

ALASKA ECONOMIC TRENDS

January 2005



Transportation



Alaska Department of Labor
and Workforce Development

Frank H. Murkowski
Governor of Alaska

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Alaska's transportation system: a complex network that touches every aspect of our economy and lives

By Governor Frank H. Murkowski

Alaska is an expansive state, with vast distances separating communities and between our natural resources and their markets. The transportation infrastructure upon which our economy depends – and the jobs it supports - has evolved dramatically from coastal waterways, crude pioneer access roads, gold rush railroads and bumpy landing strips.

Much of our infrastructure has matured. Our airports, ports, and harbors move passengers and cargo efficiently and with as little inconvenience as possible in these days of heightened security. The Alaska Railroad is the only railroad in the nation offering both passenger and freight service.

Our marine highway system serves coastal Alaska well and is going through a transition that will result in fewer long-haul routes and more short connector or shuttle ferries.

To continue to evolve our transportation system – and to accommodate the necessary growth in resource development that underlies our economy – requires a solid commitment to maintaining infrastructure we now have, as well as pushing hard to create new roads, improved port facilities, and modern airports.

We have proposed an ambitious expansion of Alaska's road system in two main categories – transportation for resources, and community access. Often, we will find these overlap, such as on the Alaska Peninsula, where the roads we are advocating would access oil and gas prospects on state and Native corporation lands and connect communities.

On the North Slope, we propose to build two new resource access roads, one east from the Dalton Highway toward Pt. Thompson, and the other west from Pump Station 2 toward the Colville River. Both of these roads will open up state lands for oil and gas lease sales, exploration, and development.

The Trans-Alaska Pipeline System (TAPS) continues to be the lifeline of state revenues, and future oil field development on the North Slope, facilitated by these pioneer access roads, will be key to keeping the pipeline running at an acceptable volume.

Community access projects, in addition to the Alaska Peninsula, include connecting small villages, such as on Nelson Island, or Naknek and South Naknek; Juneau Access, which will construct a road between Juneau and Skagway; Gravina Access, connecting Ketchikan to Gravina Island; the Knik Arm Bridge, connecting Anchorage with Pt. MacKenzie; and the Bradfield Canal road, connecting Ketchikan and Wrangell with continental highways in British Columbia.

These are all ambitious projects. But for the sake of our state's future, they need to be done. Before they can be done, they must be started.

I expect many Alaskans may not give the Trans-Alaska Pipeline System a second thought in terms of a transportation system. Yet, it is a crucial one, more directly plugged into state government's revenue stream than any other system. The operation, maintenance, and security of TAPS may often be taken for granted, but the highly trained personnel who provide those services deserve our appreciation and gratitude.

We will soon be adding a second major pipeline system – carrying North Slope natural gas to market in state and to the Lower 48.

The people of Alaska have a unique opportunity, and a decision they must soon make, on whether to participate as owners in the construction and operation of the gas pipeline. Sharing in the risk and cost of construction means a greater return over the decades the pipeline will be in operation.

The state-owned and operated Alaska Railroad is poised to enter a period of expansion, which will first take it east from the Fairbanks area to Delta Junction, and, later, on to the Canadian border to connect to the continental rail system.

Finally, our state operates more than 260 airports – some are small village strips, and others are complex international airports with hundreds of flights every day. Ted Stevens Anchorage International Airport is not just Alaska's biggest – it has become the busiest cargo port in the nation.

Alaska's transportation system is a complex network that touches on every aspect of our economy and lives, supporting tens of thousands of jobs and the families who rely on them. It is imperative that we move forward by expanding and maintaining that multi-modal network.



Alaska geography makes it an important sector

Nearly 19,000 wage and salary employees work in Alaska's private sector transportation and warehousing industry. This is more than construction, oil, information, and a number of other industries. (See Exhibit 1.) Fourteen of the state's top 100 private sector employers are involved in transportation. The industry generates more than \$3.3 billion in annual revenues. Public sector transportation is also important and includes the high profile Alaska Marine Highway and Alaska Railroad. Impressive as these facts may be, the real value of transportation lies in its contributions to the rest of

the economy. Transportation weaves the web that ties Alaska's economy together and binds it to the world.

It's big and it's inter-modal

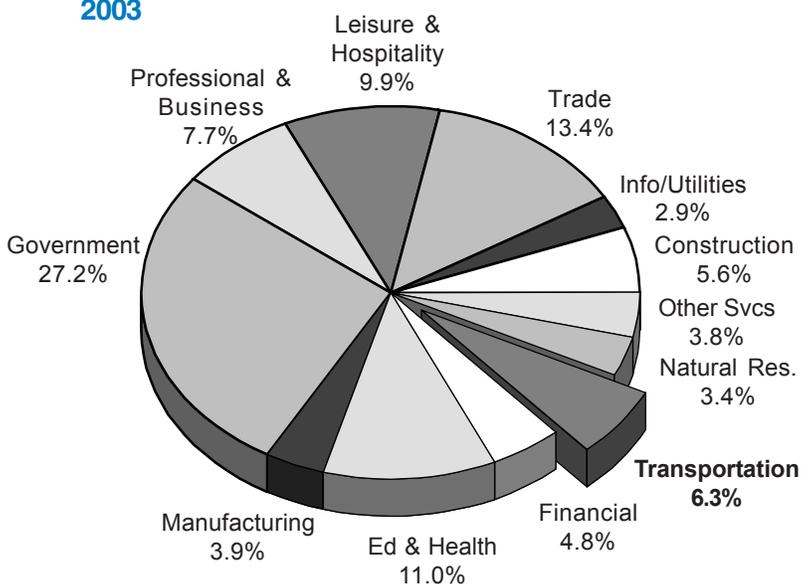
Six percent of all Alaska's private sector wage and salary workers are employed in transportation versus three percent in the country as a whole. (See Exhibit 2.) Geography is a principal reason for this disparity. What would involve a single delivery vehicle in most of the nation often requires a truck, ship, airplane and four-wheeler in Alaska. It is almost as if the term inter-modal transportation were coined for Alaska! There are very few cases in this state where a good is shipped and arrives at its destination via a single mode of transport.

An interesting history shapes the industry

Alaska's size, geography and weather, as well as its isolation from the rest of the nation, help explain its unique transportation network. History also plays a role.

Prior to European contact, Alaska's indigenous people used sea-going canoes, kayaks, skin boats, river canoes, rafts, walking trails, sleds, and dog teams. During the Russian period sailing ships and some primitive ports were added to this rudimentary infrastructure. Soon after Alaska was acquired by the United States, steam replaced sail but little else changed. In the early 20th century a congressional committee found that there was "not to be found a single wagon road over which vehicles can be drawn summer or winter" in Alaska.

1 Transportation's¹ Share Of Alaska wage and salary employment 2003



¹ Private sector transportation only

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

After World War I a series of events and innovations altered this framework. The arrival of the airplane in the early 1920s, the completion of the Alaska Railroad in 1923, the construction of the Alaska Highway during World War II and major federal support for mail carriers all shaped Alaska's unique transportation system. The introduction of the airplane was probably the single most important event. As one historian succinctly described it, "Alaskans jumped from river traffic and dog sleds to the air, bypassing the automobile entirely."

Various groupings create the industry

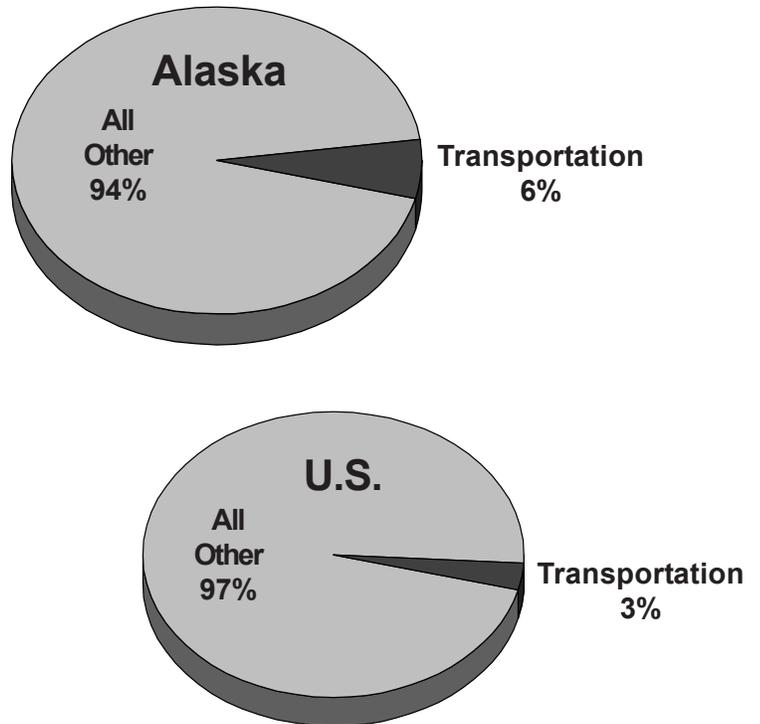
Alaska's transportation industry can be broken down into a number of broad categories. (See Exhibit 3.) Most of these classifications, such as air transportation, trucking, warehousing and water are self explanatory, but others require explanation.

The transit and ground passenger category includes school bus companies, charter buses, special needs transportation, limousine services, taxis and more. Scenic and sightseeing transportation involves recreation and entertainment such as bus tours and whale watching. Couriers include both local delivery services and nationwide employers like Federal Express.

Support activities provide services to all other segments of the transportation industry. Pipelines, although not usually thought of as part of the transportation grid, are another important source of employment. Alaska is also home to the only state-owned railroad in the nation, an enterprise that falls into a unique niche.

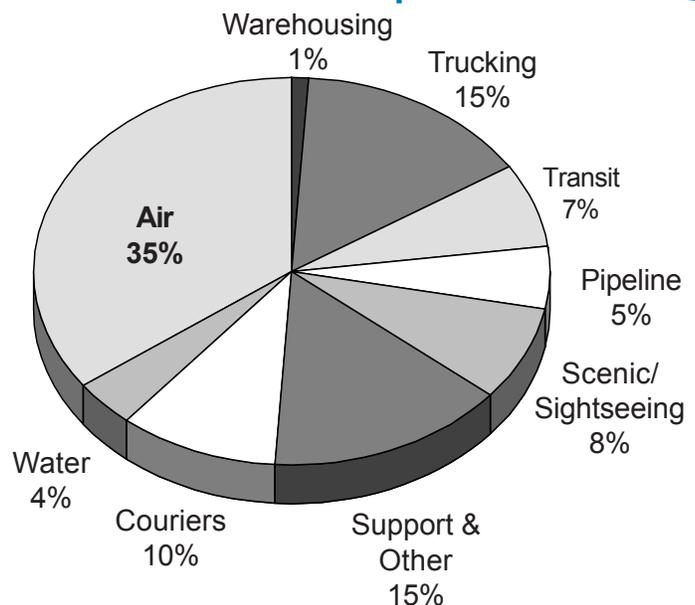
Most transportation operators in Alaska operate in close collaboration with one another and the lines between the various modes of transportation such as trucking, air, and water-borne freight are often blurred. For example, Lynden Transport, one of Alaska's largest transportation firms, is involved in almost all segments of the industry.

Transportation is Big in Alaska **2** Relative to rest of the nation—2003



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

Air is the Biggest Sector **3** In Alaska transportation—2003



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

4 Transportation Employment And payroll by area—2003

Private sector

	Employment	Payroll
Statewide	18,926	\$851,732,843
Aleutians East Borough	22	n/a
Aleutians West Census Area	266	11,400,242
Anchorage, Municipality	10,180	494,106,461
Bethel Census Area	338	10,242,565
Bristol Bay Borough	100	4,277,026
Denali Borough	341	n/a
Dillingham Census Area	100	2,270,641
Fairbanks North Star Borough	2,381	100,193,377
Haines Borough	110	2,090,632
Juneau Borough	778	25,942,999
Kenai Peninsula Borough	686	21,942,502
Ketchikan Gateway Borough	580	21,895,904
Kodiak Island Borough	221	5,434,447
Lake and Peninsula Borough	46	1,595,488
Matanuska-Susitna Borough	454	12,345,323
Nome Census Borough	269	8,202,620
North Slope Borough	200	19,068,713
Northwest Arctic Borough	108	4,662,091
Prince of Wales Census Area	84	2,913,719
Sitka Borough	207	7,384,294
Skagway-Hoonah-Angoon CA	228	8,224,855
Southeast Fairbanks Census Area	72	5,537,490
Valdez-Cordova Census Area	662	52,597,392
Wade Hampton Census Area	218	n/a
Wrangell-Petersburg CA	99	3,122,595
Yakutat Borough	14	n/a
Yukon Koyukuk Census Area	120	6,416,192
Unknown	41	2,922,457

Transportation is everywhere

Unlike regionally based industries such as oil and timber, transportation provides employment in every borough and census area in the state. (See Exhibits 4 and 5.) In nearly every community there are jobs in trucking, air transportation and school bussing. Even the relatively small pipeline industry employs people in communities all along the 800-mile trans-Alaska pipeline and beyond.

A large and growing industry with good wages

In 1990, there were 14,400 jobs in Alaska's transportation industry. By 2003 this number had increased to 18,900. (See Exhibit 6.) Over the past decade employment has grown by 20 percent versus 17 percent for overall employment. (See Exhibit 7.) These similar growth rates are not surprising because transportation is strongly linked to the general economy. Still, two factors gave this industry an extra boost: the growth in international air cargo business and the expansion of the visitor industry. Wages for the transportation industry tend to come in above average. (See Exhibit 8.)

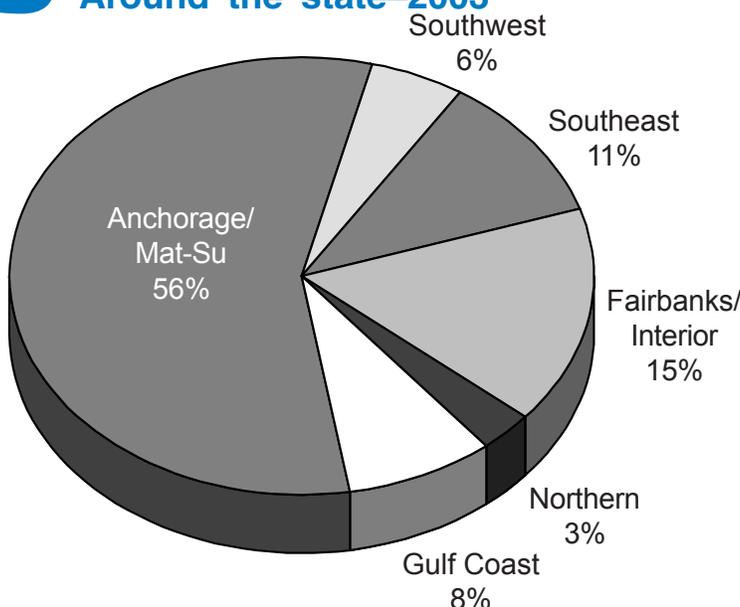
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

The public sector has a large role

Public sector transportation is also important and provides much of the state's infrastructure. (See Exhibit 9.) The Alaska Railroad has 769 employees. The Alaska Marine Highway, with 894, is counted as part of the Alaska Department of Transportation's 3,063 employees.

The Federal Aviation Administration and Transportation Security Administration employ 1,450 and 500 workers respectively. While the Coast Guard's 1,562 uniformed and 220 civilian employees are not typically considered part of the transportation industry, one of the primary missions of the Coast Guard is to lend support to the industry. Others actors, both public and private, provide direct support to transportation but are not included in the industry's employment totals. They include job categories such as caterers, customs and security people, some tour operators,

5 Transportation Jobs Are Found Around the state—2003



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

and local governments that run harbors and airports, training schools, fuelers, and others.

Air is biggest in Alaska

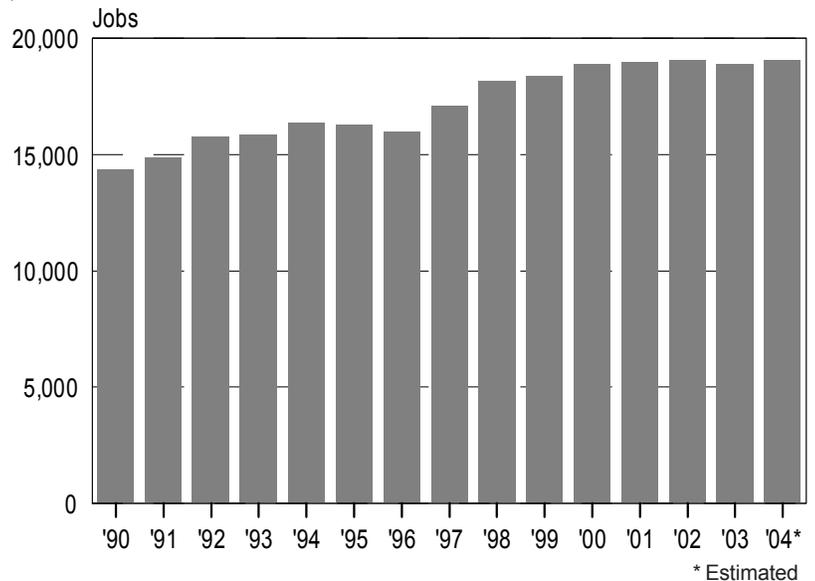
Ever since the first commercial airline in Alaska was established in Ketchikan in 1922, air transportation has left its mark on the state's economy. Today, with only 100 of its 300 communities served by road, air transport remains an essential part of modern Alaska. There are more than 1,100 airports, seaplane bases, and aircraft landing areas as well as more than 3,000 airstrips in the state. More than 8,700 Alaskans hold pilot licenses. Alaskans are 16 times more likely to own a plane than other American citizens. The "average" American flies twice a year compared to the "average" Alaskan, who flies nine times.

Many communities in the state are dependent on air transportation for their very existence. Approximately 30 percent of the state's population and most of its natural resources are not connected to the state's road and ferry systems, according to the Statewide Transportation Policy Plan.

One manifestation of this dependence is the huge role the U.S. Postal Service plays in Alaska's transportation industry. Unlike anywhere else in the nation, nearly all of Alaska's mail finds its way onto an airplane. For many of the state's intra-state air carriers, mail represents the biggest part of their business.

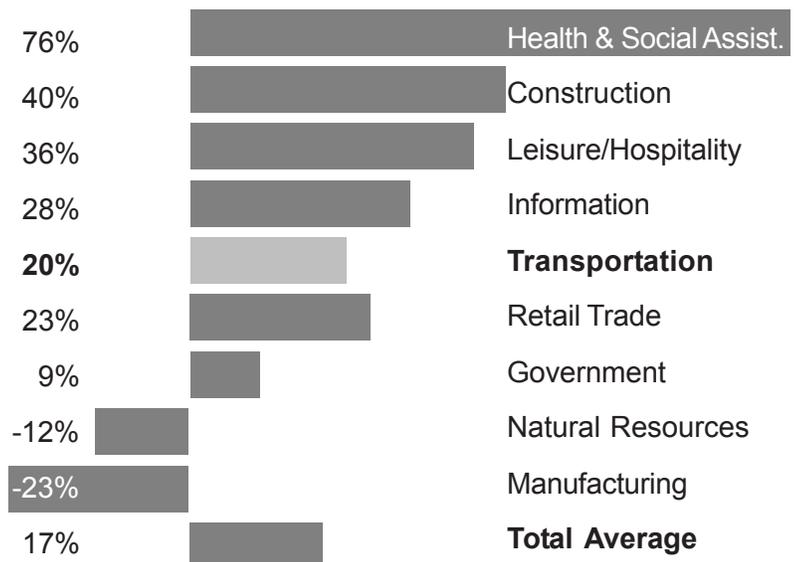
The U.S. Postal Service is mandated to provide "uniform and universal services" to all locations in the country. In Alaska, a unique subsidized program called "by-pass mail" delivers goods to much of rural Alaska. By-pass mail provides the lowest rates for moving most goods, including groceries and other staples, to roadless communities. Nearly all bush residents and businesses utilize this service for most of their freight needs. Without the U.S. mail, Alaska's intra-state air transportation system would be very different and much smaller than it is today. Not only does this service help insure a far-flung passenger carrier network, it also provides a source of jobs to many of Alaska's smaller rural

14 Years Steady Growth In Alaska's transportation industry **6**



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

Transportation Grows Faster Than average from 1993 to 2003 **7**



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

8 Transportation Earnings Are above average

Average monthly earnings 2003

\$10,666	Oil and Gas
\$4,375	Construction
\$3,866	Prof/Scientific/Tech Svcs.
\$3,750	Transportation/Warehousing
\$3,744	Information
\$3,352	Government
\$3,249	Finance/Insur/Real Estate
\$3,113	Statewide Average
\$2,913	Health Care/Social Assist.
\$2,881	Manufacturing
\$2,120	Retail Trade
\$1,380	Leisure/Hospitality

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

9 Public Sector Employers In transportation – 2003

	Average Annual Employment
Alaska Department of Transportation	3,063
Alaska Marine Highway System	894
Federal Aviation Administration (FAA)	1,450
Transportation Security Administration (TSA)	500
Alaska Railroad	769
U.S. Coast Guard (uniformed)	1,562
U.S. Coast Guard (civilian)	220

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; Alaska Marine Highway System, U.S. Coast Guard

communities where other employment opportunities are scarce.

Air transportation's economic impact was the subject of a study undertaken by the University of Alaska in 2001. The report found that the Ted Stevens International Airport was five times as large as one would expect in a city the size of Anchorage. The research also pointed out that nearly one in every nine wage and salary jobs in Anchorage owes its existence to the airport. It should therefore come as no surprise that the air transportation sector accounts for 35 percent of all transportation employment in Alaska versus 13 percent nationally. (See Exhibit 10.)

International air cargo and tourism are other contributors to air transportation's large role in the Alaska economy. Because Alaska lies equidistant between Europe and Asia, more freight is landed at the Ted Stevens Anchorage International Airport than at any other airport in the nation. (See Exhibit 11.) Fairbanks International Airport also figures in the international cargo arena. According to the University of Alaska, more than a third of all of the jobs generated at the Anchorage airport comes from international cargo. A related fact is that air transportation's employment payroll in Anchorage is seven times the national average.

In addition to the boost from international cargo, air transportation has also benefited from tourism. Approximately 1.4 million visitors came to the state in 2004 and many arrived or left by air. The industry grew by 28 percent between 1998 and 2002. According to a 2004 study produced for the Alaska Department of Community and Economic Development, nearly 13 percent of visitor sales are for the purpose of air travel. The study also found that air transportation accounted for 22 percent of the local value generated by visitor spending.

In 1993, there were 5,800 jobs in air transportation; by 2003 this number had increased to 6,500. This 12 percent increase in air transportation employment was somewhat lower than

Transportation Compared **10**

Alaska and U.S. employment—2003

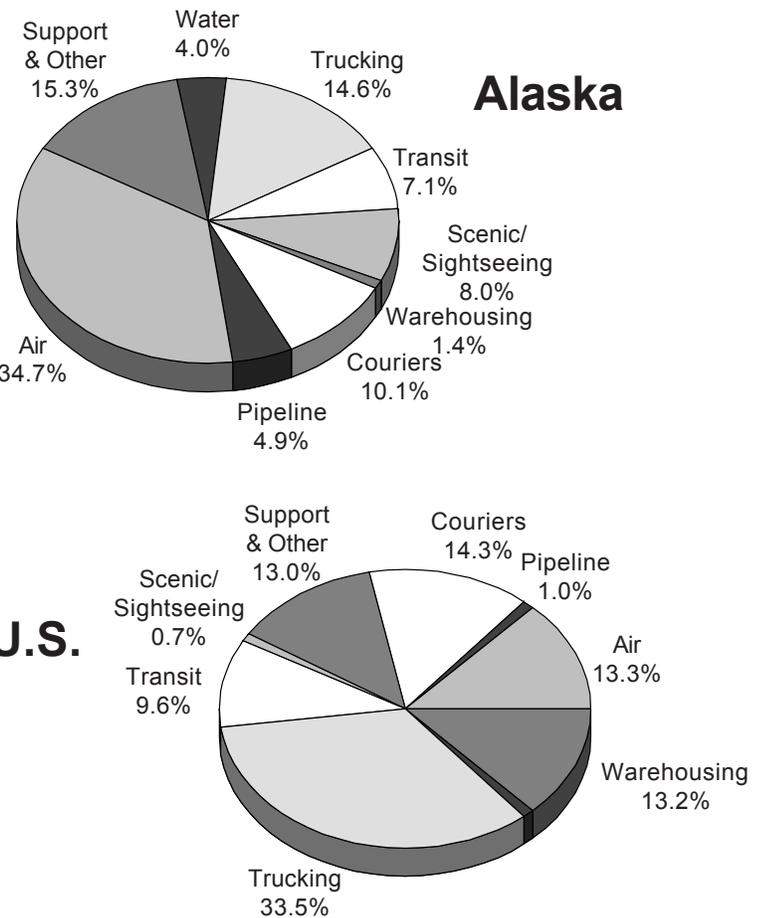
the 20 percent growth experienced by the broader transportation industry and the 17 percent generated by the overall economy.

During the past six years employment in air transportation has grown little compared to the rest of transportation. There are a number of reasons why this growth has lagged. September 11th and its aftershocks put a definite crimp on the industry's growth. The national recession and at least two soft visitor seasons also contributed. High fuel prices remain a challenge and the recent restructuring of the by-pass mail system to favor larger carriers may be playing a role in the current sluggish performance.

As of September 2004, the state's air transportation industry provided over 6,900 jobs. This number represents the employment of all scheduled and nonscheduled air passenger and cargo services as well as charters and airport services, which include things such as repair and maintenance. Six of the state's 50 largest private sector employers are counted in the air transportation industry. (See Exhibit 13.)

In 2003 Congress passed new international cargo transit regulations. These are expected to produce some important advantages over the next two years. As a result, Alaska's airport officials are forecasting annual increases of five to seven percent in international cargo traffic.

The passenger side of the business also has positive developments. Low cost carriers, such as Frontier Airlines and America West, entered the Anchorage market in 2004 with direct flights to Denver and Phoenix respectively, while the Minneapolis-based carrier Sun Country Airlines doubled its number of summer flights in 2004. The number of Japanese charters doubled from 12 in 2003 to 24 in 2004. Cathay Pacific reentered the Anchorage market in 2004. The company had stopped routing international transit passenger flights through Anchorage in 2003 due to security concerns. Delta Airlines, after an extended absence, is returning to the Fairbanks market in 2005.



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

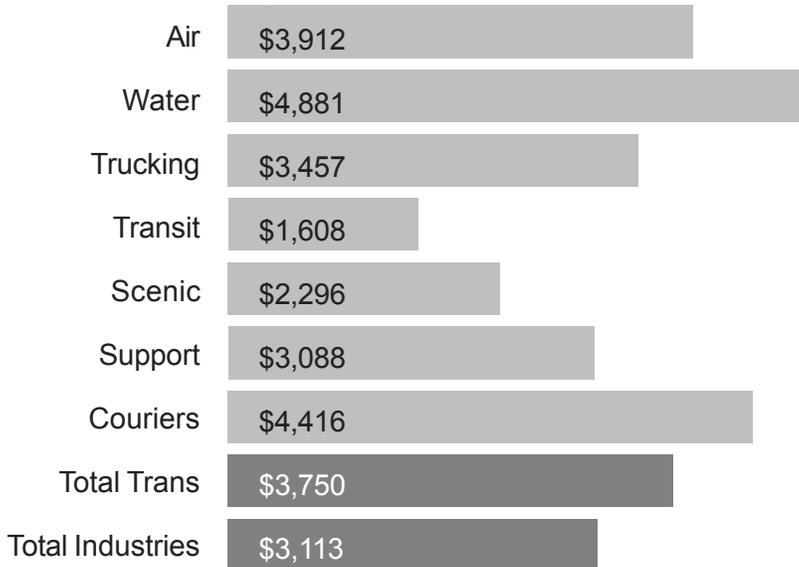
Air Cargo Helps Diversify **11**

Alaska's economy



Source: Ted Stevens International Airport

12 Average Monthly Earnings Transportation – 2003



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

13 Alaska's Top 30 Transportation Private Sector Employers – 2003

Average Annual Employment

Alaska Airlines	1,726
Federal Express	1,094
Alyeska Pipeline Service Company	895
ERA Aviation	617
Northwest Airlines	511
Laidlaw Transit	429
United Parcel Service	409
Peninsula Air Service	398
First Student	384
CSX Lines	354
Carlisle Enterprise	348
Swissport USA	333
Royal Highway Tours	310
Northern Air Cargo	269
Crowley Marine Services	245
Tatonduk Flying Services	238
Westour Motorcoaches	232
CIRI Alaska Tourism	213
Tower Group International	200
Frontier Flying Service	183
Hageland Aviation Services	179
Atlas Air	157
Sea Star Stevedore	152
Grant Aviation	149
Arctic Transportation Service	140
Southeast Stevedoring	137
Lynden Air Cargo	136
Lynden Transport	128
American Fast Freight	118
Evergreen Aviation Ground Logistics	114

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

Trucking keeps on rolling

Compared to the rest of the nation, trucking's share of transportation employment in Alaska is considerably smaller. Nationwide, the trucking industry employs over a third of all transportation workers. But the rest of the nation enjoys a vast network of interstate highways that connects almost every community and hamlet to the road system.

Alaska is connected to the rest of the nation via the Alaska Highway but it is not part of the extensive interstate highway system. The largest state in the nation ranks 47th in terms of highway mileage. Compared to the continental United States where there is one mile of road per square mile of land area, Alaska has a mile of road for every 42 square miles of land.

In spite of this much smaller highway network, trucking represents the third largest segment of the state's transportation workforce. On an annual monthly average there are nearly 2,800 trucking jobs. This count is conservative, because a large number of independent truckers are not included in these wage and salary numbers and many unrelated businesses employ truck drivers that are not tallied in transportation employment. An example is Sysco, which employs nine truck drivers.

The Division of Motor Vehicles reports more than 11,000 commercial trucks of 12,000 pounds or greater registered in Alaska. They are involved in both local and longer haul services. Trucks move much of the freight throughout Railbelt Alaska and also serve Prudhoe Bay via the Dalton Highway. Even in Alaska's smallest communities where most of the freight comes via air or barge, a truck may ultimately deliver the cargo to its final destination. While the amount of freight trucked via the Alaska Highway is usually relatively small, the highway forms a vital link. During the 2002 West Coast port lockout, truck traffic along this route dramatically increased.

Wages in the trucking sector run 11 percent above the state's monthly average for all industries.

(See Exhibit 12.) Employment in trucking has grown moderately, along with the economy, and remains closely tied to the overall economic trends.

Water transport delivers most of the goods

No other state in the continental U.S. depends on water transportation to the extent Alaska does. Water transportation is one of the smaller transportation sectors in terms of employment but it handles the greatest tonnage of freight coming into the state. Access to water has been a critical factor in the development of the state and has often dictated the location of communities. Even the Interior community of Fairbanks owes its existence to the Chena River. Alaska's 33,900 miles of coastline is far greater than that of the entire Lower 48. Commercial shippers serve this extensive coastline as far north as Prudhoe Bay. The Yukon, Tanana, and Kuskokwim rivers and some of their tributaries are also important shipping routes for communities along these drainages.

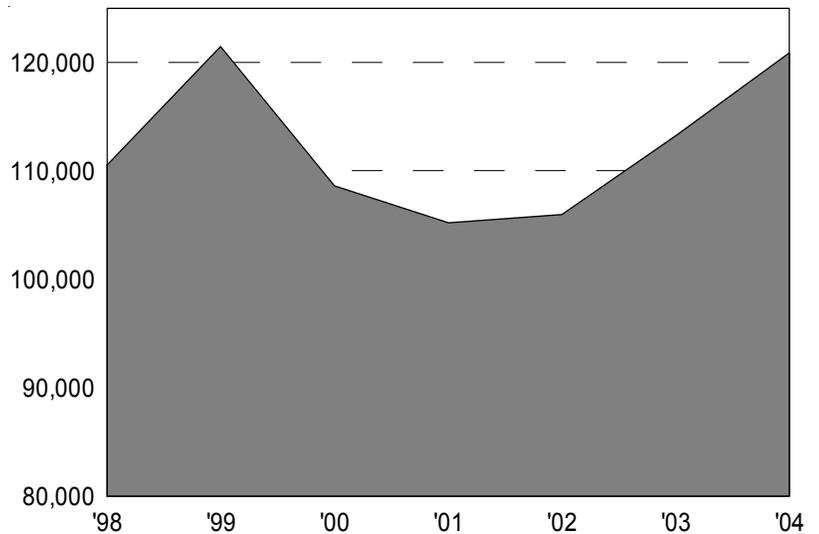
Water transportation employment includes barge workers, shipyard employees, and operators of tug boats, freighters, water taxis, lighterage and other services. It even includes those who operate the hovercraft based in Bethel that supply a number of villages along the Kuskokwim River.

In 2003, there were about 750 jobs in Alaska's water transportation industry. As with trucking, this job count understates the industry's real economic impact. For example, these numbers do not include the Alaska Marine Highway System, which serves 30 different Alaska ports and two outside ports and carries approximately 400,000 passengers per year. The Alaska Marine Highway has a workforce of approximately 894.

Valdez is the state's leading port in terms of tonnage, with oil the major commodity. Anchorage, by contrast, is more diversified and handles 90 percent of all consumer goods sold in the Railbelt. Approximately 80 percent of the state's population rely on goods that cross Anchorage wharves. But water transport is

Alaska Railroad 14

Passenger load has fluctuated

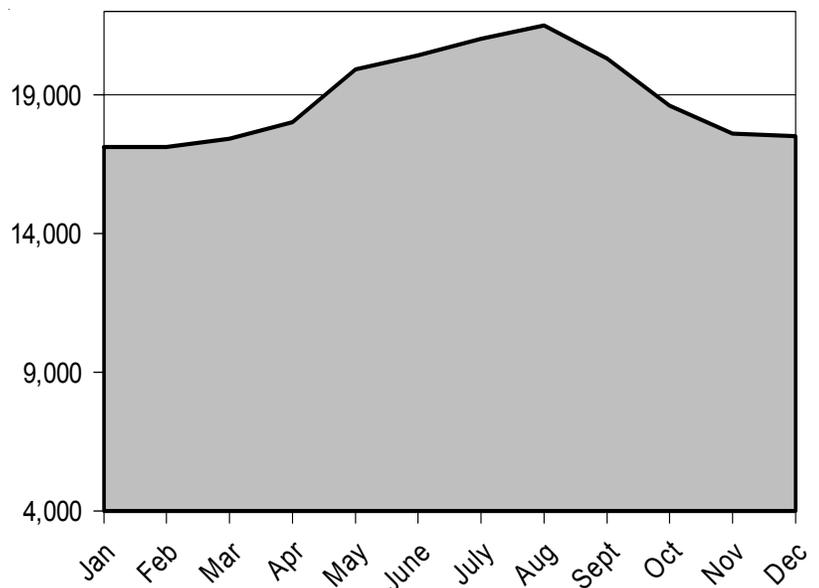


Source: Alaska Railroad

Transportation Employment 15

Peaks in summer months

Number of jobs – 2003



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

important nearly everywhere. Southeast Alaska communities are directly served by water transportation, and rely heavily on barge lines for their freight supply. Ironically, the region's thriving cruise ship industry provides little recorded employment in the transportation sector.

Pipeline transportation is big in Alaska and could get bigger

Alyeska Pipeline Service Company dominates employment in this field. The company is the 17th largest private sector employer in the state and the third largest in the transportation industry. (See Exhibit 13.) These jobs represent some of the highest paying jobs in Alaska's economy.

Unlike most other sectors of transportation, pipeline employment has been falling for nearly a decade. This has been a result of steep production declines and improvements in technology. Alyeska recently announced that it

expects to eliminate approximately 175 positions over the next two to three years, largely as a result of automation. The impact of these cutbacks will register in Valdez, Fairbanks, and Anchorage especially.

While current trends are not encouraging, the construction of a gas pipeline could rapidly reverse this trend in pipeline employment.

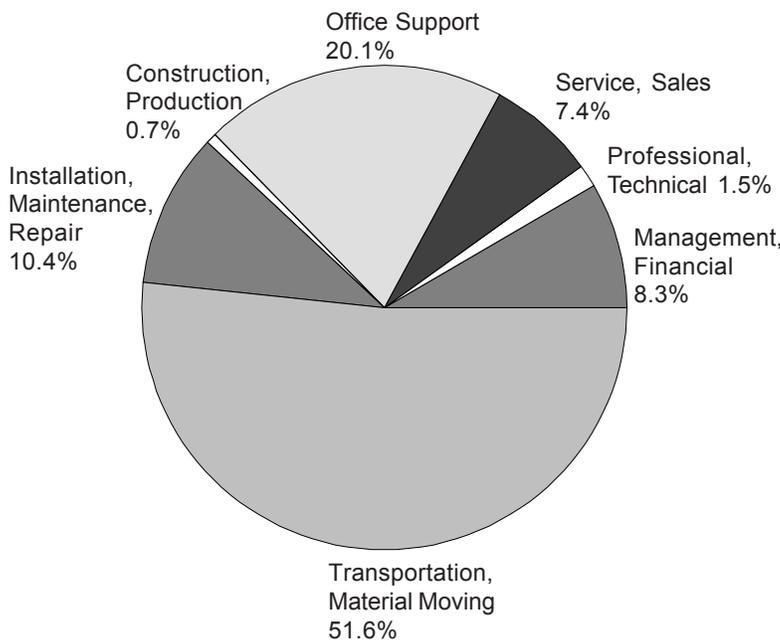
Tale of two railroads

Over the past 100 years, more than 20 different railroads have operated in Alaska. Today, there are only two: the White Pass and Yukon Railroad, which hauls summer visitors from Skagway to Lake Bennett and Frazier, British Columbia, and the full-service Alaska Railroad that operates year-round in the Seward-Anchorage-Fairbanks corridor.

In 2003, White Pass generated 93 jobs on an annual basis and peak employment reached 115 in July. White Pass was built at the turn of the twentieth century to carry goods into the Klondike and Interior gold fields. In the late 1960s, it began to haul ore from Canada to Skagway. The mine closed in 1982 and the railroad was forced to close down the same year. Then, in 1988 the railroad reopened strictly as a tourist attraction and it has enjoyed steady growth over the past decade. The company's employment is captured under the scenic and sightseeing category.

The Alaska Railroad has had a more far reaching impact on the state's economy. In 1914, Congress passed legislation to buy or build a railroad in Alaska to connect the Interior with an ice-free port and to facilitate the exploitation of coal and mineral deposits. It took nearly 10 years to complete the line running from Seward to Fairbanks. A by-product of this transportation project was the establishment of Anchorage. In 1985, the state bought the railroad from the federal government and the Alaska Railroad Corporation was formed. Today, the railroad employs 769 people, making it the eighth largest transportation employer in the state and the only full service railroad in the nation. The largest number of workers live in Anchorage, Fairbanks, and Seward but employees also live in Wasilla, Talkeetna, Healy,

16 The Staffing Pattern Alaska transportation – 2002



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

and elsewhere. It is a state-owned enterprise, so employment is recorded under state government.

The Corporation has some ambitious plans for the future that may include commuter passenger service between the Matanuska Valley, Anchorage, and Girdwood. Major rail line realignment that will make this possible and which will speed train traffic is underway. The possibility of a 90-mile track connecting Fairbanks with Delta Junction is being explored, and new inter-modal facilities are planned for both Fairbanks and Anchorage.

Couriers and messengers

Federal Express and United Parcel Service employees are counted in this category. Nationally these companies derive most of their business from package and parcel delivery. In Alaska most of their activity deals with international air cargo. Without these major companies, courier services would be a very small part of the state's transportation industry.

Support activities for transportation are significant

Included in this category are the employees of ports and harbors, cargo handling, navigational services, towing services, private air traffic control, fueling, and other support services. It is not surprising that some of the larger companies in Alaska, like Southeast Stevedoring Company, support water transportation.

Transit rides in school buses

Over three quarters of all transit employment is based on the operation of school buses (76 percent). First Student and Laidlaw are the major employers in this industry. Transit also includes shuttle services, limousine services, charter bus companies and others.

Warehousing

Although warehousing is included in the overall title of Transportation and Warehousing, it accounts for very little employment. In fact, less than two percent of transportation's employment is directly tied to this segment of the industry. This does not mean there is a shortage of warehousing facilities in Alaska. Most warehousing operations are owned and run by companies such as airlines, wholesalers, trucking firms, and the like. Employees of these firms are reported in appropriate industrial categories, but this probably results in understated warehouse totals. The largest company among the warehousing group is American Fast Freight.

Scenic and sightseeing

This visitor-directed component is the most seasonal of all the transportation industries, and is responsible for most of the spike in summer employment seen in Exhibit 15. In 2003, employment peaked at 3,115 in July and reached its low point of 444 employees in February. Royal Highway Tours, Westours and water transportation operators such as Kenai Fjord Tours are major companies in this field. The health of this industry is directly linked to that of the visitor industry. Because the latter seems robust the outlook would seem to point toward continued growth.

Outlook tied to the economy and more

Since nearly every Alaska business depends in some way upon transportation, the overall health of Alaska's economy is the best predictor of the industry's future. Still, some important contributors, such as international air cargo and visitor-based transportation, show signs of growing more rapidly than the industry as a whole. Other fortuitous events, such as the construction of a gas pipeline, could lead to expanded employment as Alaska developed the workforce required to maintain and operate it. This would give this industry a new pillar of support.

Transportation's occupational mix

The most recent Alaska industry forecast projects employment in Alaska's transportation industry to increase 30 percent between 2002 and 2012, from 19,241 to 25,066. This forecast estimates the number of wage and salary workers for the industry sector but does not include the self-employed. Job opportunities may vary from year to year as the demand for transportation services—particularly pleasure travel, a discretionary expense—fluctuates with the ups and downs in the economy.

Alaska's transportation industry employs workers in nearly 200 separate occupations including those as diverse as Aircraft Mechanics & Service Technicians and Security Guards. Educational attainment and the employment skills and experience needed by workers are varied. Some jobs require a high school education while others may require extensive specialized training or two or four year college degrees. Many people who work in this industry carry specific credentials such as FAA certificates, ratings for aircraft mechanics and pilots, or special DOT certificates for tractor trailer truck drivers who engage in interstate commerce. Within the industry are managers, administrative support personnel, highly skilled professionals and technicians, and semi-skilled workers and laborers, all of whom make their contribution to transportation in the state.

For the purposes of this article, the study of the transportation industry's occupational mix is limited to the 98 occupations with employment of 10 or more in 2002. (See Exhibit 17.) Not included are federal and state employees engaged in transportation-related jobs, for example, Transportation Security Administration (TSA) workers and Air Traffic Controllers. Two other groups not included are Alaska Marine Highway and Alaska Railroad workers.

Transportation industry employment is highly concentrated. Over 50 percent of it in 2002 is in the broad occupational category of Transportation & Material Moving occupations – jobs operating the equipment used for moving people and

materials, such as buses, trucks, barges, airplanes, taxicabs, and fork lifts. (See Exhibit 16.) The remaining employment is split between six other broad categories of occupations with such varied functions as office support; installation, maintenance and repair; and management and finance.

About one-in-three transportation workers fall into the industry's five largest occupations – Laborers & Freight, Stock & Material Movers; Airline Pilots, Copilots, & Flight Engineers; Aircraft Mechanics & Service Technicians; Truck Drivers, Heavy & Tractor Trailer; and Reservation & Transportation Ticket Agents & Travel Clerks. Combined, employment growth in these five occupations over the 2002 – 2012 decade is projected to account for nearly 30 percent of overall industry growth.

Future prospects vary by occupation

Continued passenger and cargo expansion should result in solid employment opportunities in the future. Demand will be driven by both the need for additional workers and the need to replace workers that either retire or leave their occupation to pursue other careers. But even though the overall demand for transportation services is expected to rise, the need for individual occupations will vary. Growth rates (within the transportation industry) for the occupations analyzed in this article range from an increase of 51 percent for Tour Guides to a decline of just over 9 percent for Petroleum Pump System Operators.

With projected growth rates of 22 percent and 33 percent respectively, the occupations of Airline Pilots, Copilots & Flight Engineers and Commercial Pilots are expected to grow rapidly as the growing population, rising incomes, and increasing international cargo stimulate the demand for airline transportation. By contrast, the number of Reservation & Transportation Ticket Agents & Travel Clerks is expected to increase by a modest 10 percent over the forecast period, from 987 to 1,090 — as electronic "ticketless" travel becomes increasingly common.

Demand for relatively unskilled occupations such as Laborers & Freight, Stock & Material Movers; Conveyor Operators & Tenders; and Truck Drivers, for which short-term on-the-job training (OJT) is the norm, will be high. In addition to growth in demand for these occupations, numerous job openings are expected to be available as experienced workers leave these occupations to transfer to other fields or to retire.

Technological innovations will continue to change the skills and duties required of workers in many transportation occupations. For example, changes in ship designs, such as automated controls and computerized monitoring systems in navigation, engine control and cargo handling, will change the skills required of Sailors & Marine Oilers; Captains, Mates & Pilots of Water Vessels; and Aircraft Cargo Handling Supervisors.

Wages vary widely

Although earnings in transportation occupations vary widely, a wage premium for education and skill attainment is evident. (See Exhibit 17.) All of the transportation occupations requiring an associate degree or higher, for which wage data exist, have estimated earnings in the top two wage quartiles in 2003. Nineteen of the 21 occupations requiring a bachelor degree or more have wages in the highest wage quartile — \$24.62 or higher an hour. (Wage quartiles are determined by sorting the total number of Alaska employees by their average wage from the lowest to highest. One fourth of total employment was placed in each quartile.)

Average wages for occupations requiring on-the-job training vary considerably by occupation. Fifteen of the 26 occupations requiring either medium- or long-term OJT have higher than average wages. Only one occupation requiring short-term OJT — Production, Planning & Expediting Clerks — commanded a wage higher than the all occupation average.

Nonresident worker rates

Exhibit 17 also lists the percentage of nonresident transportation workers in 2002 by occupation. Nonresident employment in high-wage/high-growth occupations such as Commercial Pilots and Welders, Cutters, Solderers & Brazers (with 37.3 and 28.2 percent nonresident employment respectively) signal lost opportunities for Alaska's workers.

Notes for Exhibit 17

Exhibit 17 organizes the occupations commonly found in the transportation industry by the minimum level of training or education generally required for entry. The table includes 2002 and 2012 projected employment within the transportation industry, the wage quartile (noted by \$), the percentage of workers 50 years of age or older, and the percentage of nonresident workers in the occupation. Employment estimates for occupations that occur in multiple industries include only the transportation industry component. Unlike the employment estimates, the wage, age and nonresident data are not transportation industry specific. Nonresident status is based on the Alaska Permanent Fund definition. Bolded occupations have higher than average wages and good employment prospects, based on projected employment growth and the number of positions.

17 Transportation Occupations by Education or Training Required

	Employment 2002 ¹	Growth Rate ¹ 2002-2012	Employment 2012 ¹	Wage Quartile	2002 % Nonresident Workers ²	2002 % Workers 50+ ²
Wage Quartiles						
\$	<\$12.71 hour					
\$\$	\$12.71-\$17.48					
\$\$\$	\$17.49-\$24.62					
\$\$\$\$	>\$24.62					
BACHELOR'S OR ABOVE						
Airline Pilots, Copilots, and Flight Engineers	1,395	1,708	22.4	\$\$\$\$	41.7	29.4
General and Operations Managers	446	623	39.7	\$\$\$\$	9.8	28.2
Chief Executives	75	96	28.0	\$\$\$\$	7.7	44.7
Accountants and Auditors	62	79	27.4	\$\$\$\$	6.1	25.3
Civil Engineers	55	56	1.8	\$\$\$\$	11.0	25.5
Sales Managers	52	71	36.5	\$\$\$\$	8.0	23.4
Marketing Managers	48	63	31.3	\$\$\$\$	9.6	23.3
Training and Development Specialists	45	60	33.3	\$\$\$	4.7	20.4
Financial Analysts	43	41	-4.7	\$\$\$\$	9.1	16.8
Financial Managers	42	51	21.4	\$\$\$\$	6.2	25.9
Administrative Services Managers	38	49	28.9	\$\$\$\$	5.9	32.4
Human Resources Managers	30	36	20.0	\$\$\$\$	5.4	32.8
Operations Research Analysts	22	32	45.5	\$\$\$	5.4	21.6
Occupational Health and Safety Specialists and Technicians	22	22	0.0	\$\$\$\$	23.7	31.6
Computer and Information Systems Managers	18	24	33.3	\$\$\$\$	7.1	27.2
Advertising and Promotions Managers	16	21	31.3	\$\$\$\$	5.1	20.3
Environmental Scientists and Specialists, Including Health	16	17	6.3	\$\$\$\$	7.0	22.3
Health and Safety Engineers, Except Mining Safety Engineers	14	18	28.6	na	25.2	31.9
Environmental Engineers	12	16	33.3	\$\$\$\$	10.7	21.2
Engineering Managers	12	12	0.0	\$\$\$\$	17.2	34.4
Lawyers	12	12	0.0	\$\$\$\$	6.4	26.5
Computer Programmers	11	10	-9.1	\$\$\$\$	7.8	22.7
ASSOCIATE OR SIGNIFICANT POSTSECONDARY VOCATIONAL TRAINING						
Aircraft Mechanics and Service Technicians	1,105	1,340	21.3	\$\$\$	16.4	20.6
Commercial Pilots	391	521	33.2	\$\$\$\$	37.3	31.7
Bus and Truck Mechanics and Diesel Engine Specialists	219	310	41.6	\$\$\$	15.0	18.2
Automotive Service Technicians and Mechanics	99	142	43.4	\$\$\$	12.5	12.7
Avionics Technicians	77	99	28.6	\$\$\$	20.4	25.4
Ship Engineers	61	87	42.6	\$\$\$	49.2	35.4
Electrical and Electronics Repairers, Commercial & Industrial Equipment	17	18	5.9	\$\$\$\$	16.7	26.0
Computer Support Specialists	16	22	37.5	\$\$\$	8.4	12.1
WORK EXPERIENCE IN A RELATED OCCUPATION						
Captains, Mates, and Pilots of Water Vessels	244	349	43.0	\$\$\$\$	42.7	26.7
Transportation, Storage, and Distribution Managers	233	319	36.9	\$\$\$\$	12.4	32.5
First-Line Supvs/Mgrs of Office and Administrative Support Workers	167	203	21.6	\$\$\$	7.5	25.1
First-Line Supvs/Mgrs of Trans & Material Moving Machine/Vehicle Opr	165	228	38.2	\$\$\$\$	4.9	35.7
First-Line Supvs/Mgrs of Mechanics, Installers and Repairers	140	178	27.1	\$\$\$\$	10.4	34.7
First-Line Supv/Mgrs Helpers, Laborers, Mat'l Movers, Hand	128	185	44.5	\$\$\$	8.4	24.2
Aircraft Cargo Handling Supervisors	123	166	35.0	\$\$	7.7	12.6
Transportation Inspectors	77	105	36.4	\$\$\$\$	16.3	30.2
Purchasing Agents, Except Wholesale, Retail, and Farm Products	40	55	37.5	\$\$\$\$	3.8	28.7
First-Line Supvs/Mgrs Construction Trades & Extraction Wrkr	31	35	12.9	\$\$\$\$	23.6	31.3
First-Line Supvs/Mgrs of Personal Service Workers	25	34	36.0	\$\$	12.9	24.8
First-Line Supvs/Mgrs of Non-Retail Sales Workers	20	27	35.0	\$\$\$\$	8.3	16.2
Emergency Management Specialists	16	17	6.3	\$\$\$\$	5.7	38.2
Lodging Managers	12	17	41.7	\$\$\$	27.3	29.0
MEDIUM OR LONG-TERM TRAINING OR EXPERIENCE						
Truck Drivers, Heavy and Tractor-Trailer	997	1,458	46.2	\$\$\$	14.7	25.8
Cargo and Freight Agents	534	597	11.8	\$\$	4.6	17.5
Bus Drivers, Transit and Intercity	492	720	46.3	\$\$	15.8	46.9
Dispatchers, Except Police, Fire, and Ambulance	315	437	38.7	\$\$	10.1	19.8
Flight Attendants	272	321	18.0	\$\$	11.9	15.4

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

Transportation Occupations by Education or Training Required

17

	Employment 2002 ¹	Growth Rate ¹ 2002-2012	Employment 2012 ¹	Wage Quartile	2002 % Nonresident Workers ²	2002 % Workers 50+ ²
Bookkeeping, Accounting, and Auditing Clerks	249	311	24.9	\$\$	7.5	22.0
Customer Service Representatives	214	292	36.4	\$\$	13.1	12.9
Tour Guides and Escorts	198	299	51.0	\$	53.9	13.7
Pump Operators, Except Wellhead Pumpers	138	130	-5.8	na	31.0	13.7
Executive Secretaries and Administrative Assistants	126	159	26.2	\$\$\$	8.6	22.3
Maintenance and Repair Workers, General	123	151	22.8	\$\$\$	12.4	27.1
Airfield Operations Specialists	112	141	25.9	\$\$\$	28.4	26.7
Billing and Posting Clerks and Machine Operators	88	119	35.2	\$\$	5.8	17.2
Secretaries, Except Legal, Medical, and Executive	69	87	26.1	\$\$	6.4	24.4
Operating Engineers & Other Construction Equipm't Operators	45	56	24.4	\$\$\$\$	17.2	26.0
Welders, Cutters, Solderers, and Brazers	38	55	44.7	\$\$\$	28.2	18.6
Payroll and Timekeeping Clerks	29	36	24.1	\$\$\$	10.2	19.7
Industrial Machinery Mechanics	24	35	45.8	\$\$\$	29.9	29.5
Machinists	24	28	16.7	\$\$\$	32.0	28.0
Sales Reps, Wholesale and Manufacturing, Except Technical/Scientific	22	30	36.4	\$\$\$	5.9	19.9
Data Entry Keyers	19	25	31.6	\$\$	21.8	14.6
Cooks, Restaurant	17	24	41.2	\$	30.3	10.1
Tank Car, Truck, and Ship Loaders	16	24	50.0	\$\$\$	2.6	40.2
Electricians	15	20	33.3	\$\$\$	19.5	18.7
Carpenters	13	16	23.1	\$\$\$	17.4	16.3
Painters, Transportation Equipment	12	18	50.0	\$\$\$	18.9	0.0
Petroleum Pump Sytem Opr, Refinery Opr, and Gaugers	11	10	-9.1	\$\$\$\$	14.1	20.7
SHORT-TERM TRAINING OR EXPERIENCE						
Laborers and Freight, Stock, and Material Movers, Hand	1,682	2,271	35.0	\$\$	17.6	11.8
Reservation and Transportation Ticket Agents and Travel Clerks	987	1,090	10.4	\$\$	10.6	13.2
Bus Drivers, School	833	857	2.9	na	7.4	45.3
Truck Drivers, Light or Delivery Services	779	1,142	46.6	\$\$	15.6	12.6
Sailors and Marine Oilers	300	436	45.3	\$\$	42.3	20.6
Office Clerks, General	277	377	36.1	\$\$	10.9	18.8
Secretaries and Administrative Assistants	238	296	24.4	\$\$	na	na
Cleaners of Vehicles and Equipment	203	269	32.5	\$	17.7	4.4
Industrial Truck and Tractor Operators	191	279	46.1	\$\$	18.8	15.0
Shipping, Receiving, and Traffic Clerks	184	258	40.2	\$\$	10.3	13.1
Taxi Drivers and Chauffeurs	157	199	26.8	\$	19.5	25.5
Combined Food Preparation and Serving Workers, Including Fast Food	122	172	41.0	\$	20.2	3.9
Stock Clerks and Order Fillers	121	153	26.4	\$	13.8	12.4
Packers and Packagers, Hand	119	174	46.2	\$	12.0	3.8
Conveyor Operators and Tenders	110	162	47.3	na	5.7	6.0
Transportation Attendants, Except Flight Attendants, Baggage Porters	102	143	40.2	\$\$	21.2	21.2
Baggage Porters and Bellhops	82	95	15.9	\$	14.8	11.8
Security Guards	80	104	30.0	\$\$	16.3	29.4
Mail Clerks and Mail Machine Operators, Except Postal Service	77	76	-1.3	\$	8.3	19.6
Receptionists and Information Clerks	74	107	44.6	\$	12.3	14.6
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	44	64	45.5	\$	11.8	24.9
Production, Planning, and Expediting Clerks	36	48	33.3	\$\$\$	6.9	18.4
Human Resources Assistants, Except Payroll and Timekeeping	20	27	35.0	\$\$	4.4	16.3
File Clerks	19	24	26.3	\$	7.9	14.0
Helpers—Installation, Maintenance, and Repair Workers	18	27	50.0	\$\$	17.7	16.4
Couriers and Messengers	16	22	37.5	\$\$	9.9	16.9
Waiters and Waitresses	14	20	42.9	\$	26.8	7.2
Cashiers	13	19	46.2	\$	16.0	11.1
Bartenders	10	12	20.0	\$	17.7	16.3
Order Clerks	10	15	50.0	\$\$	9.2	12.5
Tire Repairers and Changers	10	15	50.0	\$	22.0	3.6

1 Estimates include transportation industry employment only.

2 Data cross all industries.

Bolding denotes occupations with above average wages and estimated growth rates, and projected employment increases of 75 or more between 2002 and 2112.

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

Nominal Earnings And Purchasing Power

Or, how inflation skews year-to-year figures

Alaska Employment Scene

by
Neal Gilbertsen
Economist

On October 15, 2004 the *Anchorage Daily News* carried a headline announcing, "Alaska Oil Hits \$50.44 a Barrel, It's a Record....". While true, the banner ignores the effects of inflation. For example, the April 21, 1989 nominal value of North Slope Crude of \$46.70 would translate to \$67.94 in Consumer Price Index (CPI) adjusted 2003 terms, and slightly more in 2004 dollars. As

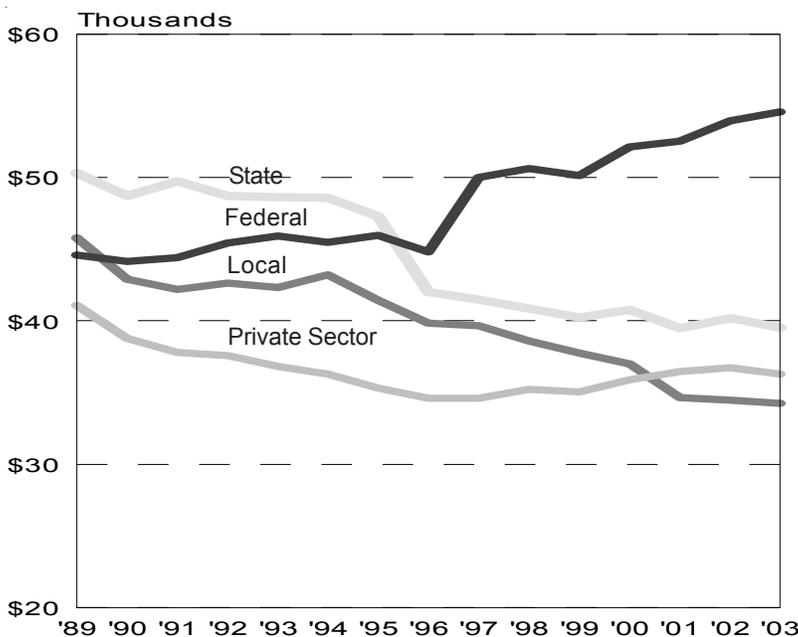
we all know, everything from a house to a hamburger carries a higher price tag now than it did in 1989. The question is, "Has your paycheck kept up with inflation?"

In 1989, the average Alaska wage and salary worker earned \$29,420. By 2003, this had increased to \$37,360. But this 27 percent increase in earnings as expressed in nominal dollars actually translates to a 13 percent decline in purchasing power as expressed in CPI adjusted constant 2003 dollars. The Consumer Price Index is a tool that converts nominal dollars into constant dollars by controlling for inflation and this adjustment allows comparisons of real earnings over time. In the above example, it would have required \$42,800 in 2003 to buy the same amount of goods and services as \$29,420 did in 1989. In other words, 29,420 nominal 1989 dollars can be expressed as 42,800 CPI adjusted 2003 dollars.

Alaska's economic boom of the 1970s and 1980s created jobs in high paying industries. These jobs attracted an influx of population as construction workers, oil field personnel, loggers, and other sought-after workers flooded into the state. The new arrivals created a demand for services and this in turn created employment opportunities in other professions ranging from medicine to education to entertainment. The state, flush with oil revenues, also rewarded government workers with high salaries.

Booms, by their very nature are temporary

1 Alaska Average Annual Earnings CPI adjusted 2003 \$



Source: Anchorage Consumer Price Index 2003

economic phenomena. As Alaska's economy suffered setbacks and matured in the 1990s, there were relatively fewer jobs in high paying fields and relatively more in lower paying service industries. For example, logging and mining accounted for 5.9 percent of all employment in 1989, but only 3.4 percent by 2003. This shift in industry employment in large part explains the 1989 to 1996 decline in CPI adjusted annual earnings. Still, the myth of Alaska as the land of high wages had been established and it endured.

In 2001, the U.S. Bureau of Labor Statistics implemented the North American Industrial Classification System (NAICS). This new method of categorizing industry employment replaced the Standard Industrial Classification System, (SIC). As a result of this change, most private sector categories include a different mix of industries than they did under the old system. Because NAICS categories are not directly comparable to SIC categories, earnings comparisons are in most cases not possible. It is, however, possible to compare overall annual earnings, as well as government and private sectors' over time.

Average annual earnings in Alaska as calculated in CPI adjusted 2003 dollars, fell from \$42,800 in 1989 to \$36,538 in 1996. Since that time they have slowly increased to \$37,360 in 2003. Private sector earnings have shown a similar trend declining from an average of \$41,077 in 1989, to \$34,600 in 1996, then growing to \$36,312 in 2003. Government average annual earnings continued to fall from their 1989 level of \$46,873 until 2001 when they bottomed out at \$40,005. Since that time they have shown a very modest increase to reach \$40,224 in 2003.

Within the Government sector, there are diverging trends. In 1989, both state and local government workers earned more than federal employees. Stated in 2003 dollars, federal workers averaged \$44,604 in 1989, while state workers earned \$50,312 and local government workers averaged \$45,791. By 2003, federal workers had seen their

purchasing power increase by 22.3 percent to \$54,564, while state workers had experienced a 21.4 percent decline to \$39,540, and local government employees had seen their average annual earnings fall by 25.2 percent to \$34,260. In terms of purchasing power, federal workers were \$10,000 better off than they were in 1989, while state and local government workers had seen their earnings decline by a similar amount.

(continued on page 22)

Alaska Average Annual Earnings

Nominal and CPI adjusted 1989 – 2003

Average Annual Earnings Alaska

Nominal \$

	All Workers	Private	Government	Federal	State	Local
1989	\$29,420	\$28,236	\$32,220	\$30,660	\$34,584	\$31,476
1990	29,650	28,296	32,868	32,232	35,544	31,320
1991	30,483	28,860	34,404	33,900	37,944	32,208
1992	31,414	29,640	35,676	35,844	38,424	33,624
1993	31,915	29,940	36,756	37,344	39,576	34,440
1994	32,271	30,156	37,752	37,776	40,380	35,916
1995	32,288	30,180	37,884	39,276	40,428	35,412
1996	32,086	30,384	36,624	39,372	36,912	34,968
1997	32,774	30,852	38,076	44,580	36,948	35,328
1998	33,498	31,848	38,136	45,768	36,936	34,908
1999	33,511	31,992	37,836	45,780	36,732	34,464
2000	34,716	33,312	38,760	48,420	37,848	34,344
2001	35,732	34,824	38,208	50,172	37,728	33,084
2002	36,705	35,748	39,276	52,524	39,132	33,564
2003	37,360	36,312	40,224	54,564	39,540	34,260

Average Annual Earnings Alaska

CPI adjusted 2003 \$

	All Workers	Private	Government	Federal	State	Local
1989	\$42,800	\$41,077	\$46,873	\$44,604	\$50,312	\$45,791
1990	40,625	38,770	45,034	44,163	48,701	42,913
1991	39,947	37,821	45,086	44,425	49,725	42,208
1992	39,819	37,570	45,221	45,434	48,704	42,620
1993	39,230	36,802	45,180	45,903	48,647	42,334
1994	38,844	36,299	45,442	45,471	48,606	43,232
1995	37,774	35,308	44,321	45,949	47,297	41,429
1996	36,538	34,600	41,706	44,835	42,034	39,820
1997	36,781	34,623	42,730	50,029	41,464	39,646
1998	37,055	35,230	42,186	50,628	40,858	38,615
1999	36,695	35,032	41,431	50,130	40,222	37,739
2000	37,385	35,873	41,740	52,142	40,757	36,984
2001	37,412	36,462	40,005	52,532	39,503	34,640
2002	37,702	36,720	40,344	53,952	40,196	34,476
2003	37,360	36,312	40,224	54,564	39,540	34,260

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

3 Nonfarm Wage and Salary Employment

By place of work

Alaska	preliminary revised		Changes from:			Municipality of Anchorage	preliminary revised		Changes from:		
	10/04	9/04	10/03	9/04	10/03		10/04	9/04	10/03	9/04	10/03
Total Nonfarm Wage & Salary¹	304,600	317,400	301,000	-12,800	3,600	Total Nonfarm Wage & Salary¹	146,700	148,000	144,700	-1,300	2,000
Goods Producing	40,700	45,400	39,400	-4,700	1,300	Goods Producing	14,000	14,800	13,400	-800	600
Services Providing	264,000	272,000	261,600	-8,000	2,400	Services Providing	132,700	133,200	131,300	-500	1,400
Natural Resources & Mining	10,500	10,600	10,300	-100	200	Natural Resources & Mining	2,300	2,300	2,300	0	0
Logging	500	500	700	0	-200	Mining	2,200	2,200	2,100	0	100
Mining	10,000	10,100	9,700	-100	300	Oil & Gas Extraction	2,100	2,000	1,900	100	200
Oil & Gas Extraction	8,400	8,500	8,100	-100	300	Construction	9,900	10,700	9,400	-800	500
Construction	19,700	21,200	18,500	-1,500	1,200	Manufacturing	1,800	1,800	1,800	0	0
Manufacturing	10,500	13,600	10,500	-3,100	0	Trade, Transportation, Utilities	33,700	34,100	33,400	-400	300
Wood Products Manufacturing	300	300	300	0	0	Wholesale Trade	4,700	4,700	4,600	0	100
Seafood Processing	6,700	9,700	6,600	-3,000	100	Retail Trade	17,900	17,900	17,800	0	100
Trade, Transportation, Utilities	62,000	65,100	61,100	-3,100	900	Food & Beverage Stores	2,400	2,500	2,400	-100	0
Wholesale Trade	6,200	6,500	6,000	-300	200	General Merchandise Stores	4,400	4,400	4,300	0	100
Retail Trade	35,100	36,100	34,600	-1,000	500	Trans/Warehousing/Utilities	11,100	11,400	11,100	-300	0
Food & Beverage Stores	5,900	6,100	6,000	-200	-100	Air Transportation	3,600	3,700	3,400	-100	200
General Merchandise Stores	9,100	9,000	8,600	100	500	Information	4,500	4,500	4,600	0	-100
Trans/Warehousing/Utilities	20,800	22,600	20,500	-1,800	300	Telecommunications	2,600	2,600	2,700	0	-100
Air Transportation	6,300	6,800	6,100	-500	200	Financial Activities	9,100	9,100	8,900	0	200
Truck Transportation	2,800	3,000	2,800	-200	0	Professional & Business Svcs	16,000	16,100	16,100	-100	-100
Information	7,000	7,000	6,900	0	100	Educational & Health Services	18,900	18,800	17,600	100	1,300
Telecommunications	4,200	4,100	4,100	100	100	Health Care/Social Assistance	17,700	17,600	16,500	100	1,200
Financial Activities	14,500	14,800	14,500	-300	0	Ambulatory Health Care	7,000	6,900	6,300	100	700
Professional & Business Svcs	23,200	23,700	23,000	-500	200	Hospitals	5,400	5,300	5,200	100	200
Educational & Health Services	35,100	34,900	33,300	200	1,800	Leisure & Hospitality	14,700	15,300	14,500	-600	200
Health Care/Social Assistance	33,000	32,800	31,000	200	2,000	Accommodation	3,100	3,300	3,000	-200	100
Ambulatory Health Care	13,900	13,800	12,900	100	1,000	Food Svcs & Drinking Places	10,000	10,300	9,900	-300	100
Hospitals	8,700	8,600	8,400	100	300	Other Services	5,400	5,300	5,600	100	-200
Leisure & Hospitality	28,900	33,700	28,600	-4,800	300	Government²	30,400	30,000	30,500	400	-100
Accommodation	7,200	9,800	7,100	-2,600	100	Federal Government ³	9,700	9,800	9,800	-100	-100
Food Svcs & Drinking Places	18,000	19,700	18,000	-1,700	0	State Government	9,700	9,600	9,700	100	0
Other Services	10,800	10,700	11,300	100	-500	State Education	2,600	2,400	2,600	200	0
Government²	82,400	82,200	82,800	200	-400	Local Government	11,000	10,500	11,000	500	0
Federal Government ³	16,900	17,700	17,000	-800	-100	Local Education	7,700	7,100	7,700	600	0
State Government	24,400	24,700	24,500	-300	-100	Tribal Government	300	300	300	0	0
State Education	7,600	7,300	7,700	300	-100						
Local Government	41,100	39,800	41,300	1,300	-200						
Local Education	23,100	21,900	23,000	1,200	100						
Tribal Government	3,900	4,100	3,900	-200	0						

Notes to Exhibits 3, 4, 5, & 7—¹Nonfarm excludes self-employed workers, fishermen, domestics, and unpaid family workers as well as agricultural workers.
²Includes employees of public school systems and the University of Alaska.
³Excludes uniformed military.
 Exhibits 3 & 4—Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.
 Exhibits 5 & 7—Prepared in part with funding from the Employment Security Division.

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

4 Hours and Earnings

For selected industries

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
	preliminary	revised	revised	preliminary	revised	revised	preliminary	revised	revised
	10/04	9/04	10/03	10/04	9/04	10/03	10/04	9/04	9/03
Mining	1,460.63	1,482.56	1,277.82	49.8	46.2	44.2	29.33	32.09	28.91
Construction	1,232.57	1,261.81	1,270.20	42.4	42.6	43.5	29.07	29.62	29.20
Manufacturing	474.39	557.96	478.35	37.8	48.1	39.5	12.55	11.60	12.11
Seafood Processing	346.70	516.11	411.51	30.6	49.2	43.5	11.33	10.49	9.46
Trade, Transportation, Utilities	498.96	540.16	529.72	31.5	33.2	34.0	15.84	16.27	15.58
Retail Trade	438.80	437.35	444.88	31.5	31.9	33.5	13.93	13.71	13.28
Financial Activities	717.89	692.57	741.26	34.9	34.1	37.8	20.57	20.31	19.61

Average hours and earnings estimates are based on data for full-time and part-time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing). Averages are for gross earnings and hours paid, including overtime pay and hours.

Benchmark: March 2003

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

5 Nonfarm Wage and Salary Employment

By place of work

	preliminary revised		Changes from:		
	10/04	9/04	10/03	9/04	10/03
Fairbanks					
North Star Borough					
Total Nonfarm Wage & Salary¹	36,700	38,300	36,150	-1,600	550
Goods Producing	4,400	4,800	4,350	-400	50
Services Providing	32,300	33,500	31,800	-1,200	500
Natural Resources & Mining	850	900	900	-50	-50
Mining	850	900	900	-50	-50
Construction	3,000	3,350	2,950	-350	50
Manufacturing	550	550	550	0	0
Trade, Transportation, Utilities	7,300	7,450	6,950	-150	350
Wholesale Trade	600	600	550	0	50
Retail Trade	4,400	4,350	4,000	50	400
Trans/Warehousing/Utilities	2,250	2,500	2,400	-250	-150
Information	550	550	650	0	-100
Financial Activities	1,450	1,500	1,400	-50	50
Professional & Business Svcs	2,000	2,200	1,900	-200	100
Educational & Health Services	4,150	4,150	4,050	0	100
Health Care/Social Assistance	4,000	4,000	3,850	0	150
Leisure & Hospitality	3,800	4,350	3,750	-550	50
Accommodation	1,100	1,300	1,000	-200	100
Food Svcs & Drinking Places	2,300	2,550	2,300	-250	0
Other Services	1,350	1,300	1,400	50	-50
Government²	11,750	11,950	11,700	-200	50
Federal Government ³	3,200	3,400	3,250	-200	-50
State Government	5,350	5,500	5,250	-150	100
Local Government	3,150	3,050	3,200	100	-50
Tribal Government	0	0	0	0	0

Southeast Region

Total Nonfarm Wage & Salary¹	35,350	39,250	35,450	-3,900	-100
Goods Producing	3,950	5,300	4,000	-1,350	-50
Services Providing	31,400	33,950	31,450	-2,550	-50
Natural Resources & Mining	650	700	750	-50	-100
Logging	350	400	450	-50	-100
Mining	300	300	300	0	0
Construction	1,850	2,200	1,750	-350	100
Manufacturing	1,450	2,400	1,500	-950	-50
Wood Products Mfg.	150	150	150	0	0
Seafood Processing	1,050	2,000	1,100	-950	-50
Trade, Transportation, Utilities	6,700	8,150	6,700	-1,450	0
Retail Trade	4,200	4,850	4,250	-650	-50
Trans/Warehousing/Utilities	2,100	2,900	2,050	-800	50
Information	500	500	500	0	0
Financial Activities	1,250	1,250	1,250	0	0
Professional & Business Svcs	1,450	1,500	1,450	-50	0
Educational & Health Services	3,500	3,500	3,450	0	50
Health Care/Social Assistance	3,350	3,300	3,250	50	100
Leisure & Hospitality	3,350	4,350	3,300	-1,000	50
Accommodation	950	1,650	950	-700	0
Food Svcs & Drinking Places	1,550	1,850	1,550	-300	0
Other Services	1,150	1,200	1,150	-50	0
Government²	13,500	13,500	13,700	0	-200
Federal Government ³	1,950	2,100	1,950	-150	0
State Government	5,450	5,500	5,600	-50	-150
Local Government	6,050	5,900	6,100	150	-50
Tribal Government	800	900	800	-100	0

	preliminary revised		Changes from:		
	10/04	9/04	10/03	9/04	10/03
Interior Region					
Total Nonfarm Wage & Salary¹	42,800	46,000	42,250	-3,200	550
Goods Producing	4,900	5,350	4,850	-450	50
Services Providing	37,900	40,650	37,350	-2,750	550
Natural Resources & Mining	950	1,050	1,000	-100	-50
Mining	950	1,000	1,000	-50	-50
Construction	3,350	3,650	3,250	-300	100
Manufacturing	600	650	600	-50	0
Trade, Transportation, Utilities	8,450	8,850	8,150	-400	300
Information	650	650	650	0	0
Financial Activities	1,600	1,650	1,550	-50	50
Professional & Business Svcs	2,400	2,600	2,300	-200	100
Educational & Health Services	4,350	4,350	4,200	0	150
Leisure & Hospitality	4,500	6,300	4,400	-1,800	100
Accommodation	1,300	1,950	1,200	-650	100
Food Svcs & Drinking Places	2,700	3,750	2,650	-1,050	50
Other Services	1,500	1,500	1,550	0	-50
Government²	14,500	14,750	14,500	-250	0
Federal Government ³	3,700	4,050	3,750	-350	-50
State Government	5,650	5,800	5,500	-150	150
Local Government	5,150	4,900	5,250	250	-100
Tribal Government	400	400	400	0	0

Anchorage/Mat-Su Region

Total Nonfarm Wage & Salary¹	163,550	165,450	160,500	-1,900	3,050
Goods Producing	16,350	17,200	15,500	-850	850
Services Providing	147,250	148,250	145,000	-1,000	2,250
Natural Resources & Mining	2,450	2,400	2,300	50	150
Construction	11,800	12,700	11,150	-900	650
Manufacturing	2,050	2,100	2,050	-50	0
Trade, Transportation, Utilities	37,550	37,950	36,900	-400	650
Information	5,050	5,050	5,150	0	-100
Financial Activities	9,850	9,850	9,500	0	350
Professional & Business Svcs	17,000	17,150	17,000	-150	0
Educational & Health Services	21,500	21,300	19,900	200	1,600
Leisure & Hospitality	16,350	17,500	16,100	-1,150	250
Other Services	5,900	5,850	6,100	50	-200
Government²	34,100	33,600	34,350	500	-250
Federal Government ³	9,900	10,050	10,000	-150	-100
State Government	10,700	10,650	10,700	50	0
Local Government	13,500	12,900	13,650	600	-150
Tribal Government	350	350	300	0	50

Gulf Coast Region

Total Nonfarm Wage & Salary¹	27,650	30,000	27,400	-2,350	250
Goods Producing	5,400	6,400	5,350	-1,000	50
Services Providing	22,250	23,600	22,050	-1,350	200
Natural Resources & Mining	1,200	1,200	1,150	0	50
Oil & Gas Extraction	1,100	1,050	1,000	50	100
Construction	1,800	1,850	1,750	-50	50
Manufacturing	2,400	3,350	2,400	-950	0
Seafood Processing	1,750	2,650	1,700	-900	50
Trade, Transportation, Utilities	5,400	5,950	5,350	-550	50
Retail Trade	3,200	3,500	3,200	-300	0
Trans/Warehousing/Utilities	1,950	2,100	1,850	-150	100
Information	400	400	450	0	-50
Financial Activities	750	800	700	-50	50
Professional & Business Svcs	1,250	1,400	1,300	-150	-50
Educational & Health Services	2,400	2,400	2,200	0	200
Health Care/Social Assistance	2,350	2,350	2,150	0	200
Leisure & Hospitality	3,350	3,900	3,300	-550	50
Accommodation	1,150	1,450	1,100	-300	50
Food Svcs & Drinking Places	1,800	2,000	1,800	-200	0
Other Services	1,150	1,150	1,250	0	-100
Government²	7,550	7,600	7,550	-50	0
Federal Government ³	800	950	800	-150	0
State Government	1,700	1,750	1,750	-50	-50
Local Government	5,050	4,900	5,000	150	50
Tribal Government	350	350	300	0	50

6 Unemployment Rates

By region and census area

	preliminary	revised	
Not Seasonally Adjusted	10/04	9/04	10/03
United States	5.1	5.1	5.6
Alaska Statewide	6.6	6.7	7.3
Anchorage/Mat-Su Region	5.2	5.5	5.8
Municipality of Anchorage	4.8	5.1	5.3
Mat-Su Borough	6.9	7.1	7.7
Gulf Coast Region	10.0	9.0	11.0
Kenai Peninsula Borough	9.6	9.5	11.5
Kodiak Island Borough	10.2	7.7	8.9
Valdez-Cordova	11.4	8.7	11.6
Interior Region	6.0	5.7	7.0
Denali Borough	11.3	5.4	17.5
Fairbanks North Star Borough	5.1	5.1	6.0
Southeast Fairbanks	11.0	10.0	10.6
Yukon-Koyukuk	15.2	13.4	15.3
Northern Region	14.8	16.9	15.6
Nome	13.6	16.4	14.5
North Slope Borough	13.3	14.3	15.5
Northwest Arctic Borough	18.7	21.1	17.2
Southeast Region	7.2	6.1	7.9
Haines Borough	9.2	6.5	12.0
Juneau Borough	5.9	5.6	6.1
Ketchikan Gateway Borough	8.0	6.1	8.6
Prince of Wales-Outer Ketchikan	10.0	10.3	11.1
Sitka Borough	5.0	4.1	6.3
Skagway-Hoonah-Angoon	13.7	7.1	14.0
Wrangell-Petersburg	7.0	7.5	9.6
Yakutat Borough	18.4	9.3	11.1
Southwest Region	13.1	14.3	12.9
Aleutians East Borough	3.5	4.4	4.7
Aleutians West	10.5	8.3	8.4
Bethel	14.2	16.5	14.4
Bristol Bay Borough	8.4	10.7	9.9
Dillingham	11.7	12.9	11.3
Lake & Peninsula Borough	14.2	13.4	13.5
Wade Hampton	22.0	23.9	22.1
Seasonally Adjusted			
United States	5.5	5.4	6.0
Alaska Statewide	7.2	7.6	8.1

2003 Benchmark

Comparisons with previous year's numbers are of very limited use because of the magnitude of year-end revisions. The current, official definition of unemployment excludes anyone who has not made an active attempt to find work in the four-week period up to and including the week that includes the 12th of the reference month. Due to the scarcity of employment opportunities in rural Alaska, many individuals do not meet the official definition of unemployed because they have not conducted an active job search.

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

(continued from page 19)

A small part of the decline in local government annual earnings can be attributed to the transference of approximately 3,300 tribal employees from the private sector to the local government category in 2001. While this number represents less than ten percent of the 39,100 local government workers recorded in that year, the transference coincides with a sharper than usual over-the-year drop of \$2,344 (CPI adjusted) in local government annual earnings. This transference may have also slightly amplified the \$589 gain registered in private sector earnings in that year.

2004 has seen a dramatic increase in oil prices and an unexpected increase in state revenues. Progress has been made on the gas pipeline project, and the results of the recent election would seem to point toward the development of Arctic National Wildlife Reserve (ANWR) oil reserves. Whether these hopes will be realized and whether they will lead to another economic boom remain open questions. If they do, Alaska will probably see increases in average annual earnings but it is also likely that the state will experience increasing inflationary pressures.

7 Nonfarm Wage/Salary Employment

By place of work

Northern Region	preliminary		revised		Changes from:	
	10/04	9/04	10/03	9/04	10/03	
Total Nonfarm Wage & Salary¹	15,800	16,100	16,050	-300	-250	
Goods Producing	5,500	5,600	5,450	-100	50	
Services Providing	10,350	10,500	10,600	-150	-250	
Oil & Gas Extraction	4,800	4,850	4,750	-50	50	
Government²	5,100	5,150	5,150	-50	-50	
Federal Government ³	150	150	150	0	0	
State Government	350	350	350	0	0	
Local Government	4,600	4,600	4,650	0	-50	
Tribal Government	550	550	550	0	0	

Southwest Region

Total Nonfarm Wage & Salary¹	19,100	20,600	19,100	-1,500	0
Goods Producing	4,300	5,450	4,300	-1,150	0
Services Providing	14,800	15,150	14,800	-350	0
Seafood Processing	3,800	4,950	3,800	-1,150	0
Government²	7,800	7,550	7,600	250	200
Federal Government ³	350	400	350	-50	0
State Government	550	550	550	0	0
Local Government	6,950	6,650	6,700	300	250
Tribal Government	1,650	1,600	1,650	50	0

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

Employer Resources

Many Alaska Job Centers have Employment Specialists who are trained to recruit and place qualified job seekers in Alaska's seafood industry. Seafood Employment Specialists network to promote employment, economic stability, and growth in Alaska's seafood industry through a no-fee labor exchange that meets and responds to the needs of seafood industry employers and job seekers. They communicate closely with hiring managers to provide; quality pre-screening, orientation and referral of applicants to seafood jobs, targeted job fairs, no-fee interview space, drug and alcohol screening coordination, marketing of job openings in the area and on [Alaska's Job Bank](#), customized recruitments, and a job-ready labor pool of Alaskans who are ready to work from one fishery season to the next. The [Seafood Jobs in Alaska](#) web site at www.jobs.state.ak.us (click on Seafood Jobs,) offers employers information about recruitment, job fairs, training and more. Call the Anchorage Seafood Employment Office at (907) 269-4775, or toll-free in Alaska 1-800-473-0688 for information and assistance.

The screenshot shows a Microsoft Internet Explorer browser window displaying the website for the Alaska Department of Labor & Workforce Development. The page title is "DLWD - Seafood Employment Unit - Microsoft Internet Explorer". The main content area is titled "Division of Employment Security" and "Seafood Jobs in Alaska". It includes a navigation menu with "Job Seekers", "Workers", "Employers", "Researchers", and "Labor Shortcuts". The page features a search bar and a "Quick Links..." section with links to "Employment Security Home", "Statewide Recruitments", "Anchorage Recruitments", "Fishing Jobs in Alaska", "About Seafood Processing Jobs", "Seafood Industry Links", "Seafood Processing App", "Online Job Order Form", and "Seafood Career Streams". The main content area is titled "Alaska's Job Bank - Selection List" and includes a list of job openings with highlighted links for "AT SEA - SEAFOOD PROCESSOR - % OR HOURLY", "AT SEA - SEAFOOD PROCESSOR, LONGLINE - % OF CATCH", "AT SEA - SEAFOOD PROCESSORS - CREW SHARE", "AT-SEA - SEAFOOD PROCESSORS - \$ 7.15 PER HOUR", "BERING SEA - PROCESSORS/FLOATING - SHARES", and "DUTCH HARBOR ST PAUL - SEAFOOD PROCESSOR FLOATING".