

# Ten-Year Industry Forecast

by Jeff Hadland, Economist,  
and Jack Cannon,  
Research Analyst

## Look for 43,000 more jobs from 2002 to 2012

**T**he number of jobs in Alaska is expected to grow to 335,500 by 2012, an increase of more than 43,000. The forecast can be characterized by continued growth in the near term, with accelerated expansion near the end of the forecast period. The quickening growth pace during the coming ten years is in part the result of one of the major assumptions in this forecast—that construction of an Alaska gas pipeline will start in 2012.

Alaska's non-military government sector, which represents more than one fourth of wage and salary employment, is expected to decline slightly during the forecast period. Virtually all of the 43,000 anticipated job growth is expected in the private sector. Overall growth is expected to be about 14.8 percent, but not all industries will grow at that pace. The largest number of new jobs is expected to be found in Health Care & Social Assistance and Trade, both of which are impacted by Alaska's growing population, greater availability of goods and services that allows consumers to buy locally rather than Outside, and the growth of Alaska's goods producing or basic industry sectors. Other bright spots include Construction, Mining, and industries supported by visitors, including Transportation and Accommodation.

An average of 4,000 or more new jobs per year is a large number for Alaska. That number should be put in perspective. Each year more than 10,000 young Alaskans enter the working age population. Fortunately for new jobseekers, Alaska also has an aging population, a high migration rate, and significant turnover, so there are many employment opportunities for Alaska workers with the right skills. Although wage and salary jobs numbered fewer than 300,000 in 2003, there were approximately 240,000 new hires. Growth in the number of new jobs, coupled with normal turnover, will result in a wide variety of employment opportunities for the unemployed, under-employed, and recent graduates of Alaska schools.

### Mining including Oil & Gas

Oil & gas employment, including support activities for mining, made up more than 85 percent of the state's total mining industry employment in 2002. Though oil & gas employment is expected to grow modestly as the decade unfolds, its hefty percentage of total mining employment may slip a bit to metal mining activities. Total mining is expected to grow 19.4 percent, with metal mining growing more than 50 percent.

Drilling for oil in Alaska is expensive. Though oil prices at the high levels of recent weeks may boost activity, smaller, independent companies are likely to be the primary players in developing new fields.

Production on the North Slope peaked at 2.2 million barrels per day in 1988, declined to 1.1

million barrels in 1999, and is projected by the Alaska Department of Revenue (DOR) to fall to about 408,000 in 2021. DOR expects that other fields, mostly in the National Petroleum Reserve-Alaska, will offset declining production on the North Slope to yield flat or slightly declining total production by the end of the forecast period. DOR is projecting half a dozen new fields to be in production by 2012.

## 1 Statewide Employment Forecast 2002 to 2012

	2002	2012	Change from 2002 - 2012	Percentage Change
Total Wage and Salary Employment**	292,200	335,500	43,300	14.8%
Agriculture, Forestry	1,100	1,400	300	27.3%
Mining	10,300	12,300	2,000	19.4%
Oil and Gas Extraction	2,800	3,400	600	21.4%
Other Mining (Metal, Coal)	1,400	2,200	800	57.1%
Support activities for Mining	6,000	6,800	800	13.3%
Utilities	1,900	2,100	200	10.5%
Construction	15,900	18,400	2,500	15.7%
Manufacturing	11,200	10,800	-400	-3.6%
Seafood Processing	7,400	6,700	-700	-9.5%
Wood Product Manufacturing	300	600	300	100.0%
Trade	40,100	50,100	10,000	24.9%
Wholesale Trade	6,200	6,800	600	9.7%
Retail Trade	33,900	43,300	9,400	27.7%
Transportation and Warehousing	19,200	25,100	5,900	30.7%
Information	7,200	7,300	100	1.4%
Financial Activities	12,500	13,800	1,300	10.4%
Professional, Scientific, Technical Svcs	10,700	12,000	1,300	12.1%
Management of Companies and Enterprises	1,400	1,700	300	21.4%
Administrative and Support Services	9,400	9,700	300	3.2%
Waste Management and Remediation	1,200	1,800	600	50.0%
Educational Services	2,200	2,500	300	13.6%
Health and Social Services	30,100	39,800	9,700	32.2%
Arts, Entertainment, and Recreation	4,000	5,200	1,200	30.0%
Accommodation	7,300	9,100	1,800	24.7%
Food Services and Drinking Places	17,700	22,200	4,500	25.4%
Repair and Maintenance	2,600	2,700	100	3.8%
Personal and Laundry Services	2,000	2,000	0	0.0%
Religious, Grantmaking, Civic, and Professional	6,500	7,900	1,400	21.5%
Private Housholds	200	300	100	50.0%
Federal Government	16,800	17,000	200	1.2%
State Government	23,900	23,700	-200	-0.8%
Local Government*	36,800	36,600	-200	-0.5%

\* Some private sector functions operated by local governments are included in other industry sectors, so local government totals will differ from other published series. \*\* Rounding will affect sums.

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

At anticipated production levels, oil and gas related employment is forecast to grow at 21.4 percent for the forecast period. Direct employment in the oil industry is forecast to be 10,200 in 2012, an increase of 1,400 over 2002. If recent high oil prices continue and production increases, the result could be even stronger employment growth. The forecast does not assume any oil development in the Arctic National Wildlife Refuge during the forecast period.

Mineral prices have been relatively high for the past few years and this has spurred excitement among hard rock miners. The Red Dog Mine north of Kotzebue is showing a profit on its production of lead and zinc after years of losses. Greens Creek, near Juneau, is producing and beginning a three-year exploration program.

Several new mines are taking the necessary steps to be in production within the forecast period. The Kensington Mine, near Juneau, which could employ 225 workers for 10 to 15 years, and Pogo, northeast of Delta Junction, expected to employ 300 for 12 years, could come on line fairly early in the forecast period. Other possibilities are Rock Creek near Nome and Nixon Fork near McGrath. Donlin Creek in southwest Alaska and the Pebble Gold and Copper Project north of Iliamna—the largest known gold deposit and second-largest copper deposit in North America—are large projects that could produce later in the forecast period.

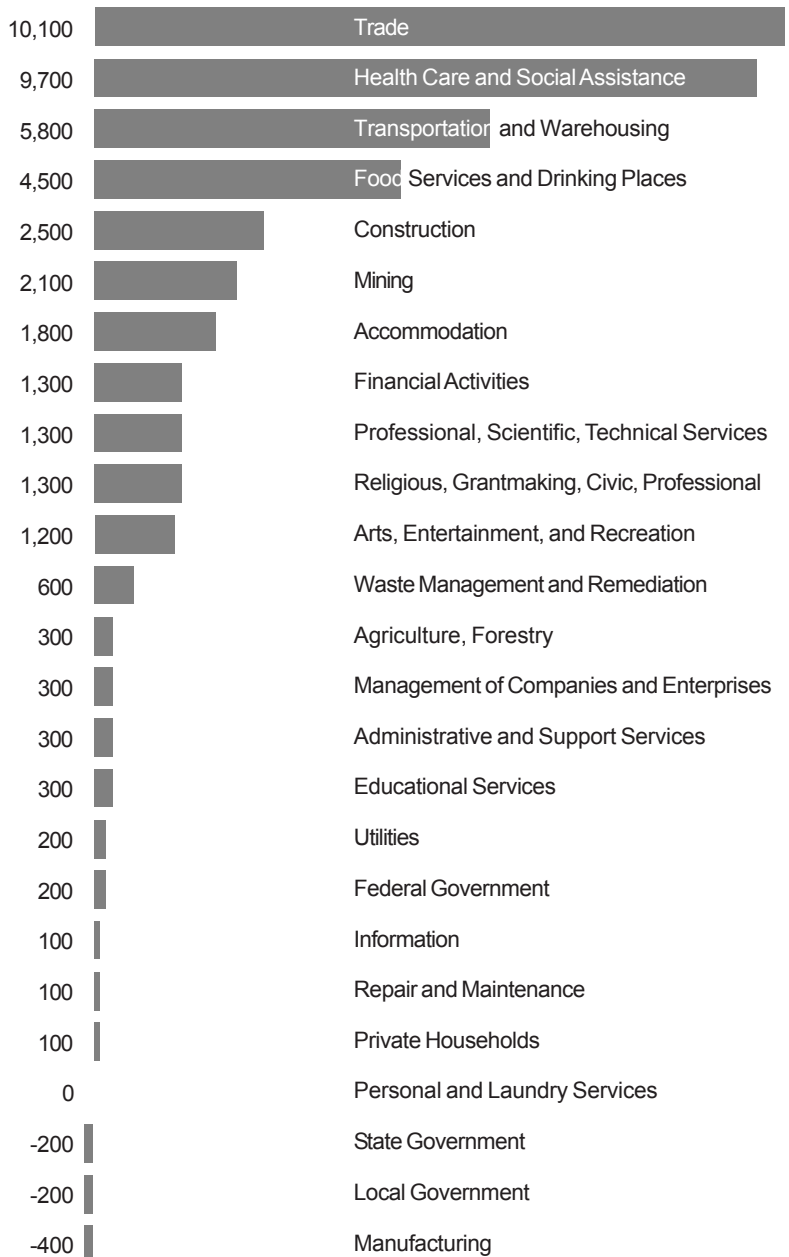
Metal mining employment is expected to enjoy excellent growth but employment gains will be partially offset by the closure of Fort Knox and other mines, which is expected within the forecast period.

### Gas pipeline construction

Although timing of the gas pipeline is difficult to predict, the assumption is that initial construction will start at the very end of the forecast period. It takes not only welders, heavy equipment operators and truck drivers to build a pipeline, but also food

service workers, security, and surveyors. Direct and indirect gas line related employment is forecast to average between 4,000 and 5,000 jobs in 2012. The majority of these jobs will be in the Mining (Oil and Gas/Mining Support) and Construction industries, but a wide variety of

## Projected Employment Change 2002 to 2012, selected industries **2**



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

other industries including Transportation, Engineering, Trade, and Accommodation will also benefit. Major impact from the gas pipeline on Alaska's economy and labor market will not occur until after this forecast period.

### Construction

The Construction industry will grow at about the same pace as the Alaska economy as a whole. It will be affected by two major factors: overall federal construction project funding and initial construction activity of the gas pipeline. Non-

gasline activity is expected to level off or slow as defense projects and major roads and bridges are completed. Overall, Alaska's share of the federal construction project spending pie is expected to decline by the end of the forecast period.

The Construction industry as a whole has been trending generally upward since about 1987, when it began to recover from the recession of the mid-80s. Federal money for public capital projects and low interest rates for residential construction have combined to make construction one of the bright spots of the Alaska economy.

Public funding for the next decade will depend largely on the ability of the Alaska congressional delegation to continue to find funding for Alaska projects. The Denali Commission has helped build infrastructure in Alaska and is expected to continue to create jobs especially in the rural areas of the state.

Robust residential construction depends on economic growth and low interest rates. As the national economy continues to recover, interest rates will likely rise from historic lows, and thus slow residential construction somewhat.

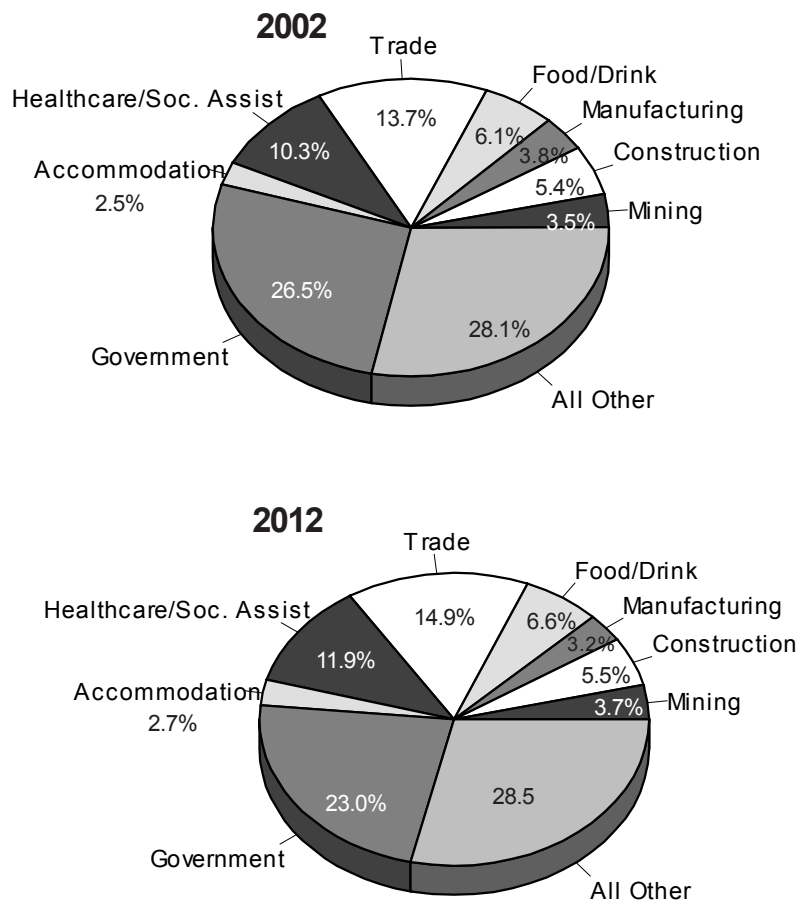
A number of large construction projects could help employment through the decade. Increased military presence would encourage construction on bases; several schools are planned; and dock expansions in Anchorage and Port MacKenzie will add to construction employment. The Gravina Island bridge in Ketchikan and other possible large infrastructure projects are assumed to occur within the forecast period.

Construction is expected to add about 2,500 jobs over the forecast period.

### Manufacturing

Seafood processing currently makes up the bulk of manufacturing employment in Alaska. Overall, slight declines in seafood processing employment

## 3 Employment by Industry 2002 and projected 2012



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

are anticipated over the ten-year period. A small increase in timber related manufacturing jobs is expected.

As Alaska's share of the salmon market has declined, so too has salmon processing activity. Plant clos-ings, consolidations, more efficient processing methods, and better utilization of workforce have resulted in fewer processors and less processor employment.

Bright spots in Alaska include the strong groundfish fishery. This is the largest fishery in the world and accounts for 30 percent of the nation's total catch. A stronger yen and improved Asian economy should increase demand and price for Alaska caught fish. Processors continue to look for ways to improve quality, to put an Alaska imprint on the product, or in some other way to add to its value.

### Trade, Food Service, and Accommodation

Population growth, visitor growth, and more purchases at home rather than outside the state have spurred growth in these industry sectors over the last ten years, and will continue to do so over the next ten. The less money that leaks out of the Alaska economy, the more jobs are created in the state. This can have a significant impact on overall employment and has been a major factor in employment growth over the last several years. Continued rapid growth in the number of visitors to Alaska will help spur faster than average growth in the Transportation, Food Services, and Accommodation sectors.

Growth in retail trade has been solid the last ten years and should continue through the next decade. Anchorage, with 40 percent of the state's population, supplies more than half of the jobs for this industry. Future growth in the state's largest city may be moderated by a market nearly full of big-box stores (Costco, Wal-Mart, etc.) and by the growth of neighboring Mat-Su. Retail

tends to follow population and Mat-Su experienced nearly 70 percent employment growth from 1992 to 2002.

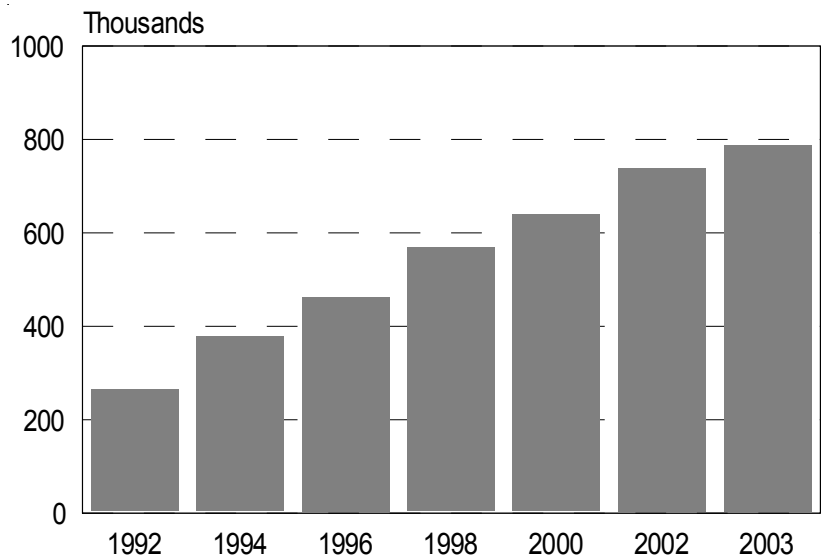
The retail trade industry grew at 23.1 percent from 1992 to 2002 and is expected to grow 27.7 percent by 2012.

### Visitor industry

The visitor industry is comprised of several sectors heavily impacted by visitor expenditures, including Transportation, Retail Trade, Food Services and Accommodation. The visitor industry has been one of the bright spots in the Alaska economy for the last decade. In 2003, over a million and a half tourists visited the state. By 2012, over two million are projected.

Cruise ship travelers are expected to provide most of the growth over the next decade. Large

## Alaska Cruise Ship Passenger Growth has been strong and steady **4**



Source: Alaska Department of Community and Economic Development, and Cruise Line Agencies of Alaska

ships, frequent sailings, and inexpensive fares have made this form of visiting the state popular. More than 800,000 tourists will visit the state by cruise ship in 2004, up more than 50,000 over 2002. (See Exhibit 4.) This upward trend is expected to continue. Besides cruise ship companies, businesses such as independent onshore tour operators and retail shops benefit from these passengers. Roughly the same number of visitors arrive by domestic air during the summer months as by cruise ship.

The traditional core age group targeted for cruise travel is the 61 and over population, usually traveling in twos. This population is expected to increase to over 40 million in 2012 compared to 34 million in 2000. Affordable cruises are also becoming attractive vacation options for younger couples with families. This shift could cause not only a difference in where money is spent—entertainment versus goods—but also how much.

Travel and tourism is not a standard industry classification, so the World Tourism Organization

has developed the Tourism Satellite Account standard as a consistent measure. This measure shows almost 26,000 full-time equivalency jobs in 2002 in core tourism industries. These account for 9.1 percent of all jobs in the state.

## Health Care & Social Assistance

Health Care & Social Assistance has been a steady contributor to the Alaska economy, and one of its stellar performers. The significant investment made in health care facilities now allows Alaskans to meet more of their needs in-state, reducing the need to travel Outside for procedures and creating well paying health care jobs.

In 2002, \$480 million were appropriated for Native health care, much of this translating into jobs. If federal money finds its way to the state at the rate it has in recent years, growth may be higher than expected.

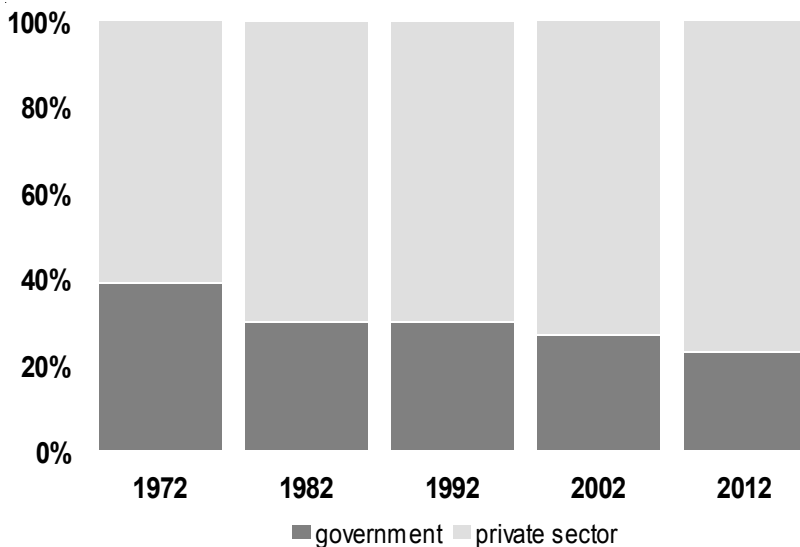
The 65 and over age group in Alaska is projected to grow 40 percent over the next decade, exerting pressure for more health and social services workers. Nearly 40,000 workers are expected in Alaska by 2012, up from 30,000 in 2002. Health Care & Social Assistance employment is projected to grow 32.2 percent by 2012, down from 65.9 percent from 1992 to 2002. Though greater numbers of older Alaskans will certainly need more health services, much of the needed infrastructure and workforce is believed to be in place.

## Transportation and Warehousing

The Transportation industry should enjoy better than average growth as the industry adds nearly 6,000 jobs through 2012.

The air transportation sector will supply the largest number of workers. This forecast assumes that Anchorage, which services aircraft for 90 percent of the cargo flown between North America and Asia, will continue to be a major hub for international air cargo. However, the conversion of a

## 5 Government Employment Declines As percent of total



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



large number of extended range passenger aircraft to cargo could negatively impact air transportation employment.

Tourism will have a positive effect on the industry as more visitors to the state arrive by air and water. While here, tourists will contribute to employment by boarding buses, boats, planes, helicopters, trains, and more to see the state up close. The scenic sightseeing sector will account for 2,400 jobs in 2012, nearly 10 percent of the industry's total employment, nearly double the number in 1992. These gains will be offset somewhat by changes in mail delivery regulations that are expected to hurt some small air carriers.

Assuming no gas line production through 2012, employment will decline in existing oil pipeline transportation as upgrades and automation make delivering oil less labor dependent.

## Government

Workers in the government sector represent an ever-decreasing slice of the employment pie in Alaska. Federal (including civilian military), state, and local government workers declined from 39 percent of Alaska's workforce in 1972 to 27 percent in 2002, and are projected to further decline to 23 percent of the workforce by 2012. (See Exhibit 5.) According to a recent study conducted by the University of Alaska's Institute of Social and Economic Research, federal spending, including that of the uniformed military, supports about half of the jobs in the state.

Uncertain oil prices, anticipated drops in oil production in the North Slope, and a shrinking Constitutional Budget Reserve Fund are forcing the state's legislators, administrators, and citizens to consider cutting services or finding alternative ways of funding Alaska's government.

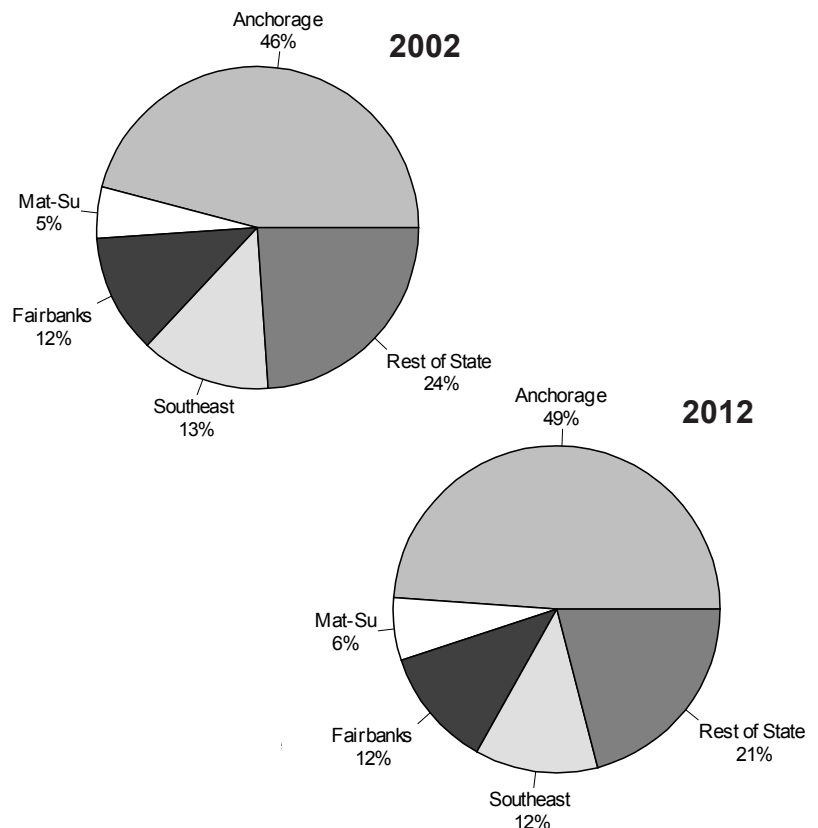
Demographics will play a role in determining government employment for the next ten years. As state employees retire, some positions may go unfilled. At the local level, the population of

school age children is expected to decline through the mid-point of the forecast period, then recover to a slight increase by 2012.

Federal civilian government employment is expected to increase slightly with the addition of the Anti-Ballistic Missile site at Fort Greely and with the Alaska deployment of the Stryker Brigade, anticipated in 2005. The military is one of the largest employers in Alaska. In 2002, 45,300 active duty military and dependents were stationed in Alaska. Almost 40 percent live off-base, creating additional jobs within their local economies.

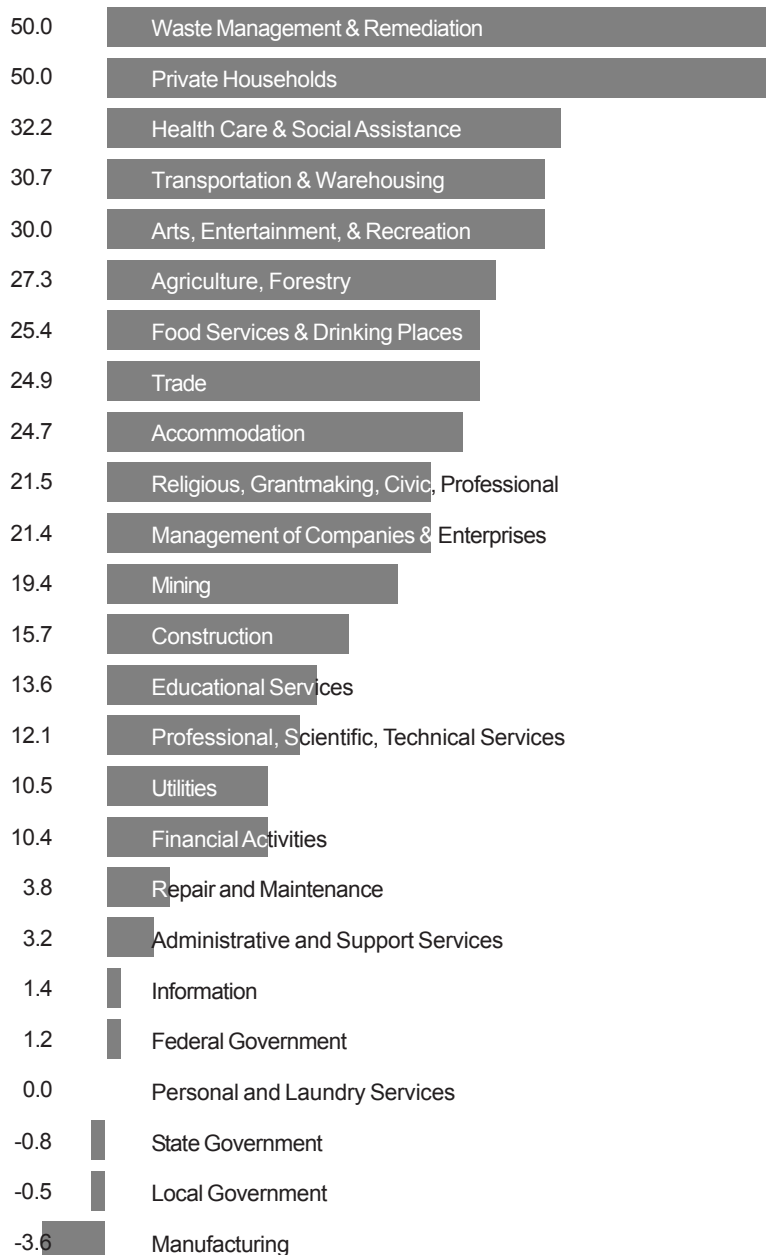
The government sectors are expected to decline slightly or remain flat through 2012. If current very high oil prices continue, state and local

## Employment by Region 2002 to 2012 **6**



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

## 7 Percent Employment Growth Projected 2002–2012



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

government may grow slightly more than projected, but significant growth is unlikely.

### Regional differences

The creation of new jobs will be concentrated in Southcentral Alaska. Fully 55 percent of all jobs will be located in the Anchorage/Mat-Su region in 2012, up from 51 percent in 2002. (See Exhibit 6.) Many of the trends that will define growth for the next decade are already in place. Population growth in Anchorage/Mat-Su will spur industries such as Retail Trade and Healthcare & Social Assistance, while timber and seafood problems limit growth in Southeast.

### Conclusion

Alaska is expected to continue its steady growth during the next ten years. New mineral development, gas pipeline construction, population growth, and strong construction activity will fuel the growth during the coming decade.