

ALASKA ECONOMIC **TRENDS**

APRIL 2012

Alaska's Highly Migratory Population



WHAT'S INSIDE

The Air Transportation Industry
Flying plays a bigger role in Alaska



ALASKA DEPARTMENT OF LABOR
& WORKFORCE DEVELOPMENT

Governor Sean Parnell
Acting Commissioner David G. Stone

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April 2012
Volume 32
Number 4
ISSN 0160-3345

To contact us for more information, a free subscription, mailing list changes, or back copies, e-mail trends@alaska.gov or call (907) 465-4500.

Alaska Economic Trends is a monthly publication dealing with a wide variety of economic issues in the state. Its purpose is to inform the public about those issues.

Alaska Economic Trends is funded by the Employment Security Division of the Alaska Department of Labor and Workforce Development. It's published by the Research and Analysis Section.

Alaska Economic Trends is printed and distributed by Assets, Inc., a vocational training and employment program, at a cost of \$1.37 per copy.

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On the cover, brown bear tracks near McBride Inlet campsite in Glacier Bay, photo by Matt Zimmerman. On page 14, a Cessna 170 auf Landebahn at the Ruby airport, photo by Oliver Kurmis

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Clarification

Since the February 2012 article on federal spending in Alaska was published, we have learned there are significant data quality problems with the Consolidated Federal Funds Report on which some of the article was based. In particular, data for military spending has acknowledged errors and the Census Bureau, which produces the report, cautions against overall comparisons between data for 2009 and 2010 and data from earlier years. Exhibit 2 (on page 5) should not be used to conclude that federal spending jumped between 2008 and 2009 — whether it increased or decreased over that period is unknown.

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Understanding dynamic population helps agencies plan



**By David G. Stone,
Acting Commissioner**

Much like the ebb and flow of Alaska's tides, between 5 and 7 percent of the state's population enters or leaves each year. This month's *Trends* focuses on that migration.

We can identify peak events that caused the greatest swings, from the end of World War II in the 1940s to the oil boom and bust of the 1980s to the recent Great Recession. But the years in between also show a high rate of population turnover.

The Alaska Department of Labor and Workforce Development's Research and Analysis Section uses a variety of sources to track the data, which retain the privacy of individuals — Permanent Fund Dividend applications, federal tax statistics, and data from the U.S. Census Bureau's American Community Survey.

Alaska gets most of its new residents from states on the West Coast or from states with larger populations, like Texas and Florida. And not surprisingly, we move more when we are young adults and haven't started families and put down roots.

Knowing where Alaskans are and where they came from can help state, local, and tribal governments allocate funds for everything from job training, housing, and community development to health care services, new schools, and police and fire departments.

Community organizations use the numbers to develop social service and community action projects.

Businesses use census numbers to decide where to locate retail centers, movie theaters, banks, and offices — which most often leads to new jobs.

And during floods, tornadoes, or earthquakes, these population numbers help rescuers plan for how many people will need help.

As they move throughout the state, Alaskans can access any of the Alaska Job Center Network's 21 job centers. Each year, the job centers help hundreds of thousands of Alaskans gain employment and obtain needed skills through training programs administered by the Department of Labor's Employment Security Division.

The Job Center Network also assists Alaska employers with job recruitment and placement. For information, go online at Jobs.Alaska.Gov.

Air Transportation

Also in this issue is an overview of air transportation in the state. Alaska as we know it would not exist without air travel, which includes air taxis to the Bush and international flights from Anchorage to the rest of the world.

Of the 385 public use airports in Alaska, 28 are regional hubs and three — Anchorage, Fairbanks, and Juneau — are international. But like the rest of the country, Alaska lost air transportation jobs over the last decade. The biggest drops in employment came in 2009 and 2010 on the heels of the global recession and high fuel prices, and the industry hasn't yet recovered.

Another unique characteristic of air travel in Alaska is bypass mail, which serves more than 125 rural communities and reduces the cost of shipping for essential items such as food and medicine. Because there are many parts of the state not accessible by road, Alaska has more mail shipped by air than any other state.

Alaska's Highly Migratory Population

Annual moves to, from, and across the state

Alaska has one of the highest rates of population turnover in the nation — there are always large numbers of people moving in and out, regardless of whether the overall population is growing or shrinking.

Depending on the year and data source, between 5 and 7 percent of Alaska's population enters or leaves the state each year. These large flows in and out, or "gross migration," tend to be fairly stable and predictable.

While gross migration flows explain how the makeup of the population changes, "net migration" measures the effect on the total population count — just one effect of moves.

Net migration — the number who move in minus those who move out — is much more volatile, and it's important to remember it's just at the surface of the much larger and more consistent in-and-out migration flows. Even during the years

Population change is made up of three components: migration, births, and deaths. Of these, migration is the most complex and volatile.

that Alaska has a net migration loss, more than 30,000 people still arrive here each year.

A history of major swings

A number of major economic events over the past century have caused large numbers of people to move in, out, and across Alaska. (See Exhibit 1.)

Through the 1940s and 1950s, the state's population boomed due to military buildups for World War II and the Cold War. A large proportion of the new residents were young GIs who would either stay in the state or return with their families.

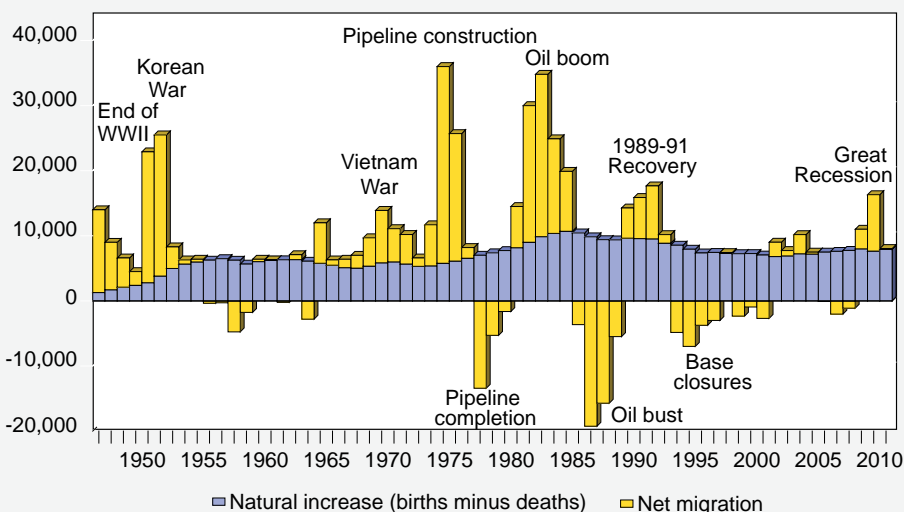
Alaska's population at statehood in 1959 was just a third of what it is today. Then in 1968, oil discovery at Prudhoe Bay and construction of the Trans-Alaska Oil Pipeline brought in tens of thousands of workers, followed by large net losses after the pipeline's completion.

New oil revenue in the early 1980s brought another period of dramatic growth through net migration, followed by big losses when oil prices dropped. Since the early 1990s, these fluctuations have been less dramatic.

No perfect data source

Migration data come from three main sources, each with its own strengths and weaknesses. This means each source is an indicator of migration, but none provides a complete system to track it.

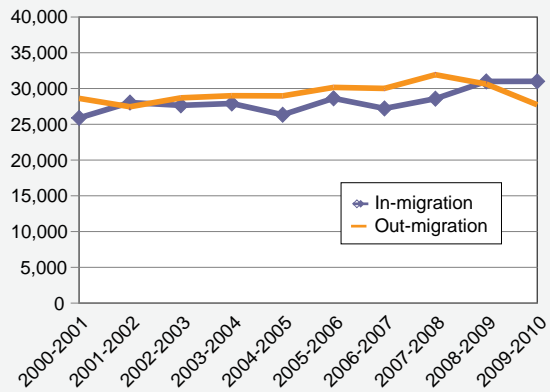
1 Historic Events and Population Change Alaska, 1947 to 2011



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

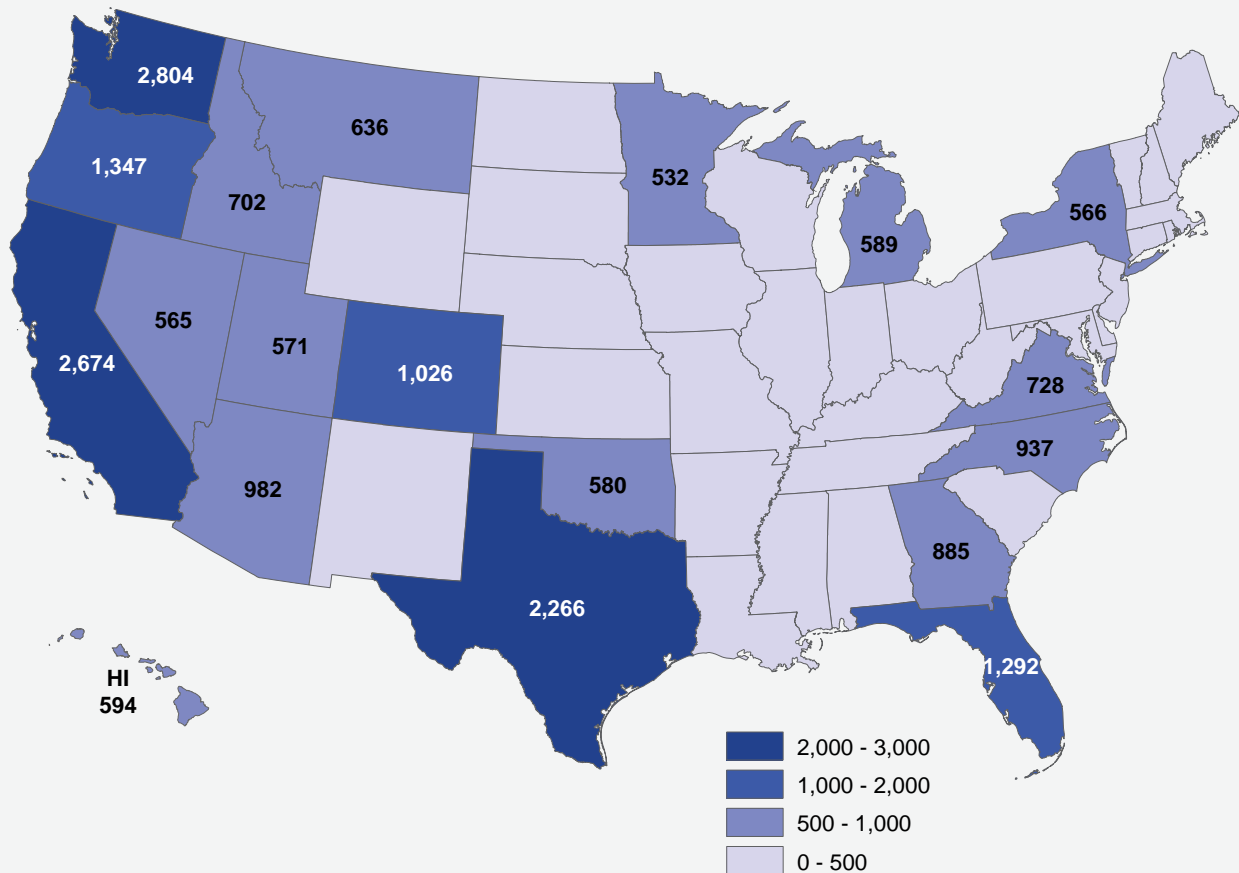
- **Data from Permanent Fund Dividend applications** have broad in-state coverage and provide information on age and sex, but lag on new migrants from outside the state because they aren't eligible for the PFD until they've lived in Alaska for one calendar year. Similarly, PFD data do not capture people who never live here long enough to qualify for a dividend. Younger workers are especially likely to be missed for that reason.
- **Data based on Internal Revenue Service tax forms** provide direct counts of migration between U.S. counties, boroughs, and census areas by comparing the mailing addresses of exemptions — that is, filers and their dependents — from year to year. However, the IRS data give no population characteristics except median income and those aged 65 or over, and

Large Movements In, Out 2 IRS data, 2000 to 2010



Note: These data only cover state-to-state migration for those included on IRS tax forms.
Sources: IRS Tax Statistics; and Alaska Department of Labor and Workforce Development, Research and Analysis Section

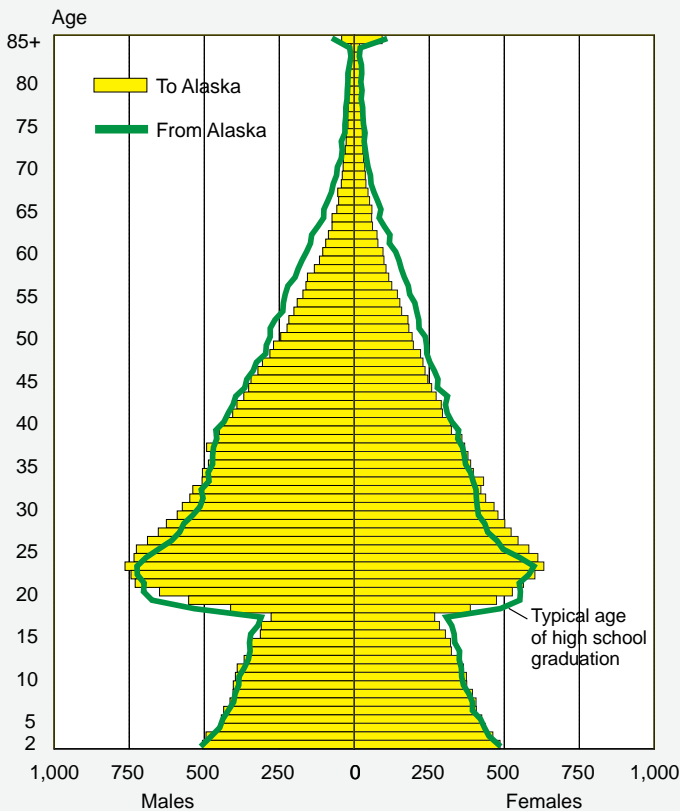
Yearly Migration to Alaska by State 3 IRS data, 2000 to 2010



Sources: IRS Tax Statistics; and Alaska Department of Labor and Workforce Development, Research and Analysis Section

4 Yearly Migration by Age and Sex

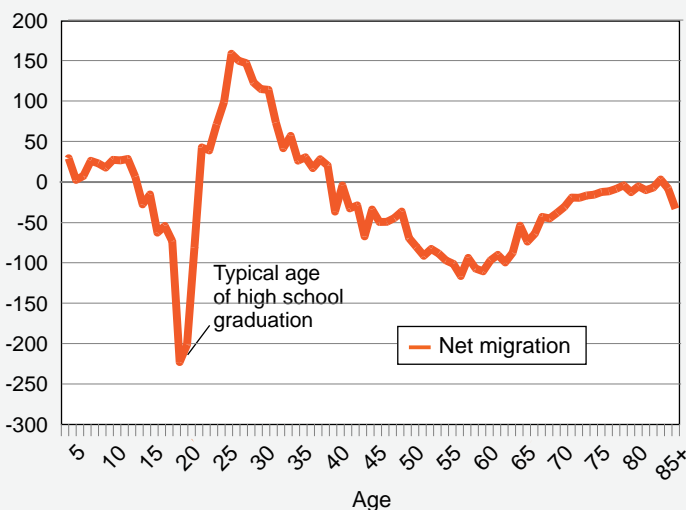
PFD data, 2000 to 2010



Note: Adjusted for one-year delay in Permanent Fund Dividend eligibility.
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

5 Yearly Net Migration by Age

PFD data, 2000 to 2010



Note: Adjusted for one-year delay in Permanent Fund Dividend eligibility.
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

they are based on the address given on the form. The data cover about 85 percent of Alaska's population, and the timing of the data release isn't clear from year to year.

- **Data from the U.S. Census Bureau's American Community Survey** provide more population characteristics than any other source, including age, sex, race, income, and education. However, the ACS is based on a small sample of the population and tends to have large margins of error. For most areas in Alaska, it's only available in five-year averages.

Migration to and from outside

Exhibit 2 shows Alaska's IRS exemption-based annual gross migration to and from other states from 2000 to 2010. Note it only covers those on federal tax returns, and it doesn't include international migration. The ACS shows that 6,500 people moved in from abroad each year on average from 2006 to 2010, netting around 1,000 to the state annually.

Overall, Alaska gets most of its new residents from states that are large and/or close. Exhibit 3 shows the states that sent the highest numbers of people to Alaska from 2000 to 2010, and this map wouldn't change much if it reflected individual years.

Large numbers of people move here from neighboring states such as Washington and California, and few come from small or faraway places like Maine and Nebraska. Distant states such as Texas and Florida have low rates of migration to Alaska, but because they have such large populations, the numbers of their residents who move here are substantial. If the map showed where in the U.S. people tend to go when they leave Alaska, the pattern would be similar.

Young people move more

It's important to understand gross migration flows by age as well as across time and space. The pattern is fairly predictable, as some age groups are more likely to move than others.

As the PFD-based migration data in Exhibit 4 show, younger people are more likely to move than older people, and parents of young children are more likely to relocate than those with children in middle school or high school. When people reach college age, movement jumps substantially as many leave home for school, new jobs, or military service. The level of migration generally peaks in the mid-20s as people settle down, and

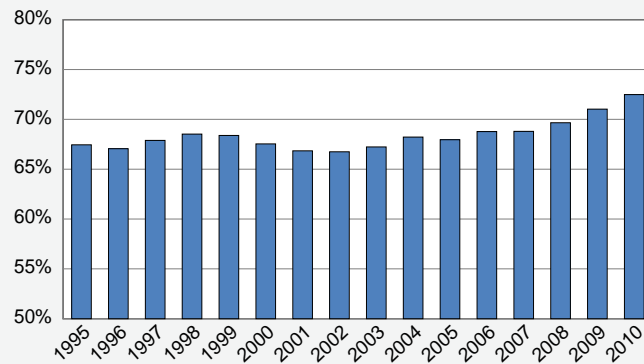
declines steadily thereafter.

The pattern of net migration by age is fairly stable from year to year, with net gains in younger years as children settle here with their parents, followed by a clear drop at college age when people leave for outside opportunities. There is a comparably dramatic increase for ages just past college, as many young adults seeking career opportunities settle here. (See Exhibit 5.)

Although the pattern of net loss and then gain of those aged 18 to 20 is striking, it's only a fraction of the more than 30,000 people in that age group. The state also consistently attracts more people between 21 and 35 than it loses.

A comparison of PFD data from year to year shows what proportion of residents are still in Alaska five years after the typical high school graduation age of 18. Since 1995, the percentage of 18-year-old applicants who have remained in

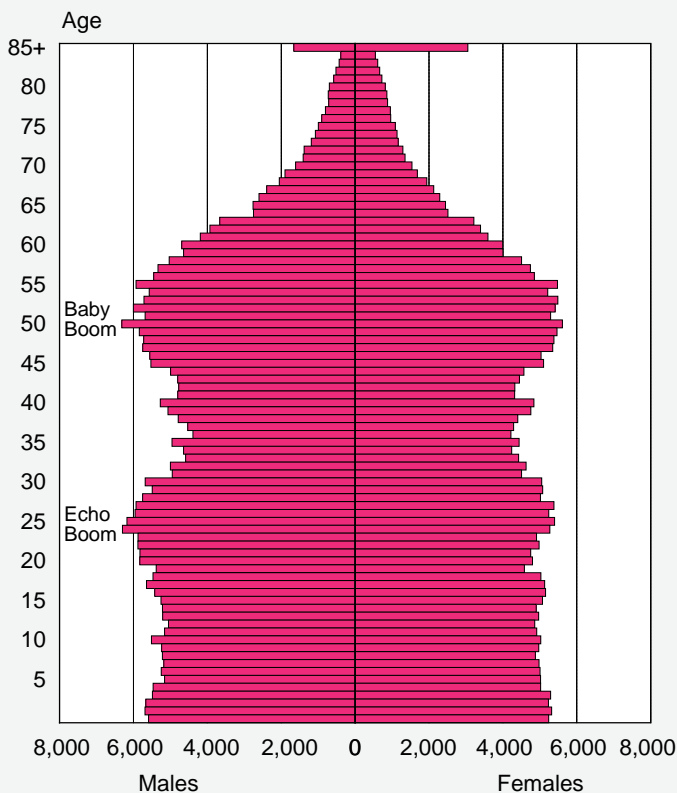
More 18-Year-Olds Stay or Return Percent in Alaska at age 23, 1995 to 2010 6



Note: Based on Alaska Permanent Fund Dividend data.
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Alaska or returned has increased from 67 to 72 percent. (See Exhibit 6.) Though that rise isn't dramatic, this age group is undoubtedly affected by opportunities in Alaska and the rest of the nation.

7 Alaska Population by Age and Sex U.S. Census, 2010



Sources: U.S. Census Bureau; and Alaska Department of Labor and Workforce Development, Research and Analysis Section

Past age 30, net migration gains steadily decrease and become net losses (See Exhibit 5.) The size of net losses among older people has been fairly stable, but this could soon change with the aging of Alaska's large "baby boomer" population — those born between 1946 and 1964 — and the relatively small pre-boomer population ahead of it. (See Exhibit 7.)

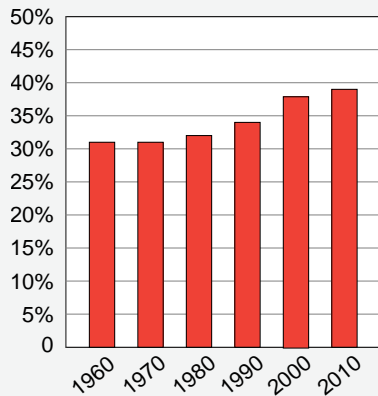
Losses at the highest ages are somewhat lower, partly because there are fewer people to affect the numbers at those ages, and partially because elderly people move less.

Most aren't born here

Place of birth is an obvious and useful indicator of whether a person has ever moved, and these data are available from decennial censuses through 2000 and the U.S. Census Bureau's American Community Survey for 2010.

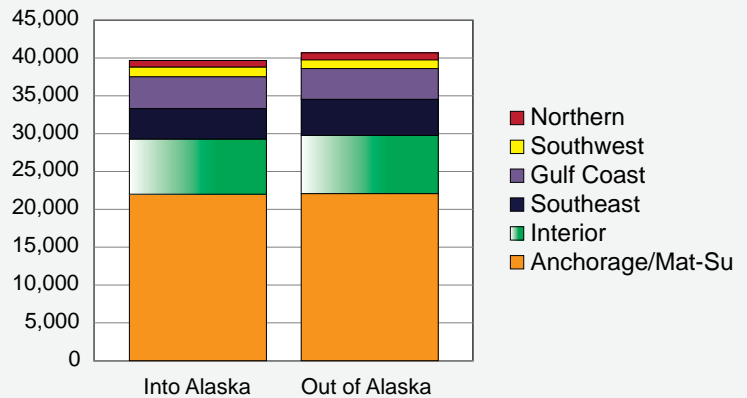
As of 2010, 39 percent of Alaskans were born in the state. (See Exhibit 8). This is an increase from 31 percent in 1960, but

8 Born in Alaska 1960 to 2010



Sources: U.S. Census Bureau; and Alaska Department of Labor and Workforce Development, Research and Analysis Section

9 Movement To and From the Regions Yearly PFD data, Alaska, 2000 to 2010



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

still much lower than the 59 percent for the nation as a whole in 2010. The only states with a smaller percentage born there were Arizona (38 percent), Florida (35 percent), and Nevada (24 percent).

In Southeast, net migration losses led to some decline in the population between 2000 and 2010, but the region gained residents between 2010 and 2011.

Regional losses and gains

Between 2000 and 2010, approximately 55 percent of Alaska's new and returning residents moved to the Anchorage/Matanuska-Susitna area, followed by 19 percent to the Interior, 10 percent to Southeast, and 10 percent to the Gulf Coast. The more remote regions, including Northern and Southwest, gained only slim shares of the state's new or returning residents — around 5 percent combined. (See Exhibit 9.)

In terms of overall net migration across the state, the Matanuska-Susitna Borough gained the most on average, with more than 2,200 additional residents per year. Mat-Su was followed by the Kenai Peninsula Borough and Fairbanks North Star Borough, which each gained 250 people per year on average. (See Exhibit 10.) Military buildups and deployments have strongly affected Fairbanks' population, especially over the past decade.

The state's more rural areas have consistently lost population to migration over the past few decades. However, the Southwest and Northern regions have had higher-than-average natural increase — that is, births minus deaths — which has tended to make up for their migration losses. (See Exhibit 11.)

Relocations within the state

Migration within Alaska often brings to mind the large numbers of people moving from villages to urban areas — particularly to Anchorage and Mat-Su — but that's only part of the story. While Anchorage and Mat-Su attract migrants each year from rural areas, they also lose a large number of people to both rural and other areas of the state. (See Exhibit 12.)

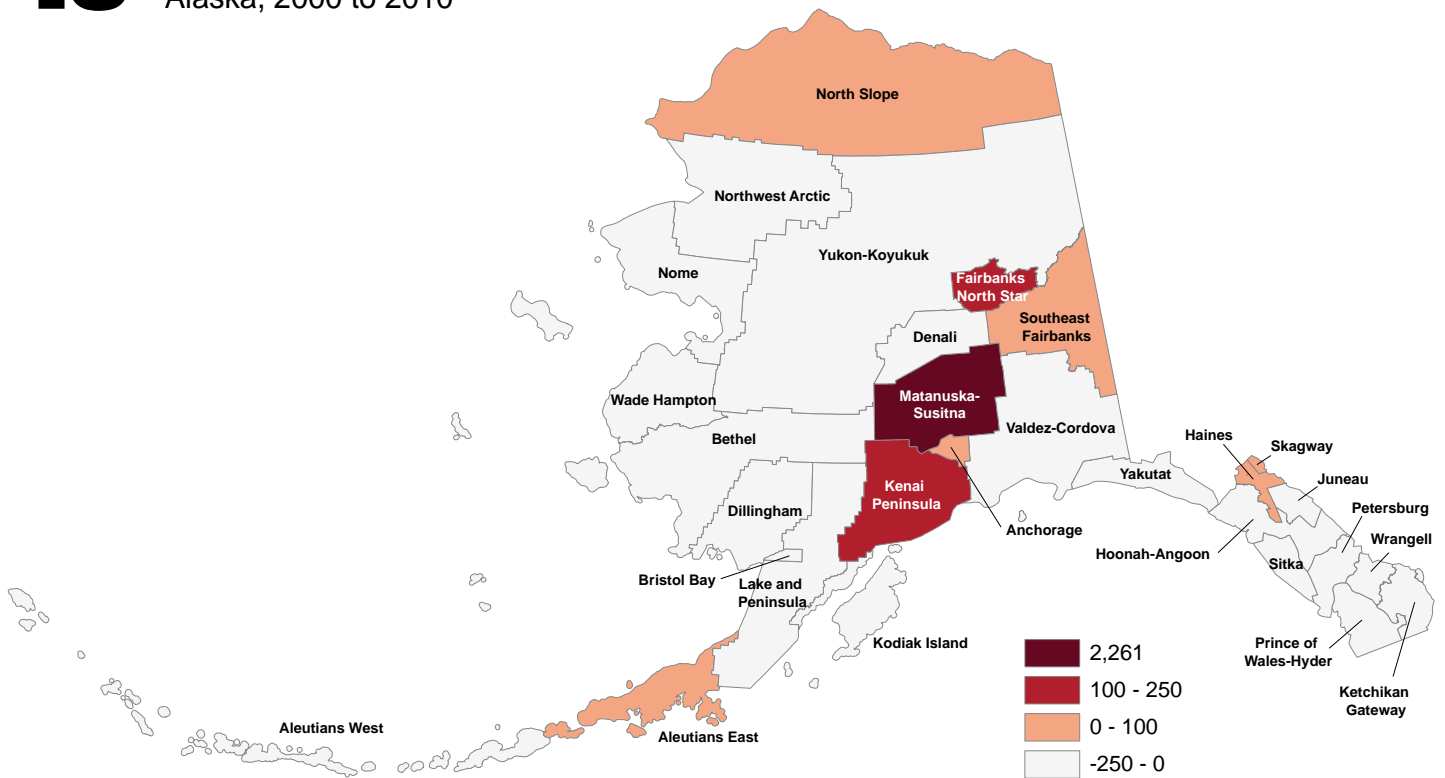
PFD records show that between 2000 and 2010, the Anchorage/Mat-Su Region gained about 5,100 people per year from elsewhere in Alaska, but also lost about 3,700 each year.

As with state-to-state migration, a region's size and location play an important role in these patterns. For example, the Anchorage/Mat-Su Region — which has the most people moving in and out by far — holds more than half the state's population, and is centrally located.

The Gulf Coast Region gained more than 500 residents each year since 2006, due in part to those who move to the Kenai Peninsula from neighboring Anchorage. Annual turnover between the Gulf Coast and Anchorage/Mat-Su is also significant.

10 Yearly Net Migration by Borough or Census Area

Alaska, 2000 to 2010



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

The Interior Region’s migration is largely tied to Fairbanks, but also to regular movement between Anchorage/Mat-Su and other parts of the state.

In-state migration for the Southeast Region is mainly characterized by people in the state’s major population centers moving to and from Alaska’s capital in Juneau, as well as migration between the region and Anchorage/Mat-Su.

Migration for the Northern and Southwest regions is often connected to hubs such as Barrow, Bethel, Dillingham, Kotzebue, and Nome; and also to Fairbanks and Anchorage — particularly at college age. These regions generally have net losses to other parts of the state, but PFD data show Southwest gained 72 people overall from Anchorage/Mat-Su in 2010–2011. In other words, during that year at least, the number of people leaving Anchorage for Southwest communities was larger than the number moving to Anchorage from those communities.

Alaska Native majority areas

Eight boroughs and census areas have populations that are more than 50 percent Alaska Native (see Exhibit 13), and their migration patterns are of unique interest.

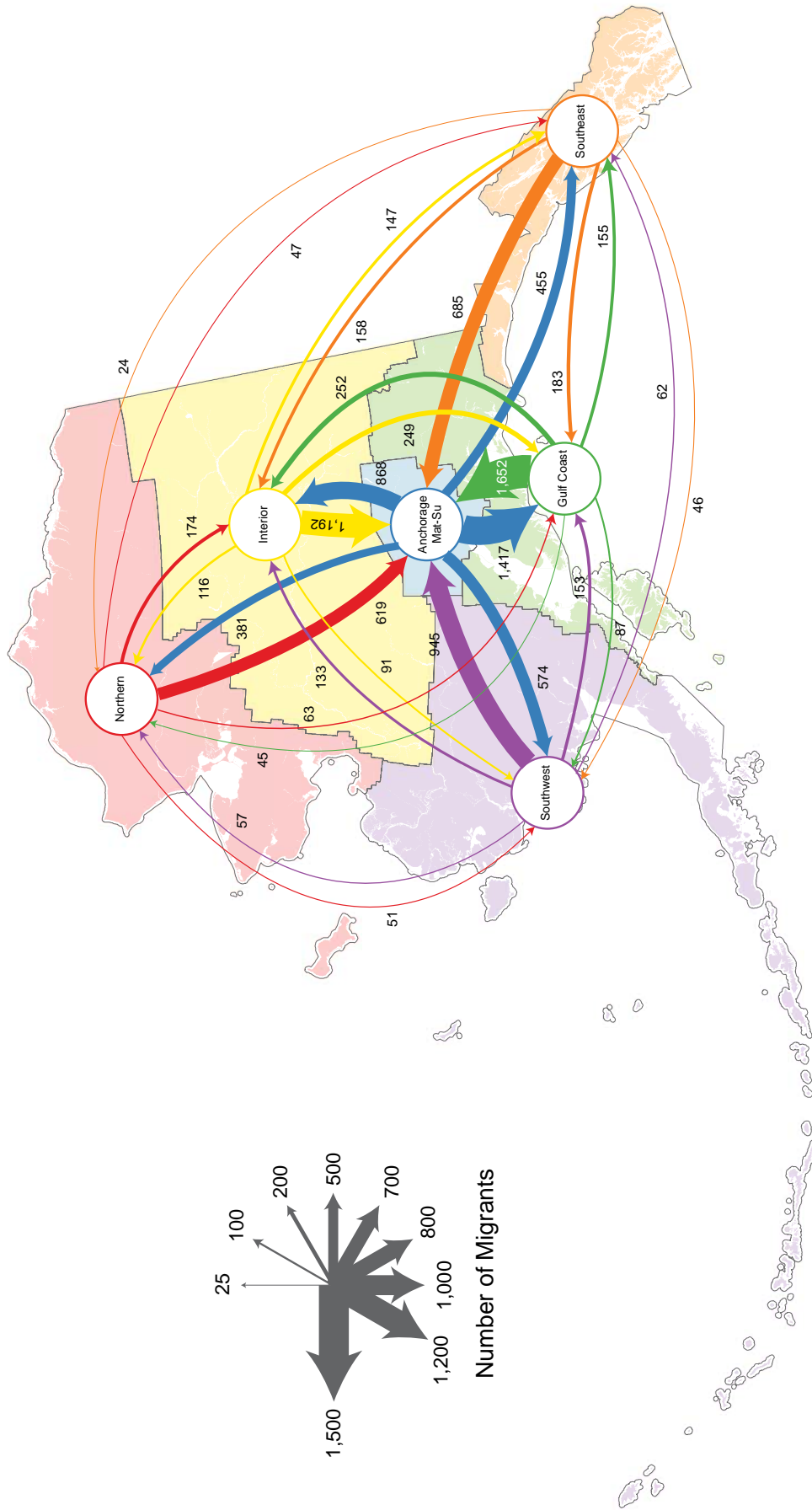
The total population for these areas is 62,983 as of the 2010 Census: 9 percent of the state’s total of 710,231. These areas are 80 percent Alaska Native on average, in contrast to 17 percent statewide. Approximately 85 percent of these areas’ residents were born in Alaska — considerably more than the 39 percent statewide.

Based on PFD data, annual migration out of these areas averaged slightly more than 4,500 for 2000 to 2010, and migration into Alaska Native areas averaged just under 3,600. Native majority areas lose population to migration each year, but they also have a higher number of children per family, which offsets the migration losses.

Of those who left majority Native areas, 2,364

12 Yearly Migration Within the State

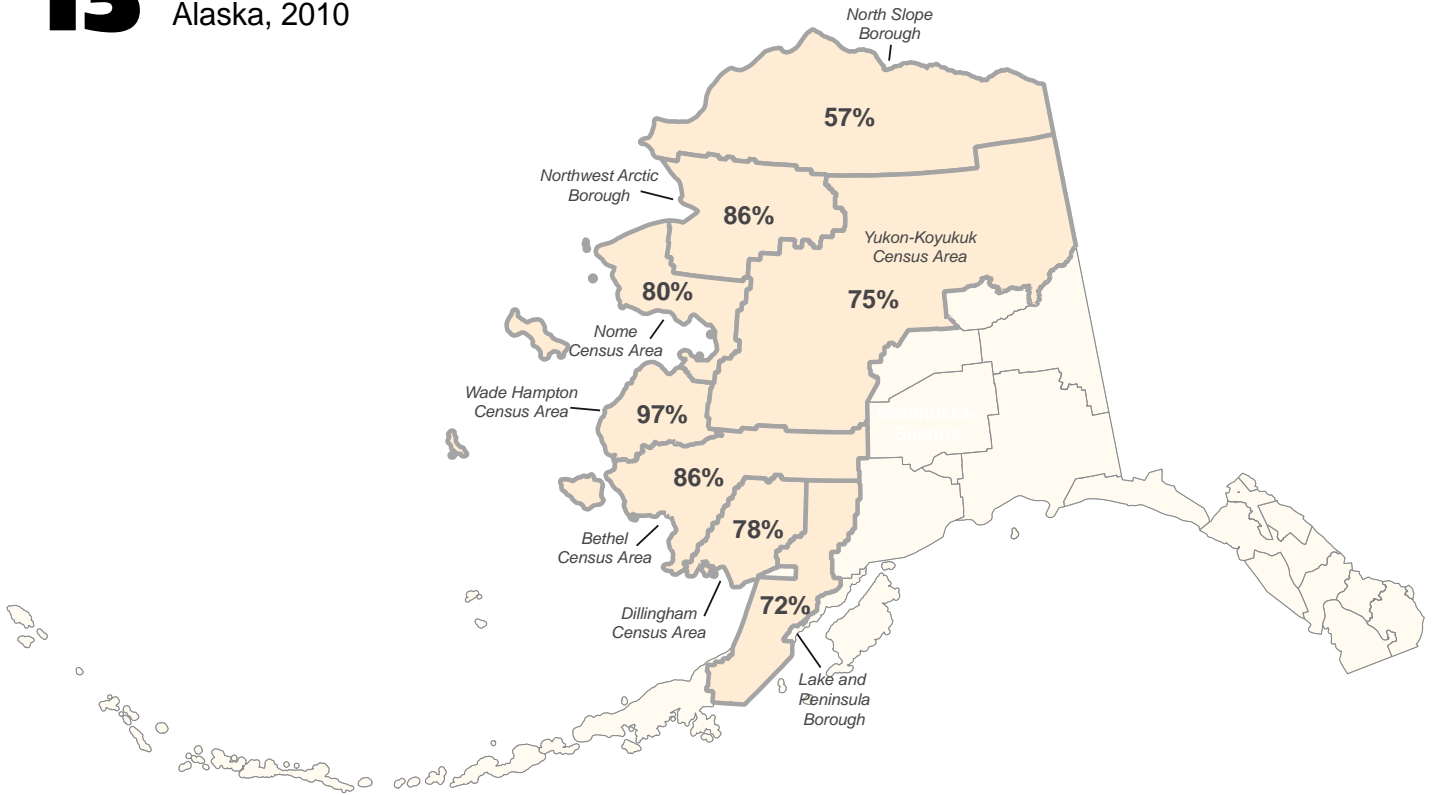
PFD data, 2000 to 2010



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

13 Alaska Native Majority Areas

Alaska, 2010



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

per year went elsewhere in Alaska, and 2,163 left the state. (See Exhibit 14.)

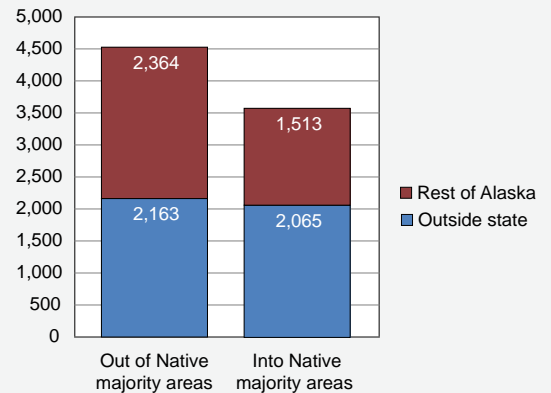
Of those who moved to a majority Native area, 1,513 per year arrived from another part of Alaska, and 2,065 came from outside the state.

Within Alaska, most of these areas' movements are to and from Anchorage, with much smaller but consistent numbers moving to and from Fairbanks, the Kenai Peninsula, and Mat-Su. Due to small numbers and fewer data sources, moves to and from outside of Alaska are harder to track, but other states with large numbers of Alaska Natives are Washington (12,485), Oregon (3,190), and Florida (1,115).

Gross migration by age and sex to and from these areas follows the overall pattern of high numbers at young ages, decreasing to high school age, then jumping sharply at age 18 with a gradual decline from the mid-20s on. Though men have higher overall rates of migration between Native majority areas and all other places, women have higher post-high school rates of relocation between Na-

14 Native Majority Areas

Yearly migration, 2000 to 2010



Note: Based on Permanent Fund Dividend data
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

tive majority areas and Anchorage.

Of Alaskans in these areas who were 18 in 2005, 73 percent still lived in a Native majority area or had returned in 2010, and 12 percent lived else-

where in Alaska. The remaining 15 percent didn't apply for a PFD, so their status was unknown. Many had likely moved outside the state.

As with all areas, the reasons people migrate to and from majority Alaska Native areas are complex and varied. People at certain ages, particularly those looking to start a career or further their education, have a tendency to move more.

However, the overall net gains and losses are best understood through incentives. There is a rural-to-urban migration trend throughout the world because people in remote locations have incentives to move to more populated areas with more job opportunities and amenities, and this holds true in Alaska.

Where to find migration data

For annual estimates of migration, including data from the Alaska Permanent Fund, Internal Revenue Service, and the American Community Survey, go to labor.alaska.gov/research. Click "Population and Census," then select "Migration Data and Information."



The Air Transportation Industry

Flights play a bigger role in Alaska

The lower 48 states are well connected by the U.S. highway system, but over 80 percent of Alaska's 200-plus communities aren't accessible by road.

Alaska's freight and mail move thousands of miles over mountain ranges, glaciers, and uninhabited wilderness. Without roads, air transportation plays a vital link — planes transport food for grocery shelves and replacement parts for equipment and vehicles. Rural residents also fly to larger hospitals for both routine and emergency medical procedures.

With a greater dependence on airplanes to move people and freight, Alaska has a larger percentage of employment in the air transportation industry than the rest of the country. Air transportation is the largest sector of Alaska's transportation industry, accounting for 30 percent of its jobs. In contrast, air transportation makes up just 11 percent

of the nation's transportation employment. (See Exhibit 1.)

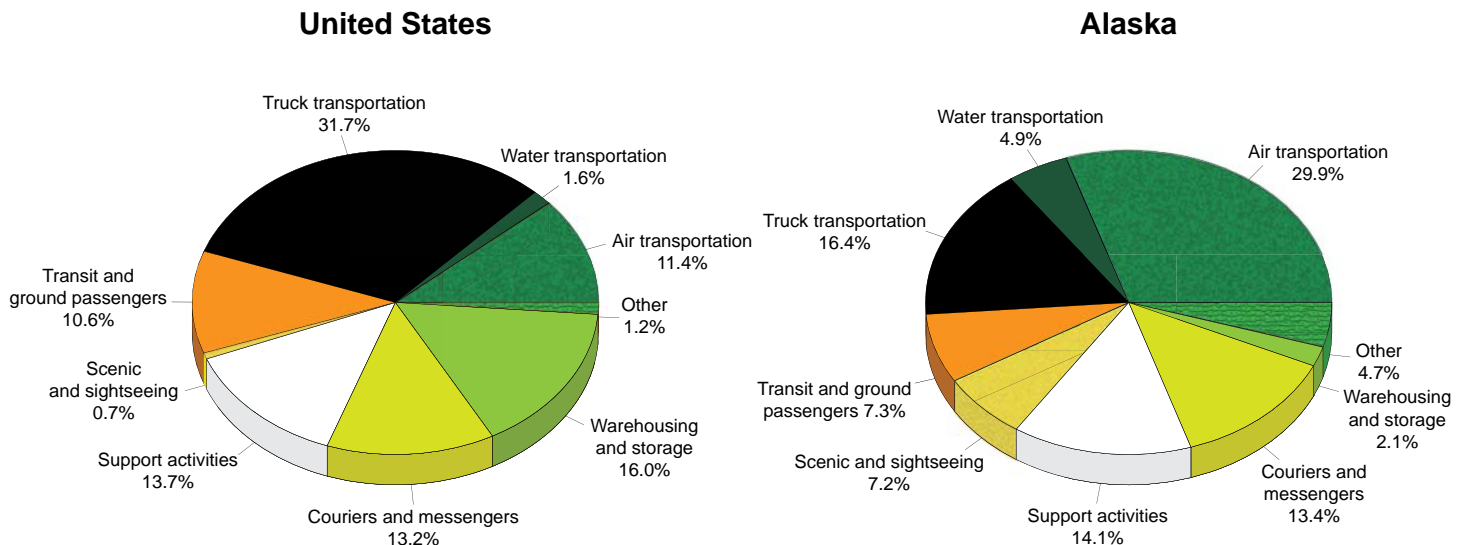
In 2010, the state's airline industry provided 5,600 jobs statewide with a total payroll of \$280.6 million — this includes full-time and part-time employees of private passenger or air cargo carriers, and excludes government and military employment.

Decade of declining jobs

U.S. air transportation employment declined by 27 percent from 2001 to 2010, and even though Alaska's market is different, jobs have declined here as well. (See Exhibit 2.)

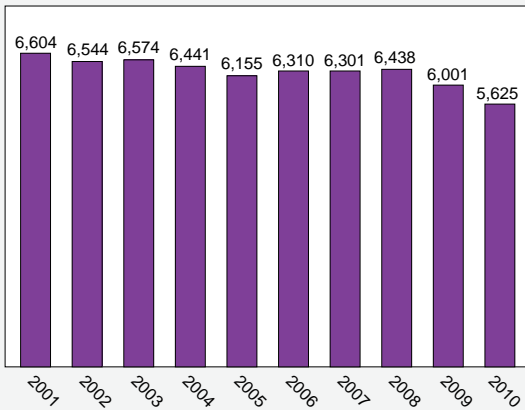
Since 2001, the industry's average annual employment has fallen by 15 percent in Alaska, from 6,604 jobs in 2001 to 5,625 jobs in 2010. This contraction came as other transportation sectors

1 The Breakdown of Transportation Employment United States and Alaska, 2010



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

2 Private Airline Jobs Alaska, 2001 to 2010



Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages

grew, such as trucking, water transportation, and courier and messenger firms.

The global recession had an impact on air transportation, but it wasn't the only contributor to the decline. Fuel prices skyrocketed in 2008, making it difficult for airlines to maintain profitability and prompting large carriers across the country to cut jobs. Fuel prices went down briefly after the recession, but appear to be on the rise again. (See Exhibit 3.)

In Alaska, airline employment has been flat or declining for most of the last decade, but the steep-

est drops came in the last few years, at 6.8 percent in 2009 and 6.3 percent in 2010. Altogether, the state lost 800 jobs over those two years. (See Exhibit 4.) Preliminary data show a gain of 100 jobs in 2011.

A comparison of 2008 and 2010 data by borough and census area shows most of the job losses were in Alaska's larger markets. Anchorage shed 670 jobs over that period while Fairbanks, Juneau, and Bethel lost about 100 combined. On the other hand, Nome, Kenai Peninsula, Wade Hampton, Matanuska-Susitna, and the Northwest Arctic all recorded small gains.

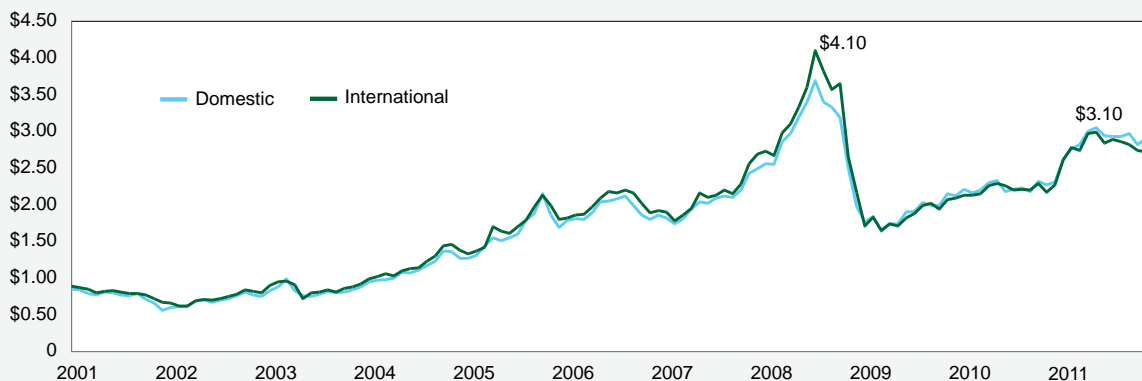
Full planes and returning profits

At the national level, airlines have cut back on scheduled flights as a cost-cutting measure, as full planes have lower per-passenger fuel and labor costs.

Alaska Airlines, the state's largest carrier, has followed that pattern. In 2008, Alaska Airlines had a "load factor" — percentage of passenger seat miles versus air miles — of 77 percent for domestic flights, based on data for all flights in all cities. By 2010, it had increased to 82.9 percent as scheduled domestic flights fell from 150,345 in 2008 to 136,967 in 2010.

Partly as a result of the increasing load factors, profits are up for the nation's largest airlines after a difficult decade in which losses were more common than profits. Combined data for the nation's

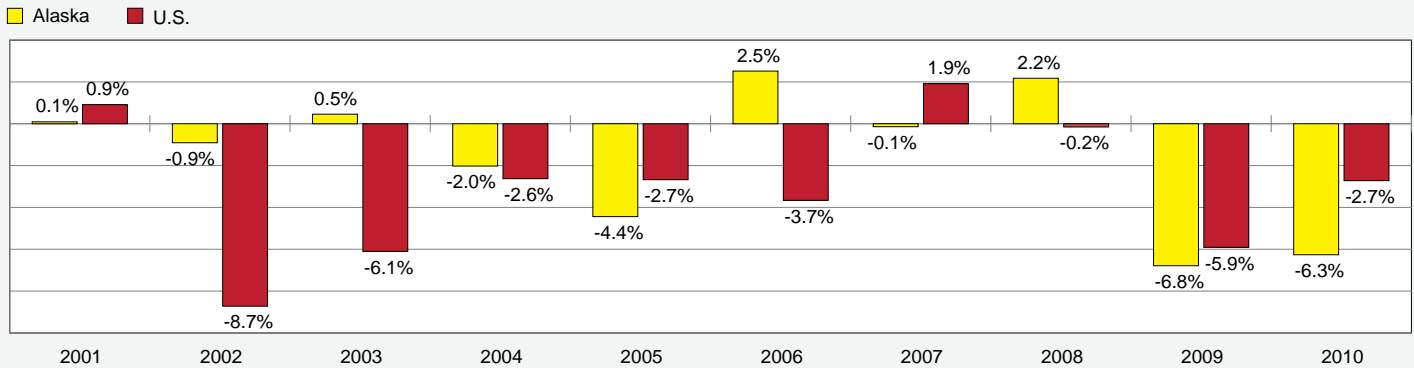
Airline Fuel Costs on the Rise 3 Monthly cost per gallon, 2001 to 2011



Note: Data include all U.S. carriers with revenue over \$20 million.
Source: Bureau of Transportation Statistics F41 Schedule P12A, as of 3/9/2012

4 A Retracting Industry

Air transportation employment changes, Alaska and U.S., 2001 to 2010



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

largest carriers, including Alaska Airlines, show they earned a profit in 2009, 2010, and the first three quarters of 2011.

Mergers and acquisitions

Consolidation has been another trend over at least the last decade. Among carriers that serve Alaska, Northwest Airlines merged with Delta Air Lines in 2008, and Continental Airlines merged with United Airlines in 2010. After the merger, Northwest Airlines closed its cargo hub in Anchorage, reducing employment there.

At the local level, Fairbanks-based Frontier Flying Service has been particularly active in merging with or buying out its competitors. Frontier bought Cape Smythe Air Service in 2005, merged with Hageland Aviation in 2008, and acquired Era Aviation and Arctic Circle Air in 2009. The new company operates under the name Era Alaska and is now the largest Alaska-based airline, with flights to 97 towns and villages.

Anchorage the largest hub

About 50 percent of Alaska's air transportation employment is in Anchorage, Alaska's largest city. Anchorage is home to Ted Stevens International Airport, the second-busiest international airport in the U.S. and fifth in the world for landed weight of cargo aircraft. Its strategic location equidistant from Europe and Asia makes it a key international cargo hub.

The number of planes landing in Anchorage declined sharply from 2007 to 2009. Cargo plane landings decreased from 49,965 in fiscal year 2007 to a 10-year low of 36,226 in 2009. (See Exhibit 5.) The number of passenger aircraft landings also dropped noticeably.

Although the number of planes landing in Anchorage began to climb again during fiscal year 2011, employment remains lower than its 2008 levels. Most of the declines were in companies that offer scheduled air passenger services, which fell 21 percent between 2008 and 2010, in contrast to a 10 percent decline among companies providing scheduled cargo flights.

Small planes are big in Alaska

Most of Alaska is serviced by smaller planes, as commercial-size passenger jets land in only 19 communities. In addition to moving the essentials, many small regional airlines also cater to tourists and hunters. A significant number are small businesses that operate as air taxi or charter services and have fewer than 10 employees.

Commercial operators of small planes that carry passengers or freight are required to have an FAR 135 certificate from the Federal Aviation Administration, valid for small planes with a payload of up to 7,500 pounds and no more than nine passenger seats. In 2010, about a third of the state's airline employment was in companies that only held an FAR 135 certificate.

Airports are economic hubs

Of Alaska's 385 public use airports, 252 are operated by the Alaska Department of Transportation and Public Facilities. Twenty-eight of these airports are regional hubs and three are international: Anchorage, Fairbanks, and Juneau. The remaining airports meet the needs of individual rural communities.

Data from the U.S. Department of Transportation's Bureau of Transportation Statistics show that some regional airports move more freight and mail than airports in much larger towns. For example, Bethel's regional airport transported 26,211 tons of freight and mail in 2010, including both enplaned and deplaned cargo, the second-highest amount in the state after Anchorage. (See Exhibit 6.)

Bethel's airport, located in a census area with 17,000 people, also moved more freight and mail than the Fairbanks and Juneau airports combined. The two larger cities have a combined population of 128,000 people, with total freight and mail at 22,984 tons. The Bethel Census Area had 111,000 fewer residents but 3,200 more tons of freight and mail.

Unlike both Fairbanks and Juneau, which have relatively simple road or water transportation access, Bethel is more exclusively dependent on air transportation. Bethel is also a postal and freight hub for 56 villages in three census areas.

State's unique mail delivery

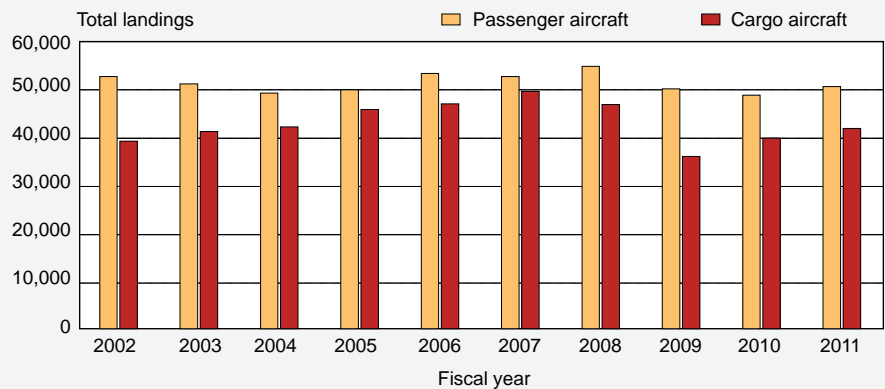
In 2010, 20 percent of all domestic mail shipped by air in the United States originated in Alaska. The state's volume of air mail is high because of its unique "bypass mail" system, which serves more than 125 rural communities in northern, western, and southwestern Alaska. About 75 percent of Alaska's mail is shipped through the bypass mail system.

Bypass mail was created so the U.S. Postal Service could deliver mail to rural Alaska, but Congress recognized it would also help fund air passenger services and reduce the cost of shipping

Passenger and Cargo Aircraft Landings

Anchorage airport, 2002 to 2011

5



Note: The fiscal year runs from July 1 to June 30.

Source: Alaska Department of Transportation and Public Facilities, Alaska International Airport System

food, medicine, and freight.

Bypass mail shipping rates are comparable to ground-based parcel post rates in the Lower 48. Federal rules mandate that bypass mail shipments originate in Anchorage or Fairbanks on pallets, with a minimum weight of 1,000 pounds per order. Individual items cannot weigh more than 70 pounds, which means furniture, appliances, and other large items do not qualify.

A large percentage of bypass mail is food for rural grocery shelves. However, restaurants and school districts also ship large quantities of food and supplies this way.

Five mainline air carriers carry bypass mail, and are authorized for shipments over 7,500 pounds: Alaska Airlines, Era Alaska, Everts Air Cargo, Northern Air Cargo, and Lynden Air Cargo (freight only). Mail is delivered to 23 regional hub airports and dispersed in smaller loads by 37 Bush air carriers approved to move shipments of less than 7,500 pounds.

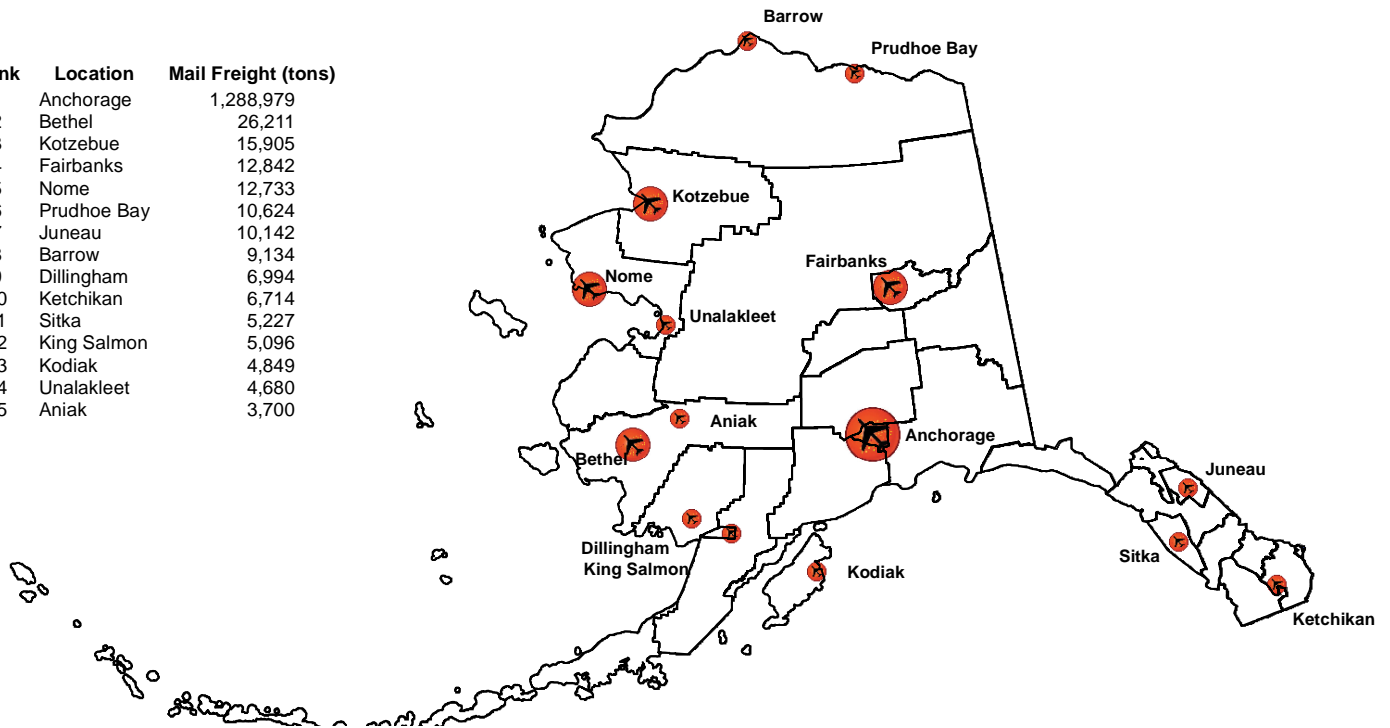
Wages

The industry paid an average wage of \$49,880 in 2010 (see Exhibit 7), comparable to the trucking industry but considerably lower than water transportation, which paid \$70,642. The disparity is partly due to the high number of relatively low-paying occupations, including employees who handle baggage and work at ticket counters. Pilots,

6 Alaska's 15 Busiest Airports

Freight and mail, 2010

Rank	Location	Mail Freight (tons)
1	Anchorage	1,288,979
2	Bethel	26,211
3	Kotzebue	15,905
4	Fairbanks	12,842
5	Nome	12,733
6	Prudhoe Bay	10,624
7	Juneau	10,142
8	Barrow	9,134
9	Dillingham	6,994
10	Ketchikan	6,714
11	Sitka	5,227
12	King Salmon	5,096
13	Kodiak	4,849
14	Unalakleet	4,680
15	Aniak	3,700



Note: Includes enplaned and deplaned freight and mail.

Source: Alaska Department of Transportation and Public Facilities, Alaska State Aviation System Plan 2011

7 Yearly Transportation Wages

By sector, Alaska, 2010

Transportation and Warehousing	\$57,295
Air transportation	\$49,880
Water transportation	\$70,642
Truck transportation	\$49,949
Transit and ground passenger transportation	\$23,314
Pipeline transportation	*
Scenic and sightseeing transportation	\$35,495
Support activities for transportation	\$46,810
Postal service	*
Couriers and messengers	\$94,830
Warehousing and storage	\$58,029

*Information is suppressed due to confidentiality requirements.

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

mechanics, and air traffic controllers require more formal training and receive higher pay.

Occupational forecasts

Airline mechanics, commercial pilots, flight attendants, and other associated occupations are expected to generate less than 10 percent of their openings from new jobs between 2008 and 2018, which is considered low employment growth. However, though the number of forecasted new workers is relatively low, workers who leave or retire will create demand for replacements. Many airline occupations will have more than 300 total openings over the 10-year period, which is considered high. (See Exhibit 8.)

Economist Mali Abrahamson contributed to this article.

Projections for Jobs, Wages, and Residency

Selected Alaska air transportation jobs, 2008 to 2018



Occupation	Wages and Residency		Projected Employment, 2008 to 2018					
	Average 2010 wage	2010 non-residents	2008 jobs	2018 jobs	Percent growth	Growth openings	Replacement openings	Total openings
Airline Pilots, Copilots, and Flight Engineers	\$94,500	48.9%	1,358	1,474	8.5	116	356	472
Cargo and Freight Agents	\$33,220	8.3%	1,244	1,360	9.3	116	308	424
Aircraft Mechanics and Service Technicians	\$59,580	18.1%	1,339	1,430	6.8	91	323	414
Commercial Pilots	\$70,750	42.8%	1,045	1,140	9.1	95	278	373
Reservation and Transportation Ticket Agents/Travel Clerks	\$31,490	17.6%	957	1,035	8.2	78	279	357
Air Traffic Controllers	\$84,530	35.4%	227	245	7.9	18	60	78
Flight Attendants	\$37,220	20.5%	319	347	8.8	28	45	73
Aircraft Cargo Handling Supervisors	\$58,800	9.9%	111	122	9.9	11	27	38
Avionics Technicians	\$55,310	14.9%	83	90	8.4	7	26	33

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

Employment Scene

QCEW: A reliable employment series to follow



The Alaska Department of Labor and Workforce Development works with the U.S. Bureau of Labor Statistics on two main programs to estimate and then count how many jobs there are in the state.

The Current Employment Statistics program uses a monthly survey of selected employers to estimate jobs. As the name suggests, the focus is on releasing numbers that are as current as possible — in Alaska's case, the estimates are generally released on the third Friday of the month for the preceding month.

The other program is the Quarterly Census of Employment and Wages, which provides the closest

thing available to an actual count of jobs in the state — as opposed to estimates — by accessing reports that nearly all wage and salary employers are required to file as part of the state's unemployment insurance system. Neither program estimates nor counts the self-employed.

Solid growth in 2011

The recently released QCEW data for the third quarter of 2011 is especially noteworthy because construction, fishing, and tourism all reach their summer peaks during the third quarter. Three quarters of data in the books clearly indicate what kind of year 2011 will be overall. (See Exhibits 1 and 2.)

The average monthly job count through the first three quarters of 2011 was up more than 5,000 over the same three quarters of 2010, which equates to growth of 1.7 percent. That growth rate is slightly higher than the statewide average of 1.4 percent over the last decade.

The QCEW program also collects data on wages, which at nearly \$12 billion through the first three quarters of 2011, were up 5.2 percent over the same three quarters of 2010. Some of that increase was offset by inflation, however, which was measured at 3.2 percent in 2011. As with the job numbers, wage growth was marginally higher than the 4.7 percent average for the decade.

Nearly all industries gained employment

Most of the state's industries contributed to job growth over the period, with the largest gains com-

1 Alaska Employment, First Three Quarters QCEW, 2010 and 2011

Industry	Avg empl 1st 3 quarters of 2010	Avg empl 1st 3 quarters of 2011	Change 2010-2011	Percent change 2010-2011
Total	325,082	330,464	5,382	1.7%
Natural Resources and Mining	16,058	16,873	815	5.1%
Oil and Gas	12,665	12,913	248	2.0%
Construction	16,240	15,816	-424	-2.6%
Manufacturing	14,231	15,300	1,069	7.5%
Wholesale Trade	6,310	6,331	21	0.3%
Retail Trade	35,490	35,635	145	0.4%
Transportation, Warehousing, Utilities	19,331	19,779	448	2.3%
Utilities	2,153	2,105	-48	-2.2%
Information	6,364	6,326	-38	-0.6%
Financial Activities	14,871	14,714	-157	-1.1%
Professional and Business Services	26,371	27,140	769	2.9%
Educational and Health Services	41,536	43,354	1,818	4.4%
Health Care	29,868	31,364	1,496	5.0%
Leisure and Hospitality	32,305	33,431	1,126	3.5%
Accommodation	8,208	8,334	126	1.5%
Food Services and Drinking Places	19,542	20,170	628	3.2%
Other Services	11,887	11,901	14	0.1%
Government	81,614	81,421	-193	-0.2%
Federal Government	17,773	17,233	-540	-3.0%
State Government	25,791	25,803	12	0.0%
Local Government	38,049	38,384	335	0.9%

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Bureau of Labor Statistics

ing from health care, leisure and hospitality, manufacturing, and natural resources and mining.

The growth in natural resources and mining came from the oil and gas industry and from the state's gold, silver, zinc, and other mining companies. Kensington Gold Mine near Juneau marked its first full year of production in 2011 and high mineral prices boosted the industry.

Manufacturing's surprisingly strong gains came from seafood processing, an indicator that 2011 was a good year for the fishing industry. The fishermen themselves are not included in the job numbers, because they are considered self-employed.

Leisure and hospitality's strength was clearly in the visitor industry — its employment performance supports other positive tourism reports after a couple of tough years. Another likely factor was improved consumer confidence of local residents, particularly in food services and drinking places.

Industries that declined generally lost a modest number of jobs, although the losses for construction and the federal government were about 400 and 500, respectively. Construction employment began to drift downward in 2005, so its numbers weren't surprising. Neither was the decline in federal employment. In 2010, the decennial census boosted employment temporarily by about 400, but those jobs disappeared by 2011.

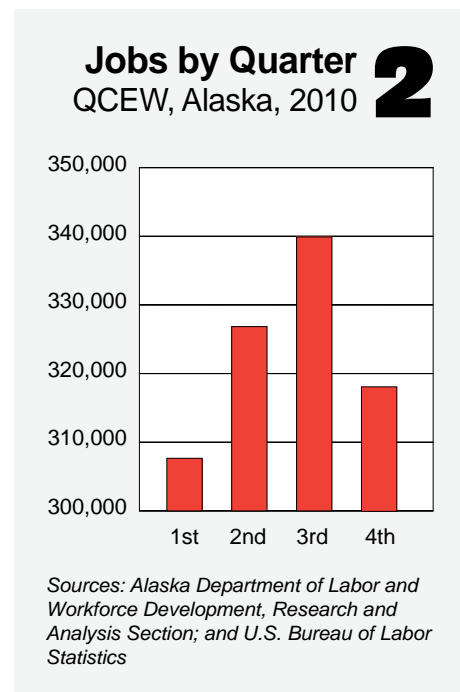
Most areas also gained jobs

A majority of the state's boroughs and census areas also gained employment in 2011. (See

Exhibit 3.)

The year-over-year changes in most places were small but varied from a high of 7.8 percent in the Aleutians East Borough to a low of -1.7 percent in Skagway. Although there doesn't appear to be a clear geographic pattern, the few areas that stood out could tie their job growth mostly to fish processing. These areas include Kodiak, the Aleutians West Census Area, and the Aleutians East and Bristol Bay boroughs, among a few other coastal areas.

The QCEW employment series is available on our Web site at labor.alaska.gov/research/qcew/qcew.htm.

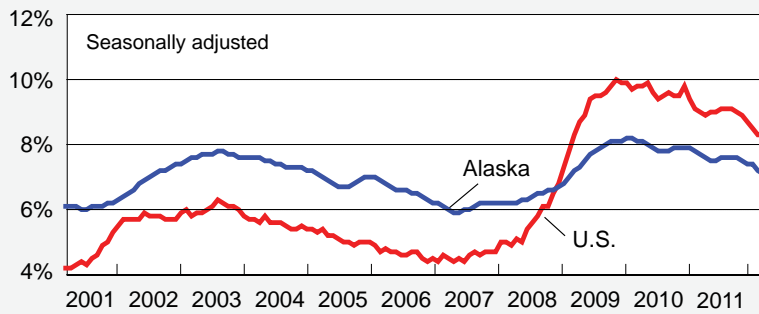


Employment Around the State **3** QCEW, first three quarters 2010 and 2011

Area	Avg empl 1st 3 quarters of 2010	Avg empl 1st 3 quarters of 2011	Change 2010-2011	Percent change 2010-2011
Statewide	325,082	330,464	5,382	1.7%
Aleutians East Borough	2,019	2,177	158	7.8%
Aleutians West Census Area	3,849	4,109	260	6.8%
Anchorage, Municipality of	149,875	152,254	2,379	1.6%
Bethel Census Area	6,743	6,811	68	1.0%
Bristol Bay Borough	1,615	1,677	62	3.8%
Denali Borough	2,154	2,145	-9	-0.4%
Dillingham Census Area	2,725	2,732	7	0.3%
Fairbanks North Star Borough	38,726	38,923	197	0.5%
Haines Borough	1,049	1,087	38	3.6%
Hoonah-Angoon Census Area	708	716	8	1.1%
Juneau, City and Borough of	18,099	18,255	156	0.9%
Kenai Peninsula Borough	19,419	19,717	298	1.5%
Ketchikan-Gateway Borough	7,366	7,513	147	2.0%
Kodiak Island Borough	6,212	6,565	353	5.7%
Lake and Peninsula Borough	773	804	31	4.0%
Matanuska-Susitna Borough	19,776	20,199	423	2.1%
Nome Census Area	3,799	3,830	31	0.8%
North Slope Borough	13,846	13,965	119	0.9%
Northwest Arctic Borough	2,900	2,896	-4	-0.1%
Petersburg Census Area	1,697	1,698	1	0.1%
Prince of Wales-Hyder Census Area	1,945	1,937	-8	-0.4%
Sitka, City and Borough of	4,374	4,451	77	1.8%
Skagway, Municipality of	897	882	-15	-1.7%
Southeast Fairbanks Census Area	2,650	2,659	9	0.3%
Valdez-Cordova Census Area	4,939	4,985	46	0.9%
Wade Hampton Census Area	2,337	2,422	85	3.6%
Wrangell, Borough of	836	866	30	3.6%
Yakutat, City and Borough of	331	329	-2	-0.6%
Yukon-Koyukuk Census Area	2,263	2,359	96	4.2%

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Bureau of Labor Statistics

4 Unemployment Rates January 2001 to February 2012



Source: Alaska Department of Labor and Workforce Development, Research and Analysis; and U.S. Bureau of Labor Statistics

6 Unemployment Rates Boroughs and census areas

	Prelim.	Revised	
SEASONALLY ADJUSTED	2/12	1/12	2/11
United States	8.3	8.3	9.0
Alaska Statewide	7.1	7.2	7.7
NOT SEASONALLY ADJUSTED			
United States	8.3	8.3	9.0
Alaska Statewide	7.1	7.2	7.7
Anchorage/Mat-Su Region	6.8	6.7	7.6
Municipality of Anchorage	6.0	5.9	6.7
Matanuska-Susitna Borough	10.0	9.7	10.6
Gulf Coast Region	9.5	9.7	11.0
Kenai Peninsula Borough	10.2	10.2	11.8
Kodiak Island Borough	5.7	6.7	6.5
Valdez-Cordova Census Area	11.5	11.2	12.8
Interior Region	8.5	8.6	8.9
Denali Borough	21.5	21.6	20.7
Fairbanks North Star Borough	7.3	7.4	7.7
Southeast Fairbanks Census Area	12.6	12.5	13.6
Yukon-Koyukuk Census Area	17.9	17.9	18.9
Northern Region	10.0	9.6	10.4
Nome Census Area	11.9	11.5	13.0
North Slope Borough	5.5	5.2	5.3
Northwest Arctic Borough	15.7	14.8	16.1
Southeast Region	8.8	8.7	9.5
Haines Borough	12.7	12.5	13.1
Hoonah-Angoon Census Area ¹	26.2	26.3	28.4
Juneau, City and Borough of	5.5	5.4	6.2
Ketchikan Gateway Borough ¹	9.2	8.9	9.6
Petersburg Census Area ¹	13.0	14.3	14.5
Prince of Wales-Hyder Census Area ¹	19.6	19.3	20.2
Sitka, City and Borough of ¹	6.9	7.0	7.6
Skagway, Municipality of ¹	27.7	28.3	29.5
Wrangell, City and Borough of ¹	11.7	13.0	10.8
Yakutat, City and Borough of	15.4	14.1	15.9
Southwest Region	12.9	13.6	12.9
Aleutians East Borough	9.6	11.8	7.8
Aleutians West Census Area	5.0	7.6	4.2
Bethel Census Area	15.6	15.3	16.0
Bristol Bay Borough	11.5	11.4	12.2
Dillingham Census Area	10.7	10.7	11.7
Lake and Peninsula Borough	12.1	11.6	13.0
Wade Hampton Census Area	21.4	21.2	21.6

Changes in producing the estimates

Beginning with the production of preliminary estimates for March 2011, production of state and metropolitan area Current Employment Statistics estimates transitioned from the Alaska Department of Labor and Workforce Development's Research and Analysis Section to the U.S. Bureau of Labor Statistics. Concurrent with this transition, BLS implemented several changes to the methods to help standardize estimation across states. While these changes reduce the potential for statistical bias in state and metropolitan area estimates, they may increase month-to-month variability. More detailed information on the CES changes is available on the BLS Web site at www.bls.gov/sea/cesprocs.htm.

5 Statewide Employment Nonfarm wage and salary

	Preliminary		Revised		Year-Over-Year Change	
	2/12	1/12	2/11	2/11	90% Confidence Interval	
Alaska						
Total Nonfarm Wage and Salary¹	317,200	314,400	308,800	2,800	-4,583	10,183
Goods-Producing ²	39,000	40,000	37,600	-1,000	-3,884	1,884
Service-Providing ³	278,200	274,400	271,200	3,800	—	—
Mining and Logging	16,100	15,200	14,800	900	107	1,693
Mining	15,800	15,000	14,700	800	—	—
Oil and Gas	13,500	12,600	12,500	900	—	—
Construction	11,500	12,500	12,300	-1,000	-3,583	1,583
Manufacturing	11,400	12,300	10,500	-900	-1,894	94
Wholesale Trade	6,000	6,100	6,000	-100	-656	456
Retail Trade	33,400	33,600	34,000	-200	-2,228	1,828
Food and Beverage Stores	6,200	5,900	5,900	300	—	—
General Merchandise Stores	9,500	9,500	9,800	0	—	—
Transportation, Warehousing, Utilities	20,100	19,200	18,900	900	-138	1,938
Air Transportation	5,300	5,400	5,300	-100	—	—
Truck Transportation	6,300	6,300	2,800	0	-581	581
Information	4,100	4,100	6,300	0	—	—
Telecommunications	14,700	14,400	4,100	300	-1,643	2,243
Financial Activities	27,200	26,000	14,400	1,200	-593	2,993
Professional and Business Services	46,100	43,900	25,400	2,200	932	3,468
Educational⁴ and Health Services	32,200	31,000	43,500	1,200	—	—
Health Care	28,300	28,000	30,800	300	-1,737	2,337
Leisure and Hospitality	10,600	11,100	27,500	-500	-3,676	2,676
Other Services	85,500	85,800	11,000	-300	—	—
Government	16,000	16,600	84,200	-600	—	—
Federal Government ⁵	26,400	26,200	16,600	200	—	—
State Government	8,600	8,600	25,100	0	—	—
State Government Education ⁶	43,100	43,000	7,500	100	—	—
Local Government	25,600	25,800	42,500	-200	—	—
Local Government Education ⁷	3,700	3,500	25,100	200	—	—
Tribal Government	3,700	4,000	3,500	200	—	—

A dash means confidence intervals aren't available at this level.

¹Excludes the self-employed, fishermen and other agricultural workers, and private household workers. For estimates of fish harvesting employment and other fisheries data, go to labor.alaska.gov/research/seafood/seafood.htm.

²Goods-producing sectors include natural resources and mining, construction, and manufacturing.

³Service-providing sectors include all others not listed as goods-producing sectors.

⁴Private education only

⁵Excludes uniformed military

⁶Includes the University of Alaska

⁷Includes public school systems

Sources for Exhibits 4, 5, and 6: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Department of Labor, Bureau of Labor Statistics

Employer Resources

State requires 90 percent Alaska hire in 23 job classes

Employers are legally responsible for hiring qualified Alaskans over nonresidents in some cases, and this preference covers most public construction contracts in Alaska. Resident hire requirements allow the hiring of nonresidents only after a reasonable effort to recruit Alaskans and formal approval from the Department of Labor and Workforce Development.

Alaska resident hire requirements apply to occupational categories with relatively high resident unemployment rates. The commissioner has deemed Alaska a “Zone of Underemployment,” which requires 90 percent employment preference for eligible Alaskans in public works contracts for certain job classifications.

The current resident hire determination is effective from July 1, 2011, through June 30, 2013, and must be met each work week for the following 23 protected job classifications:

Boilermakers	Foremen and supervisors
Plumbers and pipefitters	Bricklayers
Insulation workers	Roofers
Carpenters	Ironworkers
Sheet metal workers	Cement masons
Laborers	Surveyors
Culinary workers	Mechanics
Truck drivers	Electricians
Millwrights	Tug boat workers
Engineers and architects	Painters
Welders	Equipment operators
Pile-driving occupations	

The first person on a certified payroll in any classification is called the “first worker” and is not required to be an Alaska resident. Once a contractor adds more workers, the 90 percent rule applies. If workers perform duties in more than one classification during a work week, the classification in which they spent the most time counts for preference determination. If time is split evenly between two classifications, workers are counted in both.

If meeting the 90 percent requirement is difficult, an employer must obtain an approved waiver before hiring a nonresident. The waiver requires proof of an extensive search for qualified Alaskans.

The penalties for noncompliance are severe. AS 36.10.100 (a) states, “A contractor who violates a provision of this chapter shall have deducted from amounts due to the contractor under the contract the prevailing wages which should have been paid to a displaced resident and these amounts shall be retained by the contracting agency.” If the state finds contractors or subcontractors are out of compliance, penalties accumulate until they achieve compliance.

For more information about Alaska resident hire law, contact the nearest Wage and Hour office in Anchorage at (907) 269-4900, Fairbanks at (907) 451-2886, or Juneau at (907) 465-4842; or visit labor.alaska.gov/lss/whhome.htm.

A Safety Minute

Personal protective equipment is often not the best choice

Have you ever visited a business where the employees are all wearing safety glasses, hard hats, gloves, or some type of hearing protection and wondered, “Why are they wearing all that stuff?” Although adequate safeguards are necessary to protect employees from hazards, personal protective equipment isn’t always the best choice. A three-step job hazard assessment can help employers determine the best safety measures:

1. Engineering control. This step should always be first, and it can be as simple as a protective cover on a piece of equipment that prevents employees from coming into contact with moving parts, a ventilation hood in a laboratory or welding shop, or a protective railing instead of fall protection harnesses.

2. Work practice control. This step can be substituting less harmful materials, such as selecting a liquid adhesive that doesn’t give off harmful vapors. These controls can prevent

creation of a hazard in the first place.

3. Personal protective equipment. Always give engineering controls and work practice controls a fair chance before deciding to use personal protective equipment. Too many employers automatically choose this option first, but it has several drawbacks. First, it requires an initial and recurring cost for the employer as issued and reissued items become worn, damaged, or lost. Second, some employees will remove their gear if it impairs their ability to do the job, leaving them open to injury. Finally, some employees may not have their equipment on a given day, or may choose not to use it. If you determine that personal protective equipment is the only course of action, make sure it’s appropriate for the given hazard.

For more information on job hazard assessments, personal protective equipment, and other workplace safety and health topics, contact the Alaska Department of Labor and Workforce Development at (800) 656-4972.