



ALASKA ECONOMIC
TRENDS

SEPTEMBER 2011

The Decade in Review 2000 to 2010



WHAT'S INSIDE

Green Jobs Come Into Focus
Comprehensive survey shows a growing role



ALASKA DEPARTMENT OF LABOR
& WORKFORCE DEVELOPMENT

Governor Sean Parnell
Commissioner Click Bishop

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The Little Susitna River on the way to Hatcher Pass near Palmer. Photo courtesy of Flickr user Code Poet.

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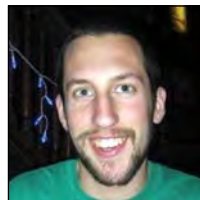
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Alaska ends decade strong, plans for future growth



**By Commissioner
Click Bishop**

This month's *Trends* provides a snapshot of our economy from 2000 to 2010. Unlike some "feast or famine" periods, this decade was one of slow, steady growth. Alaska continues to fare better than most states, and ended 2010 with 3,500 new jobs.

While Alaska's 21-year streak of job gains was broken in 2009, employment began recovering in 2010 and our economy continues to show improvement as we slowly add jobs again this year. We also have started a new streak of success — for 33 consecutive months, Alaska's unemployment rate has been below the national rate.

We ended the last decade ahead of almost every other state — but rather than take it for granted, Alaska has focused resources and training for the new jobs in the industries that will be vital in the coming decade.

Green Jobs

Also in this issue is an update on green jobs in Alaska. The Alaska Department of Labor and Workforce Development's first survey of private and government entities indicates that about 5,000 Alaskans work in at least one of seven green categories: renewable energy; energy efficiency; greenhouse gas reduction; pollution prevention, reduction, and cleanup; recycling and waste reduction; agricultural and natural resources conservation; and education, compliance, public awareness, and training.

Alaska's State Energy Policy target is to generate 50 percent of our electricity from renewable energy by 2025 and improve energy efficiency by 15 percent. To help achieve this goal, Gov. Sean Parnell and the Alaska Legislature are moving forward on a comprehensive energy program that includes the Susitna-Watana hydroelectric project, which would begin providing reliable, long-term power by 2023. The project would supply half of the Railbelt's current energy needs. The Alaska Energy Authority has a new Web site with project information at: www.Susitna-WatanaHydro.org.

The AEA has also published a "Renewable Energy Atlas of Alaska," available at www.AKEnergyAuthority.org, for Alaskans interested in the production of heat, electricity, and fuels from wind, solar, biomass, geothermal, hydro, and ocean power resources.

The Alaska Department of Labor received a \$3.6 million grant from the U.S. Department of Labor, Employment and Training Administration. The Alaska Workforce Investment Board formed the Alaska State Energy Sector Partnership to provide recommendations on where to focus training for careers in emerging energy-efficient and renewable energy industries including geothermal, hydroelectric, wind turbine, and biomass. The ASESP includes AVTEC-Alaska's Institute of Technology, Alaska Energy Authority, Alaska Housing Finance Corporation, Alaska AFL-CIO, Denali Commission, University of Alaska, U.S. Office of Apprenticeship, and Alaska Works Partnership, Inc.

The department has invested more than \$2 million to train almost 1,000 Alaskans in retrofitting and updating residential weatherization, hydro power plant training for rural utility employees, wind technician, incorporating wind and hydro into existing power plants, and projects like the Sitka Blue Lake Dam Expansion.

The focus has been on serving veterans, people with disabilities, unemployed and underemployed workers, low-income individuals, dislocated workers, and out-of-school youth.

The department is accepting applications for ASESP training funds that are still available. Training can include coursework; on-the-job training and customized training with existing federally registered apprenticeship programs and labor management partners; technology-based learning; and distance learning. More information is available through the Division of Business Partnerships at Labor. Alaska.Gov/bp/egram/home.htm or (907) 269-4590.



The Decade in Review

2000 to 2010

Alaska's economy of the past decade was without large booms, busts, or any defining economic event — yet it was still unique. The 2000–2010 decade was the slowest period of employment growth since statehood, and probably the least dramatic. (See Exhibit 1.)

Some referred to it as the “one percent economy” because that’s about as much as it grew each year. Despite the lackluster economic performance, it might have been one of the more balanced decades, as nearly every industry contributed to the expansion. (See Exhibit 2.) For example:

- The fishing industry began to recover from the lows of the late 1990s and early 2000s.
- Employment in the oil industry grew significantly.
- Oil revenues and federal expenditures both more than doubled.
- A third of the state’s currently operating large mines opened, along with other major mineral exploration and development.

- The number of summer visitors climbed from 1.2 million in 2001 to 1.5 million in 2010.
- International air cargo volume increased by a third.

One exception to the growth trend was the timber industry, which continued to shrink during most of the past decade.

High, unprecedented prices for commodities such as oil, minerals, and fish spurred production for many of the above industries.

The story behind a slow decade

The biggest story of the past 10 years didn’t come until the end of the decade, and it was more about the other states than what happened in Alaska. The “Great Recession,” from December 2007 to June 2009, was the nation’s worst economic downturn since the Great Depression of the 1930s.

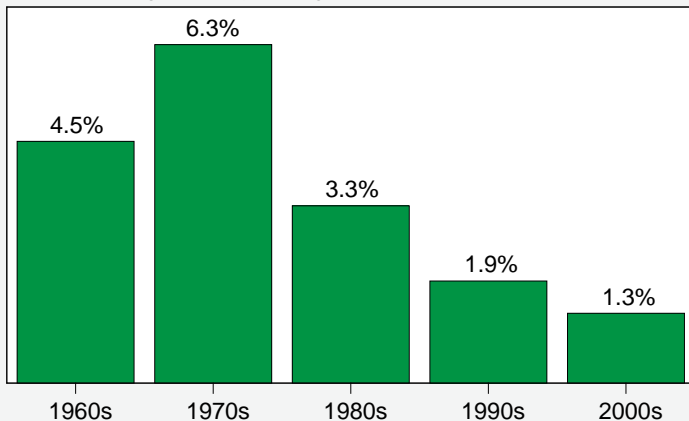
A national recession made for unusual times in Alaska’s economy, which initially kept growing while the nation shed millions of jobs.

In 2009, the national economic blight began to affect Alaska, ending the state’s record streak of 21 years of uninterrupted job growth. Employment fell by 0.4 percent in 2009, or 1,200 jobs, but growth resumed in 2010 with a net gain of 3,500 jobs. This means Alaska finished the decade with a record number of jobs, while the nation fell back to levels last seen in 2000. North Dakota was the only other state that skirted the recession.

Alaska’s redemption was the structure of its economy, with its dominance of extraction and government and the relative lack of speculative real estate investment, manufacturing, and financial industries. Alaska’s economy was simply different enough to avoid being pulled down in the nationwide furor.

1 Slowest Decade Since Statehood Alaska, by decade

Annual average employment growth



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

Also in 2009, Alaska's jobless rate (7.8 percent) dropped below the nation's (9.3 percent) for the first time in history, a pattern that continued throughout 2010. (See Exhibit 3.) This wasn't an indicator of a robust job market in Alaska, as state unemployment did increase — it was more a reflection of how badly the labor market had turned in the rest of the nation.

Oil and gas prices, jobs

One of the big economic surprises of this past decade was oil and gas employment reaching record levels even though oil production in the state continued to decline. Between 2000 and 2010, oil production in Alaska fell from 970,000 barrels per day to 599,000, but oil industry employment grew from 8,800 to 12,800.

During the 1990s, industry employment and oil production both declined. By 1999, employment had fallen to a 19-year low of 7,900 amid strong signals that Alaska's oil workforce had entered an era of stagnation and enduring losses. This indication was further reinforced in 2000, when Alaska's largest oil industry employer, Atlantic Richfield Company, sold its assets to BP and ConocoPhillips.

However, oil and gas employment began to rebound that year, buoyed by the near-concurrent developments of the Alpine and North Star oil fields. The industry also built a number of large oil modules around the state, whereas before they had always been in the Lower 48 or overseas.

This burst of activity was short-lived, though. By 2003, with the major work on the North Star and Alpine fields complete, oil patch employment fell steeply and hovered at near-record lows through 2004, raising concerns of a permanent downward curve.

That didn't happen. After four years of above-

Balanced Growth Spanned Nearly All Industries

Alaska, 2000 to 2010

2

	2000	2010	Change 2000–2010	Percent change 2000–2010
Total Nonfarm	280,700	323,400	42,700	15.2%
Mining and Logging	11,500	16,100	4,600	40.0%
Mining	9,900	15,200	5,300	53.5%
Oil and Gas	8,800	12,800	4,000	45.5%
Construction	14,000	16,100	2,100	15.0%
Manufacturing	12,100	12,700	600	5.0%
Wholesale Trade	6,300	6,300	–	0.0%
Retail Trade	33,000	35,400	2,400	7.3%
Transportation and Warehousing	18,700	18,900	200	1.1%
Utilities	1,600	2,100	500	31.3%
Information	7,400	6,400	(1,000)	-13.5%
Financial Activities	12,300	14,800	2,500	20.3%
Professional and Business Services	23,900	26,200	2,300	9.6%
Educational and Health Services	25,900	41,800	15,900	61.4%
Health Care	18,600	30,000	11,400	61.3%
Social Assistance	5,400	9,500	4,100	75.9%
Leisure and Hospitality	27,500	31,400	3,900	14.2%
Accommodations	7,100	7,700	600	8.5%
Food Services and Drinking Places	16,800	19,300	2,500	14.9%
Other Services	9,900	18,900	9,000	90.9%
Government	76,500	82,700	6,200	8.1%
Federal Government	17,100	17,500	400	2.3%
State Government	22,100	25,900	3,800	17.2%
Local Government*	37,300	39,300	2,000	5.4%

*Tribal government was manually added to local government in 2000.

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

average oil prices, which by 2005 had more than doubled from the 2001 low, the oil industry began to stir again. (See Exhibit 4.)

Unlike many earlier upswings, this recovery was tied to many small projects. Then in early 2006, a section of BP's pipeline sprung a leak that became the largest oil spill in the history of the North Slope. Soon after, BP discovered additional corrosion problems and began to replace pipe and upgrade its facilities — undoubtedly a major contributor to the hefty increase in industry employment, which hit a new high by 2007 and kept growing. In 2009, employment reached an all-time record of 12,900 jobs, a number that retreated slightly the following year.

Higher oil prices and maintenance were likely overriding factors in the upswing in jobs.

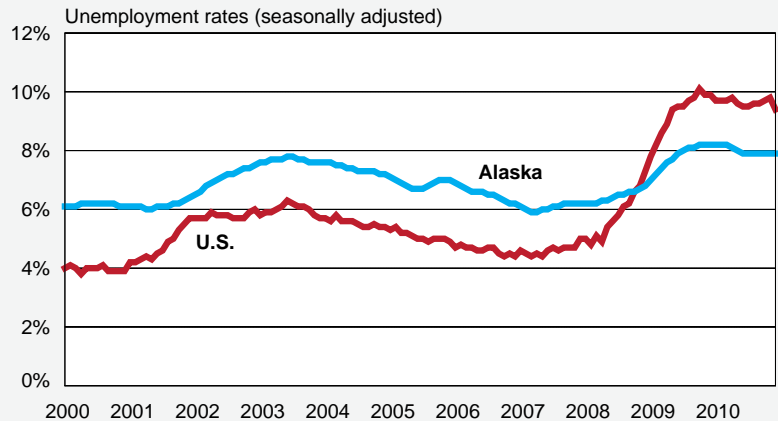
A growing list of independent producers and other

new players also contributed to the oil industry's rebound. Shell Oil returned to the state in 2005 and became the largest bidder in the 2008 Chukchi Sea lease sale, which netted \$2.7 billion. It was the highest lease bid in Alaska's history, and represented the first major offshore oil activity in the state since Cook Inlet.

Another example of a newcomer mixing things up is Pioneer Natural Resources, which made history on the North Slope in 2008 with its Oooguruk project and became the first independent to operate a producing oil field on the North Slope.

Despite high levels of oil and gas employment, national industry employment still outpaced Alaska, growing 56 percent over the decade versus Alaska's 47 percent. One big reason for this difference is that natural gas has remained largely idle in Alaska while it drives oil and gas employment elsewhere in the country.

3 Alaska's Jobless Rate Below Nation's 2000 to 2010



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

Health care maintained momentum

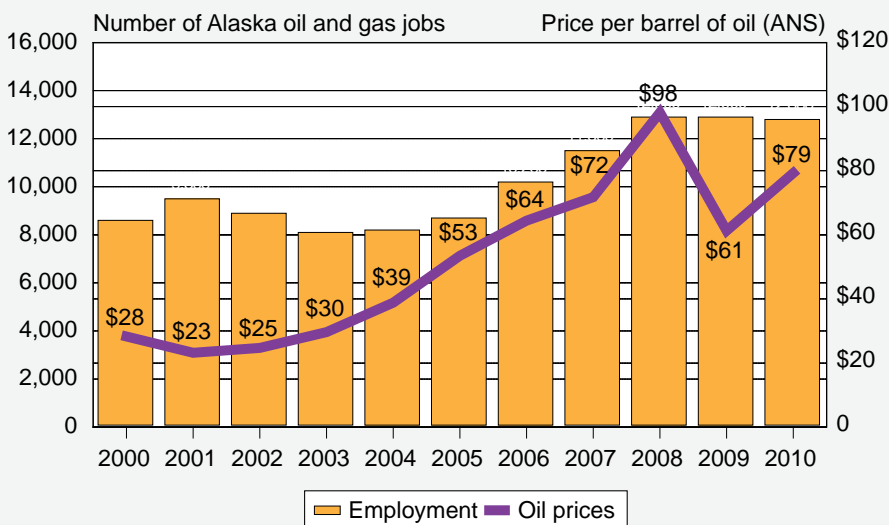
Health care is the state's fastest-growing industry as well as one of the largest. It employs nearly 32,000 people, and in 2010 its payroll exceeded \$1.5 billion. Fifteen of the 100 largest private-sector employers in the state are health care providers.

Private sector health care employment increased from 18,600 in 2000 to 30,000 in 2010 and grew four times as fast as the average for all industries: 62 percent compared to 15 percent for total employment. (See Exhibit 5.) As a result, health care made up over a quarter of all employment growth over the past decade in Alaska. It also grew twice as fast as the nation's health care sector.

There is no single explanation for the magnitude or speed of growth, but some of the reasons include:

- Technological changes increased the availability of health care services to consumers.
- The number of medical procedures available grew.
- More of Alaska's health care needs were met locally.

4 Oil Prices and Employment Alaska, 2000 to 2010



Sources: Alaska Department of Revenue, Tax Division; Alaska Department of Labor and Workforce Development, Research and Analysis Section

- The growing population of elderly Alaskans increased demand for services.

Alaska’s population is getting older. Although only 7.7 percent of Alaskans are over 65 compared to the nation’s 13 percent, the 65-plus cohort grew by 54 percent between 2000 and 2010, compared to 13 percent nationally.

As the industry expanded and more health care choices emerged, more of Alaska’s health care spending remained in-state. In 1990, health care accounted for 4 percent of Alaska’s wage and salary employment versus 7 percent for the nation. But by 2010, that difference narrowed to 9.3 percent for Alaska and 10.6 percent nationwide.

As the percentage of health care in Alaska’s economy nears national proportions, growth could begin to slow. However, even at the national level, health care employment is forecasted to grow twice as fast as overall jobs. Expansion could be hampered by costs, which continue to escalate in Alaska and nationwide. Another potential limit is the availability of public funds. Nevertheless, because of the powerful forces of demographics and advances in medical technology, most experts believe health care will stay on the growth track in the near future.

Retail growth slowed

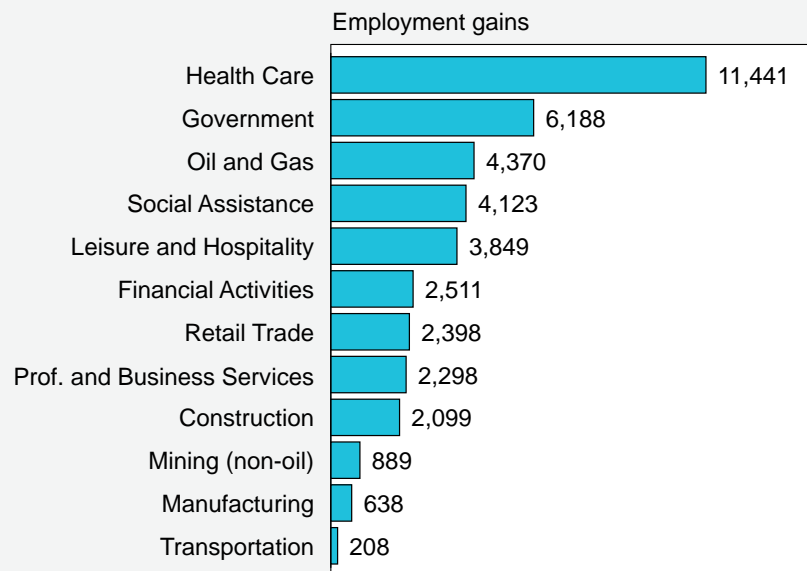
A spate of new chain and homegrown retailers opened in Alaska during the past decade, and more are sure to pop up. Target, the nation’s fifth-largest retailer, entered Alaska’s market in late 2008. More have arrived since 2000, including Kohl’s, new Walmarts, Best Buy, Sportsman’s Warehouse, Petco, Bed Bath and Beyond, and Walgreens. Retail sales in Alaska added up to \$9.7 billion and generated more than 35,000 jobs in 2009, according to Nielsen Claritas Retail Market Power.

Retail trade remains Alaska’s largest private-sector employer, and it probably has more direct contact with the average person than any other industry. At last count, there were more than 2,655 retail establishments in the state. Even in some of the smallest communities with little access to shopping, residents make purchases over the Internet or via phone or catalog.

The Booming Health Care Sector

Alaska, 2000 to 2010

5



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

Retail is a rough-and-tumble, hyper-competitive industry. Stalwarts such as Kmart, Carr-Gottstein, Borders, and Gottschalks disappeared during the past decade, their departures overshadowed by the new players that replaced them — almost like musical chairs.

The 1990s transformed Alaska’s retail landscape with 2.8 percent job growth each year. That decade also included the “invasion” of the big box stores and discount warehouses — some of them are now among Alaska’s largest private-sector employers and biggest retailers.

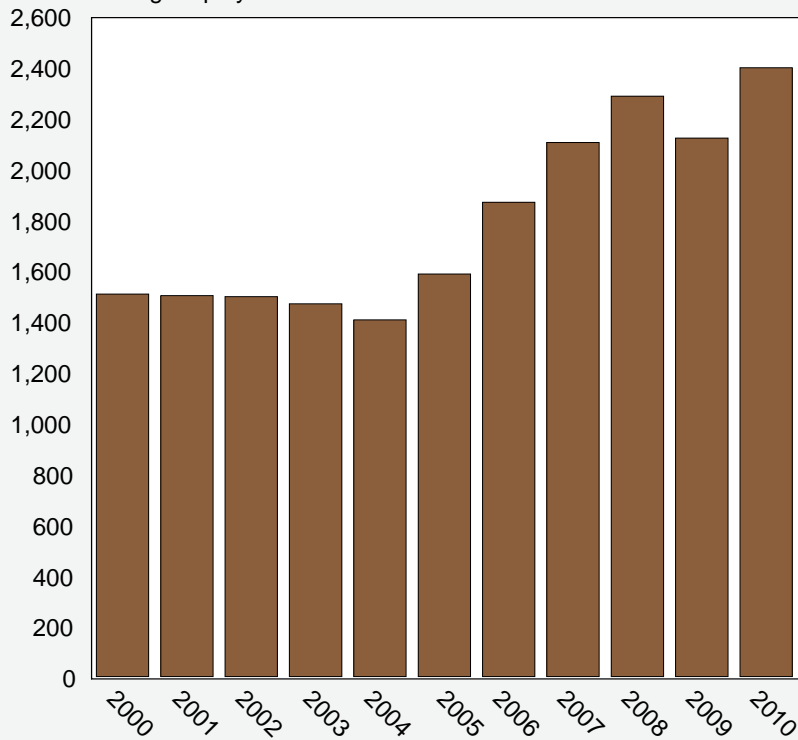
During the 1980s and ‘90s, retail trade in Alaska grew far more rapidly than the overall economy. However, during this most recent decade, retail employment grew half as fast as overall employment, adding just 2,400 jobs compared to the 7,500 new jobs during the ‘90s.

Alaskans sometimes question whether the state is “under-retailed,” but by the end of the last decade, retail’s share of total statewide employment was on par with the rest of the nation at 11 percent. In the future, Alaska is likely to mimic the rest of the nation in retail trends and expansion.

6 Mining Employment Changed Course

Alaska, 2000 to 2010

Mining employment



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

Although the statistics are limited in Alaska because most of the state's largest retail markets lack a sales tax, all indicators show Alaska is a healthy environment for retail. According to census data, Alaska's per-capita sales run 9 percent above the national average, with higher prices probably accounting for most of that difference.

Another factor that benefits the industry is Alaskans' lower-than-average tax burden. Alaska also has the second-youngest population and one of the most migratory populations in the country, which means frequent household formation is common — a blessing for many retailers, as young families tend to be big spenders.

Permanent Fund Dividends are also an industry boost that doesn't exist elsewhere. There are no data that tell us in detail how Alaskans spend their dividends, but even to the casual observer it's obvious that a substantial amount ends up in retailers' hands.

Industry expansion has not only created jobs, but has meant more Alaska retail dollars stay in the state and in communities. Put another way, retail's leakage out of the state economy is being plugged, evidenced by the sales receipts from communities that levy a sales tax.

The expansion of retail in the Matanuska-Susitna Borough, which added 1,000 jobs and doubled retail sales between 2000 and 2010, has led residents to satisfy more of their shopping needs at home rather than in Anchorage or other markets. Significant retail employment increases in places like Fairbanks, Kodiak, the Kenai Peninsula, Juneau, and Ketchikan indicate a similar trend.

Transportation was bigger in Alaska

What might be a simple drive down a highway in the Lower 48 could involve a boat, truck, plane, and a four-wheeler in Alaska. Few products are shipped in this state by a single mode of transport.

In 2010 you were nearly twice as likely to be employed in the transportation sector in Alaska as you would have been nationwide, at 5.9 percent of Alaska's wage and salary employment versus 3.2 percent for the nation. Transportation also represents a greater share of gross domestic product in Alaska than it does nationwide, at 9 percent in-state versus the nation's 3 percent.

Alaska's diverse transportation players collaborate closely. Because of this interdependence, the lines between modes of transportation such as trucking, air, ocean freight, and railroads are often blurred. For example, Lynden Transport, one of Alaska's largest transportation employers, is involved in all of these.

Transportation employment grew modestly in the last decade, with 18,900 jobs in 2010 compared to 18,700 jobs in 2000. Why transportation grew so much slower than the overall economy is somewhat of a mystery. The slowdown in Alaska's economy in 2009 hit transportation hard, with steep declines in the visitor industry and international cargo. However, compared with the rest of the nation, Alaska did remarkably well. Between

2000 and 2010, employment in the nation declined more than 6 percent, in contrast to Alaska's slight growth.

Because nearly every Alaska business depends on transportation, the overall health of Alaska's economy is the best predictor of the industry's future. Still, important contributors such as international air cargo and visitor-based transportation show signs of expanding faster than the industry as a whole.

A change in mining trends

The economic picture of mining in Alaska has changed dramatically, from declining employment in the beginning of the 2000s to a booming industry by 2006. (See Exhibit 6.) Despite a slight hiccup in 2009, mining employment has grown 59 percent overall since 2000, far outpacing the nationwide growth rate of just 1.4 percent.

Several large developments buoyed the industry. Pogo Mine in the eastern interior of Alaska was commissioned in 2006, but began to create jobs in 2005. Fort Knox Mine in the Fairbanks North Star Borough built a heap-leach facility in 2009. And after several delays and much controversy, Kensington Mine opened in Southeast in June of 2010.

The brief decline in mining employment in 2009 was largely attributable to shifts in the exploration stages at several potential mines. The recent climb in mineral prices has also renewed interest in numerous mining projects around the state. Large new potential mines include the Nixon Fork Mine and Chuitna Coal Strip Mine in Southcentral, the Lik prospect in the Northwest, and the Donlin Creek and Pebble projects in Southwest Alaska. (See Exhibit 7.)

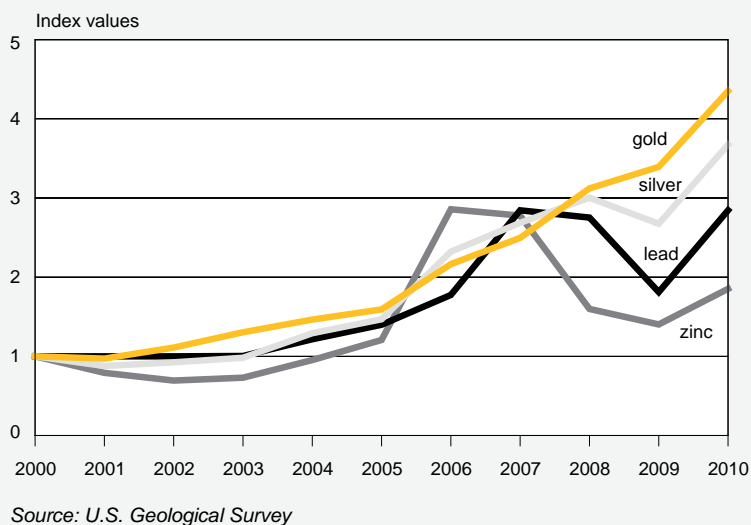
Production values quadrupled

Higher prices have also increased the value of Alaska's mineral production. The value of Alaska's primary produced metals more than quadrupled from 2001 to 2007, from \$786.6 million to \$3.22 billion. The value of mineral exports also quadrupled in roughly the same period, from a low of \$293 million in 2000 to a high of \$1.3 billion in 2007, with a total value of \$6.87 bil-

High Mineral Prices Renewed Interest

United States, 2000 to 2010

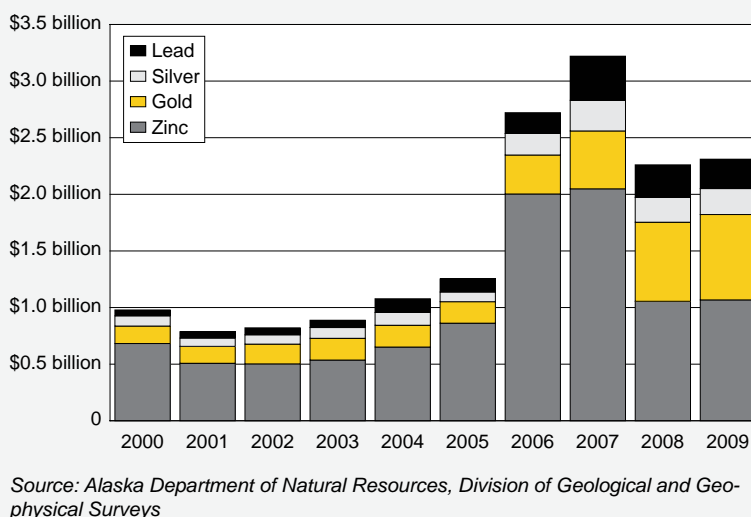
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Production Values Dropped Off

Alaska primary metals, 2000 to 2009

8



lion over the decade. The value even includes the falloff in export and production values in 2008 and 2009 as the price for zinc — Alaska's most produced metal — fell to less than \$1 per pound. (See Exhibit 8.)

Construction waxed and waned

The construction industry started the decade strong, gaining 4,500 jobs from 2000 to its peak in 2005, an increase of 32 percent.

Since 2005, the industry has lost 2,400 jobs — 13 percent — to end the decade at 16,100. The decline in recent years in commercial and residential construction employment, which was strong in the beginning of the decade, contributed to this overall loss. Despite this, the industry has accomplished much over the decade. Construction on military bases across the state has been bustling, building everything from new hangars to new housing.

Construction in the health care industry has also grown as several hospitals have been built or expanded across the state. For example, The Anchorage Alaska Native Medical Center and Fairbanks Memorial Hospitals expanded their facilities and construction began on replacement hospitals in Barrow and Nome.

Professional services depended on health of other industries

The professional and business services sector comprises jobs that often require high skill levels, professional degrees, or licenses — and pay higher-than-average wages. These include engineers, waste management workers, lawyers, telemarketers, and advertisers.

The industry as a whole has grown steadily since 2000, mostly in the professional and technical services subsector, which includes law firms, accounting services, architectural and engineering services, and advertising. These jobs are often associated with construction, mining, or oil and gas, so their trends tend to move in tandem.

A tourism-related hiccup

Leisure and hospitality has three major categories — recreation, food and drink, and accommodations — with two-thirds of employment in food service and drinking places.

All three grew over the past decade, but at varying rates. Food and drink outshined the other two, adding 2,500 jobs — more than the others combined. Over the same period, accommodations grew by 600 jobs; arts, entertainment, and recreation added 700.

As with the industry as a whole, subsector growth was not smooth. Accommodations and food and beverage places lost employment during

the nationwide recession when fewer visitors came to the state.

The highly seasonal leisure and hospitality industry was on a growth track of around 2 percent annually until the recession finally dug into Alaska's tourism in 2009. The industry lost more than 2,500 jobs at the peak of that season.

By the end of the decade, employment had recovered a bit, growing by just under 600 jobs from the 2009 to 2010 summer peaks. With this small recovery, leisure and hospitality ended the decade up 14 percent — or 3,800 average annual jobs — above its 2000 level but still 2,000 jobs below the 2008 peak.

Information lost jobs

The information sector has seen definite and significant decline in the face of technological advances. Some of the drop is artificial, though, as Internet service providers classified in information were recoded as utility sector firms. The employment loss, around 1,000 jobs, was largely due to the trimming or closure of traditional information outlets such as newspapers, radio, and television companies as accessing information became easier and cheaper online.

Government played a key role

Government is a key employer in Alaska, responsible for 82,700 jobs in 2010 — that's over a quarter of all nonfarm employment. This sector encompasses occupations in all industries, including teachers, builders, deckhands, and scientists. Because more residents require more government services, employment in this sector grows with the population. One example is education; there were 3,800 more jobs in 2010 than in 2000.

Government jobs represented more than \$4.1 billion in wages in 2010 — more than mining, construction, and manufacturing combined. However, government's total share of Alaska jobs shrank from 27.3 percent to 25.6 percent of jobs during the period as private industries outpaced government.

Local government employment only grew by about 2,000 jobs — or 5.4 percent — from

2000 to 2010, but local administrations and school districts are still often the largest employers in an area. For example, in 2010 there were nearly twice as many jobs at the Anchorage School District than at Providence Health & Services, Anchorage's largest private employer. Within the local government sector, school district employment gained 12 percent and other city, municipal, and borough employment grew by only 1 percent.

State government employment is another large sector, and its share of total employment is consistently around 8 percent. The state-run University of Alaska's employment increased by 1,358 jobs, or 22 percent, while other state agencies increased by 15 percent over the decade. This added up to an overall increase of 17 percent in state government employment.

Federal government employment grew very little, adding only about 400 jobs — or 2.3 percent — over the decade. Growth in the civilian defense sector, Veterans' Affairs, and the National Park Service was largely offset by the shrinking U.S. Postal Service, health services, agriculture, and aviation as private firms stepped in or programs were phased out.

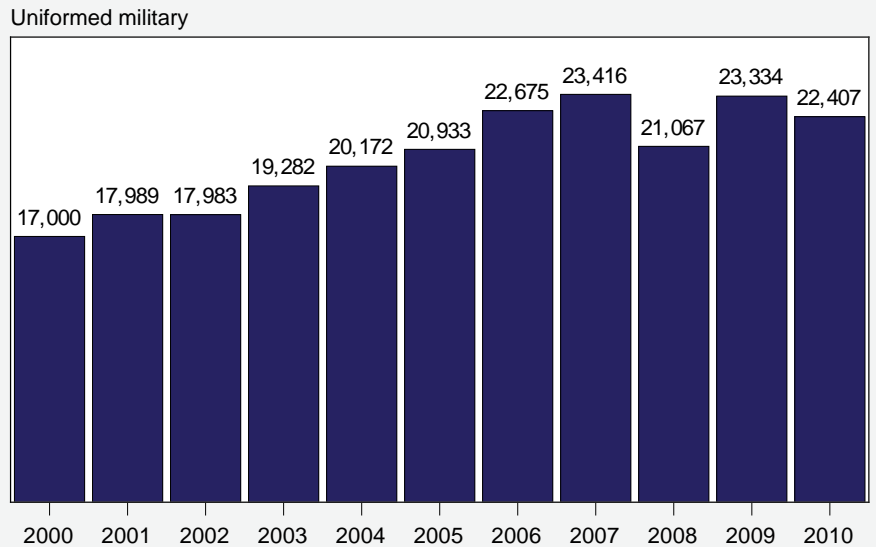
Military increased its presence

Before the terrorist attacks of Sept. 11, 2001, the military was reducing its presence in Alaska. However, the U.S.-led War on Terror funneled more and more defense funds into the state.

Though the Base Realignment and Closure Act of 2005 eventually led to closures, the overall presence of armed forces has increased. There were 5,400 more uniformed military personnel in Alaska in 2010 than there

Military Population Grew 9

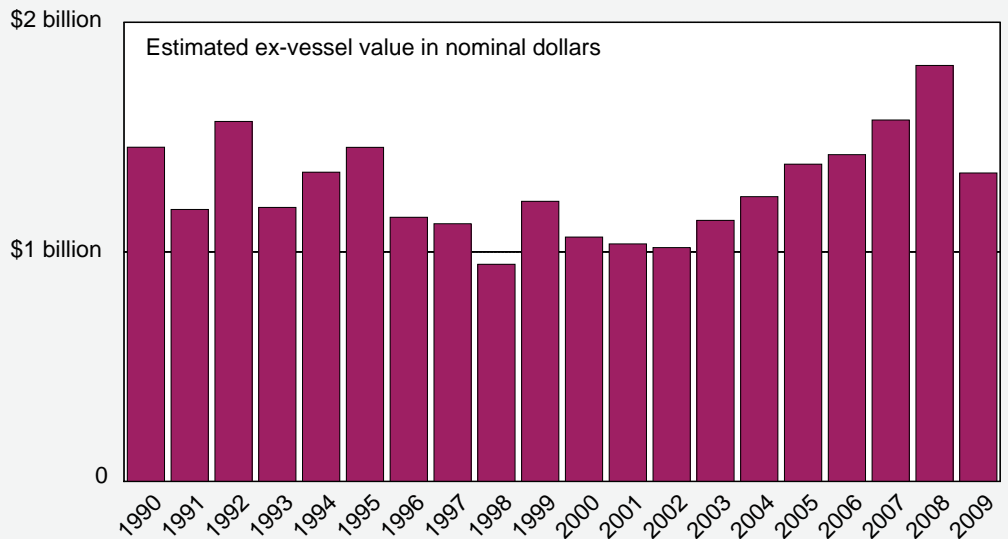
Alaska, 2000 to 2010



Sources: Alaska Command; Alaska Department of Labor and Workforce Development, Research and Analysis Section

Fisheries Values Recovered 10

All Alaska fisheries, 1990 to 2009



Source: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Fisheries Science Center

were in 2000. (See Exhibit 9.)

Other military growth includes civilian defense employment and federal spending on base and facility upgrades, salaries, and maintenance.

Seafood heritage survived

In the 1960s, framers of Alaska's constitution dubbed Alaska's fisheries the "key to statehood." Although other natural resources such as oil have overtaken seafood in terms of gross value, seafood remains an important part of Alaska's exports and local economies. In 2010, seafood made up 44 percent of Alaska's export value. Japan remains the top destination, though seafood exports to China are growing rapidly.

Self-employed fishermen are generally exempt from reporting wages and employment, making it difficult to measure their economic impact. There are also different governing bodies for the various fisheries, which use different methods and people to estimate values and jobs. The most recent Alaska Department of Labor and Workforce Development estimates show a total harvesting workforce of 29,891 in 2009. The National Marine Fisheries Service estimate is 31,153 commercial harvesting jobs the same year.

The component of the seafood industry that is included in wage and salary employment data encompasses the army of seafood processing workers: a highly seasonal, largely nonresident, mobile workforce. Given that the 2000s saw a more modest volume of fish harvested than decades past, it

makes sense that seafood processing employment only grew by 700 jobs, or 8 percent, between 2000 and 2010.

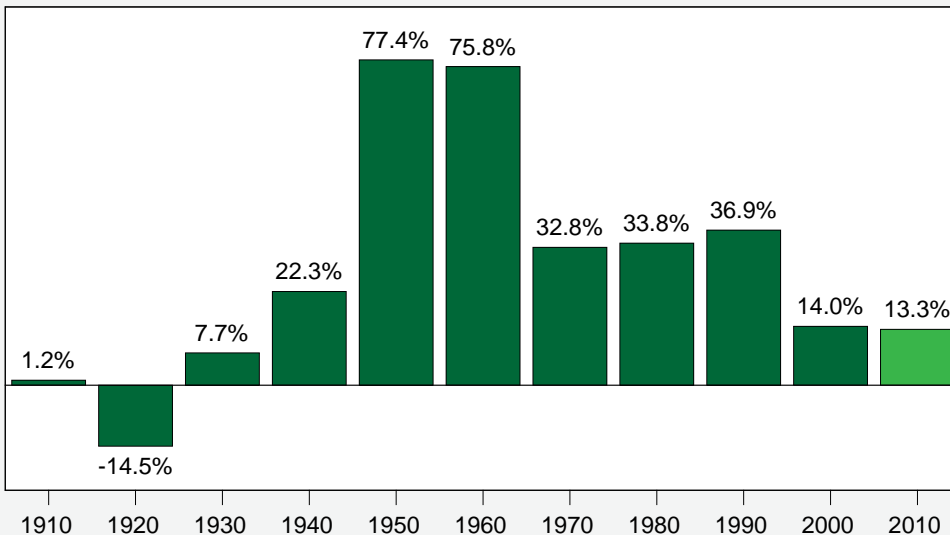
The decade started out dismally because of fish stock crashes and low prices in key fisheries. Opilio or snow crab crashed in 2000 and cut Alaska shellfish values by half within a year. Salmon prices were severely undercut by competition from farmed fish in the latter part of the '90s, and fell to their lowest point since the '70s. Due to a weak Japanese economy, Alaska pollock and mackerel values also reached record lows in 1998.

After that, developed and emerging nations' desire for more ocean-derived protein increased demand and boosted prices. Salmon prices recovered more gradually than the large price booms of the '80s and '90s, but were boosted by marketing that differentiated Alaskan wild salmon from their farmed counterparts.

As the salmon market strengthened, fishermen's permits recovered value — some have even doubled in price in the last few years. The industry was not immune to the global recession, though. Prices and values fell sharply in 2009 for cod, pollock, halibut, and crab, which interrupted what initially looked like a sustained recovery. (See Exhibit 10.)

11 Population Growth Continued to Slow Alaska, 1910 to 2010

Population growth



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

In popular culture, harvesting and marketing developments combined with the dynamic nature of fisheries work have spawned an ever-increasing school of Alaska reality television stars, drawing even more attention to the industry.

Structural changes for crab

In 2005, the Crab Rationalization Program allocated Bering Sea and Aleutian crab to harvesters, processors, and coastal communities. The program was intended to address species management, bycatch, and economic and safety issues.

The program limited who had the rights, or held the quota, to

catch and process crab. It also ended the “race” to catch them, and the elimination of derby-style competition allowed vessels more time to harvest. This meant crew members worked more days, and in fewer boats.

The federal vessel buyback program also shrunk the crab fleet from more than 200 vessels in the 2001–02 season to just 76 in 2009–10. Because fewer boats needed crew, employment shrank and the percentage of crew pay fell by half, from over 30 percent to roughly 20 percent of gross crab harvest.⁶

Urban migration and diversity

The pace of Alaska’s growth rate over the decade — 13.3 percent — was slow compared to recent history. (See Exhibit 11.) The 2010 Census measured the total population of Alaska at 710,231, up from 626,932 in the 2000 Census. The majority of high-growth areas were those with access to the road system. Anchorage topped the list, gaining 31,543 residents, followed closely by the Matanuska-Susitna Borough at 29,673. (See Exhibit 12.)

The Mat-Su also had the fastest growth rate in the state at 50 percent from 2000 to 2010. The Fairbanks North Star Borough came in second, with a population that grew 1.8 percent on an average annual basis, gaining 14,741 people over the decade.

The results were mixed in rural areas, with over

Population Change by Borough and Census Area **12**

Alaska, 2000 to 2010

	2010	2000	Change	Percent growth, 2000–2010	2010 Census		
					Median age	Percent male	Percent Native
Matanuska-Susitna Borough	88,995	59,322	29,673	50.0%	34.8	51.7%	5.5%
North Slope Borough*	9,430	7,385	2,045	27.7%	35.1	62.6%	54.1%
Fairbanks North Star Borough	97,581	82,840	14,741	17.8%	31	52.8%	7.0%
Aleutians East Borough	3,141	2,697	444	16.5%	42.1	66.6%	27.9%
Southeast Fairbanks Census Area	7,029	6,174	855	13.8%	37.4	55.7%	11.5%
Skagway, Municipality of	968	862	106	12.3%	41.2	51.7%	3.5%
Anchorage, Municipality of	291,826	260,283	31,543	12.1%	32.9	50.8%	7.9%
Kenai Peninsula Borough	55,400	49,691	5,709	11.5%	40.6	52.4%	7.4%
Wade Hampton Census Area	7,459	7,028	431	6.1%	21.9	52.9%	95.0%
Bethel Census Area	17,013	16,047	966	6.0%	26.2	52.3%	82.9%
Haines Borough	2,508	2,392	116	4.8%	46.9	50.8%	9.2%
Northwest Arctic Borough	7,523	7,208	315	4.4%	25.7	53.6%	81.4%
Nome Census Area	9,492	9,196	296	3.2%	27.6	53.3%	75.8%
Juneau, City and Borough of	31,275	30,711	564	1.8%	38.1	51.0%	11.8%
Aleutians West Census Area	5,561	5,465	96	1.8%	40.7	66.9%	15.4%
Sitka, City and Borough of	8,881	8,835	46	0.5%	38.2	50.5%	16.8%
Dillingham Census Area	4,847	4,922	-75	-1.5%	29	52.4%	71.6%
Kodiak Island Borough	13,592	13,913	-321	-2.3%	32.5	53.0%	55.3%
Wrangell, City and Borough of	2,369	2,448	-79	-3.2%	46.7	52.4%	16.2%
Denali Borough	1,826	1,893	-67	-3.5%	41.5	54.9%	3.6%
Ketchikan Gateway Borough	13,477	14,059	-582	-4.1%	38.4	51.3%	14.2%
Valdez-Cordova Census Area	9,636	10,195	-559	-5.5%	39.8	53.4%	13.6%
Prince of Wales-Outer Ketchikan Census Area	5,559	6,157	-598	-9.7%	39.9	55.2%	39.7%
Petersburg Census Area	3,815	4,260	-445	-10.4%	41.5	52.0%	16.1%
Lake and Peninsula Borough	1,631	1,823	-192	-10.5%	30.8	52.7%	65.1%
Yukon-Koyukuk Census Area	5,588	6,510	-922	-14.2%	35.3	54.2%	71.4%
Hoonah-Angoon Census Area	2,150	2,574	-424	-16.5%	46	54.2%	41.4%
Yakutat, City and Borough of	662	808	-146	-18.1%	39.7	54.4%	35.8%
Bristol Bay Borough	997	1,258	-261	-20.7%	42.8	54.2%	33.5%

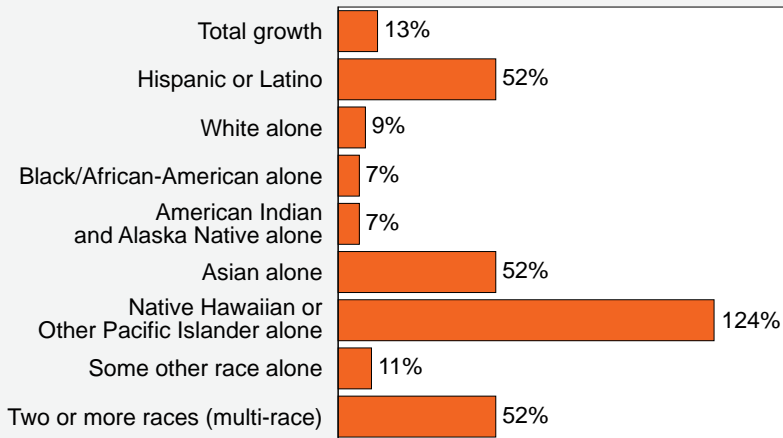
*The large increase in the North Slope Borough population number is primarily due to 2010 Census counts of employees at remote work sites in the borough, who were not counted as residents in past censuses.
Source: U.S. Census Bureau

half of these rural boroughs and census areas losing residents. The Yukon-Koyukuk Census Area lost more than 900 people, while the populations of the Prince of Wales-Outer Ketchikan Census Area, Ketchikan Gateway Borough, and Valdez-Cordova Census Area all declined by 550 to 600 people. The smaller boroughs didn’t lose as many in terms of numbers, but their populations shrank by up to 21 percent, as in the Bristol Bay Borough.

The growth in population shifted Alaska’s race and ethnicity profile. While all race groups in the state gained population, there is now a higher

13 Increase in Ethnic, Racial Diversity

Alaska percent change, 2000 to 2010



Source: U.S. Census Bureau

proportion who identified as solely Asian or Pacific Islander, and a lower percentage identified as white only, Alaska Native only, or black only. However, there was a 52 percent increase in people who claimed two or more races. The number of people who identified as Hispanic also grew. (See Exhibit 13.)

Alaska grew older overall

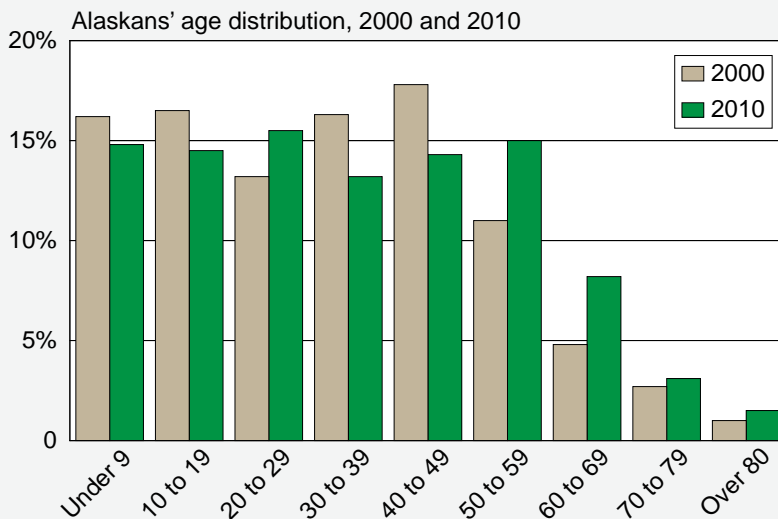
Alaska's median age rose by 1.2 years from 2000 to 2010, reflecting the increasing proportion of baby boomers, or those over age 50. "Echo boomers," or the 20- to 29-year-old children of baby boomers, were the only age group under 50 to increase. (See Exhibit 14.)

The highest median age anywhere in the state was in Haines, at nearly 47, and the lowest was 22 in the Wade Hampton Census Area. It's there that nearly half of the population is under 22, compared to about 30 percent statewide.

At the time of the 2010 Census, the Aleutians had the highest proportion of men in Alaska; the Aleutians East Borough and Aleutians West Census Area are both two-thirds male. Sitka, on the other hand, is the most gender-equal at 50 percent.

14 Age Makeup of the Population

Alaska, 2000 and 2010



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

Green Jobs Come Into Focus

State's first comprehensive survey shows a growing role



Hearing about or reading environmental news has become a part of daily life for most of us. Environmental issues capture radio, television, magazine, and newspaper coverage not only nationally, but in Alaska too. The environment has become an economic driver, promoting research and development along with creating demand for new products and advances in technology. This “greening” effect is changing the way we live and do business.

In most states, both private and public sectors are part of this new trend, especially in the areas of renewable energy and energy efficiency. Policy makers, educators, and economists have begun asking, how important is this growing sector of the economy? How many so-called “green jobs” are there? Is there an adequate workforce trained for these jobs? What education and training will workers need to gain the skills required for future work?

Green Employment by Industry **1** Alaska, 2011

Industry	Estimated green jobs	As % of all green jobs	3rd qtr 2010 employment	As % of industry employment
Agriculture, Forestry, Fishing, and Hunting ¹	205	4.1%	1,208	17.0%
Mining, Quarrying, Oil and Gas	125	2.5%	16,156	0.8%
Utilities	110	2.2%	2,233	4.9%
Construction of Buildings	278	5.6%	5,698	4.9%
Heavy and Civil Engineering Construction	58	1.2%	4,540	1.3%
Specialty Trade Contractors	481	9.7%	9,341	5.1%
Manufacturing	305	6.1%	19,040	1.6%
Wholesale Trade	91	1.8%	6,666	1.4%
Retail Trade	225	4.5%	36,898	0.6%
Transportation and Warehousing	53	1.1%	21,414	0.2%
Information	0	0.0%	6,483	0.0%
Financial Activities	91	1.8%	15,385	0.6%
Professional, Scientific, and Technical Services	1,013	20.4%	14,209	7.1%
Administrative and Support Services	17	0.3%	10,713	0.2%
Waste Management and Remediation Services	367	7.4%	1,626	22.6%
Educational Services, Private	37	0.7%	2,065	1.8%
Health Care and Social Assistance, Private	5	0.1%	39,891	0.0%
Leisure and Hospitality	321	6.5%	37,399	0.9%
Other Services (Except Government)	158	3.2%	12,174	1.3%
Local Government	1,033	20.8%	30,996	3.3%
TOTAL	4,973	100.0%	294,135	

¹ Excludes the self-employed and most commercial fishermen and agricultural workers.

Note: All numbers exclude state and federal employment. Percentages won't sum due to rounding.

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








Although Alaska has a number of renewable energy and energy efficiency projects already built and more are on the horizon, no formal study had been done to measure this emerging part of the economy, until now.

Green jobs defined


























In 2010, the Alaska Department of Labor and Workforce Development's Research and Analysis Section surveyed 4,826 private and local government firms. R&A received a response from 2,979 of these firms, with 375 reporting they employed at least one worker in a green job. R&A defined a green job as providing a good or service in at least one of seven categories:

- Renewable energy

- Energy efficiency
- Greenhouse gas reduction
- Pollution prevention, reduction, and cleanup
- Recycling and waste reduction
- Agricultural and natural resources conservation
- Education, compliance, public awareness, and training

Icons Key	
	Renewable energy
	Energy efficiency
	Greenhouse gas reduction
	Pollution prevention, reduction, and cleanup
	Recycling and waste reduction
	Agricultural and natural resource conservation
	Education, compliance, public awareness, and training

2 Top Green Occupations by Employment Alaska, 2011

Occupation	Estimated green jobs	3rd qtr 2010 employment	% of all green jobs	Categories of work*
Tour Guides and Escorts	440	1,133	8.9%	
Carpenters	275	3343	5.5%	
Fishers and Related Fishing Workers ¹	266	605	5.4%	
Environmental Scientists and Specialists, Including Health	254	401	5.1%	 
Retail Salespersons	247	11,520	5.0%	
Construction Laborers	212	5461	4.3%	
Zoologists and Wildlife Biologists	166	254	3.3%	 
Environmental Science and Protection Technicians, Including Health	158	158	3.2%	 
Geological and Petroleum Technicians	144	649	2.9%	
General and Operations Managers	139	3,780	2.8%	
Roofers	111	324	2.2%	
Environmental Engineering Technicians	93	253	1.9%	
Ship Engineers	93	208	1.9%	
Service Unit Operators, Oil, Gas, and Mining	63	660	1.3%	
Environmental Engineers	60	177	1.2%	
Hazardous Materials Removal Workers	58	327	1.2%	
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	52	1,134	1.1%	
First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	52	125	1.1%	 
Office Clerks, General	51	6,236	1.0%	 
Power Plant Operators	49	441	1.0%	

¹Excludes most commercial fishermen

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

*See the top of this page for icon key.

How many green jobs are there?

R&A identified 145 individual green occupations with reported employment in Alaska. Total green employment was estimated at 4,973 jobs¹ among 1,552 employers during 2010, with green work representing 1.7 percent of Alaska's private and local government employment. (See Exhibit 1.)

The results are consistent with existing research that suggests green jobs do not represent an industry of their own; rather, they are spread across all industries where employers pursue more environmentally sustainable concepts.

The seven categories

Renewable energy accounted for 13 percent (639) of all positions.² These jobs were found primarily in utilities and local government.

Energy efficiency accounted for 39 percent (1,954) of all positions. These jobs were found primarily in construction.

Greenhouse gas reduction accounted for 9 percent (466) of all positions. These jobs were found primarily in utilities and mostly in jobs helping the transition to power sources with less carbon pollution.

Pollution prevention, reduction, and cleanup made up 33 percent (1,620) of all green positions. These jobs were found primarily in waste management and remediation.

Recycling and waste reduction accounted for 32 percent (1,611) of all positions. These jobs were found primarily in waste management and local government, but this category spanned the largest cross-section of industries.

Agricultural and natural resources conservation accounted for 26 percent (1,313) of all positions. These jobs were found primarily in agriculture and in professional and scientific services.

Education, compliance, public awareness, and training accounted for 35 percent (1,740) of all positions. These jobs were found primarily in professional and scientific services.

Shades of green

Most workers in green jobs don't spend 100 percent of their time producing a green product or service.



Angoon residents install a solar power panel on a home as part of the Sustain Angoon Project. Photo courtesy of Central Council, Tlingit and Haida Tribes of Alaska.

Survey data support the idea of "shades of green." Many workers have accepted new environmentally conscious roles that supplement their primary workload. In other cases, workers have found themselves in essentially new occupations where the green work differs significantly from that of their nongreen counterparts.

By taking the average percentage of time workers in an occupation spend on green tasks, R&A estimated the various shades of green among industries and occupations. The results show that 8 percent of green occupations involved 50 percent or more time on average performing work in one of the green categories.

Industries

The largest concentrations of green jobs were in local government at 1,033 jobs (20.8 percent); and in professional, scientific, and technical service organizations at 1,013 jobs (20.4 percent).

Among industries, local and tribal governments have the largest number of green jobs. In a rural community, people often wear many hats in addition to their regular jobs. It is not unusual to find seemingly unlikely combinations, such as cooks who also run the community compost program.

The Environmental Protection Agency's Indian General Assistance Program had a big impact in Alaska by providing funds for tribal governments to address solid and hazardous waste management, recycling,

3 Top Green Jobs by Green Score

Alaska, 2011

Occupation	Estimated green jobs	3rd qtr 2010 employment	Green score	Categories of work**
Environmental Science Teachers, Postsecondary	*	*	10	
Wind Turbine Service Technicians	*	*	10	
Materials Scientists	*	*	9	
Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	*	*	8	
Environmental Science and Protection Technicians, Including Health	158	158	8	
Zoologists and Wildlife Biologists	166	254	7	
Boilermakers	30	44	5	
Conservation Scientists	23	28	5	
Foresters	*	*	5	
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	14	30	5	
Power Distributors and Dispatchers	17	34	5	
Ship Engineers	93	208	5	
Chemical Engineers	40	48	4	
Environmental Scientists and Specialists, Including Health	254	401	4	
Fishers and Related Fishing Workers ¹	266	605	4	
Environmental Engineers	60	177	3	
Farm and Home Management Advisors	*	*	3	
First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	52	125	3	
Geological and Petroleum Technicians	144	649	3	
Natural Sciences Managers	17	28	3	
Sales Engineers	20	45	3	
Tour Guides and Escorts	440	1,133	3	
Travel Guides	*	*	3	
Biological Technicians	7	59	2	
Economists	*	*	2	
Environmental Engineering Technicians	93	253	2	
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	13	65	2	
Logging Equipment Operators	11	50	2	
Roofers	111	324	2	
Soil and Plant Scientists	*	*	2	
Training and Development Specialists	32	156	2	

¹Excludes most commercial fishermen.

An asterisk (*) means the data are suppressed due to confidentiality and/or reliability reasons.

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

**See page 16 for icon key.

Green Occupations With Special Requirements

By training category, Alaska, 2011

4

Training category	% reported	Examples
Renewable Energy Certification	3.2%	Wind Turbine Operation and Maintenance (O&M), Calibrating solar panels
Cleanup and Abatement Certification	15.5%	HAZWOPER Oil Spill Response Training
Equipment Operators License/CDL	4.9%	Class A CDL Hazardous Materials Endorsement (HME)
Energy Efficient Construction/LEED (Weatherization)	16.4%	LEED Certified Building Energy Efficiency Standard (BEES)
Other Certification	10.4%	Certified Erosion and Sediment Control Lead (CESCL), Certified Forester
Prior Experience/On-the-Job Training	17.8%	Organic Farming Techniques, Knowledge of Regulations

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

and renewable energy.

Professional and scientific services came in a close second for number of green jobs. Work in this industry is broad and instrumental in development of renewable energy, energy efficiency, and sustainability education.

The highest concentration of green jobs was in the waste management and remediation industry. Its percentage of statewide employment is one of the smallest, but occupations in this sector are critical to supporting the state's environmental health. Many of this industry's jobs are fundamentally green because they deal overwhelmingly with handling waste and mitigating the effects of pollution.

Green jobs are found across almost all industries, but this survey didn't uncover any in the information industry, and found few in health care and administrative support. These results are in line with other states' research.

Occupations

R&A asked employers to identify occupations that fell into at least one of the seven green categories. Those who responded reported:

- The total number of workers in these jobs
- How many performed green work
- The percentage of time each employee spent doing green work
- The green categories of work performed

By employment numbers, the top 25 green occupations represent 66 percent of green employment in the state. Tour guides and escorts are the largest

occupation by green employment. (See Exhibit 2.) Alaska has a highly seasonal tourism industry that depends on the state's natural beauty and resources. The survey shows that slightly less than 38 percent of tour guides and escorts educate the public on sustainable practices and increase public awareness of sustainability concepts.

As a major occupational group, construction and extraction occupations have the largest total employment and include eight of the top 25 green occupations. This result matches other states' data, and reflects a subset of the construction industry that focuses on home weatherization and energy efficiency upgrades.

The green occupations with the highest employment fall primarily into the energy efficiency category, which is followed closely by education.

Green score

An occupation's green score is the weighted average of the percentage of time spent on green activities within a given occupation. The numbers are rounded up and indexed between 1 and 10, with 10 representing 100 percent of work qualifying as green, 9 representing 90 percent, and so on.

Thirty-five green occupations scored greater than 2. (See Exhibit 3.) Occupations with the most time spent on green activities (for example, wind turbine technicians) often have the lowest total employment.

It is also important to look at an occupation's green employment percentage to assess whether green is prevalent throughout the group or in just a fraction, represented by a few companies producing a

specific green product. This distinction is useful for determining how to discuss and target green occupations in the state.

Carpenters and construction laborers are two occupations ranking high in green employment and low on percentage of time spent in green activities. Both are large occupation groups doing important home weatherization work; however, targeting all of these positions for training may not be the best approach. It might make more sense to focus on businesses employing carpenters or construction laborers whose primary purpose is a green product or service.

On the other end of the spectrum, a wind turbine service technician's work is 100 percent green. Even though employment in this occupation is extremely low, any training would go directly toward producing green goods and services.

When grouped by green score, occupations are primarily performing work in the agriculture and natural resources category, followed closely by pollution reduction, then education.

Taken together, the employment estimates and green scores provide a more robust look at the effects of green work in Alaska. Jobs with high employment and low green activity, as well as jobs with low employment and high activity, are both critical to development of the state's green infrastructure. Understanding their differences will increase the efficacy of developments targeting these two groups and any combination.

Training, skills, and certifications

Employers reported that 46 percent of green occupations require special skills, certificates, or licenses to perform the work. (See Exhibit 4.) This survey did not determine whether these requirements are a condition of hire.

About 3 percent of green jobs required renewable energy certification or training, and these requirements were primarily in the utilities and local government industries. Employers reported that 5 percent of green jobs required an equipment operator or commercial driver's license. A CDL was often paired with a Hazardous Materials Endorsement.

By far the most prevalent certification reported was the Hazardous Waste Operations and Emergency Response Standard, or HAZWOPER. Cleanup and abatement certification was required by 15.5 per-

cent of green occupations, with the HAZWOPER certification accounting for approximately half of the responses within the category. Energy efficient construction and certification in Leadership in Energy and Environmental Design, or LEED, was the largest specific requirement reported, at 16 percent of all occupations.

Other certifications at 10 percent and prior experience or on-the-job training at 18 percent captured a wide breadth of requirements that did not contain enough responses to stand on their own. Other certifications included occupations requiring a bachelor's degree specific to green work. Exhibit 4 provides examples of reported requirements.

Recruiting green workers

Recruiting and retaining green workers is not currently an issue for 80 percent of all green jobs. Employers who have had difficulty cite a lack of workers in Alaska (6 percent), a lack of required green skills (4 percent), and other reasons (4 percent).

As a group, green occupations have a nonresident hire rate of 16 percent, compared to 20 percent across all private and local government employment. Occupations with the most difficulty recruiting due to lack of workers in Alaska usually reported nonresident hire rates above the rate for all green occupations.

These data support the conclusion that green jobs are an emerging component across all industries and occupations in Alaska. In some cases, workers have been doing green work without that previous classification, and their industries are well established. In other cases, occupations such as power plant operators integrate investments in renewable resources while supporting existing traditional power generation infrastructure.

The Alaska Green Jobs Report is available in its entirety on R&A's Web site: <http://labor.alaska.gov/research/greenjobs/greenjobs.htm>. The full report includes additional information, methodology, and a complete listing of the 145 occupations in which Alaskan employers reported green employment.

Notes

¹Except where otherwise noted, all employment references in this report only reflect private and local government employment. See the methodology appendix and the state government chapter in the full report online for a discussion of the challenges of reporting public green employment.

²An employer can classify workers in more than one category. The sum will exceed the total number of green jobs.

Employment Scene

Unemployment rate at 7.7 percent in July

Alaska's seasonally adjusted unemployment rate for July was 7.7 percent, up slightly from June's revised rate of 7.5 percent. The comparable national rate was 9.1 percent.

The unemployment rates for Alaska and the nation are both lower than they were a year ago, but neither rate has changed much during 2011. The state's jobless rate is still above its 10-year average of 7.1 percent, although it remains considerably healthier than the national rate. July also marks the 33rd straight month that the state's jobless rate has been lower than the nation's.

Alaska hits record, but nation scrambles to catch up

In terms of jobs, the contrast between Alaska and the nation is even more pronounced. Although employment in the nation began to recover in 2010 and has continued to improve modestly this year, the July employment number of 130.9 million puts the nation at 2004's levels — that means the U.S. has a long way to go in making up those job losses.

In Alaska, though, 2011 represents an all-time high, with July employment at 355,100. With the exception of one year, employment in Alaska has grown every year since 1988. That exception was 2009, the tail-end of the national recession, when state employment declined by four-tenths of a percent. However, Alaska made up those small losses promptly in 2010, then surpassed them.

Alaska a good place to find work

For the average job seeker in Alaska, this means it's been easier to find a job here than in most other places in the country for the last three years



— and this has not gone unnoticed. The July issue of *Forbes* magazine deemed Anchorage the third-best mid-sized city for jobs in the United States. Commentary touting Alaska's above-average job market has been common. While Alaskans may hope to continue earning this distinction, the state shouldn't take its good fortune for granted.

July is the peak month for jobs

The not seasonally adjusted jobless rates fell in every region in the state in July, as July is frequently the top month for economic and labor force activity in Alaska. Construction, seafood processing, and the visitor industry hit or approach their peak this time of year. Six areas' rates were below 5 percent — the lowest was Bristol Bay at 1.1 percent. Eight areas had double-digit unemployment rates, with Wade Hampton Census Area the highest at 24.6 percent. Wade Hampton's annual unemployment rate has topped 20 percent in five of the past 10 years.

2 Statewide Employment

Nonfarm wage and salary

	Preliminary		Revised		Year-Over-Year Change		90% Confidence Interval	
	7/11	6/11	7/10	7/10	7/10	7/10	Low	High
Alaska								
Total Nonfarm Wage and Salary¹	355,100	349,500	348,200	6,900	-483	14,283		
Goods-Producing ²	61,500	53,000	58,600	2,900	16	5,784		
Service-Providing ³	293,600	296,500	289,600	4,000	-	-		
Mining and Logging	17,400	17,000	16,400	1,000	207	1,793		
Mining	16,700	16,500	16,000	700	-	-		
Oil and Gas	13,600	13,500	13,300	300	-	-		
Construction	19,100	18,900	19,600	-500	-3,083	2,083		
Manufacturing	25,000	17,100	22,600	2,400	1,406	3,394		
Seafood Processing	17,700	10,800	18,800	-1,100	-	-		
Trade, Transportation, Utilities	69,300	68,100	67,400	1,900	-472	4,272		
Wholesale Trade	6,700	6,500	6,700	0	-556	556		
Retail Trade	37,900	37,600	37,200	700	-1,328	2,728		
Food and Beverage Stores	6,600	6,500	6,700	-100	-	-		
General Merchandise Stores	10,300	10,400	10,200	100	-	-		
Transportation, Warehousing, Utilities	24,700	24,000	23,500	1,200	162	2,238		
Air Transportation	6,400	6,300	6,100	300	-	-		
Truck Transportation	3,700	3,600	3,400	300	-	-		
Information	6,600	6,500	6,500	100	-481	681		
Telecommunications	4,500	4,400	4,300	200	-	-		
Financial Activities	15,000	14,900	15,400	-400	-2,343	1,543		
Professional and Business Services	28,300	28,000	27,600	700	-1,093	2,493		
Educational⁴ and Health Services	42,400	43,100	41,800	600	-668	1,868		
Health Care	31,700	31,800	30,300	1,400	-	-		
Leisure and Hospitality	41,300	39,100	38,100	3,200	1,163	5,237		
Accommodations	8,300	8,100	10,900	-2,600	-	-		
Food Services and Drinking Places	24,500	23,400	21,700	2,800	-	-		
Other Services	11,600	12,100	11,900	-300	-3,476	2,876		
Government	79,100	84,700	80,900	-1,800	-	-		
Federal Government ⁵	17,800	17,700	18,900	-1,100	-	-		
State Government	24,900	25,700	25,000	-100	-	-		
State Government Education ⁶	6,000	6,400	6,000	0	-	-		
Local Government	36,400	41,300	37,000	-600	-	-		
Local Government Education ⁷	17,800	23,100	18,100	-300	-	-		
Tribal Government	3,900	3,900	4,200	-300	-	-		

4 Regional Employment

Nonfarm wage and salary

	Preliminary		Revised		Changes from		Percent Change		90% confidence interval	
	7/11	6/11	7/10	6/11	7/10	6/11	7/10	Low	High	
Anch/Mat-Su	176,200	178,700	176,200	-2,500	0	-1.4%	0.0%	-3,552	3,552	
Anchorage	40,700	40,500	40,500	200	200	0.5%	0.5%	-2,315	2,715	

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 1, 2, and 3: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Department of Labor, Bureau of Labor Statistics

Sources for Exhibit 4: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Department of Labor, Bureau of Labor Statistics, for Anchorage/Mat-Su

3 Unemployment Rates

Boroughs and census areas

	Prelim.		Revised	
	7/11	6/11	7/10	7/10
SEASONALLY ADJUSTED				
United States	9.1	9.2	9.5	
Alaska Statewide	7.7	7.5	7.9	
NOT SEASONALLY ADJUSTED				
United States	9.3	9.3	9.7	
Alaska Statewide	6.9	7.8	7.0	
Anchorage/Mat-Su Region	6.5	7.2	6.8	
Municipality of Anchorage	6.0	6.7	6.5	
Matanuska-Susitna Borough	8.1	8.9	7.9	
Gulf Coast Region	7.4	8.3	7.2	
Kenai Peninsula Borough	7.8	8.7	7.8	
Kodiak Island Borough	6.4	7.4	6.1	
Valdez-Cordova Census Area	6.3	7.4	5.8	
Interior Region	6.8	7.6	6.6	
Denali Borough	4.1	4.4	3.6	
Fairbanks North Star Borough	6.1	7.0	6.2	
Southeast Fairbanks Census Area	10.1	10.4	8.7	
Yukon-Koyukuk Census Area	17.7	16.0	14.2	
Northern Region	10.2	10.9	9.9	
Nome Census Area	14.4	14.5	14.8	
North Slope Borough	5.0	5.1	5.0	
Northwest Arctic Borough	14.5	16.3	12.7	
Southeast Region	5.8	7.0	5.8	
Haines Borough	5.0	6.7	4.6	
Hoonah-Angoon Census Area ¹	11.0	13.1	9.4	
Juneau, City and Borough of	4.7	5.4	5.0	
Ketchikan Gateway Borough ¹	5.6	6.9	5.4	
Petersburg Census Area ¹	7.4	9.0	-	
Prince of Wales-Hyder Census Area ¹	12.7	15.5	-	
Prince of Wales-Outer Ketchikan CA ¹	-	-	12.7	
Sitka, City and Borough of ¹	4.9	6.4	5.0	
Skagway, Municipality of ¹	2.8	3.1	2.0	
Wrangell, City and Borough of ¹	5.4	7.6	-	
Wrangell-Petersburg Census Area ¹	-	-	7.1	
Yakutat, City and Borough of	7.1	8.9	7.8	
Southwest Region	10.6	13.2	10.0	
Aleutians East Borough	7.7	11.1	6.1	
Aleutians West Census Area	5.6	7.4	5.4	
Bethel Census Area	15.3	16.8	15.0	
Bristol Bay Borough	1.1	2.0	1.0	
Dillingham Census Area	8.1	11.0	6.9	
Lake and Peninsula Borough	4.5	6.6	4.3	
Wade Hampton Census Area	24.6	23.4	22.8	

¹ Because of the creation of new boroughs, this borough or census area has been changed or no longer exists. Data for the Municipality of Skagway and Hoonah-Angoon Census Area became available in 2010. Data for the City and Borough of Wrangell, Petersburg Census Area, and Prince of Wales-Hyder went into effect in January 2011. Prior to January, data were published for Wrangell-Petersburg Census Area and Prince of Wales-Outer Ketchikan Census Area.

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 has 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, the 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 <http://www.bls.gov/sae/cesprocs.htm>.

For more current state and regional employment and unemployment data, visit our Web site: laborstats.alaska.gov

Employer Resources

Employers can hire hardworking leaders at November Veterans Job Fair

The Alaska Department of Labor and Workforce Development will hold its annual Veterans Job Fair on Nov. 2 from 10 a.m. to 3 p.m. at the University Center in Anchorage. The annual event coincides with "Hire a Veteran Month" in Alaska.

Employers with open positions throughout Alaska are encouraged to attend, and there is no cost to recruit at the job fair. More than 1,000 veterans, their spouses, and active-duty service members attended the job fair last year.

Some of the benefits of hiring veterans are:

- **Work ethic:** Members of our armed services know their success depends on their teammates and as a result, their work ethic is strong. Further, men and women who have served in the military are used to working long hours in nontraditional environments.
- **Teamwork:** Veterans understand how genuine teamwork grows out of a responsibility to one's colleagues, and that diverse individuals can work together to achieve common goals.
- **Leadership:** Veterans are put into leadership roles early in their service, often in the most trying circumstances. Veterans are trained to lead by example as

well as through direction, delegation, motivation, and inspiration.

- **Background and security clearance:** More than 90 percent of military personnel have had background checks for various levels of security.

The U.S. Chamber of Commerce partnered with the U.S. Department of Labor's Veterans' Employment and Training Service to launch "Hiring Our Heroes" in March of this year. This is a nationwide effort to help veterans and their spouses find meaningful employment, and to improve public-private sector coordination in the communities to which veterans return.

The job fair is co-sponsored by Morris Alaska Media Group; University Center and Furniture Enterprises of Alaska, Inc.; University of Alaska Anchorage; Princess Tours; U.S. Chamber of Commerce; Anchorage Chamber of Commerce; VETS; and Employer Support of The Guard and Reserve.

The "Hiring Our Heroes: Veterans Job Fair" is for veterans, transitioning service members, the National Guard, the reserve, and spouses. Contact the Alaska Department of Labor's Business Connection at (907) 269-4777 for more information and to reserve a booth.

A Safety Minute



Wind turbine owner-operators must ensure green jobs are safe jobs

More than 35 states, including Alaska, now use some form of wind power. Alaska completed its first utility-scale wind turbine on Kodiak Island in the summer of 2009. The Alaska Pillar Mountain Wind Farm, which consists of three G.E. SLE 1.5 MW turbines on 80-meter towers, has cut the area's use of diesel by 9 percent.

Wind energy workers are exposed to hazards that can cause death or serious injuries including falls, crushing injuries, and severe burns from electrical shocks, arc flashes, or fires.

On Aug. 8, the Occupational Safety and Health Administration and the American Wind Energy Association formed an alliance focused on preventing worker exposure to electrical, crane, and fall hazards in the wind energy industry. OSHA is committed to helping workers and employers ensure that green jobs are safe jobs.

In April, a Minnesota-based wind-power firm was hit with

\$378,000 in OSHA penalties when a worker suffered third-degree burns from an arc flash. With OSHA likely to tighten safety enforcement in the wind sector in the future, turbine owner-operators are advised to stay a step ahead on preventive measures. These include fall protection, electrical safety and lock-out/tag-out procedures, and safety measures for cranes, rigging, and confined spaces.

Wind farm operators must also prepare detailed emergency response programs in case of an accident, and should build relationships with local emergency response units.

Safety and health consultants with the Alaska Department of Labor and Workforce Development are available to help employers identify, evaluate, and control workplace hazards. For more information, please call (800) 656-4972. For more on OSHA wind-farm standards and compliance, visit <http://www.osha.gov/dep/greenjobs/windenergy.html>.

