer as well as the economic driver for the state. Alaska has two commercially active oil and gas regions, located in Cook Inlet in Southcentral Alaska, and on Alaska's North Slope.

### Historic and Projected Alaska Oil Production




*Source: Alaska Department of Natural Resources*

The Prudhoe Bay Unit (PBU), on the Alaska Arctic coast, is the largest operating oil field in the United States, having produced 12.8 billion barrels of oil since production began in the late 1970s, with an estimated 6.4 billion barrels of oil still in the ground. A number of other North Slope oil units have come online to supplement the Prudhoe Bay Unit's production that has declined significantly over the last 15 years. Total North Slope oil production is expected to level out at about one million barrels per day through 2010. North Slope oil is transported through the Trans Alaska Pipeline to the City of Valdez for tanker delivery to West Coast refineries. There are also enormous amounts of natural gas in the North Slope reserves. Some of this gas is used to power oilfield operations and is re-injected to improve production. Construction of a natural gas pipeline from the North Slope is under active consideration.

Oil and gas production from Cook Inlet is refined for domestic and international markets and natural gas is distributed for residential and commercial use in the upper Kenai Peninsula, Anchorage and the Mat-Su Valley. A gas pipeline is planned for construction from the City of Kenai to the community of Ninilchik. Several smaller, independent oil companies have shown increased interest in Cook Inlet oil and gas exploration and production since the mid 1990s, leading to renewed drilling and production following years of decline.

Little activity is occurring on Alaska's federal Outer Continental Shelf, where oil and gas development and production faces significant environmental and economic challenges. Most of the Outer Continental Shelf is distant from existing infrastructure and is unexplored, although the federal Minerals Management Service has prepared detailed resource estimates for fifteen Alaska offshore planning areas.

The state's new shallow gas leasing program, together with coalbed methane studies and exploration, could lead to gas production and the development of local energy sources in rural areas of the state, offsetting the need to import costly diesel fuel.

## Employment and Earnings

According to a 2001 study by the McDowell Group, the oil and gas industry generates approximately 33,500 jobs and a $1.4 billion payroll annually in the state. Most of these figures reflect activity related to the huge production volumes from Prudhoe Bay.

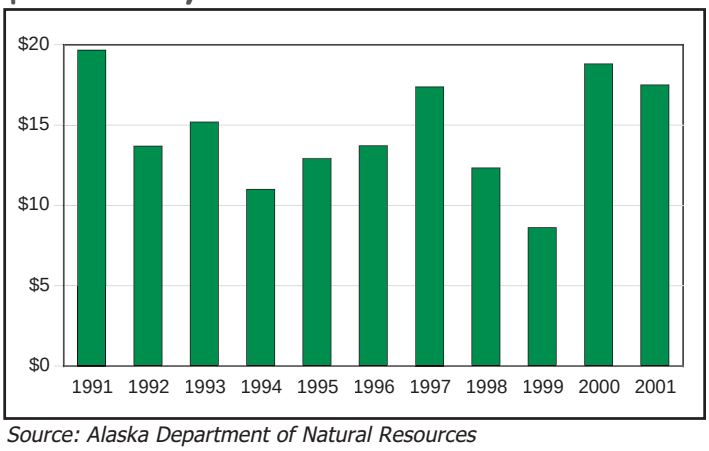
## Royalties and Taxes

The oil and gas industry generated almost $2 billion in revenues for the State of Alaska during FY 2001, representing more than half of all General Fund unrestricted revenues. This included about $704 million in severance taxes, $799 million in royalties, $338 million in corporate income taxes and $45 million in property taxes. Additionally, $344 million in royalties went into the Alaska Permanent Fund. Alaska's government services are greatly dependent on the oil industry. Petroleum revenue has provided over 70% of the state's General Fund unrestricted revenue since 1978, Prudhoe Bay's first full year of production.

## Industry Issues and Outlook

**Prudhoe Bay Declines.** The most significant trend in the state's oil and gas industry is declining production from Prudhoe Bay, which, because of its huge size and production levels, sends ripples throughout the state economy. These ripples affect oil industry employment in offices, in the fields and in support industries. They affect services and state government income directly, and many other services and businesses indirectly.

**Alaska North Slope Spot Oil Price, $ Per Barrel, 1991-2001**




*Source: Alaska Department of Natural Resources*

**New Cook Inlet Discoveries.** The state's second active oil and gas producing region is in Cook Inlet, within the boundaries of the Kenai Peninsula Borough. Several smaller, independent operators have succeeded to leases formerly held by major oil and gas companies. Using new exploratory and drilling techniques, these operators have re-invigorated interest in the region. With improved techniques and the possibility of new discoveries, Cook Inlet could be producing gas for local markets and for export for many more years.

**Coalbed Methane.** The State of Alaska is planning to explore for the availability of coalbed methane gas at three locations around the state: Chignik, on the Alaska Peninsula; Fort Yukon, near the confluence of the Porcupine and Yukon Rivers; and Wainwright, on the western Arctic coast. The exploration program will provide valuable information on development costs and feasibility.

**Shallow Gas Lease Program.** The State initiated the shallow gas lease program in 1999. The intent of the program is to locate local sources of gas that can be delivered to rural and remote communities at less cost than alternatives, particularly costly, imported diesel fuel. Shallow gas leases have been let in the Matanuska-Susitna Valley, in the Delta Junction area and in the Northwest Arctic Borough near the Red Dog mine.

**Other Oil Field Resources.** As production from the large Prudhoe Bay oilfield continues to decline, considerable interest exists to develop other oil and gas resources, principally from the Arctic Slope. Recent lease sales and exploration in the National Petroleum Reserve-Alaska (NPR-A), for example, have been very positive for oil development, and the proximity to Prudhoe Bay infrastructure improves the potential for future production. Over $64 million in oil and gas leases were sold in June of 2002 in the NPR-A. Oil exploration and development in the Arctic National Wildlife Refuge (ANWR) has been a very controversial issue in recent years and will require congressional approval before any activity can occur.

Exploration is taking place in interior basins, in the Nenana Basin in Interior Alaska and in the Copper River Basin near Glennallen. Exploration is also planned at the Katalla oilfield near Cordova, where oil was produced from early in the 20th century through the 1920s. Gas or oil discoveries in interior basins, if economic, could provide for local energy needs; however, much exploratory work will be needed to determine whether commercial quantities of gas can be developed.

**Natural Gas Pipeline.** There is considerable interest in the construction of a natural gas pipeline to bring Prudhoe Bay gas to market. Interest peaked in 2001 when gas prices rose to over $4 dollars and higher (per thousand cubic feet) and active interest continues, with the Congress currently considering incentives for the project. Routing alternatives include 'over-the-top', along the Arctic coast to the MacKenzie River delta in Canada; along the Alaska Highway to Alberta, Canada; and along the existing oil pipeline to Valdez. The gas line, estimated to cost up to $20 billion depending on routing, enjoys strong political support, but both prices and markets must be secure to prompt investment.

**Outer Continental Shelf.** The U.S. Department of Interior has approved the federal Minerals Management Service's 2002 – 2007 Outer Continental Shelf leasing program. Eight lease sales are planned: the Beaufort Sea in 2003, 2005 and 2007; the Chukchi Sea/Hope Basin in 2004 and 2007; Cook Inlet/Shelikof Straits in 2004 and 2006; and, in Norton Sound in 2003. Resource estimates indicate the potential for significant amounts of oil and gas, however, further exploration is needed to determine actual reserves, and offshore development is expected to be both costly and lengthy. The Minerals Management Service is attempting to see whether the gas-prone Hope Basin can be developed for local use, for both nearby communities and the Red Dog mine.

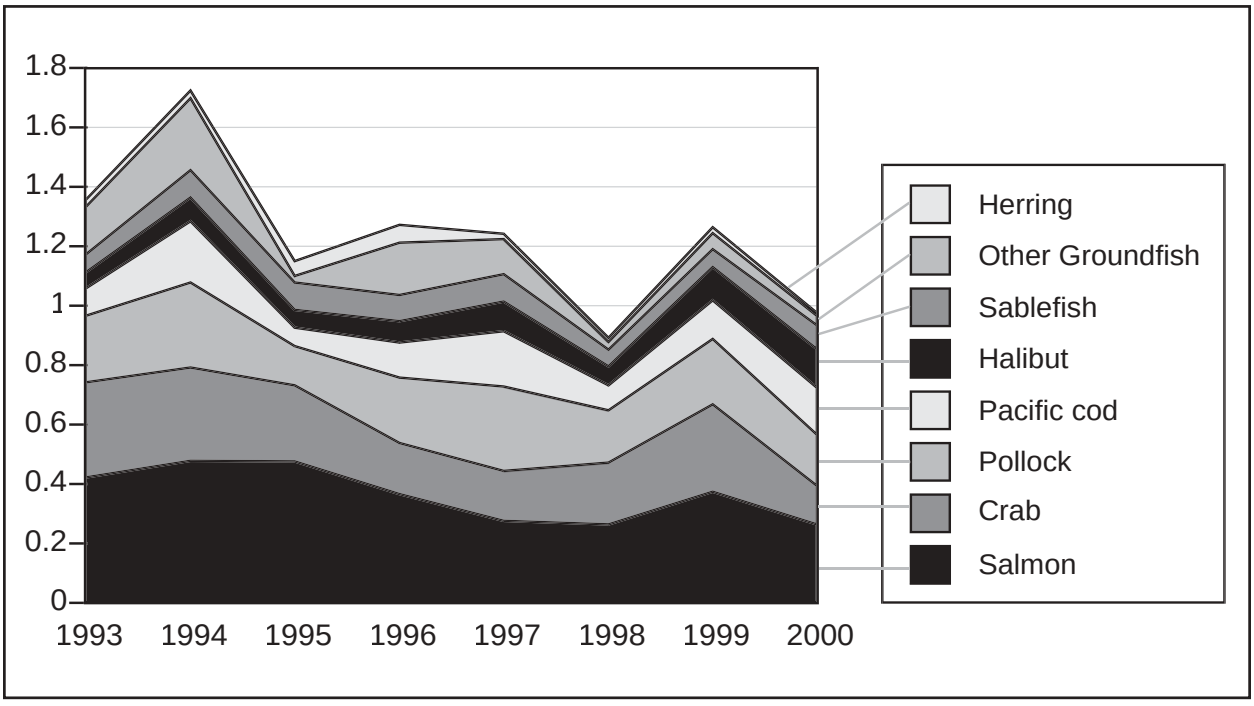
# Seafood Industry

The seafood industry is very important to the economy and social fabric of Alaska. For the last hundred and fifty years, fishermen from all parts of the world have ventured to Alaska to take advantage of the abundant and lucrative commercial fish resource. Alaska's fishery management systems have evolved in an effort to maintain the rich ecosystem. The Alaska fishing industry is under constant pressure to keep up with technical advances in fishing and seafood processing, and to maintain and improve its global market position. While total commercial harvests have remained fairly constant in recent years, fisheries and related activities are nonetheless areas of major growth potential for the Alaska economy. This is because many important components of the industry that could potentially be in Alaska are still located outside the state.

## Seafood Harvest Value

Approximately 2.1 million metric tons (4.5 billion pounds) of fish and shellfish were harvested in Alaska waters in 2000, with a value to the harvesting sector of $1 billion. The chart below shows the ex-vessel harvest value between 1993 and 2000. Alaska processors earned wholesale values in excess of $2 billion in 2000. Exports of Alaska seafood contributed $1 billion to the U.S. balance of trade.

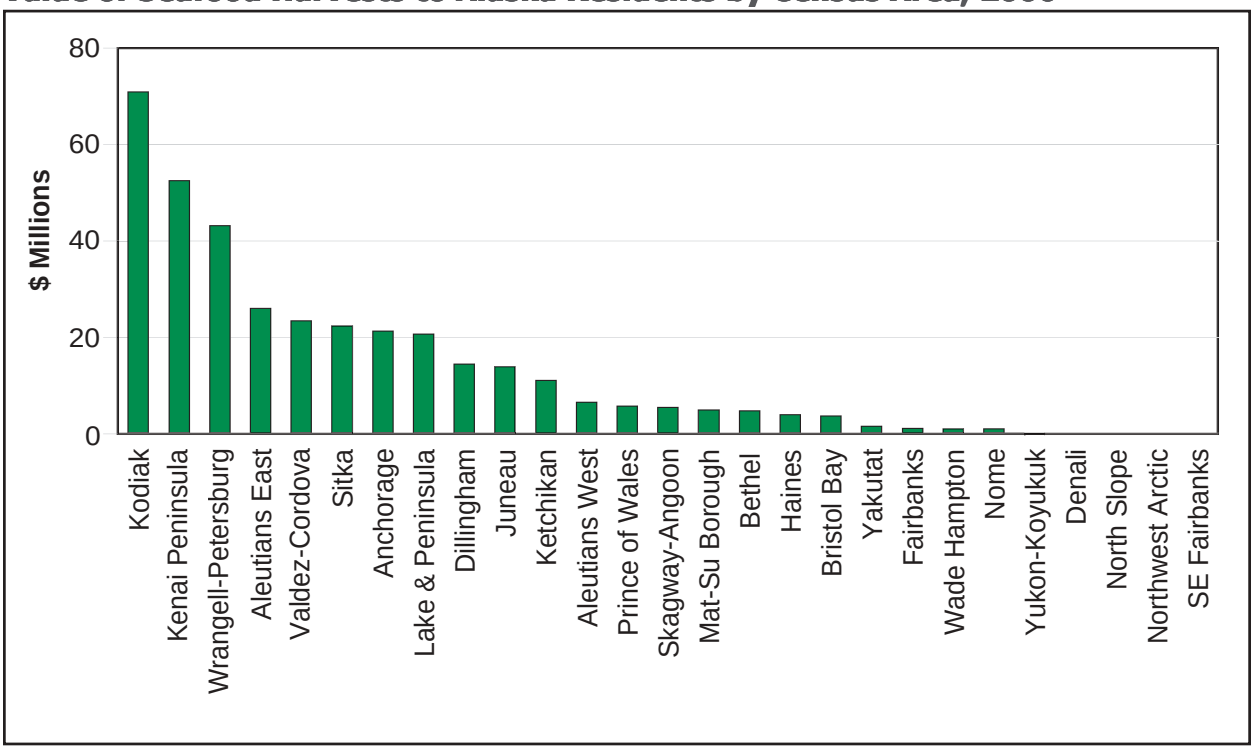
**Alaska Seafood Industry,**
**Ex-Vessel Value of Commercial Fisheries for All Harvesters**




*Source: State of Alaska, Commerical Fishing Entry Commission; and Alaska Fisheries Information Network*

Nearly 49% of U.S. commercial seafood harvest by weight came from Alaska in 2000, equating to 27% of the total value. In 2000, Alaska had two of the country's three top ports as measured by value of seafood harvest. Dutch Harbor and Kodiak produced $124.9 million and $94.7 million in ex-vessel value, respectively. Dutch Harbor, located in the western Aleutians Islands Census Area, may be Alaska's busiest port; however, as shown the chart below, residents from Kodiak Island earn more from fishing than residents of any other region of Alaska. For most of Alaska's coastal communities, fishing is the backbone of the local economy. Fisheries-related jobs provide for about 74% of the wages from economic activity in Western Alaska. This area is responsible for up to half of the world's sockeye salmon harvest in some years. Very little other economic base is available in this remote region to replace the declining value of salmon.

**Value of Seafood Harvests to Alaska Residents by Census Area, 2000**



## Fisheries Management Systems

There are over 100 commercially valuable species harvested around Alaska. The State of Alaska, with a Constitutional mandate to manage its resources for sustainability, manages all nearshore fisheries, up to 3 miles from shore. It also exercises lead management responsibility for several species throughout the US Exclusive Economic Zone (EEZ) off Alaska under extended or joint jurisdiction with the federal government. These include salmon, crab and several lesser resources. The federal government is primarily responsible for the other offshore EEZ fisheries, 3 to 200 miles from shore, which include pollock, Pacific cod, sablefish and other groundfish. Halibut harvests are set by the International Pacific Halibut Commission and managed by the federal government.

## Fisheries Taxes and Fees

The commercial fishing industry is second to the oil industry in contributions to the Alaska General Fund. Taxes from fishing activity averaged $47 million from 1990 to 2000. The cities and boroughs of the state receive half of the state's fisheries taxes. Their share of both the FY 2001 fisheries business tax and fisheries landing tax was $18.3 million.

In 2000, the National Marine Fisheries Service established the IFQ Cost Recovery Program. Halibut and sablefish quota holders are assessed a modest tax to cover the cost of federal management. In the same year, the State of Alaska established the Community Development Quota (CDQ) Program Fee that is paid by CDQ groups to cover the cost of state oversight.

## Employment and Earnings

During 2000, 45,550 people were engaged in commercial fishing and seafood processing in Alaska, including the adjacent and federally managed EEZ waters. This translated into 27,877 full time equivalent jobs, of which Alaska residents held 36%. Total personal income earned in the industry during 2000 is estimated to have been $437 million.

In 2000, the Alaska Commercial Fisheries Entry Commission (CFEC) issued 25,151 commercial fishing permits required to fish for salmon, herring, crab, and other fisheries. Alaska residents held 78% of these. CFEC also issued 21,868 crew permits, of which Alaskans held 57%.

**Commercial Fishing and Seafood Employment (FTE)**

| | Resident | % Resident | Non-resident | % Non-resident | Total |
|---|---|---|---|---|---|
| Harvesting | | | | | |
| Fishers with CFEC permits | 3,070 | 42% | 4,290 | 58% | 7,360 |
| Crew | 4,590 | 57% | 3,500 | 43% | 8,090 |
| Subtotal | 7,660 | 50% | 7,790 | 50% | 15,450 |
| Processing | | | | | |
| Onshore | 2,282 | 26% | 6,494 | 74% | 8,775 |
| Offshore | 187 | 5% | 3,465 | 95% | 3,652 |
| Subtotal | 2,469 | 20% | 9,959 | 80% | 12,427 |
| **Total** | **10,129** | **36%** | **17,749** | **64%** | **27,877** |

*Source: AK CFEC*

There were 1,078 fishing vessels and 105 offshore processors in 2000, including floaters, motherships and catcher processors. The federally managed ground-fisheries are dominated by non-residents, and are very lucrative. A total of $956,650,686 in ex-vessel gross earnings was reported by CFEC for year 2000. About 41% of these earnings went to Alaska residents. During 2000, crew wages typically ranged from $169,000 to $239,000 per year on trawl catcher vessels.

During 2000, seafood-processing employment was 8,775 for onshore facilities and 3,650 for offshore processors. Alaska residents occupy about 26% of the onshore jobs and 5% of the offshore processing jobs. According to the Alaska Department of Labor and Workforce Development, seafood processing makes up 60% of the state's "manufacturing" sector. Nine seafood processors are listed among the top 100 employers in the state for 2000.

## Industry Issues and Outlook

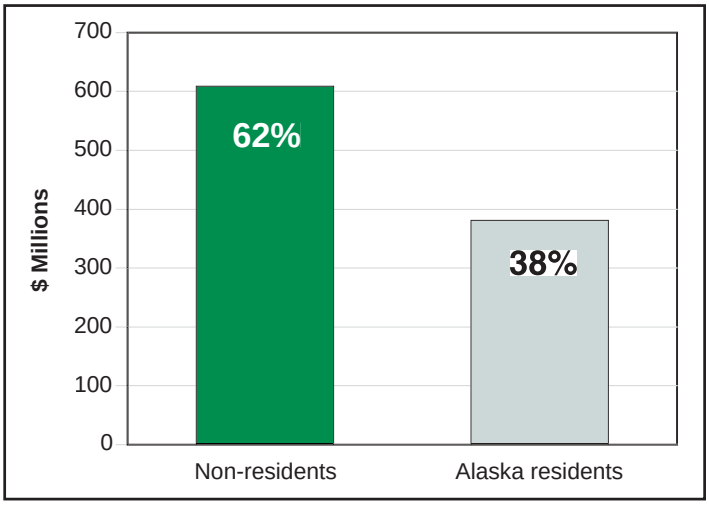
The Alaska seafood industry must constantly innovate to adapt to changing marine and market environments. The ability of the industry to alter its operations to balance these dynamic forces will dictate its long-term success, and to a large extent, the health of Alaska's coastal communities.

**Aquaculture.** Over the next ten years aquaculture will be a pervasive force on the Alaska fishing industry. The salmon industry is struggling under the weight of huge supplies of farmed salmon. Sablefish, halibut and cod, all important to Alaska through the 20th century, are also beginning to be produced at fish farms. In order to establish the superiority of its wild seafood brand over farm-based competitors, Alaska's seafood suppliers must embrace consumer-based market strategies aimed at differentiating wild, natural products from farmed. Strategies could include point of origin labeling, organic and sustainable fisheries seals and a marketing slogan that captures the unique and healthful attributes of Alaska seafood. To remain competitive, the Alaska seafood industry must continue to lower costs and increase efficiencies while increasing product value and diversifying product options.

**Shellfish Aquaculture.** Although Alaska does not permit finfish farming, it is legal to raise shellfish in the state. A growing number of aquatic farms in Alaska raise shellfish including oysters, mussels and clams, and the industry is gearing up to introduce additional species.

**Non-Resident Harvest.** As indicated in the chart on the right, Alaskans earned only 38% of the statewide total ex-vessel value of the Alaska fisheries in 2000. A large majority of fisheries earnings went to people residing outside of the state. Increasing participation by Alaskans in the harvesting and processing of Alaska's bountiful seafood resources is a major challenge facing the state.

**2000 Commercial Fishing Statewide Earnings, Alaska Residents vs Non-Residents**



**Sustainability.** Worldwide, there is growing consumer awareness of the problem of overfishing in many areas. Sustainability has become a byword in consumer education and marketing campaigns. Alaska's Constitution requires that commercial fisheries be managed for sustainability, and federal fisheries in the EEZ operate under very conservative quotas. Consequently, the overall health of fish stocks in Alaska is excellent. The Alaska salmon fishery was the first major commercial fishery in the world to be certified sustainable by an independent international certification organization, and the pollock fishery is currently under study for such certification. However, unless more is done to get the word out to consumers about Alaska's enviable harvesting and management methods, the Alaska seafood industry faces being tainted with "guilt by association" due to the poor fishing practices of some other fishing nations. Compounding this problem at the national level is a trend to reduce federal resources for commercial fisheries development as attention turns to solving overfishing issues in other parts of the country, and promoting domestic aquaculture operations.

**Bycatch Reduction.** "Bycatch" refers to non-targeted fish species incidentally caught in a particular fishery. Major improvements have been made in bycatch reduction, and it can be anticipated that further gains will be made in those fisheries that continue to have bycatch or selectivity concerns. Innovations in management practices and development of improved gear, coupled with market incentives and regulatory requirements will drive this process.

**Endangered Species.** Environmental issues have assumed a prominent role in the groundfish fisheries. Declines in western Alaska Stellar sea lion populations have resulted in the decision by NOAA to list them as an endangered species. Constraints have been applied to traditional fisheries in the region as fishery managers seek to understand the cause of this decline. Similar environmental issues will likely continue to play a key role in fishery management decisions in Alaska.

**Full Utilization.** Greater utilization of harvested fish and shellfish is an ongoing effort. Fish waste from processing operations has many potential uses including fuel, fertilizer, medicine, feed, and human food. The industry will continue to find alternative and profitable uses for fish waste.

**Market Diversification.** Alaska seafood suppliers continue developing new markets in response to the now decade-long recession in the Japanese economy – historically the principal market for Alaska seafood products. Global competition continues to challenge Alaska operators, but promising opportunities exist in the U.S. and Europe, and in emerging markets in developing nations.

**Expanding Individual Fishing Quota Concept.** An ongoing issue in fisheries management is the question of expanding individual fishing quotas into other fisheries. Experience shows that management regimes that steer competition away from the "race for fish" and toward improved quality assurance, reduction of costs, and innovative marketing benefit participants and the general economy in several ways. Most notable are important gains in operational safety, substantial increases in unit resource value, and improvements in bycatch and selectivity. The successes of the halibut and sablefish IFQ programs, the State's Chatham and Clarence Straits blackcod fisheries, Bering Sea pollock cooperatives, and, most recently, the Chignik salmon cooperative have highlighted the possibilities for similar improvements in other fisheries. However, concerns remain about assuring fair initial distribution of the resource among participants, safeguarding the economic well being of coastal communities, and fairly accommodating future new entrants.

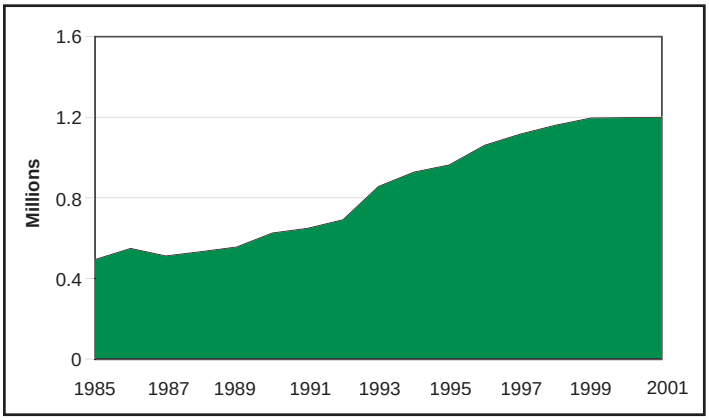
**Product Development.** Much of the production infrastructure in Alaska, particularly for salmon, is antiquated. Even the more progressive production operations for pollock continue to require product development support. Alaska must continue to enhance the efficiency and nature of its production capacity to improve the quality and desirability of its seafood products. Technical innovation and improved worker productivity are key elements in stemming the loss of valuable production capacity to developing countries with lower production costs.

**Seafood and Federal Food Programs.** Seafood is an important food item for this country. However, despite several attempts by Alaska, the U.S. government does not recognize seafood in the same way as livestock and other protein sources for the purposes of several federal food programs. Alaska continues to pursue recognition of its seafood resources, on par with livestock and other proteins, by these federal food programs.

# Tourism Industry

The visitor industry includes all non-resident travel into Alaska. During the 2000-2001 visitor season, over 1.4 million visitors came to Alaska. Not surprisingly, 83% of these visitors came during the summer season, from May to September. This is double the number of summer visitors in 1991 and represents an average annual growth rate of 6.5%. The highest growth rate is in cruise ship travel, with an average annual growth rate of 11.6% since 1991. Other arrival modes such as domestic air, international air, and highway travel have seen an average annual increase of 5.4%, 1.7%, and 1.5% respectively since 1991.

**Non-Resident Tourism, Summer Arrivals**




In 2000-2001, Alaska visitors were primarily domestic visitors from the United States (87%), with 9% from Canada and about 4% from other countries. Visitor travel during the fall/winter season is increasing. Since the 1994-95 season, the number of fall/winter visitors has grown by an annual average rate of 5.2%. Between the 1998-1999 and 2000-2001, fall/winter visitor season, tourism has grown more rapidly, by 8.5%. Significant factors contributing to winter tourism growth include the expansion of winter trails and the increasing popularity of aurora viewing.

**Fall/Winter Visitors**

- Alaska had 254,400 visitors during Fall/Winter 2000-01 (10-15 percent increase from visitor arrivals in Fall/Winter 1998-99).
- Approximately 34% of total arrivals were visitors.
- "Business Only" was the most common trip purpose.

**Summer Visitors**

- Alaska had 1,202,800 visitors during Summer 2001.
- Approximately 72 percent of the total arrivals were visitors.
- "Vacation/Pleasure" travel was the most common trip purpose.

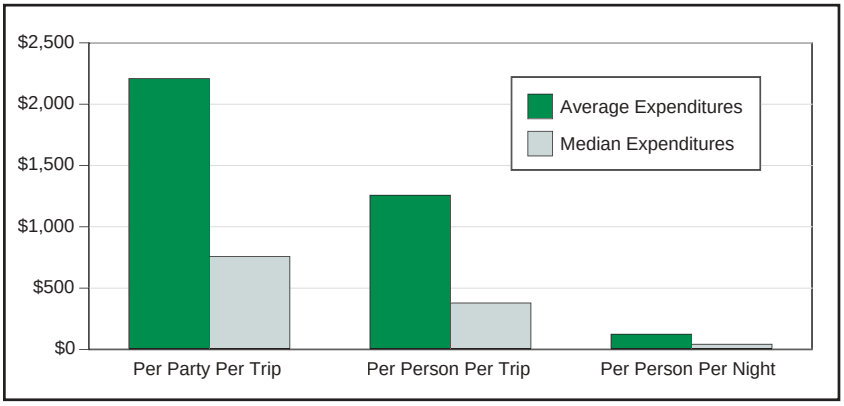
A visit to Alaska continues to be the fulfillment of a life-long dream for many travelers. The state's scenic beauty, wilderness setting and wildlife continue to attract and enthrall visitors. In a time of uncertainty and concern for safety, Alaska has an opportunity to capitalize on the perception that Alaska is a safe place to visit and an exotic alternative to traveling abroad. While infrastructure and transportation challenges exist throughout the state, abundant resources are available for communities and businesses to develop cultural tourism, ecotourism, wildlife viewing, adventure tourism, and sportfishing opportunities.

Statewide marketing support for these opportunities comes through the Alaska Travel Industry Association, the marketing organization for Alaska. The association's marketing objectives include strengthening Alaska's winter image to attract new winter visitors, marketing to Alaska Highway and Alaska Marine Highway visitors, and enhancing small business opportunities in niche segments such as sportfishing, cultural tourism, ecotourism and bed & breakfasts.

## Visitor Spending

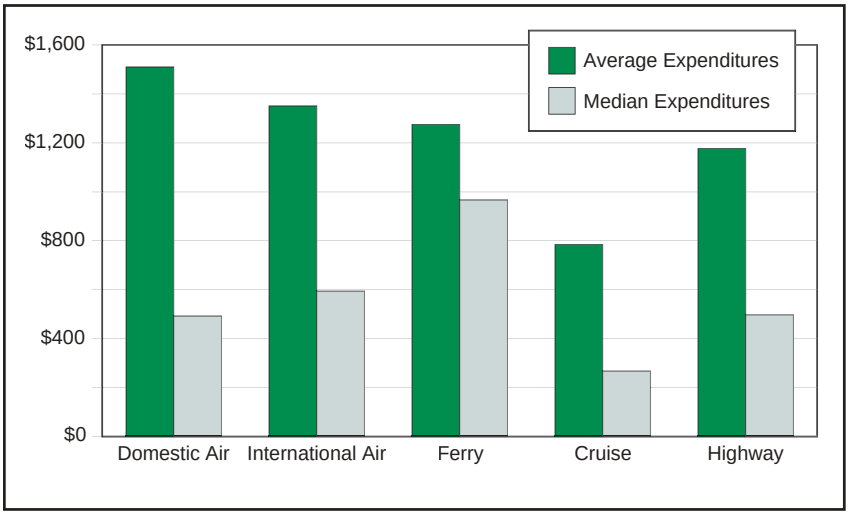
Visitors to Alaska spent over $1.8 billion from October 2000 to September 2001. Summer visitor spending increased from $598 million in 1993 to almost $1.4 billion in 2001. Fall/Winter visitor spending increased from $87 million in 1993-94 to $327 million in 2000-01. Visitor spending outpaced the increase in visitor travel, even accounting for inflation. This is likely the result of increased numbers of in-state tour businesses and tour opportunities. Some of the observed increases in visitor spending figures may be due to changes in data gathering methodology between the 1993 and 2001 visitor surveys.

### In-State Visitor Expenditures, Summer 2001




*Source: DCED, Alaska Visitor Statistic Program IV*

### In-State Visitor Expenditures, Per Party, Per Trip, By Mode of Travel, Summer 2001




*Source: DCED, Alaska Visitor Statistic Program IV*

The median amount spent by individuals per trip during the 2001 summer season was $760. The first chart below shows the average and median expenditures per trip per person, per travelling party and per person per night. The second chart shows the total visitor spending in Alaska per trip, per person, based on the mode of arrival. In-state visitor spending by ferry travelers is different from the other categories because it includes the in-state expenditure of traveling to Alaska on the Alaska Marine Highway System, whereas other modes of arrival in Alaska entail out-of-state expenditures for travel to Alaska (airlines, cruise ships, etc.).

An estimated 14.5% of summer visitor dollars are spent on recreation, 33.5% on lodging, 13.2% on transportation, 9.8% on food and beverages, 9.5% on souvenirs, 7.3% on Alaska Native Arts and Crafts, 4.6% on clothing, 2.2% on personal expenses, and 5.5% on other expenses.

## Employment and Earnings

Tourism is one of the state's top industries in terms of employment. The Department of Community and Economic Development estimates that the non-resident visitor industry accounts for about 20,000 direct jobs and $447.9 million in personal income. Non-resident employment in the tourism industry is estimated to be about 20% to 25%. This is much lower than non-resident employment in other economic base industries such as seafood processing, timber and oil and gas extraction.

## Industry Issues and Outlook

The visitor industry has a growing role in the Alaska economy. In addition to being one of the state's top employers, non-resident tourism in Alaska represents a growing economic sector, in contrast to the decline in Alaska's resource extraction industries (fishing, mining and timber).

**Cruise Industry.** Virtually all visitor growth during this period is attributable to the cruise sector that experienced an average annual growth rate of 5.6%. The only other mode of travel that increased was domestic air with an annual average increase of 0.7%. (These increases can also be attributed to the cruise sector due to visitors who fly to the state to begin their cruise). Highway, ferry, and international air visitor numbers declined between 1999 and 2000, with respective average annual decreases of 13.6%, 9.1% and 14.4%.

Some net additional growth is expected over the next few years as cruise lines increase their capacity in the market. Cruise berth capacity for the industry is projected to grow at an annual rate of 10.4% from 2002 through 2004. This is down from an 11.5% growth rate projected in June 2001 and this average may continue to fall to become closer to the historical growth rate of 7% to 8%.

**Slowdown in Tourism.** While visitor numbers to Alaska continue to increase, the rate of growth for summer visitation has fluctuated and slowed substantially since the mid-1990s. The overall growth in the summer visitor market has slowed to less than half a percent per year between 1999 and 2001. An end of season review of selected visitor indicators around the state showed that with the exception of cruise ship visitors and Alaska Marine Highway passengers, arrival numbers at selected statewide sites for highway and air travelers continued to trend moderately downward over the 2002 summer visitor season. A statewide survey of tourism businesses, commissioned by the Alaska Travel Industry Association, also confirmed that some sectors of the industry saw increases while others were in sharp decline, resulting in overall zero visitor growth in 2002.

According to a recent survey released May 2002 by the Travel Industry Association, U.S. travelers were expected to travel during the summer in normal numbers, but they were taking shorter trips, spending less money and staying closer to home. Of those people traveling during summer 2002, 19% were expected to travel by air compared to 22% travelling by air the previous summer. Because people would be driving more, they would not likely be traveling as far. This obviously had direct consequences for the Alaska visitor industry which historically has had to deal with the significant challenge of overcoming perceptions that Alaska is far away, expensive, and requires a substantial time commitment.

In addition to the general pattern of slowing growth rates in visitation, and declining growth rates in the non-cruise sectors, Alaska's visitor industry has struggled with the specific impacts of the September 11 terrorism attacks that have profoundly impacted the travel industry worldwide. As of March 2002, Alaska visitor industry bookings were down 20% to 28% for wilderness lodges, hotels and motels, backcountry experiences, and cabins. By September 2002, the Alaska Travel Industry Association survey indicated that half of the 315 tourism businesses surveyed said that their

business was down in the 2002 summer season. Special travel discounts used to attract bookings during this period reduced profitability in many sectors of the visitor industry. Also, bargain-minded visitors were less inclined to purchase tours and gifts and make other expenditures while traveling.

**Tourist Industry Seasonal Employment.** Another issue facing tourism is the seasonal nature of the industry. While resident hire within the industry is high, out-of-state workers must still fill many visitor industry jobs. Many groups and local governments continue to encourage increased "shoulder" tourism seasons in the Spring and Fall to make use of idle facilities and to allow Alaskans longer employment opportunities.

**Managing the Alaska Tourism Experience.** As the volume of visitors grows, maintaining the quality of the "Alaska experience" at prime Alaska attractions is a key issue facing the visitor industry. The state and the industry recognize this concern and, through long-term planning efforts, are working to improve the visitor infrastructure and develop new attractions.

**Winter Tourism.** There are significant opportunities statewide to expand tourism offerings during the Winter season. Winter visitors are drawn by the Northern Lights, particularly in Fairbanks and the Interior. Aurora viewing is accompanied by other activities, which include dog sled tours, skeet shooting, cross-country and downhill skiing, snow machining, ice skating, ice fishing and other winter activities.

# Minerals Industry

The table below shows the estimated value of the mineral industry in Alaska from 1981 to 2001, as divided between exploration and development investments and the value of the mined products. Estimated exploration expenditures during 2001 were approximately $23.4 million, the lowest level since 1987 and a drop of about 33% from the previous year. Low metal prices affected the ability of companies to raise capital for exploration, not only in Alaska but globally, and this trend is likely to continue into 2002. The decline in the amount expended on development in 2001 was primarily the result of the completion of a $105 million mill optimization project at the Red Dog Mine in northwestern Alaska early in the year. Also, an adit into the Liese ore body at Pogo mine in the eastern interior region was completed. Alaska's mineral industry produced $917.3 million in mineral commodities in 2001, a decrease of 17% from the previous year. The decline was in part due to lower production of zinc and rock, but was mainly due to record low prices for most metals, including gold, silver and zinc.

**Total Value of the Mineral Industry in Alaska, by Year, Millions of Dollars**

| | Exploration (expenditure) | Development (expenditure) | Production (value) | Total |
|---|---|---|---|---|
| 1981 | 76.3 | 24.7 | 188.6 | 289.6 |
| 1982 | 45.6 | 41.6 | 196.4 | 283.7 |
| 1983 | 34.1 | 27.9 | 212.4 | 274.4 |
| 1984 | 22.3 | 53.4 | 199.4 | 275.1 |
| 1985 | 9.2 | 34.1 | 226.6 | 269.9 |
| 1986 | 8.9 | 24.3 | 198.5 | 231.7 |
| 1987 | 15.7 | 100.3 | 202.4 | 318.4 |
| 1988 | 45.5 | 275.0 | 232.2 | 552.6 |
| 1989 | 47.8 | 134.3 | 277.0 | 459.0 |
| 1990 | 63.3 | 14.3 | 533.0 | 610.6 |
| 1991 | 39.9 | 25.6 | 546.5 | 612.0 |
| 1992 | 30.2 | 29.6 | 560.8 | 620.6 |
| 1993 | 30.3 | 27.7 | 448.7 | 506.7 |
| 1994 | 31.1 | 45.0 | 507.5 | 583.6 |
| 1995 | 34.3 | 148.6 | 537.2 | 720.1 |
| 1996 | 44.7 | 394.0 | 590.4 | 1,029.2 |
| 1997 | 57.8 | 168.4 | 936.2 | 1,162.4 |
| 1998 | 57.3 | 55.4 | 921.2 | 1,033.9 |
| 1999 | 52.3 | 33.8 | 1,032.9 | 1,119.1 |
| 2000 | 34.9 | 141.7 | 1,106.4 | 1,283.0 |
| 2001 | 23.4 | 81.2 | 917.3 | 1,021.9 |
| **TOTAL** | **804.9** | **1,880.9** | **10,571.6** | **13,257.5** |

*Source: Alaska's mineral industry reports published annually by DGGS.*

## Employment

The estimated total employment by the Alaska mineral industry in 2001 was 2,882 full-time equivalent jobs. This was a drop of 301 jobs (10%) from 2000. Much of the decline was in development employment as activity at the Red Dog Mine and Pogo Mine wound down. With the startup of the True North Mine near Fairbanks, an additional 106 well-paid jobs in the hardrock mining sector were created. Placer mine employment continued to decline and made up the largest part of the job decline in mining industry.

## State and Local Government Revenues

The minerals industry paid almost $7 million to the State of Alaska in 2001, of which slightly over $2 million was for mining license taxes. An additional $9.7 million was paid to municipalities, and mining companies were the largest taxpayers in the City & Borough of Juneau, and the Fairbanks North Star, Denali, and Northwest Arctic boroughs. Overall, payments to the state and the boroughs totaled $16.76 million, slightly more than in 2000.

## Exploration and Development

With the completion of a mill optimization project at the Red Dog Mine, statewide development expenditures dropped from $142 million in 2000 to $81 million in 2001. The development of the True North Mine near Fairbanks, the Pogo gold project near Big Delta, and the Kensington/Jualin and Greens Creek Mines near Juneau also helped to cushion the decline.

Exploration expenditures in Alaska continued the decline that began in 1998, declining 33% from the $34.9 million in 2000 to $23.4 million in 2001. Compared to the past several years, exploration activity was more evenly distributed throughout Alaska. The eastern region saw a sharp reduction in activity, while the Seward Peninsula and southeastern Alaska experienced a resurgence in activity. Gold remained the major exploration commodity, but poly-metallic and platinum-group-element exploration increased from recent levels.

There are several large projects that promise development in the future, including the Pogo gold property near Big Delta, the Donlin Creek gold project near Crooked Creek, and continuing discoveries near the Red Dog Mine. Unprecedented increases in the price of platinum, palladium and tantalum spurred many smaller exploration projects in 2001, from platinum/palladium in Union Bay in southeast Alaska and near Paxson to Kougarok (tantalum) on the Seward Peninsula. Permitting and road and pit development at True North Mine west of Fort Knox Mine near Fairbanks was recently completed.

About 9 miles north of the Red Dog Mine a new zinc-lead-silver discovery called the Aktigiruq was discovered and partially delineated, and the reserve estimates of the Anarraaq deposit 3 miles to the south were increased. Although the reserves of the Pogo gold deposit remain at 10.7 million tons grading at 0.524 ounces of ore per ton of waste, drilling continued to better define the geometry and continuity of the deposit. Reserves at Donlin Creek were increased substantially by a 24,000-foot drilling project in 2001 to a possible 23 million ounces of gold, depending on the price of gold.

The billion-ton Pebble Copper project west of Iliamna was the subject of renewed interest after detailed geophysical surveys showed that the known copper-gold mineralization may be the tip of the iceberg. In the same area, the million-ounce Shotgun gold prospect will be the focus of exploration in 2002.

With the rising price of platinum-group metals, exploration projects were reported in southeast Alaska (Union Bay and Kasaan), in the interior (Paxson and Farewell), in western Alaska (Dime Landing) and in the Noatak area of northern Alaska. The tantalum content of the Kougarok tin-granite north of Nome attracted attention in 2001, and two new targets were identified for further exploration in 2002.

## Minerals Production

The table below shows the amount and value of commodities produced over the last three years.

**Gold and Silver.** Gold production during 2001 was almost the same as in the prior year with the Fort Knox Mine near Fairbanks, and the satellite True North Mine, producing 411,220 ounces of the 551,000 ounces reported statewide. The True North Mine began production in July 2001, after intense road and mine construction in the first half of the year. With a full year of operation, gold production is expected to increase in 2002. The gold-silver mine at Illinois Creek continues to produce gold in a "mining-to-reclamation" operation. About 23,000 ounces were reported from the forty-two placer mines still operating in 2001. Throughput at the mill at Greens Creek silver Mine near Juneau set a record in 2001, but metal production was down due to milling lower grade ore.

### Estimated Mineral Production in Alaska, 1999-2001[a]

| | Quantity | | | Estimated values[b] | | |
|---|---|---|---|---|---|---|
| **Metals** | **1999** | **2000** | **2001** | **1999** | **2000** | **2001** |
| Gold (ounces) | 517,890 | 551,982[c] | 550,644 | $144,262,000 | $154,058,000 | $149,246,000 |
| Silver (ounces) | 16,467,000 | 18,226,615 | 16,798,000 | 85,628,000 | 90,404,000 | 73,408,000 |
| Copper (tons) | 2,100 | 1,400 | 1,400 | 2,982,000 | 2,296,000 | 1,988,000 |
| Lead (tons) | 125,208 | 123,224 | 127,385 | 57,596,000 | 51,754,000 | 56,049,000 |
| Zinc (tons) | 643,642 | 669,112 | 634,883 | 630,769,000 | 682,494,000 | 507,907,000 |
| **Subtotal** | | | | **$921,237,000** | **$981,006,000** | **$786,610,000** |
| **Industrial minerals** | | | | | | |
| Jade and soapstone (tons) | 2 | 2 | 2 | $25,000 | $25,000 | $25,000 |
| Sand & gravel (million tons) | 10.6 | 10.6 | 10.4 | 52,418,000 | 49,855,000 | 55,221,000 |
| Rock (million tons) | 2.34 | 5.2 | 3.1 | 18,010,000 | 36,588,000 | 27,176,000 |
| **Subtotal** | | | | **$70,453,000** | **$86,468,000** | **$82,442,000** |
| **Energy minerals** | | | | | | |
| Coal (tons) | 1,560,000 | 1,473,000 | 1,537,000 | $41,048,000 | $38,768,000 | $48,108,000 |
| Peat (cubic yards) | 38,000 | 35,600 | 36,000 | 165,000 | 178,000 | 180,000 |
| **Subtotal** | | | | **$41,213,000** | **$38,946,000** | **$48,288,000** |
| **TOTAL** | | | | **$1,032,903,000** | **$1,106,420,000** | **$917,340,000** |

a. Production data from DGGS questionnaires, phone interviews with mine and quarry operators, Alaska Department of Transportation and Public Facilities, and federal land management agencies.
b. Values for selected metal production based on average prices for each year; for 2001—gold ($271.04/ounce unless other value provided by operator); silver ($4.37/ounce); copper ($0.71/lb); zinc ($0.40/lb); lead ($0.22/lb). All other values provided by mine operators. Values rounded to nearest $1,000.
c. Hardrock gold 527,803 ounces, placer 22,841 ounces.

*Source: Alaska Department of Natural Resources*

**Zinc.** Zinc was the most valuable metal produced in Alaska in 2001, with a gross value of $508 million, representing 65% of the total metal value, followed by gold ($149 million; 19%), silver ($73 million; 9%), and lead ($56 million; 7%). Zinc is produced at the Red Dog Mine near Kotzebue, and at the Greens Creek Mine near Juneau. A major mill optimization project at Red Dog was completed in 2001, but will not be fully utilized until the price of zinc recovers from current low values. Production in 2002 at Red Dog is expected to increase by about 8 percent. The mine also yields 83% of the lead produced in the state, and an estimated 35% of the silver. At the Greens Creek Mine, metal ore produced in 2001 was down from the previous year despite record throughput at the mill, due to mining of lower-grade ore.

**Industrial Minerals.** Production value in 2001 for sand and gravel was $55,221,000 for approximately 10.4 million tons, and $27,176,000 for 3.1 million tons of rock. Production is expected to remain at this level for the next year.

**Coal.** The Usibelli Coal Mine at Healy is the only operating coal mine in the State. In 2001 it produced 1,537,000 tons of coal, of which about 700,000 tons were exported to Korea via the Alaska Railroad through the loading facility at Seward. With the expiration of the Korean contract, the last rail shipment of coal occurred in September of 2002.

## Industry Issues and Outlook

All-time low metal prices over the last few years have reduced investment in exploration worldwide, including Alaska. Several good exploration targets in advanced stages, including the Pogo gold deposit northeast of Delta Junction (10.7 million tons at a grade of 0.524 ounces per ton), the Donlin Creek gold prospect north of Crooked Creek (23 million ounces of resources in all categories), and the Kensington/Jualin Mine north of Juneau (reserves of about 1.5 million ounces in 16.5 million tons) will improve the industry values when they move from exploration to development and production.

There are further reserves in the vicinity of Fort Knox gold mine north of Fairbanks (Gil, Dolphin, Golden Summit) that may provide feedstock for the existing mill. The future of the Red Dog zinc-lead-silver mine north of Kotzebue seems assured with huge reserves in the vicinity of the existing mine. Greens Creek Mine near Juneau also has sufficient reserves to last several years, and the chance of further discoveries in the mine is good, as is also the case at Illinois Creek. Employment at these mines includes 559 at Red Dog, 360 at Fort Knox, 275 at Greens Creek and 55 at Illinois Creek.

Employment at the Usibelli Coal Mine has dropped as the Korean export contract expired, with associated employment losses at the Alaska Railroad and at the Seward loading facility. Some of the mine workers may be rehired if the mine-mouth Clean Coal Power Plant in Healy is activated.

In addition to the existing mines and advanced exploration targets, there are several very large prospects in the early stages of exploration, including the Pebble Copper copper-gold-molybdenum prospect near Iliamna, and the Shotgun gold prospect north of Dillingham.

Alaska also has substantial known reserves of many other metallic and non-metallic commodities such as tin (Chulitna, Kuskokwim, Sleitat, Seward Peninsula), beryllium (Seward Peninsula), barite (Red Dog), molybdenum (Quartz Hill), rare earths (Prince of Wales Island) and graphite (Seward Peninsula). Coal resources in the northwest Arctic could amount to four trillion tons, and the heat content of the identified resource matches some of the best thermal coals elsewhere in the world.

# Wood Products Industry

Recent years have brought the Alaska forest products industry to its lowest point in half a century. Three major trends have had negative effects:

- The long-term stagnation of Japan's economy, Alaska's primary export market
- A substantial decrease in allowable harvest levels in the Tongass National Forest
- A decrease in harvest on privately held Native Corporation lands

During these difficult times, primary processing of Alaska forest products has grown only very slightly. Most of this modest growth is occurring in small firms located in Southcentral or Interior Alaska, instead of Southeast Alaska, the forest products industry's traditional stronghold.

## Harvest

Alaska's public lands timber harvest in 2000 totaled approximately 129 mmbf (million board feet). Coupled with an approximate 125 mmbf harvest of private Native Corporation lands, that bring total harvest to roughly 254 mmbf. Harvest on public lands was off sharply again in 2001, to about 57 mmbf.

**Alaska Public Lands Timber Harvest, 1998-2001**

| | State | | Federal | | Total Public | |
|---|---|---|---|---|---|---|
| **Year** | **Sold** | **Harvested** | **Sold** | **Harvested** | **Sold** | **Harvested** |
| **1998** | 42,036.00 | 23,593.00 | 19,649.00 | 121,500.00 | 61,685.00 | 145,093.00 |
| **1999** | 21,050.00 | 32,547.00 | 133,649.81 | 153,584.65 | 154,699.81 | 186,131.65 |
| **2000** | 9,003.00 | 9,128.00 | 92,377.37 | 119,480.75 | 101,380.37 | 128,608.75 |
| **2001** | 9,541.00 | 12,879.00 | 52,837.62 | 44,411.42 | 62,378.62 | 57,290.42 |
| Figures are in thousand board feet (mbf) scribner scale. | | | | | | |

*Sources: Alaska Division of Forestry and US Forest Service, Alaska Region*

## Employment and Earnings

In the calendar year 2001, logging companies and sawmills employed an annual average of 1,200 workers, peaking at 1,500 in August at the height of the logging season. Primary sawmills employed approximately 400, or one-third, of that total and offer more seasonably stable employment. Overall employment is down 37% from five years earlier. In 1996 industry wide employment, excluding the Ketchikan Pulp Company pulp mill operating at the time, was 1,900. However, employment in sawmills has edged up slightly over the past few years. In 1997, they employed approximately 340 full time equivalent positions. Industry wide earnings totaled $45 million for 2001, and average monthly individual earnings were $3,219. Logging accounted for $30 million of total earnings and these positions earned slightly more than sawmill workers, averaging $3,504 per month.

Approximately one hundred fifty commercial sawmills and secondary manufacturers operate across the state. These range from 5 sawmills that produce from 1 mmbf to 30 mmbf annually, to mobile dimensional mills that saw personal-use wood from national and state forests for individual clients. Products of Alaska mills vary across a wide range that is somewhat weighted towards the primary processing side of the industry. Products include: large export cants and sawlog slabs, shop lumber destined for remanufacture, dimensional lumber, railway ties, shakes and shingles, tone woods for musical instruments and a host of specialty millwork and craft products.

## Wood Product Exports

In the calendar year 2001, the total value of wood products exported from Alaska was $146.2 million, including $136 million in softwood logs, $9.5 million in chips, and $700,000 in lumber. The total value decreased 26% from the previous year's total of $196.6 million. Japan remains the dominant export market, accounting for 58% of total wood product exports in 2001. However, because of the long-term stagnation of Japan's economy, Alaska exporters have had to look to other markets. Traditionally, Japan has purchased nearly 80% of Alaska's total wood products exports. In 2001, Korea and Canada purchased approximately 20% and 15% respectively. China (4%) and Taiwan (2%) were the other two significant export markets.

## Industry Issues and Outlook

Overall, the Alaska wood products industry is struggling to find its feet after a series of setbacks and fundamental changes. In Southeast Alaska, the cancellation of long-term contracts between the U.S. Forest Service and two pulp mills in the 1990s, coupled with a new management plan, have sharply reduced annual harvests. Additional judicial appeals over wilderness declarations and roadless areas further cloud future harvest projections. The Alaska Division of Forestry refocused its timber sale program to provide raw material for Alaska mills and stepped up its timber sales in Southeast Alaska in the mid to late 1990s to assist mills strapped for wood supply. Most of the Native Corporations in

### Exports of Alaska Wood Products, 1991-2001

| | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Softwood Logs** | | | | | | | | | | | |
| Volume (mmbf) | 528.8 | 532.0 | 563.0 | 525.4 | 561.5 | 530.2 | 541.7 | 325.4 | 428.0 | 436.2 | 320.6 |
| Value (millions $) | 294 | 329.8 | 453.6 | 388.5 | 390.3 | 374.3 | 347.9 | 154.1 | 195 | 186 | 136 |
| Unit Value ($/mmbf) | 555.81 | 619.85 | 805.67 | 739.5 | 695.1 | 706 | 642.3 | 473.6 | 455.7 | 426.4 | 424 |
| **Lumber and Cants** | | | | | | | | | | | |
| Volume (mmbf) | 170.3 | 136.6 | 151.9 | 111.8 | 50.4 | 26.9 | 32.8 | 9.0 | 14.7 | 3.6 | 3.3 |
| Value (millions $) | 70.2 | 65.7 | 77.1 | 62.8 | 39 | 19.2 | 19.6 | 4.2 | 10.8 | 3.3 | 0.7 |
| Unit Value ($/mmbf) | 412.31 | 481.4 | 507.35 | 561.3 | 775 | 715.1 | 599.5 | 460.2 | 735.8 | 901.6 | 208.2 |
| **Woodchips** | | | | | | | | | | | |
| Volume (1000 short tons) | 101.4 | 15.5 | 56.3 | 73.5 | 146.3 | 199.9 | 105.7 | 145.8 | 131.7 | 178.5 | 154.9 |
| Value (millions $) | 7.9 | 0.3 | 6.2 | 8 | 20.1 | 16.7 | 7.6 | 10.8 | 5.5 | 7.3 | 9.5 |
| Unit Value ($/short ton) | 78.01 | 21.73 | 110.13 | 108.4 | 137.4 | 83.79 | 72.1 | 73.8 | 41.75 | 41.03 | 61.28 |
| **Total Value** | 372.1 | 395.8 | 536.9 | 459.3 | 449.4 | 410.2 | 375.1 | 169.1 | 211.3 | 196.6 | 146.2 |

Log and lumber volumes are reported as millions of board feet (mmbf) and chip volumes are short tons, on a dry weight basis. Values are free along ship (FAS) in millions of dollars. Source: U.S. Department of Commerce

Southeast and Southcentral Alaska have exhausted their timber supply or chosen not to harvest and sell round logs into severely depressed markets. Sealaska Corporation, Alaska's largest private timberland owner with nearly 3 billion feet of standing timber, and Afognak Native Corporation are the two most active private timberland owners. Japan's long term economic stagnation has depressed prices and shrunk the market niche for Alaska's high-quality and high-priced coastal old growth timber.

On the Kenai Peninsula, private and public landowners have greatly increased harvest of timber to deal with the devastating spruce bark beetle infestation. Public and private landowners in the area are striving to reduce fire loads, create defensible space for communities, and salvage resource value to invest in replanting. While this has accelerated local wood product activity, the overwhelming majority of these trees have been chipped and exported. Little of the harvest has been suitable for value-added products. Further, the infestation has robbed the area of a commercial wood supply for a number of decades to come. The only area in Alaska with growing employment in the wood product industry, however slight, is the Interior. Small mills that produce custom log cabins and other wooden structures and construct them on site have found some recent success.

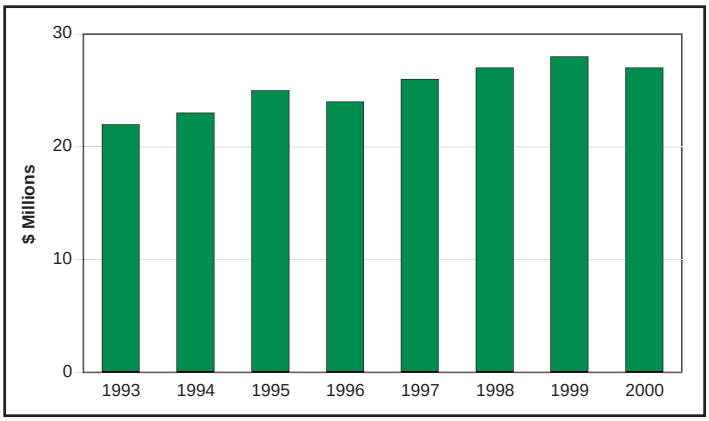
Despite the gloomy economic outlook for the industry, some positive developments are taking place. The Alaska Wood Technology Center in Ketchikan is currently testing the strength characteristics of Alaska tree species in order to establish Alaska-specific lumber grades. It is thought that these grades will recognize the higher design values of Alaska species that are currently lumped into less advantageous grades. The new grades will increase the value of Alaska lumber and standing timber. Further, in Southeast Alaska, two efforts are underway to realize profit from currently under-utilized parts of the resource. With assistance from the Department of Energy, Sealaska Corporation is investigating the feasibility of a facility that would convert wood waste into ethanol, thus lowering or offsetting the disposal costs and future liability of wood waste from both harvesting and manufacturing. A group of investors is also trying to restart the veneer mill in Ketchikan formerly owned by Gateway Forest Products. If functional, the mill would use lower grade hemlock and spruce. By trading with other mills for a log supply, this would increase production efficiency for the area's entire industry.

# Agriculture Industry

Due to Alaska's northern location and generally unfavorable climate, agriculture plays a relatively small role in the state's economy. Farmed land accounts for only a fraction of one percent of the state. The Alaska Agricultural Statistics Service lists 580 farms in Alaska, with approximately 920,000 acres in farmland, much of it pasture. While agriculture is practiced throughout the state, it is typically on a small scale and for local consumption. Commercial agriculture occurs mostly in Southcentral Alaska in the Matanuska-Susitna Valley and Tanana Valley including the Fairbanks and Delta areas, and to a lesser extent in the Copper River Valley, the Kenai Peninsula, Kodiak Island and the Aleutian Islands.

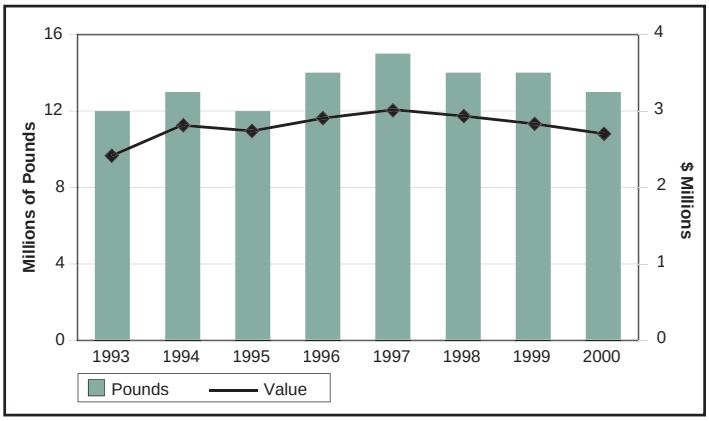
The Tanana Valley, from Fairbanks to Delta Junction, produces much of the state's barley and hogs, as well as hay, oats, potatoes, milk, beef, greenhouse plants and vegetables. The Matanuska-Susitna Valley, just north of Anchorage, produces much of the state's vegetables as well as milk, beef, potatoes, oats, hay, and greenhouse plants and vegetables. Beef cattle are found on Kodiak Island and on the Aleutian Islands, but beef production, both volume and value, is greater in the Tanana and Matanuska-Susitna Valleys. The Seward Peninsula region around Nome hosts a number of domesticated reindeer herds. Other areas where commercial crop agriculture is practiced include parts of Kodiak Island, the western part of the Kenai Peninsula, and the Copper River Valley between Kenny Lake and Glennallen.

## Farm Cash Receipts , All Commodities Excluding Aquaculture



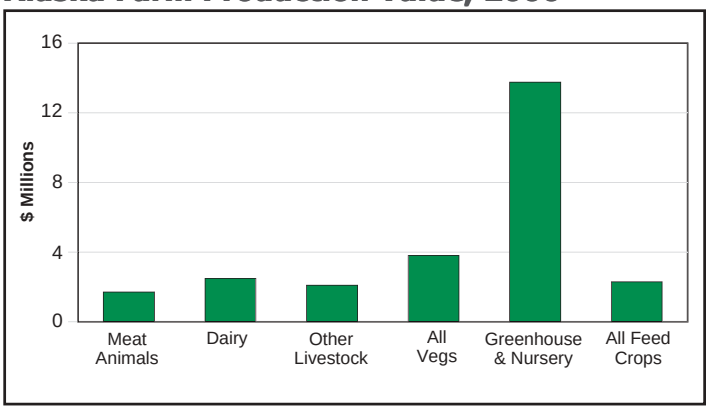

*Source: Alaska Agriculture Statistics Service*

## Alaska Milk Production




*Source: Alaska Agriculture Statistics Service*

## Alaska Farm Production Value, 2000

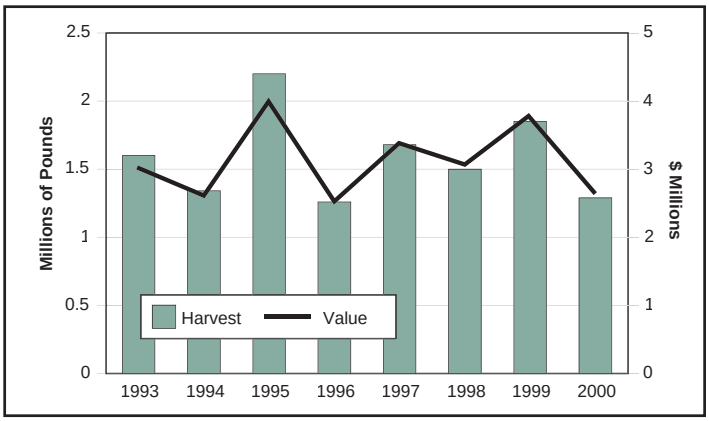



*Source: Alaska Agriculture Statistics Service*

## Farm Production Value

The value of farm production in 2000 was $26,514,000, excluding the value of aquaculture production. Livestock production including beef cattle, calves, sheep, lambs, pigs, hogs, wool, poultry and egg production and exotic species totaled $3,799,000. Dairy production was valued at $2,487,000; vegetables at $3,801,000; feed crops at $2,296,000 and nursery/ greenhouse production at $14,129,000.

**Alaska Potato Harvest**

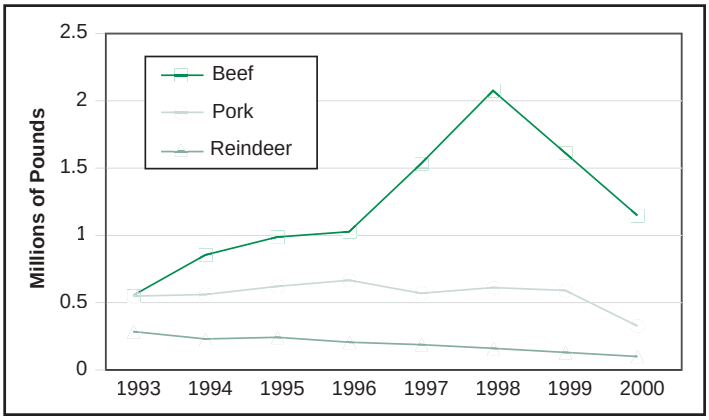



*Source: Alaska Agriculture Statistics Service*

## Farm Employment

In addition to farmers, total agriculture related employment was 1,618 in 2000. Agricultural services accounted for 1,065 jobs, Crop production for 279 jobs, livestock production for 15 jobs and meat/dairy/grain manufacturing for 50 jobs.

**Alaska Livestock Production**




*Source: Alaska Agriculture Statistics Service*

## Livestock and Crops

Alaska livestock in 2000 included 10,500 cattle and calves, 800 hogs, 1,300 sheep and 17,000 horses, goats and other exotic species (reindeer, elk, alpacas, buffalo and llamas). In 2000, major crops in Alaska included hay (from grain and grass), potatoes, carrots, barley, oats, lettuce and greenhouse production (bedding plants, nursery stock, tomatoes, cucumbers).

## Industry Issues and Outlook

**Rural Agriculture.** Domestic and small-scale gardening will continue to be practiced throughout rural Alaska. Many rural locations have excellent growing soils and long growing days during the summer. However, despite state-supported efforts dating from the early 1980s at Aniak, Selawik and elsewhere, rural commercial farming efforts have lacked sustained management and marketing strategies. Organizations like the Cooperative Extension Service and the Tanana Chiefs Conference remain active in supporting rural agriculture and potential exists for cooperative ventures at the village level to supplant costly and often poor-quality imported produce.

**Limited Markets.** Because of Alaska's small population and the great distance to external markets, Alaska farmers have limited markets. Hay production continues to be the most stable and reliable market for Alaska farmers. Good quality hay finds ready buyers among horse and livestock owners. Potatoes, and to a lesser extent carrots, have been exported to China and Taiwan, but these ventures have been small and no firm export markets have been established. Exports to Canada and the continental United States have also been on a very small scale.

The continued ability to sell in quantity to urban markets in Alaska will depend in large measure on the willingness of retail chains to continue buying Alaska products. Farmers' markets in Anchorage, Eagle River, the Matanuska-Susitna Valley, Kenai Peninsula and Fairbanks provide significant sales opportunities. Some farmers offer "u-pick" sales on the farm. New sales opportunities may exist through niche markets with hotel and restaurant sales, sales to cruise ship lines and sales to manufacturing plants such as Alaska Seafoods Inc. The feasibility of these niche markets needs to be assessed. The Alaska Grown program, a promotional effort of the state's Division of Agriculture and local farmers has proven to be a useful tool in maintaining market share.

**Urbanization.** The conversion of arable land to residential, commercial and other developed uses has eroded much of the traditional agriculture land base in the Matanuska-Susitna Valley, the Kenai Peninsula, Kodiak Island and the Fairbanks Borough. Actual rates of conversion are unknown; but flat accessible land suitable to agriculture is typically also highly suited for residential, commercial and other uses. None of the borough governments for these areas provide for agricultural zoning.

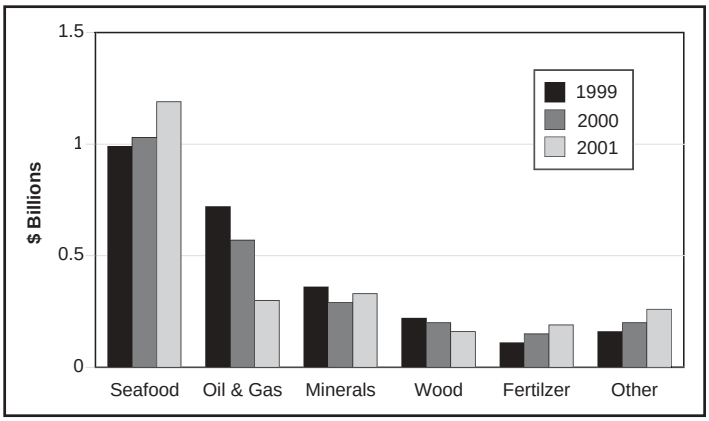
**Green House Production.** According to the 1997 Alaska Census of Agriculture by the U.S. Department of Agriculture, the number of square feet under greenhouse glass grew by over 20% from 1992 to 1997, to 1,053,170 square feet. Between 1992 and 2000, the value of greenhouse sales doubled, from $6,639,000 to over $14,000,000. This includes all nursery crops and greenhouse crops such as tomatoes, cucumbers and peppers.

**New State Land Sales.** The Alaska State Division of Agriculture is contemplating additional agricultural land sales near Point MacKenzie and in the Copper River Valleys. As an illustration that some demand may exist for additional agricultural land, farm tracts in the Delta area are fully occupied and the Farm Service Agency reports there is regular inquiry about the availability of farmland.

# Export Markets

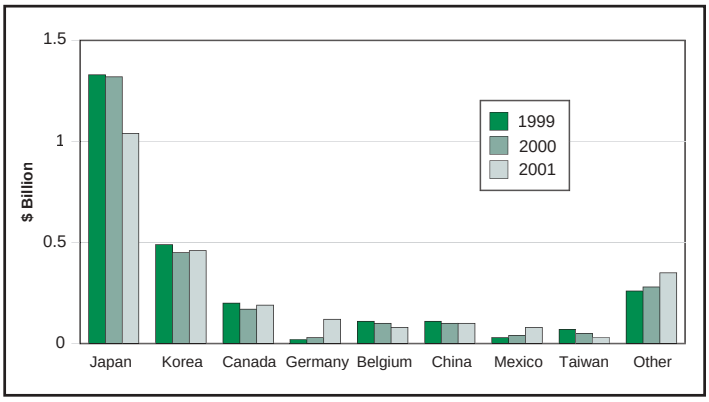
Global demand for resources complements Alaska's wealth of fish, oil and gas, forest products, minerals and coal. In 2001, Alaska exported $2.4 billion worth of goods not including services. This was 2% less than 2000 and 6% less than 1999. Historically, fish products made up the largest component of exports. They were valued at $1.2 billion in 2001, up 20% from 1999. In 2001, mineral exports, valued at $329 million, surpassed oil and gas exports as the next largest component. Crude oil exports became a major export item as a result of the lifting of the North Slope oil export ban in 1996. However, oil exports, valued at $296 million in 2001, were down almost 60% from their 1999 value. Among other export commodities, fertilizer is up 23% and wood products are down 26% from 2000. Economic troubles in Alaska's two largest trade countries, Japan and South Korea, and the relatively high value of the U.S. dollar, have driven down the value of exports. Japan remains Alaska's largest customer, importing $1.04 billion of Alaska products in 2001. Exports to Japan are down 21% from 2000. Korea was Alaska's second largest export partner in 2001, importing $479 million of Alaska products. Canada, Germany, Belgium, China, Mexico and Taiwan were also significant trading partners in 2001. Since 1999, the largest growth in exports was to Germany and Mexico.

**Total Value of Alaska Exports, By Product, 1999, 2000, and 2001**




*Source: DCED, Division of International Trade and Market Development*

**Total Value of Alaska Exports, By Destination, 1999, 2000, and 2001**




*Source: DCED, Division of International Trade and Market Development*

## Japan

In 1965, Alaska was the first state to open a trade office in Tokyo. This long-standing relationship has encouraged strong trade ties and Japan continues to be a dominant player for Alaska trade. Japan is by far the leading market for Alaska's exports, importing about $1 billion worth of products in 2001. Seafood exports were the largest component of Alaska exports to Japan, accounting for $658 million in 2001 and representing 63% of Alaska's total exports to that country and 55% of Alaska's total seafood exports.

Crude oil and natural gas products represent the next greatest commodity exported to Japan, 19% of total exports or about $202 million. Timber and wood products exported to Japan were valued at $90 million in 2001, down from $118 million in 2000. Metal mining exports were valued at about $49 million, or 5% of the total exports to Japan in 2001.

## Korea

As was the case with Japan, Alaska was the first state to open an international trade office in Korea - in 1985. Korea is Alaska's second largest export market, purchasing 18% of Alaska's exports. Exports to Korea were valued at $463 million in 2001, a 3% increase from 2000.

Seafood exports to Korea increased to a record of $237 million in 2001, representing 63% of total exports to Korea. Korea's second largest import from Alaska was urea and fertilizer, valued at $88 million in 2001. Mineral exports were the third largest export to Korea, accounting for $70 million, 15% of total exports to Korea. Forest products represent 7% of the country's Alaska imports, and oil and gas products were valued at $29 million in 2001.

## Canada

A common border and a long history of cooperation contribute to making Canada Alaska's third largest trading partner. Eight percent of Alaska's exports went to Canada in 2001, totaling $188 million, a small increase over the previous year.

Canada imports and processes a large portion of Alaska's ore exports. Metal mining valued at $49 million represented 26% of Alaska's exports to Canada in 2001. The majority of minerals exports to Canada are lead and zinc, extracted from the Red Dog mine. Exports of seafood products were a close second in 2001, with a value totaling $43 million. Timber products ranked third, with exports valued at $23 million, down 30% from the previous year.

## Other Alaska Trade Partners

In 2001, Alaska exported $115 million worth of goods to Germany (an increase of 238% from 1999), making it Alaska's fourth largest trading partner. Total exports to China totaled $102 million, remaining fairly close to 2000 trade levels. As China's economy continues to develop, its need for natural resources increases. Alaska has what China needs in the long-term: energy, food and timber. Crude oil and natural gas accounted for $13 million of Alaska's exports to China in 2001. Although China is the world's largest seafood producer, it is a net importer. Seafood exports accounted for 48% of total exports to China, or $49 million. Finishing off the list of Alaska's top ten export markets are the Netherlands, the United Kingdom, Mexico and Taiwan.

# Support Sectors

## Retail and Services Sectors

The retail sector has been the fastest growing component of the state's economy, representing a very broad range of businesses. In 2000, the services sector accounted for 73,300 jobs. Since 1990, 20,000 new jobs were added to the trade and services sectors.

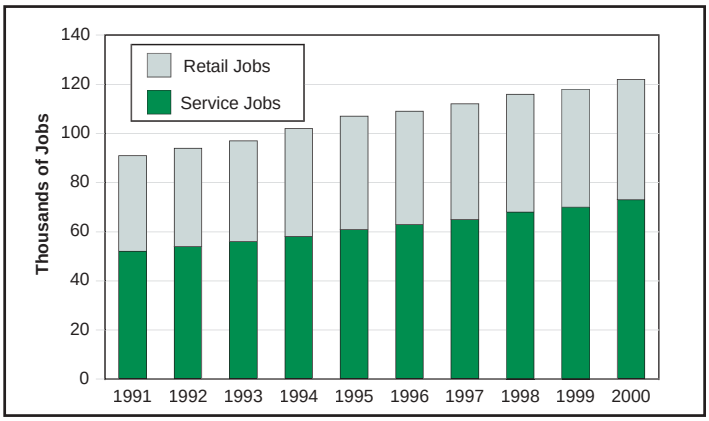
## Finance, Insurance and Real Estate

Total reported assets held by Alaska banks were about $6.48 billion in 2000, an increase of 13% from the previous year's $5.7 billion. From 1996 to 1997, a substantial decrease in reported assets occurred when Bank of America and Key Bank became national banks - their holdings are no longer reported as part of Alaska bank holdings. The recent mergers in Alaska follow the national trend of consolidation as banks take advantage of economies of scale.

Total deposits in 2000 increased to $4.4 billion from $4.2 billion in 1999, an increase of about 5%. Again, the decrease in deposits from 1996 to 1997 is accounted for by the nationalization of Bank of America and Key Bank.

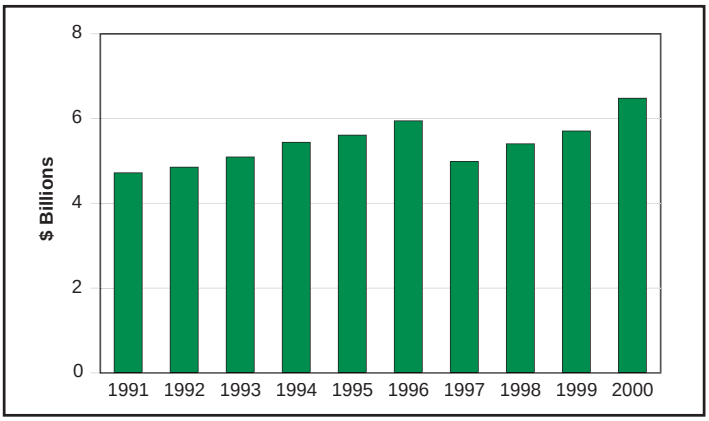
Low interest rates generally translate into high levels of lending activity. Alaska's financial, insurance, and real estate sector supported an average of 12,800 jobs in 2000 and is unchanged since 1999.

**Service and Retail Employment, 1991-2000**



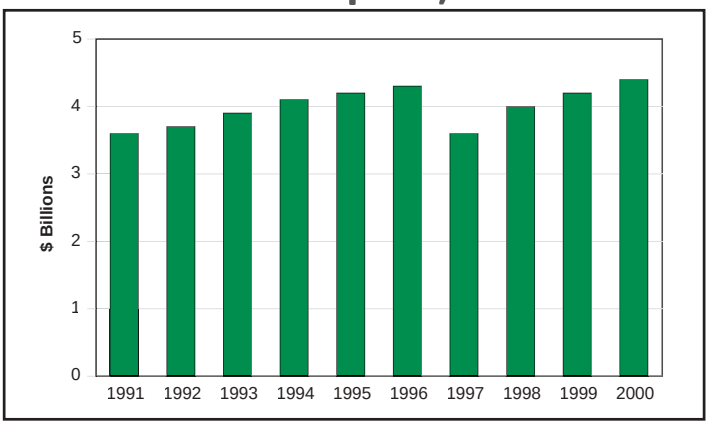

*Source: Alaska Department of Labor, Workforce Development*

**Alaska State Banks Assets, 1991-2000**




*Source: DCED, Division of Banking, Securities, and Corporations*

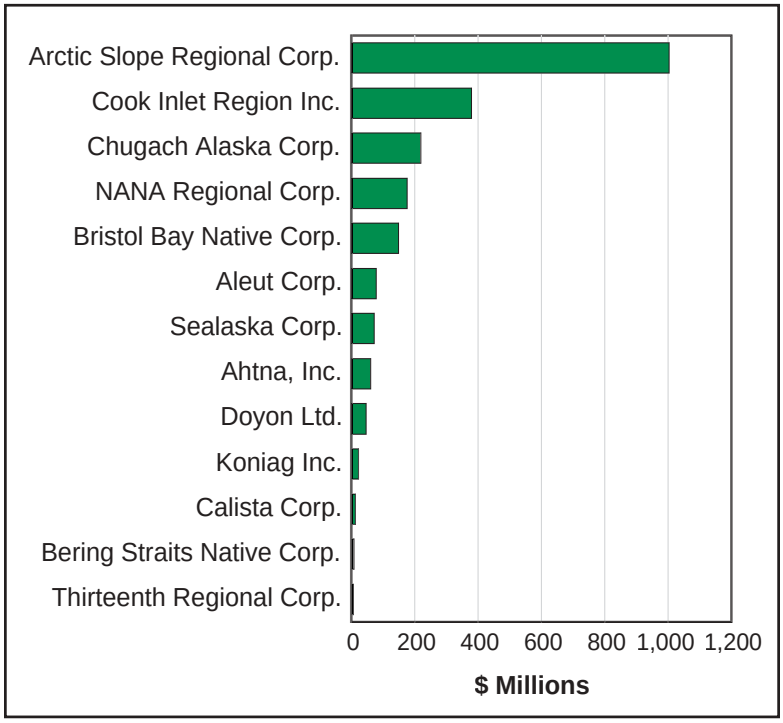
**Alaska State Banks Deposits, 1991-2000**




*Source: DCED, Division of Banking, Securities, and Corporations*

## Alaska Native Corporations

**Alaska Native Regional Corporations, 2000 Revenues**

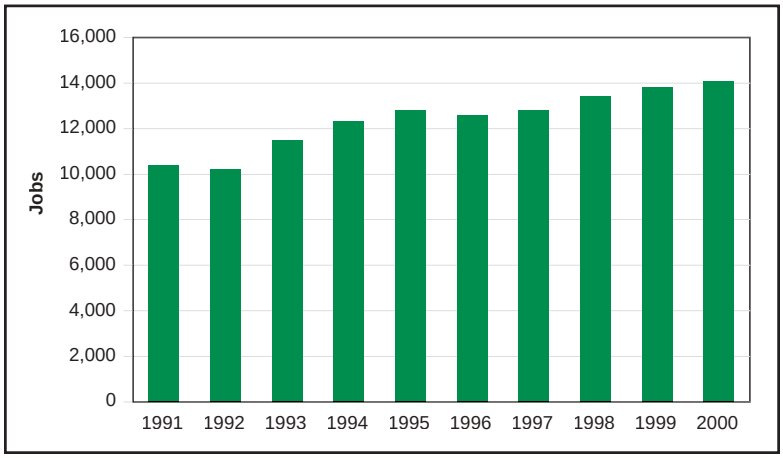



*Source: Alaska Business Monthly*

The Alaska Native regional corporations created by the Alaska Native Claims Settlement Act of 1972 (ANCSA) have acquired substantial economic muscle and will play a significant role in the state economy. Ranging from natural resource development to contracting services, each corporation has many components that make up their revenue. Many of these corporations have significant involvement in the Finance, Insurance and Real Estate (Fire) sector. Native corporations operate subsidiaries and joint ventures dealing with pipeline maintenance, fiber-optic telecommunications, and utilization of natural resources. A number of regional Native corporations are involved with environmental consulting and environmental remediation. Revenue from natural resources comes from oil and gas, minerals and gravel, and coal. Some revenue is transferred among the corporations based on Section 7(i) of ANCSA, which requires that 70% of revenues generated from resource development other than rock, sand, and gravel be shared with the other regional Native corporations. The growth in Native corporations helps explain why the private support sector is still growing, while many of the traditional economic base industries show flat or declining trends.

## Construction

**Construction Industry Employment, 1991-2000**




*Source: Alaska Department of Labor, Workforce Development*

Construction employment averaged 14,100 jobs in 2000, peaking at 17,500 jobs during August. The industry gained 300 jobs in 2000, an increase of 2% from 1999. Following the recession in the late 1980s, construction employment grew gradually and has maintained a consistent level in recent years. 2002 construction is expected to be the most active since the Alaska oil pipeline was built in the 1970s.

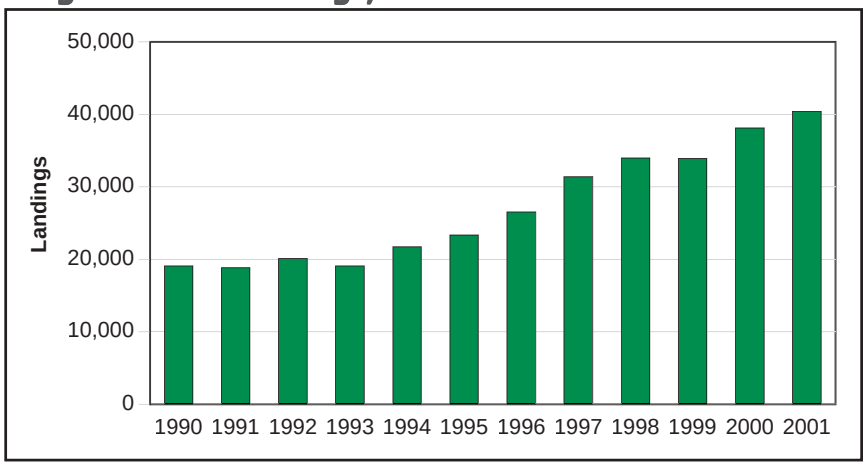
# Transportation

Transportation plays a much larger role in Alaska's economy than in much of the rest of the nation. The lack of truck and rail transportation means in many cases resources cannot be developed. Identified statewide transportation needs approach $7.5 billion, and no other state relies as heavily on federal funds to help meet its transportation needs. For fiscal year 2003, federal funding to address statewide transportation needs represents 83% ($493 million) of the Alaska Department of Transportation and Public Facilities capital budget of $593 million. In 2000, there were 16,285 jobs in Alaska directly providing air, land and sea transportation services – up 3% from 15,766 in 1999.

## Air Transportation

Air transportation accounts for half of all transportation employment in Alaska compared with less than one third nationally. In Anchorage, one in 10 residents works at a job that is airport-related. There are more than 1,100 airstrips and airports in Alaska, almost 10,000 registered aircraft and as many pilots. The State owns or operates 171 gravel-surfaced airports and 43 paved airports as well as numerous seaplane bases. Municipalities own or operate another 20 airports. Ted Stevens Anchorage International, Fairbanks International, Juneau International and Ketchikan International airports account for most air activity occurring throughout the state. The majority of funding for these and other airport facilities comes from the Federal Aviation Administration through the Airport Improvement Program. In 2002, this amount totaled nearly $145 million.

### Anchorage International Airport, Cargo Aircraft Landings, 1990-1998




*Source: Anchorage International Airport 1998 Economic Significance*

### World Airports Rankings by Total Cargo, 2001

| Rank | Airport | Total Cargo |
|---|---|---|
| 1 | MEMPHIS | 2,631,631 |
| 2 | HONG KONG | 2,100,276 |
| **3** | **ANCHORAGE** | **1,873,750** |
| 4 | LOS ANGELES | 1,774,402 |
| 5 | TOKYO | 1,680,937 |
| 6 | MIAMI) | 1,639,760 |
| 7 | FRANKFURT | 1,613,179 |
| 8 | PARIS | 1,591,310 |
| 9 | SINGAPORE | 1,529,930 |
| 10 | LOUISVILLE | 1,468,837 |

Cargo = loaded, unloaded freight & mail in metric tonnes.

*Source: Airports Council International*

**Air Cargo.** Anchorage's air cargo industry is expected to continue to expand, by an average of 5% annually over the next five years, mirroring worldwide market trends, but down from the double-digit growth experienced during much of the 1990s.

Air cargo industry analysts report a glut of cargo airplanes in the world market will likely result in lower freight prices and allowing more goods to be shipped cheaply to U.S. markets, using Alaska as a fueling stop.

**Ted Stevens Anchorage International Airport.** In 2000, Ted Stevens Anchorage International Airport led all U.S. airports in the amount of fuel pumped into cargo planes, more than 700 million gallons. The airport annually ranks among the nations top ten cargo airports, averaging approximately 520 cargo flights weekly. In 2001, approximately 1.7 million metric tons of cargo passed through Anchorage. Nine all-cargo domestic airlines, 17 all-cargo international airlines and four all-cargo international charter airlines were served. According to market reports published by the airport in 2002, cargo traffic continues to grow at approximately 3.3% per month. State of Alaska airport planners, using recent data from aircraft manufacturers, project a four-fold increase in needed cargo facilities, and a 25% increase in other aviation-related facilities at the Ted Stevens Anchorage International Airport over the next 20 years.

**Fairbanks International Airport.** Alaska Department of Transportation and Public Facilities tracked Fairbanks International Airport cargo landings for over ten years. During this period the airport averaged about 12% annual growth. However, landings began to slow four years ago and now averages approximately 2% annually. Concurrently, growth measured in "pounds of cargo throughput" has increased approximately 5% annually.

**Surface Transportation Road.** During the closing months of 1999, the U.S. Congress passed a new highway appropriations bill increasing Alaska's highway funding by almost 50%. The new legislation provided nearly $100 million annually through 2002 and supports the largest highway construction and maintenance program in Alaska since statehood. Today, 1,487 miles (73%) of Alaska's National Highway System roads meet national standards. During fiscal year 2002, the statewide highway budget was approximately $350 million dollars, covering scores of projects ranging from reconstructed roads and bridge replacements to trail safety marking and new construction.

**Rail.** Anchorage is the hub for the Alaska Railroad, with rail access to the ocean ports of Seward and Whittier, and to communities as far north as Fairbanks. In the last several years, the rail system was significantly strengthened through the introduction of year-round container ship service at the Port of Anchorage and railcar-barge service between Alaska and the continental United States. The total volume of rail freight increased between 1% and 2% annually over the past five years. However, little growth is expected in 2002 as the railroad continues to compete with trucking for locally based bulk freight delivery contracts.

## Marine Transportation

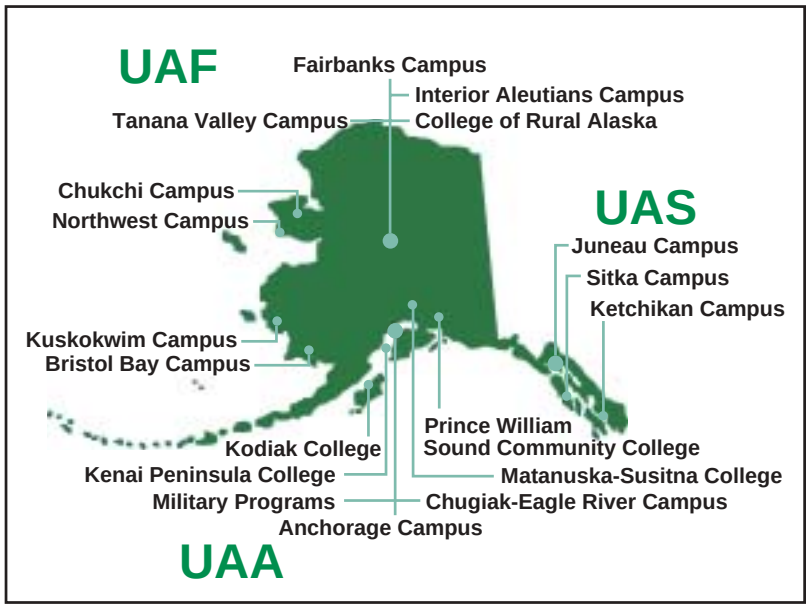
Waterborne access remains an essential component of economic development in Alaska. In regions of the state unconnected by roads, tug and barge operations provide a vital service to communities depending on barges for most of their supplies and heating oil. The vast majority of Alaskans employed in marine operations work for private companies, including tug and barge operations, chartering, lightering and warehousing. The Alaska Rail Marine service is a recent development in multi-modal shipping. The Alaska Railroad, in partnership with Lynden, provides direct shipping of individual railroad cars aboard mainline barges destined for the Port of Whittier.

**Alaska Marine Highway System.** According to the State Department of Transportation and Public Facilities, beginning in 2000, the Alaska Marine Highway ferries experienced a shift in marine freight and passenger service, from mainline long-haul service toward point-to-point local service. In Southeast Alaska and Prince William Sound the addition of smaller, high speed ferries over the next several years is expected to dramatically alter how people and goods move throughout rural coastal marine areas unconnected by roads.

**Ports and Harbor Development.** Alaska's seaports and coastal harbors are principal centers of commerce and crucial links to interior communities. New and improved ports and harbors can reduce the delivery cost of goods and services, increase the frequency of delivery, improve the value of regionally exported resources and products and improve the productivity, safety and quality of life for people in a region. An absence of dedicated federal funding programs for marine facilities, similar to that for highways and airports, is having a direct affect on the timing, type, and level of marine infrastructure being built. Additionally, Alaska relies on revenue generated from a marine fuel tax of five cents per gallon to address ports and harbor infrastructure needs. While this tax generates between $6 and $8 million annually, during the past five years the state has spent 37 cents for port and harbor improvements for every dollar of marine fuel tax it collects.

## University System

A major source of jobs in Alaska is the University of Alaska, with three regional centers, in Anchorage, Fairbanks and Juneau, and a series of associated campuses located around the state. The University serves about 17,000 students and offers degrees in 70 disciplines. Recently, the University created a scholarship program for Alaska residents who graduate in the top 10 percent of their high school class. The program is part the University's initiative to produce the "home grown" knowledge and workforce that Alaska needs to prosper in the "new economy" that requires regional economies to be more adaptive, global and high tech. The University also plans to increase investments in international trade, engineering and science programs and explore new public-private partnerships that bring new technology to the marketplace. University research programs include the Geophysical Institute, Arctic Regional Supercomputing Center, Institute of Social and Economic Research and School of Fisheries and Ocean Sciences.




*Source: University of Alaska*

**University of Alaska Fairbanks (UAF).** UAF is the primary research institution of the Alaska system and the only institution offering doctoral degrees. In 2001, it was in the top 30 U.S. institutions with funding from the National Science Foundation. During fiscal year 2001, UAF generated more than $70 million in funding from sources outside the university. For every $1 of state money spent on research, an additional $5.60 comes from federal and other sources. UAF integrates teaching and learning with research and public service, and emphasizes partnerships. The new International Arctic Research Center, funded with major Japanese investment, is exploring energy efficiency opportunities. In 2001, UAF had 7,142 enrolled students, employed more than 3,500 full- and part-time faculty and staff, including 1,103 student workers, and had an annual payroll of more than $125 million.

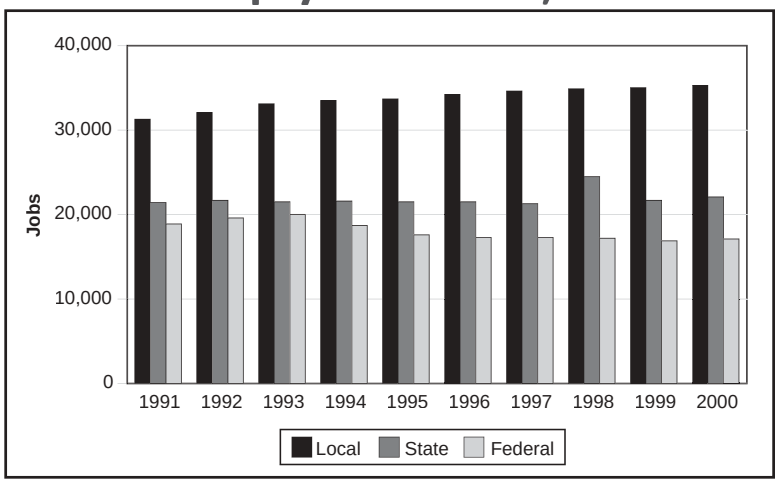
**University of Alaska Anchorage (UAA).** UAA also employs a number of public-private partnerships designed to strengthen and diversify the economy, especially by developing a resident skilled workforce in a shortage category like health care. Over a three-year period, the University of Anchorage is matching $1.8 million in donations from the state's five largest health care providers in an effort to double the number of nursing graduates by 2006. In 2001, UAA had 15,040 full and part-time students, and employed more than 2,088 full and part time faculty and staff, with estimated wages and salaries of $57.3 million.

**University of Alaska Southeast (UAS).** UAS serves students in Southeast Alaska, with the main campus in Juneau. UAS has exchange and cooperative agreements with over 100 international institutions around the world through its international education consortia affiliations. The Juneau campus offers a wide range of certificate and two-year programs, as well as baccalaureate and graduate degrees. In 2001, UAA had 3,307 students enrolled and employed more than 303 full time and part time faculty and staff, with estimated wages and salaries of $10.6 million.

# Government

Government plays a critical role in Alaska's economy. In 2000, government employment accounted for 74,500 jobs, approximately 26% of total employment in the state. Government employment included 35,300 local government jobs, including school district jobs, 22,100 state government jobs and 17,100 federal government jobs. Since federal programs bring new money into Alaska, federal employment is considered to be an element of the state's economic base. The figure above shows that local government employment is increasing, while state employment has been stable. Federal government employment is decreasing, primarily due to military base closures.

**Government Employment in Alaska, 1991-2000**

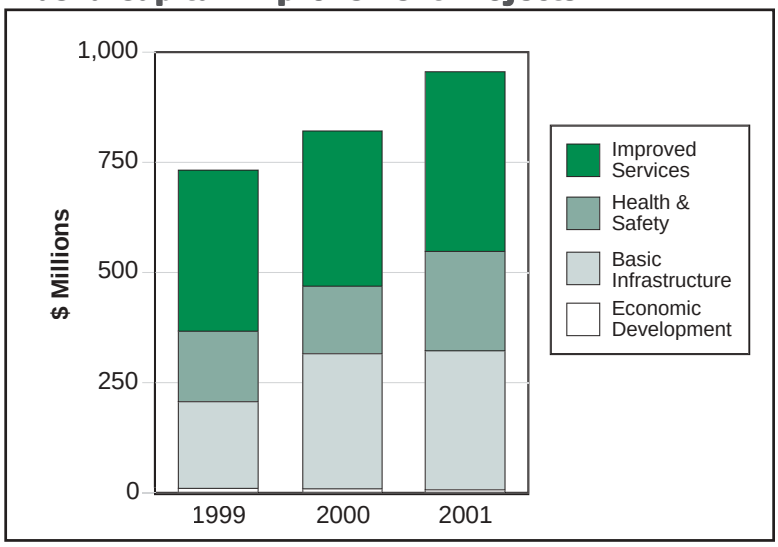



*Source: Alaska Department of Labor, Workforce Development*

## State Government

State government directly employs about 21,600 Alaskans and indirectly generates jobs for thousands of local government, retail trade and services workers. Additionally, government spending on capital improvement projects accounts for several hundred million dollars each year. From 2000 to 2001, funded state and federal capital improvement projects increased from $820.4 million to $953.8 million. By category, the breakdown in capital improvement projects for 2001 is "expanded or improved Services" (43%), "basic infrastructure" (33%), "health and safety infrastructure" (24%) and "economic development" (1%). The figure on the right and the table on the following page provide details on the distribution of capital improvement projects.

**Alaska Capital Improvement Projects**




*Source: DCED, RAPIDS Database*

Alaska State government relies heavily on oil revenues, and capital projects tend to fluctuate with the price of oil. However, given the backlog of funded capital improvement projects, the 2002 construction season will be the busiest since the construction of the Trans-Alaska Pipeline System (TAPS) in the 1970s.

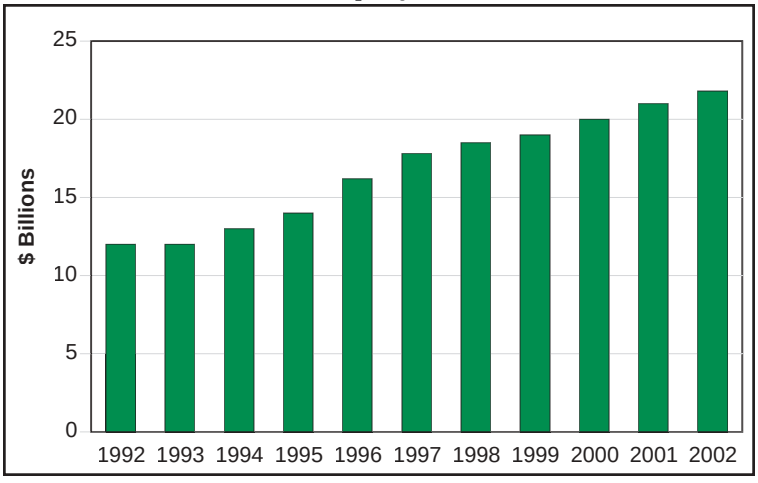
## State and Federal Capital Improvements in Alaska

| | 1999 | 2000 | 2001 |
|---|---|---|---|
| Economic Development Infrastructure | | | |
| Economic & Business Development | $8,970,494 | $7,227,800 | $5,128,292 |
| **Total** | **$8,970,494** | **$7,227,800** | **$5,128,292** |
| Basic Infrastructure | | | |
| Bulk Fuel | $66,569,341 | $17,713,545 | $20,373,887 |
| Electrical | $7,228,488 | $28,435,474 | $3,876,031 |
| Harbors & Docks | $41,687,676 | $17,692,523 | $37,233,609 |
| State Roads | $58,308,491 | $210,349,284 | $226,439,317 |
| Marine Ferry | $22,362,781 | $32,564,469 | $28,227,892 |
| **Total** | **$196,156,777** | **$306,755,295** | **$316,150,736** |
| Health & Safety Infrastructure | | | |
| Airport Improvements | $43,946,479 | $44,904,427 | $149,667,800 |
| Water & Sewer | $95,661,826 | $84,561,552 | $45,619,686 |
| Landfill | $5,899,105 | $7,477,896 | $4,016,749 |
| Health Facilities | $13,102,036 | $13,102,051 | $23,636,266 |
| Public Safety | $1,468,925 | $3,662,870 | $2,040,439 |
| **Total** | **$160,078,371** | **$153,708,796** | **$224,980,940** |
| Expanded or Improved Services | | | |
| Local Roads | $73,863,010 | $123,184,827 | $136,410,339 |
| Facilities/Buildings | $81,084,774 | $103,464,930 | $49,537,183 |
| Housing Construction and Repair | $142,101,769 | $111,825,681 | $108,196,451 |
| Other | $6,218,693 | $8,114,586 | $12,846,106 |
| Schools | $58,146,330 | $3,296,770 | $98,671,003 |
| Equipment Purchases | $4,372,033 | $2,831,373 | $1,905,546 |
| **Total** | **$365,786,609** | **$352,718,167** | **$407,566,628** |
| **Total** | **$730,992,251** | **$820,410,058** | **$953,826,596** |

## Alaska Permanent Fund

Established in 1976 by state constitutional amendment, the Alaska Permanent Fund invests dedicated oil revenues, special legislative appropriations and fund earnings into high quality, income-producing securities, bonds and real estate. As of the end of the fiscal year 2002, the fund had a market value of about $23.5 billion, down from $28 Billion the previous year. The market value is the sum of principal in the fund and net income earned from the fund's investments. Each year, the Alaska

### Permanent Fund Principal, 1992-2002

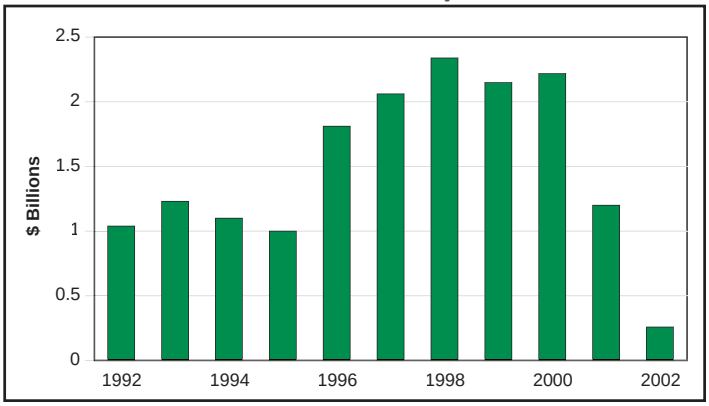



*Source: Alaska Permanent Fund Corporation*

Legislature has added to the fund's principal by direct appropriation and reinvesting a portion of the fund's earnings. Gross earnings are the increase in the value of the investments, plus any dividends and interest earned. Net income is the gross earnings minus the costs to administer the fund.

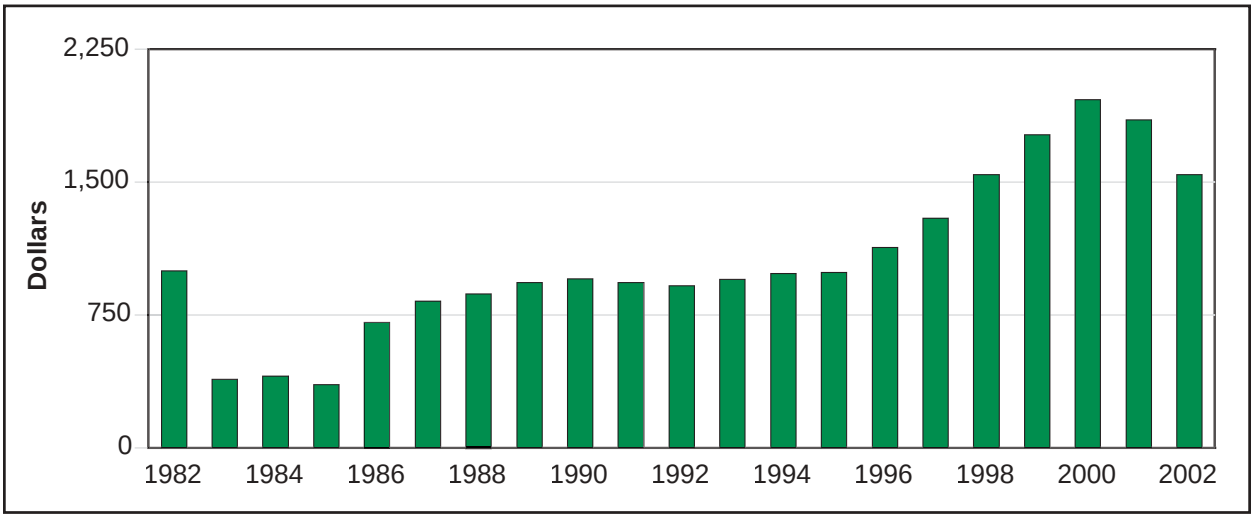
The main goals of the fund are to ensure its stability and continued growth. The Alaska Permanent Fund provides a yearly dividend to all Alaskans. The annual check to each resident is based on the

**Permanent Fund Net Income, 1992-2002**




*Source: Alaska Permanent Fund Corporation*

**Alaska Permanent Fund Dividend Checks**




*Source: Alaska Department of Revenue*

average fund performance over the previous five-year period. The 2002 dividend paid to Alaska residents was about $1,541, 17% less than the 2000 payment. The decrease is generally due to a declining stock market – the worst U.S. bear market in 60 years. The total pay out to Alaskans, over a billion dollars during each of the last several years, has a significant impact on the state's economy.

## Alaska Aerospace Development Corporation

Alaska Aerospace Development Corporation (AADC) is a public corporation created in 1991 to develop aerospace related economic, technical and educational opportunities for the State of Alaska. AADC is nearing completion of a comprehensive low earth orbit launch complex in Kodiak and facilitating development of full service satellite ground station facilities in Fairbanks. AADC is located for administrative purposes within the Department of Community and Economic Development and is affiliated with the University of Alaska.

**Kodiak Launch Complex.** The Alaska Aerospace Development Corporation supports one of the state's most promising economic enterprises: the Kodiak Launch Complex. The Complex is located at Narrow Cape on Kodiak Island, about 250 miles south of Anchorage and 25 miles southwest of the City of Kodiak. This facility is the only U.S. commercial launch range not co-located with a federal facility. Kodiak Island is ideal for polar launch operations due to its northerly location and unobstructed downrange flight path over the Pacific Ocean. It is well suited for launching telecommunications and space science payloads of up to 8,000 pounds into low earth polar orbit. The first launch at the facility occurred in 1998, when the Orbital Sciences Corporation launched a sub-orbital vehicle for the Air Force. A second Air Force rocket was launched in 1999 for the atmospheric interceptor test program. AADC successfully negotiated launch services contracts for 2000 with the Lockheed Martin Corporation, the Air Force Space and Missile Center and the Army Space and Missile Defense Command. Initial construction cost $40 million and in 2001, AADC received another $8.4 million for a second range safety system and $9.3 million for infrastructure and equipment.

**Fairbanks Ground Stations.** AADC is also promoting Fairbanks as a location for polar orbiting satellite ground stations. Several companies are building or operating satellite ground stations near Fairbanks, and others have selected Fairbanks as the site for future ground stations. Proximity to the North Pole provides more opportunities to communicate with polar orbiting satellites. Typical polar orbiting satellites make about 15 orbits around the earth each day. As the satellite orbits, the earth turns below. Any site near the equator would be under the satellite only once per day. The Poles, however, are stationary with respect to the earth's rotation, and the satellite passes over them almost every orbit. This greatly increases the time to communicate with the satellite, check operational status, issue commands and perform data recovery.

## Alaska Industrial Development and Export Authority

The Alaska Industrial Development and Export Authority (AIDEA) is a public corporation of the State of Alaska. The primary goal of AIDEA is to encourage economic growth and diversification. It was created by the Alaska Legislature to "promote, develop and advance the general prosperity and economic welfare of the people of Alaska, to relieve problems of unemployment, and to create additional employment."

**AIDEA Loan Participation/Guarantees, 1992-2002**

| Region | Projects Funded or Pending | Total Loan Participations/ Guarantees | Estimated Jobs Created | |
|---|---|---|---|---|
| | | | Construction | Permanent |
| **Anchorage/Mat-su** | 99 | $129,587,200 | 1728 | 1180 |
| **Gulf Coast** | 9 | $7,225,000 | 82 | 144 |
| **Interior** | 20 | $24,170,500 | 578 | 297 |
| **Northern** | 3 | $7,715,000 | 34 | 33 |
| **Southwest** | 15 | $28,943,000 | 206 | 272 |
| **Southeast** | 23 | $37,093,000 | n/a | n/a |

*Source: AIDEA*

AIDEA provides and facilitates various means of financing business and economic development projects in Alaska. AIDEA remains a secondary financial entity and does not become a direct lender or provider of grants. AIDEA also has the ability to own and operate facilities that advance basic economic development in the state. AIDEA-owned development projects include:

- Alaska Seafood International - Anchorage
- Federal Express Aircraft Maintenance Facility - Anchorage
- Snettisham Hydroelectric Facilities - Juneau
- DeLong Mountain Terminal and Transportation System (Northwest Alaska)
- Skagway Ore Terminal
- Healy Clean Coal Project
- Unalaska Marine Center
- Ketchikan Shipyard
- Seward Coal Facility
- Alaska Cargo port

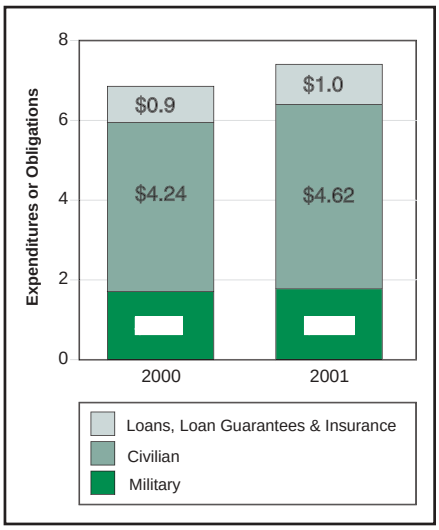
In addition to its other development programs, AIDEA houses the Alaska Energy Authority (AEA). AEA's programs emphasize lowering the costs and increasing the safety and reliability of rural power systems. In this effort, AEA has invested hundreds of millions of dollars in rural Alaska over the last ten years, including the construction of diesel and hydroelectric facilities, upgrading existing facilities to improve energy efficiency, and exploration of innovative alternate sources of power generation.

# Federal Government in Alaska

The federal government still plays a large role in Alaska's economy. Before statehood, and even before Alaska became a large oil and gas producer, federal agencies in health and social services, education and natural resources were a large and stable part of the State's economy. This is still true, although to a lesser extent. For comparison, the oil and gas industry share of Gross State Product (GSP) was about 20% in 2000, while the federal government's share was 9%.

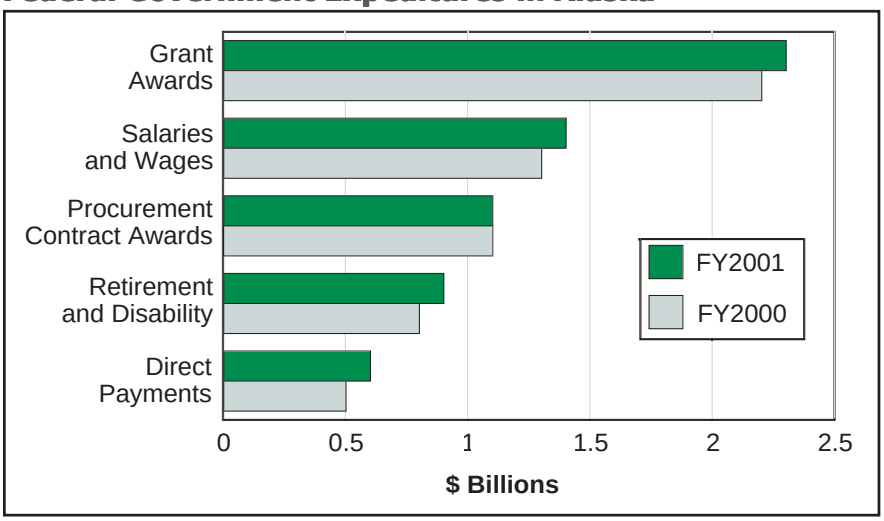
In 2001, total federal expenditures and obligations were $6.4 billion, of which 72% was for civilian programs and 28% was for defense. Both civilian and military spending are up from the previous year. In addition, there is $1 billion in federal loans, loan guarantees and insurance designated for Alaska.

**Dedicated Federal Funds for Alaska, Billions of Current Dollars**



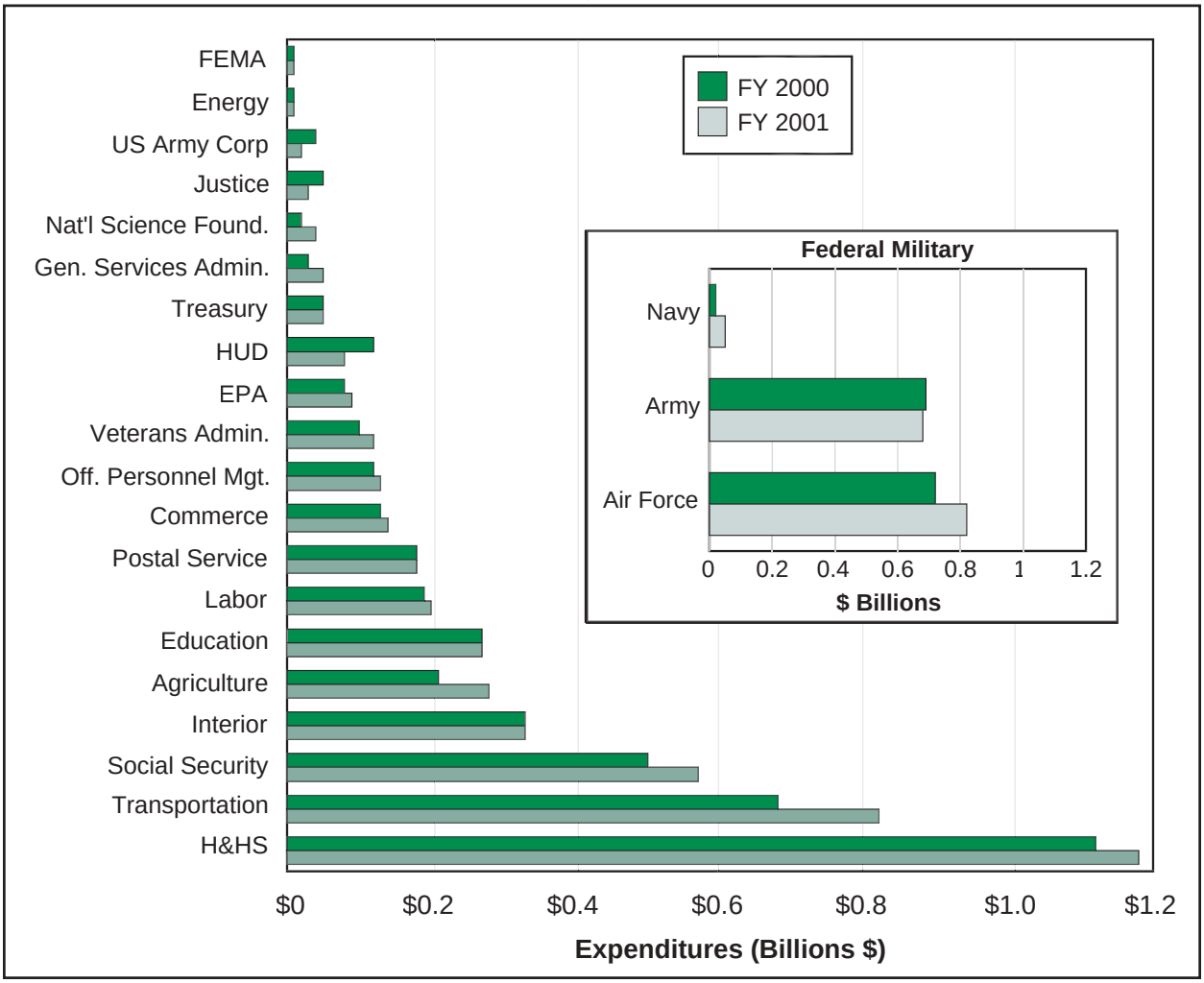

The chart below shows federal expenditures, by category, for FY 2000 and FY 2001. Federal Grants are the largest expenditure category. Grants support nearly 400 programs and some of the larger grants finance highways, airports, water and sewer systems, Medicaid, Aid to Families and Dependent Children, Temporary Assistance to Needy Families, workforce development, Indian Health services, the U.S Pacific salmon treaty, and fisheries disaster relief. The second largest expenditure category is the wages and salaries for federal employees and military personnel. Procurement contracts were about $1.1 billion in 2001 and are dominated by military spending (74%). Expenditures for federal retirement and disability include social security, federal retirement and veteran's benefits. Direct payment to individuals includes expenditures for food stamps, Medicare, unemployment benefits and low income housing assistance. In 2001 there was a large increase in payments to local entities to fund tribal self-governance and self-determination. However, this increase was offset by program funds in the Department of Interior, and actually represents a reallocation of funds. The following chart shows federal military spending, and expenditures for the top 15 civilian federal agencies, in Alaska in FY 2000 and FY 2001.

**Federal Government Expeditures in Alaska**




*Source: U.S. Census Bureau*

## Expenditures, Top 15 Civilian Federal Agencies in Alaska

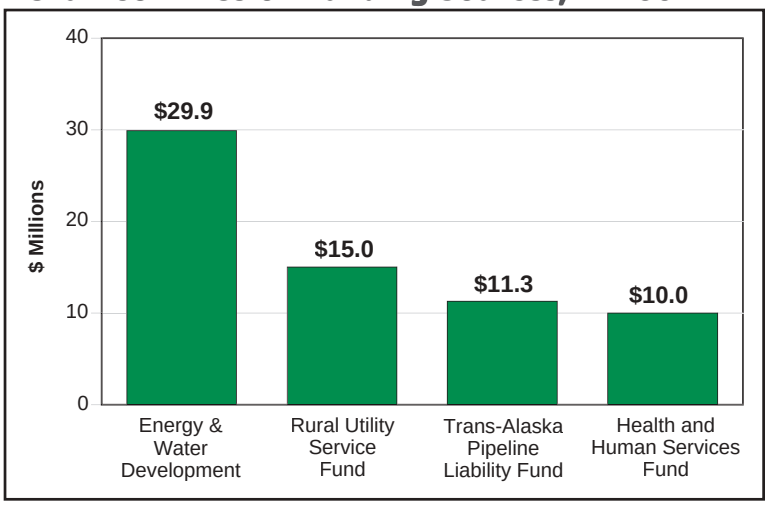



*Source: U.S. Census Bureau*

**U.S. Missile Defense System.** Reductions in military personnel from Fort Greely, near Delta Junction, started in 1995. Over the next six years, the federal government and the community of Delta Junction studied alternative uses of the base, but no viable anchor tenant was found. Since then, the U.S. Army Corps of Engineers has begun the preliminary construction of test bed facilities for a U.S. missile defense project. The project is designed to explore the operational feasibility of the U.S. Ground-Based Midcourse Missile Defense system. The new test facility will cover about 260 acres at Fort Greely, which is about 95 miles southeast of Fairbanks and 400 miles northeast of Anchorage. Other test facilities will be constructed at Eareckson AFS, at the tip of the Aleutian Island chain. The project will be incrementally funded and could amount to $250 million in construction if all items are executed. Fluor Alaska, Inc. and their subcontractors are employing about a hundred construction workers on this project and the number of jobs is expected to increase to 600-800 jobs by 2003. The government's stated intent is to provide a maximum opportunity for Alaska firms and qualified Alaskans to be employed in this construction project. Construction will be completed in 2004. When the site becomes operational there will be about 160 personnel assigned to the site. To help the City of Delta Junction provide additional services, the Department of Defense is providing $18-20 million in federal impact funds.

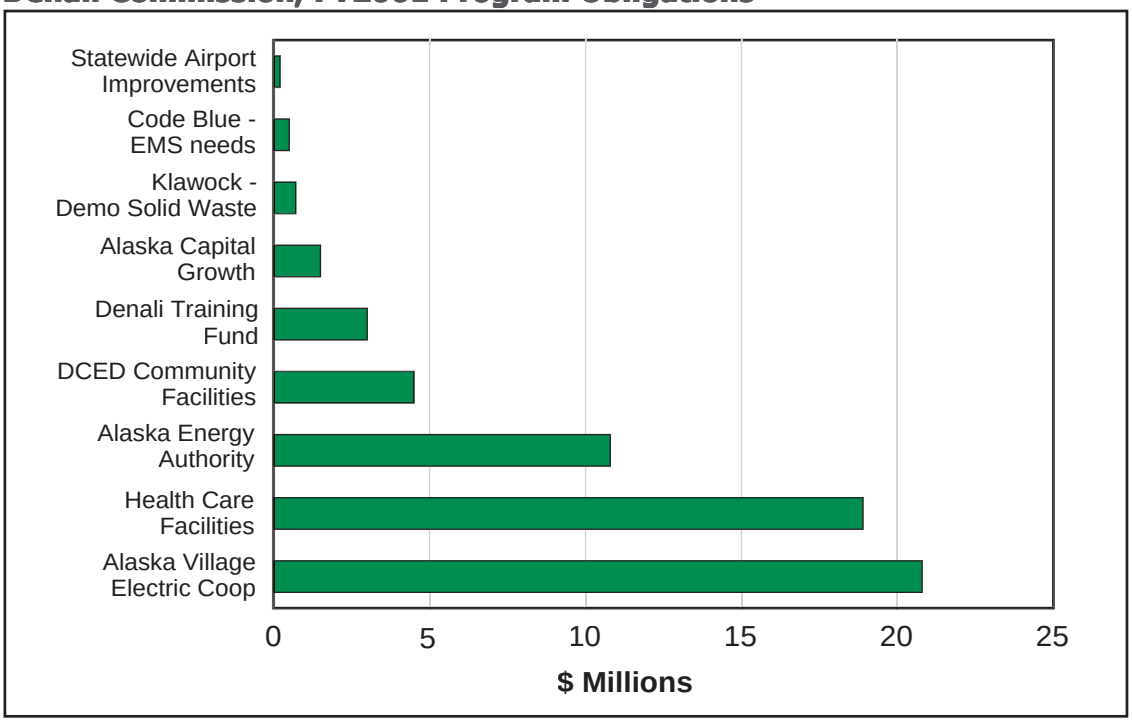
**The Denali Commission.** Senator Ted Stevens authored the Denali Commission Act of 1998, which was signed into law on October 21, 1998. The Denali Commission is an innovative federal-state partnership designed to provide critical utilities, infrastructure, and support for economic development in Alaska. The goal is to lower the cost of living and raise the standard of living throughout Alaska by ensuring all Alaskans have the means to achieve economic self-sufficiency. Initially, the Commission focused primarily on energy related projects, especially power plant upgrades and new bulk fuel storage facilities. New bulk fuel facilities hold 5,162,419 gallons, or 11%, of the 45,493,035 gallons needing replacement facilities. In 1999 the Commission's focus was broadened to include health care facilities. The Commission identified primary care needs in more than 288 rural communities, with and estimated cost for facilities at $253 million.

## Denali Commission Funding Sources, FY2001




*Source: Denali Commission 2001 Financial Statement*

## Denali Commission, FY2001 Program Obligations




*Source: Denali Commission 2001 Financial Statement*

For FY 2001, federal appropriations for the Denali Commission totaled $66.3 million. Sources of federal funding are becoming more diversified, expanding from one source of general appropriations, to three additional sources: Health and Human Services Fund, USDA Rural Utility Service Fund, and interest earned from the Trans-Alaska Pipeline Liability Fund.

Program obligations in 2001 totaled $60.8 and program administration costs were $3.1 million or 4.77% of total appropriations. During 2001, the Denali Commission spent $62.4 million of its own funds and gained another $41 million in matching funds from other federal, private, state, and local government sources. The distribution of Denali Commission projects in 2001 was 60% for energy, 33% for health care, 12% for infrastructure other than energy and 5% for job training. Denali Commission funding, with local matching funds, financed:

- 40 energy related projects in 26 communities
- 34 health care projects in 33 communities
- 7 programs for solid waste disposal, airport improvements, grants and loans
- A statewide program for job training

# Alaska Economic Information System - AEIS

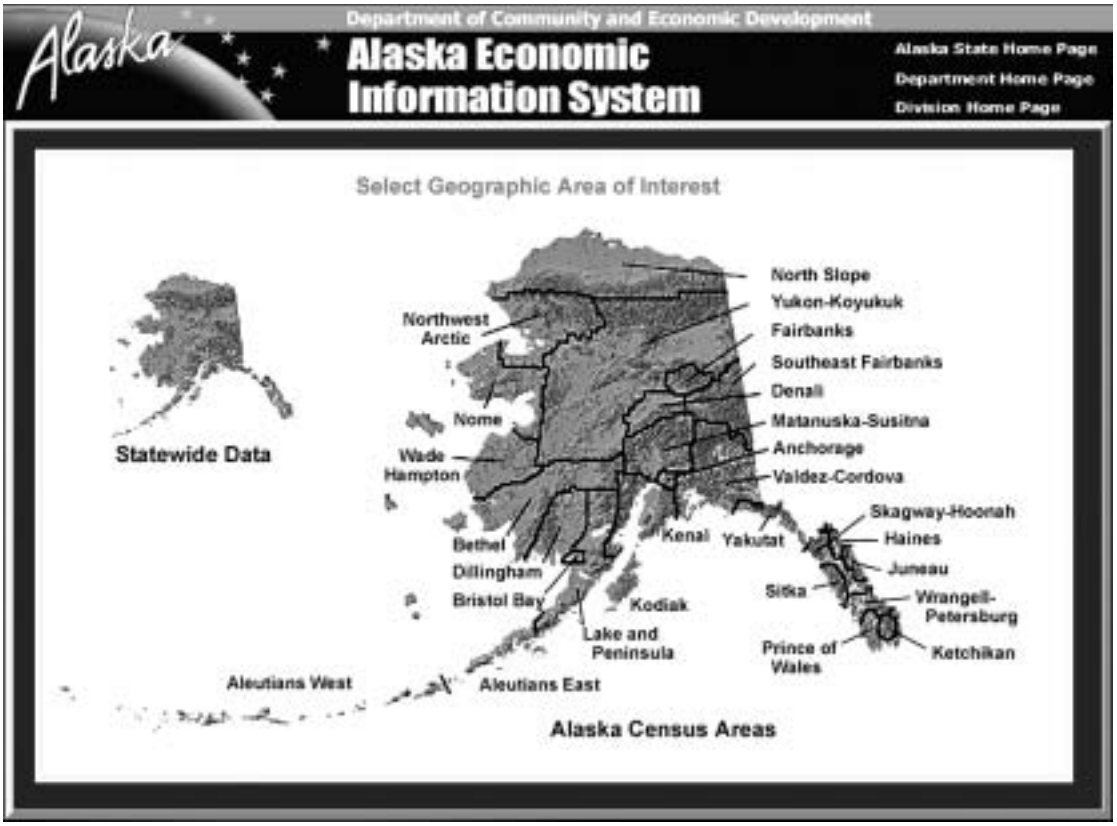
Department of Community and Economic Development

Department of
Community and
Economic Development

Until recently, information about Alaska's economy, labor force, and industrial sectors was scattered among a large number of agencies and organizations. The Alaska Economic Information System (AEIS) was created to provide user-friendly access to all this information at a one-stop portal on the web.

The AEIS represents a tremendous development resource for businesses, communities, and individuals — saving them significant time and effort in collecting the information on which to base development decisions and plans. Starting from a map of Alaska, users can "click" on a census area, and quickly get the picture of that area's basic economic industries such as tourism, oil and gas, mining, and seafood. Detailed information is also provided for the critical infrastructure elements of transportation, energy, and utility sectors that support long-term, viable economic development. A statewide perspective is also provided for each sector of the economy, and the Alaska economy as a whole.

Users can "drill down" through the information on the AEIS web site to get to greater levels of detail about their specific areas of interest, including maps, charts, and working spreadsheets that users can download to their own computers for further analysis. As a web portal, the AEIS contains a host of links to other web site relevant to an understanding of the Alaska economy, its work force and its economic sectors.




**On the web at:**
**http://www.dced.state.ak.us/cbd/AEIS/AEIS_Home.htm**

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