

ALASKA ECONOMIC

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November 2000

Fatalities in Alaska's Workplace



Fishing and Aviation at Highest Risk

Alaska Department of Labor
and Workforce Development

Tony Knowles
Governor of Alaska

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Fatalities in Alaska's Workplace

by
Talitha Lukshin
Labor Economist

The majority of deaths in 1999 were from fishing and aviation accidents

At 42 deaths in 1999, the number of fatal work injuries in Alaska inched downward, changing only slightly from the previous year. (See Exhibit 1.)

The Census of Fatal Occupational Injuries (CFOI) showed that nearly 500 workers lost their lives since 1992, an average of one every six days. Last year, smaller numbers of fatal falls, aviation-related fatalities, and homicides were offset with increases in industries such as commercial fishing and logging. The rate remained unchanged from 1998, at 14 deaths per 100,000 workers, with the latest five-year average dropping slightly. (See Exhibit 2.)

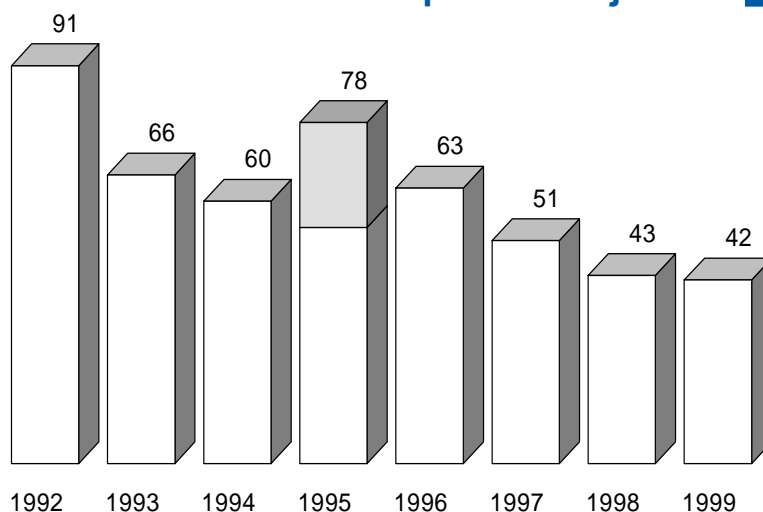
In 1999, nearly three of four fatalities occurred on or near operating vehicles such as fishing vessels; 16 deaths were water vehicle-related, ten were aircraft-related, and five were in other transportation incidents. Of the latter group, three were highway accidents. Occupational deaths caused by violent acts reached a new low. Down by more than half from the prior year, this category accounted for three at-work deaths last year. One police officer was fatally shot after he approached a vehicle to do a welfare check on a man slumped over the steering wheel. Since 1992, seven police officers have died; six were homicides.

Major causes of occupational fatalities in Alaska consistently show striking differences from those seen nationwide. In 1999, aircraft and water vehicle-related events comprise 6 percent of the

national fatal work injuries, but more than 60 percent of the fatalities here. On average, all other event classifications of fatal work injuries were lower in Alaska than in U.S. statistics. (See Exhibit 3.)

According to a Bureau of Labor Statistics analysis of national census data from all fifty states, highway crashes were again the leading cause of on-the-job fatalities during 1999, with one-fourth of the 6,023 deaths. Falls were the second leading cause of death, with slightly over half occurring in

Deaths in Alaska 1992-1999 Census of Fatal Occupational Injuries



Note: 24 deaths in 1995 were related to a single military air crash.

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

the construction industry. Workplace homicides moved to third in 1999, reaching a new low since the start of the census. The drop in homicides was most pronounced in retail trade, down 51 percent from the peak in 1994.

Fishers account for 40 percent of deaths in 1999

The number of fishers killed on the job in 1999 increased to 17, up from 13 in 1998. In all, 13 fishers died in capsizing or sinking vessels, three went overboard, and one was struck by a falling boom and block. Capsize casualties totaled ten,

from five different vessels, including one skiff incident. The sinking of the F/V *Mistress* claimed three lives with no survivors after the vessel apparently broke apart in heavy seas.

In three capsizing incidents that claimed seven lives, icing was cited by the United States Coast Guard (USCG) as a factor contributing to the loss of vessel stability. Five fishers were lost when the 96-foot F/V *Lin J*, a crabbing vessel, capsized in the Bering Sea. The USCG investigation for this incident has not been released. The F/V *Kavkaz*, a 37-foot fiberglass vessel, and F/V *Northern Aurora*, a 30-foot wood vessel, both longliners targeting cod, each lost one of two crewmembers after capsizing. In these two separate incidents two fishers survived in their immersion suits and two did not. In both fatalities it appeared that the zipper failed from lack of periodic maintenance.

The 54-foot longliner F/V *Becca Dawn* capsized and sank when the halibut catch and deck gear shifted after being struck broadside by 20-foot waves. According to the USCG, the piloting crewman triggered the Emergency Position Indicating Radio Beacon (EPIRB) and threw it overboard while the other three crewmen donned survival suits. He then tied a rope attached to the vessel to his waist and dove into the water to retrieve a life raft that had washed overboard without deploying. The vessel sank and the crewman was not recovered. The other three crewmen were rescued within an hour floating 100 yards from the EPIRB. A light attached to one immersion suit helped signal the location of the crew to the approaching USCG helicopter.

In another capsizing, two of three fishers died when their 18-foot set-net skiff overturned. After attaching the net in 3-foot seas, waves came over the stern, filling the boat. The line from the net was thrown off, but a large wave hit, capsizing the boat. None of the three was wearing a flotation device and two perished. According to USCG investigation reports, the crewman who survived climbed onto the partially submerged skiff. He

2 Alaska Incidence Rates 92-99 Census of Fatal Occupational Injuries

Year	CFOI Fatalities ²	CPS Employment ³	Rate per 100,000 ¹
1992	82	261,155	31
1993	64	274,788	23
1994	54	281,417	19
1995	51	280,829	18
1996	61	288,511	21
1997	50	289,735	17
1998	41	298,547	14
1999	41	295,137	14
1992-1996	62	277,340	22
1993-1997	56	283,056	20
1994-1998	51	287,808	18
1995-1999	49	290,552	17

¹ Incidence rate is calculated as $(N/W \times 100,000)$ where N is the number of occupational fatal injuries and W is the number of workers employed, multiplied by a base number of workers, 100,000.

² CFOI counts shown here exclude military personnel, volunteer workers and workers under 16 years of age.

³ Current Population Survey (CPS) employment for the civilian labor force, 16 and older, shows estimates based on a monthly survey of Alaska households. The rates are experimental measures because the CPS data are by place of residence and CFOI fatality data are by place of occurrence. Updated September 11, 2000.

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

held onto the boat until it sank up to his neck, jumped off, treaded water until the skiff surfaced and then climbed on again, repeating the process until help arrived.

One of the three man-overboard casualties occurred when the fisher was washed over by a rogue wave. While setting crab pots, the swell broke over the side of the vessel breaking onto the pot launcher and the crewmen, washing one overboard. Although the crew initially saw the victim in the water, they lost sight of him when the vessel turned to attempt a rescue. In another incident, a fisher was knocked into the water after being hit by a swinging crab pot. A rescue swimmer from the boat went into the water, but was unable to reach the victim before he disappeared underwater.

One fisher was struck and killed when the wire from the vessel's boom and block used to haul a salmon seining net released suddenly, bringing the load down on the crew below. According to the USCG, the cause of the wire failure was excessive wear and corrosion.

Aviation accidents are second leading cause of fatal work injuries

Nearly one of four fatal work injuries in 1999 was related to aviation accidents, making this event the second leading cause of death. In all, ten workers died. Five were unscheduled air transportation pilots and one was a military pilot. Two guides, one the operating pilot, died in an aviation crash. In another incident, a pharmacist piloting his plane for business was killed. Since 1992, 18 guides have died in Alaska, 12 in aviation accidents, six as operating pilots.

Of the five unscheduled air transportation pilots, four were classified as wage or salary employees. Of these four, three were hired within the past year and all were the pilot-in-command. This new-hire pattern is the same as in 1998. Because many of the unscheduled air transportation employers service a specific geographic area, there is the possibility that limited pilot experience in a new area with unfamiliar operational

Fatalities by Type of Accident 3 Census of Fatal Occupational Injuries (CFOI) Alaska and U.S. 1992-1999

	1992	1993	1994	1995	1996	1997	1998	Five Year Average, 1994-1998				1999			
								Alaska		U.S.		Alaska		U.S.	
Total	91	66	60	78	63	51	43	59		6,280		42		6,023	
Water Vehicle	38	21	14	21	26	8	14	17	28%	104	2%	16	38%	102	2%
Aircraft	26	22	10	34	16	19	13	18	31%	304	5%	10	24%	227	4%
Other Transportation	4	4	6	11	6	6	3	6	11%	2,232	36%	5	12%	2,284	38%
Contact with Object	10	4	9	3	4	6	1	5	8%	984	16%	5	12%	1,029	17%
Violent Acts	4	12	6	4	6	6	7	6	10%	1,168	19%	3	7%	893	15%
Falls	-	-	-	1	0	0	4	-	-	686	11%	1	2%	717	12%
Fires & Explosions	0	1	3	0	1	2	1	1	2%	199	3%	0	0%	216	4%
Exposure	6	0	10	3	4	4	0	4	7%	583	9%	-	-	529	9%
Other	-	-	-	1	0	0	0	-	-	21	0%	-	-	26	0%

Event grouping is coded using the Bureau of Labor Statistics Occupational Injury and Illness Classification Structure (OIICS).
- Not publishable

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

complexities, regardless of flight experience in or out of Alaska, may be a contributing factor.

In early September of this year, the National Transportation Safety Board (NTSB) released the probable cause for two of the five air carrier accidents. In both cases, the pilot's continued VFR (visible flight regulations) flight into adverse weather or into instrument meteorological conditions was cited as the probable cause of the accident. In one case, there was an inadvertent stall, and in the other, the pilot failed to maintain control.

From 1990 to 1998, Alaska accounted for 37 percent of all commuter and air taxi accidents in the United States. In the 1990s, Alaska averaged one aviation accident every two days, according to a study by the National Institute of Occupational Safety and Health (NIOSH) field office in Anchorage. The loss of life was high; nearly 400 aviation fatalities occurred in Alaska during the study period.

Towards safer skies

The Capstone program conducted since 1998 by the Federal Aviation Administration in collaboration with the NTSB, the National Weather Service and the NIOSH, has put in place a demonstration information technology system to address the high number of aviation accidents in Alaska. Automated weather information systems, the Global Positioning System (GPS), and terrain avoidance hardware and software are all part of the system. Pilots will be alerted to hazards such as other planes in the air space and rising terrain. Soon, upcoming cloud cover and weather patterns will also be available. The demonstration is currently underway in the Bethel area.

Seven deaths investigated by AKDOL OSH account for 17 percent of CFOI

The Alaska Department of Labor and Workforce Development (AKDOL), Occupational Safety and Health (OSH) has jurisdiction over workplace safety. Fatalities among wage and salary employees are investigated in the absence of primary jurisdiction by another government agency such as the USCG, NTSB, Federal Mine Safety and Health Administration or OSHA.

The seven fatal work injuries investigated in 1999 were reported in four different industries and accounted for 17 percent of the annual census. Two electrocutions were investigated, both in the construction industry and both involving overhead power lines. (See Exhibit 4.) Electricity from an overhead power line arced to a helicopter long line, electrocuting the worker attaching the load. Another electrocution occurred when the operator of a drilling rig raised the mast into overhead power lines.

In all, there have been five electrocutions in eight years involving equipment contact with overhead power lines. The three prior to this year involved a crane, a boom concrete pump truck, and a boom loader, with two reported in the construction industry and one in logging. In three of these cases, the operator in the cab survived the electrical charge. However, the worker touching the equipment, such as when adjusting outriggers, operating controls, or extinguishing the vehicle's burning tires started by the electrical charge, did not survive.

Two of three logging industry fatalities in 1999 were investigated. An equipment operator died when the front-end loader he was operating veered off the road and rolled over. Two cutters were killed after being struck by a falling limb or by a falling tree.

In eight years, 24 loggers have been killed. Seven cutters died felling trees, and single helicopter accidents took five lives in 1992. Three were killed in landslides, some triggered by an uprooted choker tree or digging. In three separate incidents, three loggers were struck and killed by moving vehicles, two when coiling choker wire. A logging truck, a front-end loader, and a forklift were the vehicles or equipment involved.

Summary

Fishing casualties accounted for 40 percent of the fatal work injuries in Alaska—17 lives in 1999. Capsizing vessels, most often caused by icing conditions, claimed ten lives. Immersion suits in working condition helped lessen the loss of life. During the past year three fishers were lost overboard and another was crushed by a falling block and boom.

The second leading cause of occupational death in 1999 was aviation accidents. As in 1998, three of four unscheduled air transportation pilots were newly hired at the time of their fatal crash. The FAA Capstone project currently being demonstrated in Bethel incorporates advanced information systems into air transportation operations. Pilots in the program have access to timely weather, terrain and positioning information using GPS and other information systems.

AKDOL investigated seven of last year's 42 fatal work injuries. Logging fatalities were up, as were electrocutions. As in previous years, workers were in jeopardy when moving around mobile equipment.

Overall, aviation accidents were down and fishing casualties were up. Deaths caused by violent acts reached a new low, although police fatalities continue to average one per year. Despite the unchanged rate of fatal work injuries from 1998 to 1999, the latest five-year moving average did drop slightly.

Accident Investigations by AKDOL OSH, 1999

4

Mining

Worker was crushed between two vehicles when he attempted to hook a moving tracked vehicle to a drilling rig stuck in the snow.

Construction

Avalanche buried a backhoe operator.

Electricity from an overhead power line arced to a helicopter long line, electrocuting the worker attaching the load below.

A drilling assistant leaning against the rig was electrocuted when the operator raised the drill mast into an overhead power line.

Logging

A cutter was struck in the head by a falling limb that was dislodged from above when felling a tree.


An operator was killed after the front-end loader he was driving went off the road and rolled down an embankment.

Trade

A load of conduit fell off a trailer and struck the warehouseman unloading the delivery. The worker had not removed the tarp covering the shipment before cutting several bands securing the load. The load had shifted in transit.

Source: Alaska Department of Labor and Workforce Development, Division of Labor Standards and Safety

Services to swell, mining to shrink, from 1998 to 2008 in Alaska

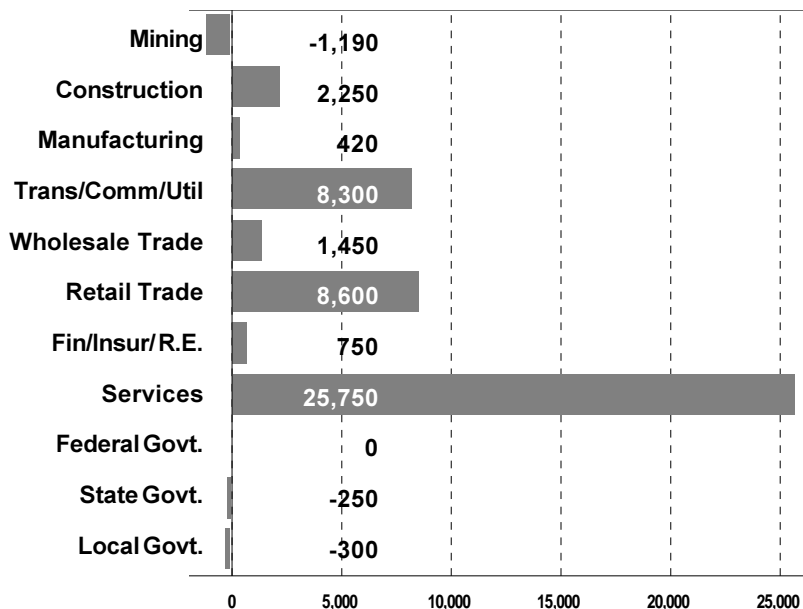
 Read more online here.
(To view the complete Occupational Table)

Occupational employment in Alaska is projected to increase by 16.6 percent, from 292,431* to 341,090,* between 1998 and 2008. The types of jobs created by this growth reflect a variety of economic and technological changes.

Research and Analysis (R&A) has developed projections for more than 500 detailed occupations. The growth rates range from an increase of 97 percent for respiratory therapists to a decline of

nearly 36 percent for wellhead pumpers. Projected employment is analyzed from two perspectives in this article: numerical change and percent change. To get a clear picture of future employment opportunities, both measures must be used. For example, the employment of surgical technologists is projected to grow very rapidly over the 1998–2008 period (81 percent), while adding only 72 new jobs. In contrast, the employment of carpenters, which is expected to grow by only 13 percent, will add 552 jobs—more than seven times as many jobs as surgical technologists.

1 Alaska Employment Growth 1998–2008 forecast



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

Many factors combine to shape employment opportunities. These include the creation of new jobs through economic growth or technological changes, occupational turnover including the need to replace retiring employees, and a shortage of trained and available workers. This article focuses on the growth or decline of jobs resulting from economic or technological changes.

Industry forecast—a snapshot

The industry forecast and occupational forecast for 1998–2008 are companion views of Alaska's economic future. The industry forecast provides the big picture economic assumptions working behind the scenes of the occupational forecast. Assumptions such as the price of oil, government's future employment levels, and the demand for health care services are all captured in the

* Includes estimate of self-employed workers.

industry forecast model. By contrast, the subtle economic changes affecting the demand for one occupation relative to another are captured in the occupational forecast process.

The 1998–2008 industry forecast, on which this occupational forecast is based, projects modest but steady growth. Alaska’s strategic location, oil wealth, and expanding service economy will provide thousands of new jobs between 1998 and 2008. The long-term shift from goods-producing to service-producing employment is expected to continue.

The jobs generated by industry growth reflect a variety of economic factors. The projected growth in the services, retail trade, and transportation/communications/utilities industries will result in employment increases. (See Exhibit 1.) The continued declines in crude oil production, timber harvests and government, on the other hand, will reduce employment in some occupations. (Oil and gas employment is included under the mining industry category; timber employment is a subcategory of the manufacturing sector.) For a detailed discussion of the industry forecast on which this occupational forecast is based, see the “Ten-Year Industry Forecast” article in the July 2000 issue of *Alaska Economic Trends*.

Occupational employment

The big picture of where Alaskans will work is not expected to change significantly. In fact, as Exhibit 2 illustrates, employment by major occupational category will remain fairly stable between 1988 and 2008. Slight shifts are occurring, reflecting changes in Alaska’s economy. By 2008, the increasing importance of the visitor and retail industry sectors will push the marketing and sales occupations from seventh to sixth place in the employment rankings.

The ranking of major occupational categories by growth rate, however, tells a different story. The

MAJOR OCCUPATIONAL CATEGORIES

Administrative Support: Prepare and record memos, letters and reports, and gather/distribute information. Examples include receptionists, general office clerks, and teacher aides.

Ag/Forestry/Fishing: Perform tasks associated with plants and animals. Examples include groundskeepers and animal caretakers. Fish harvesters are not included.

Service: Attend to the public, including occupations such as nursing aides and orderlies, child-care workers, and waiters and waitresses.

Professional Specialty: Provide a variety of professional services. Occupations include registered nurses, computer systems analysts, and teachers.

Craft and Repair: Perform highly skilled production, construction and mechanical work. Examples include machinists, carpenters, and auto mechanics.

Operators and Laborers: Operate production machinery and transportation equipment. Occupations include truck drivers, welders, and electricians.

Marketing and Sales: Sell goods and services and supervise sales work. Occupations include retail salespersons, cashiers, and travel agents.

Managers and Professional Support: Direct the activities of business, government and other organizations. Examples include general managers and top executives, hotel managers, and budget analysts.

Technicians: Operate technical equipment and assist engineers, scientists and other professional specialty workers. Examples include health technicians, computer programmers, and aircraft pilots.

technicians occupational category, which contains occupations such as respiratory therapists and computer programmers, will move up the rankings from second to first place. Similarly, the robust growth rate projected for professional specialty occupations, such as registered nurses and teachers, will raise that category from eighth to second place in the rankings. These changes reflect the increasing dominance of health services and computer-related occupations in Alaska's labor market.

A more detailed occupational look

Occupational growth will be very concentrated during the 1998–2008 decade. The fifteen occupations in the Alaska column of Exhibit 3 are projected to account for more than 32 percent of Alaska's total employment growth. Ten of these large occupations are found in the service-related occupational clusters (sales, clerical and services) and all but the two supervisory positions have estimated wages in the lower earnings groups.

Of course, not all large occupations have low pay and low training requirements. Four of the Alaska occupations included in Exhibit 3 have estimated wages in the highest wage group: registered nurses, general managers and top executives, aircraft pilots, and systems analysts. These four occupations require the professional education and skills and the compensation typical of small-sized or fast growing occupations.

The U.S. and Alaska lists of occupations with large numerical increases contain more similarities than differences, with ten occupations occurring on both lists. Occupations unique to Alaska's list, such as aircraft pilots and amusement and recreation attendants, highlight the importance of the visitor and air transportation industries in Alaska. By contrast, those occupations appearing only on the U.S. list reflect both the need for education-related workers and the importance of information technology occupations in the national labor market.

Retail salespersons will experience not only the largest numerical increase, they will also become Alaska's largest single occupation by 2008. More than 9,700 workers will be employed in this occupation. General office clerks, the second largest occupation, will employ 8,638 workers. Cashiers, and general managers and top executives occupy the third and fourth slots with employment levels of 8,074 and 7,978 respectively. In 2008, one of every ten Alaska workers will be employed in one of these four occupations.

2 Employment¹ by Major Category 1988, 1998, 2008

Employment

Occupational Group	1988	1998	2008
Administrative Support Service	43,397	52,661	58,655
Professional Specialty	34,270	48,020	57,487
Craft & Repair	35,342	44,261	53,463
Operators/Laborers	26,494	35,639	40,592
Marketing & Sales	26,829	33,963	38,306
Managers/Professional Support	19,985	31,005	37,235
Technicians	23,044	31,214	35,667
Agriculture/Forestry/Fishing ²	8,423	12,394	16,005
Total, All Occupations	2,306	3,274	3,680
	220,090	292,431	341,090

Growth Rate Change

Occupational Group	Rank	88-98	Rank	98-08
Technicians	2	47.5%	1	29.1%
Professional Specialty	8	25.1%	2	20.8%
Marketing & Sales	1	55.1%	3	20.1%
Service	4	40.1%	4	19.7%
Managers/Professional Support	5	35.6%	5	14.3%
Craft & Repair	6	35.4%	6	13.9%
Operators/Laborers	7	26.6%	7	12.8%
Agriculture/Forestry/Fishing ²	3	42.0%	8	12.4%
Administrative Support	9	21.3%	9	11.4%

¹ Includes estimate of self-employed workers.

² Fish harvesting employment is not included.

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

Fast growing occupations are another source of employment opportunities for qualified applicants. The list of fastest growing occupations during this projection period reflects the strong outlook for the health care services, business services and transportation industry sectors. Driven by economic growth, fast-growing occupations provide excellent employment opportunities. (See Exhibit 4.)

Of Alaska's 15 fastest-growing occupations, ten are associated with health services, three with information technology and two with the transportation/visitor industries. Factors contributing to the increased demand for health services occupations include the aging of the population, which will continue to require more services, and the increased use of innovative medical technology for intensive diagnosis and treatment.

Patients will increasingly be shifted out of hospitals and into outpatient facilities, nursing homes, and home health care in an attempt to contain costs.

Respiratory therapists occupy the number one slot on the list of high growth occupations. Alaska's aging population will help to fuel the increasing demand for respiratory therapists. The demand for more accessible care in the home will drive the need for home health aides, another high-growth occupation. Health care payers' demands for increasingly detailed and accurate medical records will boost the need for medical records technicians.

The increasing need for information technology occupations, such as systems analysts and computer support specialists, will result from the fast pace of technological change and the need to

Occupations Ranked by Projected Numerical Growth The top 15 in U.S. and Alaska, 1998-2008



Employee Earnings per Hour	U.S.		Alaska	
	Occupations	Earnings Quartile	Occupations	Earnings Quartile
\$ < \$10.92 \$\$ \$10.92-\$15.24 \$\$\$ \$15.25-\$22.28 \$\$\$\$ > \$22.28	Systems Analysts, EDP ●	\$\$\$\$	Retail Salespeople ●	\$
	Retail Salespeople ●	\$	Cashiers ●	\$
	Cashiers ●	\$	Registered Nurses ●	\$\$\$\$
	General Managers & Top Executives ●	\$\$\$\$	General Managers & Top Executives ●	\$\$\$\$
	Truck Driver, except Driver/Sales Workers	\$\$\$	Child Care Workers	\$
	General Office Clerks ●	\$\$	General Office Clerks ●	\$\$
	Registered Nurses ●	\$\$\$\$	Receptionists	\$\$
	Computer Support Specialists	\$\$\$\$	Truck Drivers: Light, including Delivery/Route	\$\$
	Personal & Home Care Aides	\$	Administrative Support Supervisors ●	\$\$\$
	Teacher Aides ●	\$	Sales Supervisors	\$\$\$
	Janitors & Cleaners	\$	Amusement & Recreation Attendants	\$
	Nursing Aides & Orderlies	\$	Waiters & Waitresses	\$
	Computer Engineers	\$\$\$\$	Teacher Aides ●	\$\$
	Teachers: High School	\$\$\$\$	Aircraft Pilots	\$\$\$\$
	Administrative Support Supervisors ●	\$\$\$	Systems Analysts, EDP ●	\$\$\$\$

● indicates occupations that appear on both the U.S. and Alaska lists.

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

apply the latest technologies to business applications. A significant percentage of Alaska's information technology workers are employed in the government sector. The growth projected for computer-related occupations in Alaska has been tempered by the expected decline in government employment.

Occupations with declining employment

Not all occupations will show positive employment growth. Thirty-two occupations with 1998 employment of 75 or more are expected to drop employment by 10 percent or more during the forecast decade. Combined, these occupations

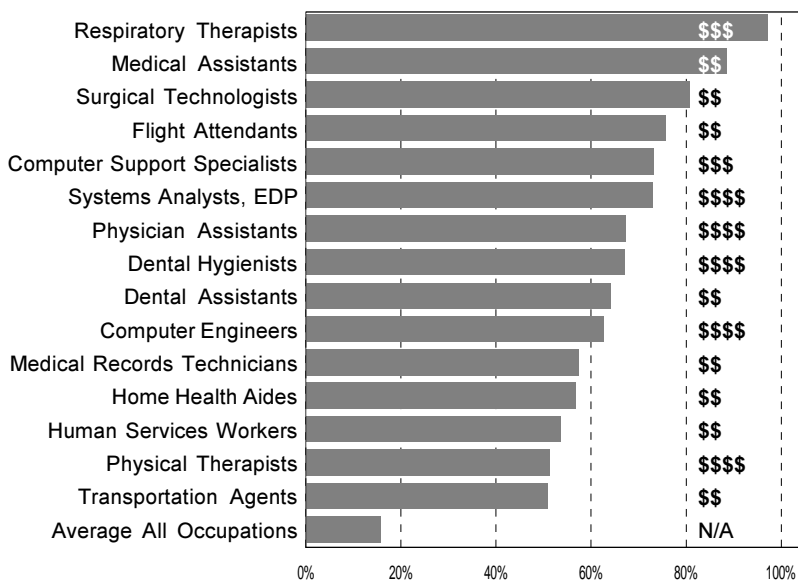
will account for 1.7 percent of total employment in 2008. Technological changes or organizational shifts will affect many of these occupations. For example, the demand for computer operators will slide as a result of mainframe computer system automation. (See Exhibit 5.) The occupation of bank teller is expected to have the largest decrease in total employment. Demand for these workers is expected to decline substantially due to increased use of ATMs and on-line banking services. (See Exhibit 6.)

Of the occupations on the fastest declining list, six are in the oil and gas industry, reflecting the expectation that Alaska production of crude oil will continue to decline. The decline in timber-related employment is also expected to continue, reducing the demand for choke setters, and fallers and buckers.

Even occupations with declining employment can offer excellent employment opportunities. For example, the aging of Alaska's workforce may result in significant employment opportunities as employers replace retiring workers. (See the September 2000 issue of *Alaska Economic Trends* for an analysis of Alaska's aging population.) The industries potentially hit hardest by the need to replace retiring workers are government, health services, membership organizations, social services, and oil and gas extraction. The need to replace a significant percentage of the oil and gas workforce over the next decade may mitigate the declining employment in oil-related occupations.

4 Fastest Growing Occupations 1998-2008 Projections

Occupations with 1998 employment of 75 or more in Alaska



Fast growing occupations are defined as those with a growth rate of at least 16.6 percent for the forecast period.

Total employment is divided into four groups, or quartiles. Pay ranges are represented by \$ for the lowest and \$\$\$\$ for the highest quartile.

N/A – not available

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

Alaska's top jobs

Alaska's future labor market will offer a wide variety of employment opportunities, at all levels of education and training attainment and earnings potential. Exhibit 7 lists Alaska's 149 top occupations—those with higher than average projected growth or largest numerical increases—organized by education or training level. Estimated wages for the top occupations are also

noted. When viewed together, these three measures provide insight into Alaska's future labor market, even though they are not the only criteria for judging job quality.

For years, Alaska's resource-based economy was able to provide high-paying jobs to workers with only a high school education. But many traditional sources of high-wage/lower-skill work now have limited growth prospects. Although jobs will continue to be available for workers at all levels of educational attainment, Alaskans with the most education or training will enjoy the best opportunities.

To further refine the list of top occupations, Exhibit 7 also notes Alaska's "best-bet" occupations, those with both good employment opportunity and good wages. (Best-bet occupations are bolded.) These occupations, with total projected employment of 63,810 in 2008, are concentrated in the higher education and training categories, underscoring the importance of career planning and educational attainment. Twenty-seven of the 41 best-bet occupations require education or training of an associate degree or higher. Five of the 41, largely supervisory occupations, require work experience in a related occupation. Nine on-the-job training (OJT) occupations, some requiring significant OJT, such as air traffic controllers and correctional officers, make the best-bet list.

Although not officially on the "best-bet" list, six occupations included in Exhibit 7 offer both good employment opportunities and excellent earnings potential. The labor trades and crafts occupations of electricians, plumbers, electrical powerline installers/repairers, excavating and loading machine operators, and operating engineers all combine growing employment numbers with estimated earnings in the highest earnings group. The often rigorous training required for these occupations is generally available "on-the-job."

Methodology

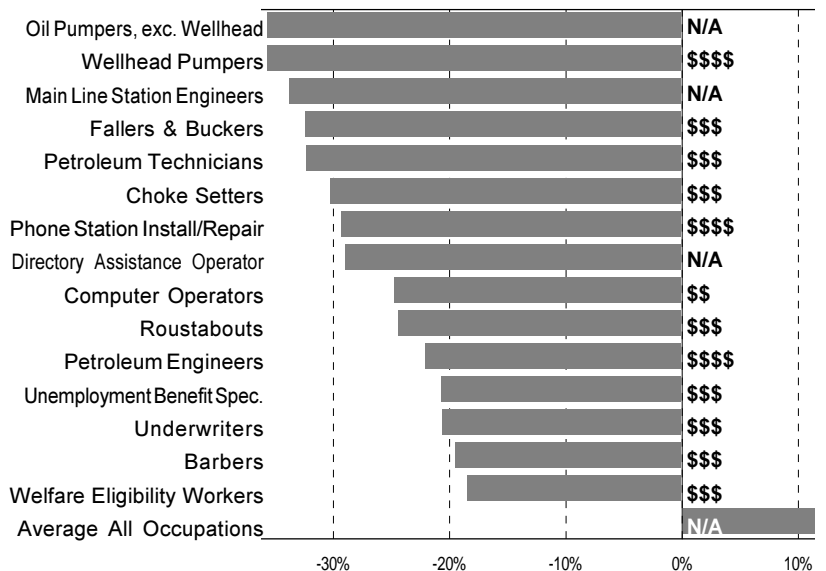
Occupational employment forecasts are the end product of a three-part system: employer surveys, construction of a matrix of industries and occupations, and industry employment forecasts.

Employer Surveys: The foundation of this forecast is the Occupational Employment Statistics (OES) program, operated jointly by AKDOL/R&A and the U.S. Bureau of Labor Statistics. The OES program surveys occupational employment through a representative and random sample of employers who do business in Alaska. The results of the OES employer surveys produce profiles of the occupational makeup for surveyed industries and estimates of wage rates by occupation.

Fastest Declining Occupations 1998-2008 Projections

Occupations with 1998 employment of 75 or more in Alaska

5



Total employment is divided into four groups, or quartiles. Pay ranges are represented by \$ for the lowest and \$\$\$\$ for the highest quartile.

N/A – not available

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

Industry/Occupation Matrix: The occupational profile of each industry is arranged into a matrix of occupations and industries. Base year employment estimates (1998) are made by multiplying the proportion of employment for each occupation in an industry by the current (1998) estimate of total employment for that industry and then summing across all industries.

Future occupational employment requires the use of “change factors” to indicate shifts in industry staffing patterns as employers respond to changes in both technology and the marketplace.

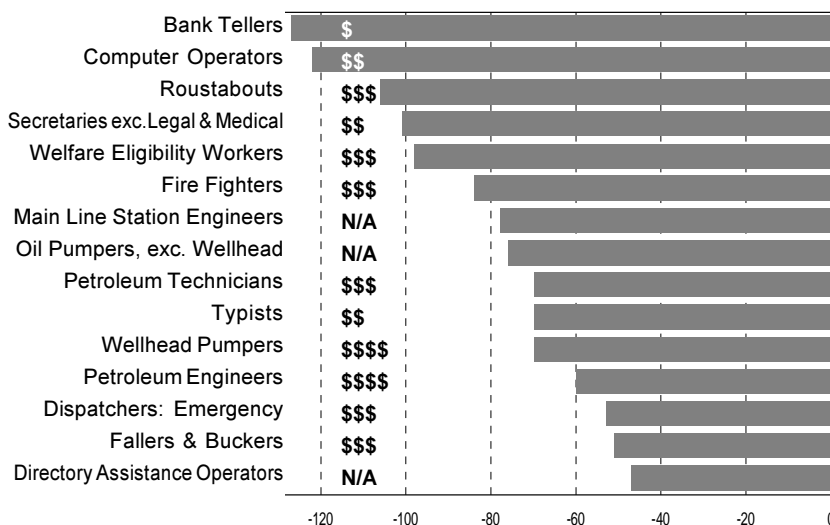
Estimates of self-employed workers are made by applying ratios of self-employed workers in each occupation to estimates of wage and salary workers in the same occupation.

Industry Employment Forecasts: Industry forecasts are constructed by statistical techniques and adjusted based on assumptions about the probability of future events. A detailed description of the methodology used in producing the 1998-2008 industry forecast is available upon request.

Earnings quartiles: Earnings quartiles were determined by sorting the total number of Alaska employees by their wage from lowest to highest. Rankings are based on quartiles using one-fourth of total employment to define each quartile. A single \$ represents occupations with employee earnings of less than \$10.92 per hour. \$\$ represents earnings between \$10.92 and \$15.24 per hour, \$\$\$ between \$15.25 and \$22.28 per hour, and \$\$\$\$ greater than \$22.28 per hour. Wage information is from the 1998 Occupational Employment Statistics Survey.

6 Occupations Losing Largest Number of Jobs 1998-2008 Projections

Occupations with 1998 employment of 75 or more in Alaska



Total employment is divided into four groups, or quartiles.
Pay ranges are represented by \$ for the lowest and \$\$\$\$ for the highest quartile.

N/A – not available

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

Top Occupations by Education and Training

Projected 1998-2008



Occupations with Fastest Rates of Growth	Growth Rate (%)	Earnings Quartile	Occupations with Largest Numerical Increase	Numerical Increase	Earnings Quartile
First Professional Degree					
Chiropractors	47.5	N/A	Physicians & Surgeons	229	\$\$\$\$
Clergy	41.5	\$\$	Chiropractors	94	N/A
Physicians & Surgeons	38.2	\$\$\$\$	Pharmacists	73	\$\$\$\$
Optometrists	25.0	\$\$\$\$	Dentists	72	\$\$\$\$
Veterinarians & Veterinary Inspectors	24.2	\$\$\$\$	Lawyers	50	\$\$\$\$
Pharmacists	24.1	\$\$\$\$	Clergy	44	\$\$
Dentists	20.8	\$\$\$\$	Veterinarians & Veterinary Inspectors	37	\$\$\$\$
Doctoral Degree					
Professors: Computer Science	39.6	\$\$\$\$	Biologists	420	\$\$\$
Professors: Health Assessment & Treatment	35.0	\$\$\$\$	Professors: Computer Science	36	\$\$\$\$
Biologists	29.8	\$\$\$	Professors: Health Assessment & Treatment	28	\$\$\$\$
Professors: Life Sciences	24.4	\$\$\$\$	Professors: Business	25	\$\$\$\$
Masters Degree					
Physical Therapists	51.5	\$\$\$\$	Social Workers: Medical & Psychiatric	342	\$\$\$
Social Workers: Medical & Psychiatric	49.8	\$\$\$	Physical Therapists	88	\$\$\$\$
Speech Pathologists & Audiologists	36.2	\$\$\$\$	Vocational & Educational Counselors	71	\$\$\$\$
Work Experience + Bachelor's or Higher Degree					
Medicine & Health Services Managers	43.8	\$\$\$\$	General Managers & Top Executives	1,338	\$\$\$\$
Engineering/Math/Natural Science Mgrs	35.5	\$\$\$\$	Financial Managers	289	\$\$\$\$
Marketing, Advertising & Pub Rel Mgrs	33.8	\$\$\$\$	Administrative Services Managers	259	\$\$\$
Comm/Transportation/Utility Managers	29.1	\$\$\$\$	Marketing, Advertising & Pub Rel Mgrs	249	\$\$\$\$
Artists	28.2	\$\$	Engineering/Math/Natural Science Mgrs	241	\$\$\$\$
Human Resource Managers	22.9	\$\$\$\$	Comm/Transportation/Utility Managers	200	\$\$\$\$
Administrative Services Managers	21.7	\$\$\$	Medicine & Health Services Managers	172	\$\$\$\$
General Managers & Top Executives	20.2	\$\$\$\$	Artists	120	\$\$
Financial Managers	19.1	\$\$\$\$	Human Resource Managers	94	\$\$\$\$
Bachelor's Degree					
Systems Analysts, EDP	73.2	\$\$\$\$	Aircraft Pilots	674	\$\$\$\$
Physician Assistants	67.5	\$\$\$\$	Systems Analysts, EDP	612	\$\$\$\$
Computer Engineers	62.8	\$\$\$\$	Social Wkrs, exc. Medical & Psychiatric	556	\$\$\$
Occupational Therapists	46.0	\$\$\$\$	Recreation Workers	290	\$\$
Aircraft Pilots	40.4	\$\$\$\$	Residential Counselors	281	\$\$
Chemists, exc. Biochemists	38.9	\$\$\$	Teachers: High School	234	\$\$\$\$
Residential Counselors	38.7	\$\$	Property & Real Estate Managers	210	\$\$
Data Base Administrators	37.9	\$\$\$\$	Teachers: Special Education	209	\$\$\$\$
Salespeople: Securities	36.5	\$\$\$\$	Construction Managers	172	\$\$\$\$
Technical Writers	32.7	\$\$\$\$	Accountants & Auditors	161	\$\$\$\$
Social Workers, exc. Medical & Psychiatric	32.3	\$\$\$	Human Resource Specialists	146	\$\$\$\$
Dieticians & Nutritionists	30.5	\$\$\$	Instructional Coordinators	145	\$\$\$
Instructional Coordinators	29.5	\$\$\$	Computer Programmers	141	\$\$\$\$
Designers, exc. Interior	27.6	\$\$	Civil Engineers	116	\$\$\$\$
Recreation Workers	26.2	\$\$	Teachers: Preschool	115	\$\$
Industrial Engineers, exc. Safety	24.0	\$\$\$\$	Geologists/Geophysicists/Oceanographers	109	\$\$\$\$
Teachers: Preschool	23.1	\$\$	Physician Assistants	106	\$\$\$\$
Mechanical Engineers	22.0	\$\$\$\$	Designers, exc. Interior	101	\$\$
Construction Managers	20.1	\$\$\$\$	Salespeople: Securities	81	\$\$\$\$
Safety Engineers, exc. Mining	19.8	\$\$\$\$	Writers & Editors	73	\$\$\$
Teachers: Special Education	19.3	\$\$\$\$	Computer Engineers	71	\$\$\$\$
Associate Degree					
Respiratory Therapists	97.4	\$\$\$	Registered Nurses	1,555	\$\$\$\$

(continued page 16)

"Best Bet" occupations, those with both good employment opportunity and good wages, are bolded. N/A – not available
Total employment is divided into four equal groups, or quartiles. Pay ranges are represented by \$ for the lowest and \$\$\$\$ for the highest quartile.

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

7 Top Occupations by Education and Training Projected 1998-2008 (continued)

Occupations with Fastest Rates of Growth	Growth Rate (%)	Earnings Quartile	Occupations with Largest Numerical Increase	Numerical Increase	Earnings Quartile
Computer Support Specialists	73.4	\$\$\$	Computer Support Specialists	567	\$\$\$
Dental Hygienists	67.4	\$\$\$\$	Dental Hygienists	258	\$\$\$\$
Medical Record Technicians	57.6	\$\$	Paralegals	177	\$\$\$
Radiologic Technologists	50.5	\$\$\$	Medical Record Technicians	170	\$\$
Paralegals	39.9	\$\$\$	Medical Laboratory Technicians	143	\$\$\$
Registered Nurses	39.9	\$\$\$\$	Respiratory Therapists	112	\$\$\$
Medical Laboratory Technicians	30.2	\$\$\$	Radiologic Technologists	106	\$\$\$
Postsecondary Vocational Training					
Surgical Technologists	80.9	\$\$	Aircraft Mechanics	536	\$\$\$
Telephone Systems Installers/Repairers	49.4	\$\$\$\$	Auto Mechanics	477	\$\$\$
Aircraft Mechanics	43.6	\$\$\$	Licensed Practical Nurses	168	\$\$\$
Secretaries: Medical	41.2	\$\$	Travel Agents	127	\$\$
Computer Repairers	39.6	\$\$\$	Emergency Medical Technicians	86	\$\$\$
Emergency Medical Technicians	32.5	\$\$\$	Real Estate Agents	84	\$\$\$
Transcriptionists	30.2	\$\$\$	Telephone Systems Installers/Repairers	82	\$\$\$\$
Auto Mechanics	30.1	\$\$\$	Surgical Technologists	72	\$\$
Licensed Practical Nurses	27.2	\$\$\$	Transcriptionists	65	\$\$\$
Travel Agents	23.9	\$\$	Secretaries: Medical	61	\$\$
Work Experience/Related Occupation					
Instructors: Nonvocational Education	35.4	\$\$\$	Administrative Support Supervisors	826	\$\$\$
Lawn Service Managers	35.3	\$\$	Sales Supervisors	821	\$\$\$
Transportation & Moving Machine Supv	28.1	\$\$\$\$	Mechanics/Installers/Repairers Supv	244	\$\$\$\$
Housekeepers	25.6	\$\$	Food Service & Lodging Managers	188	\$\$
Administrative Support Supervisors	23.1	\$\$\$	Instructors: Nonvocational Education	146	\$\$\$
Mechanics/Installers/Repairers Supv	21.0	\$\$\$\$	Transportation & Moving Machine Supv	112	\$\$\$\$
Sales Supervisors	18.3	\$\$\$	Inspectors & Compliance Officers, exc. Const	86	\$\$\$\$
Food Service & Lodging Managers	18.0	\$\$	Construction/Extractive Wkr Supervisors	84	\$\$\$\$
Captains: Water Vessel	17.3	\$\$\$\$	Real Estate Brokers	75	\$\$\$\$
Ship Mates	16.9	\$\$\$	Teachers: Vocational Education/Training	59	\$\$\$\$
More Than 12 Months of On-the-Job Training					
Flight Attendants	75.8	\$\$	General Maintenance Repairers	552	\$\$\$
Marine Equipment Mechanics	41.7	\$\$\$\$	Cooks: Restaurant	464	\$
Coaches & Umpires	38.8	\$	Carpenters	450	\$\$\$
Tel/Cable TV Line Installers/Repairers	36.0	\$\$\$	Electricians	246	\$\$\$\$
Producers, Directors & Actors	32.4	\$\$	Air Traffic Controllers	205	\$\$\$\$
Musical Instrument Repairers/Tuners	29.9	\$	Flight Attendants	179	\$\$
Brick Masons	27.8	\$\$\$\$	Correction Officers & Jailers	164	\$\$\$
Automotive Body Repairers	26.9	\$\$\$	Tel/Cable TV Line Installers/Repairers	163	\$\$\$
Machinists	26.8	\$\$\$	Plumbers	148	\$\$\$\$
Air Traffic Controllers	25.9	\$\$\$\$	Bus/Truck & Diesel Engine Mechanics	106	\$\$\$
Musicians: Instrumental	25.2	N/A	Automotive Body Repairers	102	\$\$\$
Heating & Air Conditioning Mechanics	23.6	\$\$\$	Welders	87	\$\$\$
Cooks: Restaurant	22.7	\$	Electrical Powerline Installers/Repairers	86	\$\$\$\$
Petroleum Refinery & Control Panel Operators	18.7	\$\$\$\$	Police Patrol Officers	85	\$\$\$\$
Correction Officers & Jailers	18.2	\$\$\$	Heating & Air Conditioning Mechanics	65	\$\$\$
Electrical Powerline Installers/Repairers	18.1	\$\$\$\$	Coaches & Umpires	50	\$
One to 12 Months of On-the-Job Training					
Medical Assistants	88.8	\$\$	Instructors: Sports	449	\$\$
Dental Assistants	64.4	\$\$	Dental Assistants	410	\$\$
Human Services Workers	53.8	\$\$	Human Services Workers	376	\$\$
Salespeople: Business Services	47.0	\$\$\$	Medical Assistants	317	\$\$
Instructors: Sports	45.2	\$\$	Sales Rep, exc. Scientific Prod & Retail	277	\$\$\$
Crushing/Grinding/Blending Machine Operators	43.3	\$\$\$	Salespeople: Business Services	270	\$\$\$

"Best Bet" occupations, those with both good employment opportunity and good wages, are bolded. N/A – not available
Total employment is divided into four equal groups, or quartiles. Pay ranges are represented by \$ for the lowest and \$\$\$\$ for the highest quartile.

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

Top Occupations by Education and Training Projected 1998-2008 (continued) 7

Occupations with Fastest Rates of Growth	Growth Rate (%)	Earnings Quartile	Occupations with Largest Numerical Increase	Numerical Increase	Earnings Quartile
Opticians	40.7	\$\$	Painters/Paperhangers	161	\$\$\$
Sheet Metal Duct Installers	39.0	\$\$\$	Salespeople: Parts	154	\$\$
Painters: Transportation Equipment	36.0	\$\$\$	Salespeople: Advertising	109	\$\$\$
Demonstrators & Promoters	33.2	\$	Hazardous Materials Removal Workers	97	\$\$\$
Salespeople: Advertising	33.0	\$\$\$	Excavating & Loading Machine Operators	80	\$\$\$\$
Bakers: Manufacturing	29.2	\$\$\$	Opticians	79	\$\$
Tax Preparers	26.6	\$\$\$	Demonstrators & Promoters	70	\$
Insurance Claims Takers	23.6	\$\$	Operating Engineers	70	\$\$\$\$
Merchandise & Window Displayers	23.0	\$	Roofers	69	\$\$\$
Roofers	22.7	\$\$\$	Sales Reps: Scientific Prod, exc. Retail	67	\$\$\$
Food Processing Technicians	22.2	N/A	Crushing/Grinding/Blending Machine Operators	65	\$\$\$
Earth Drillers, exc. Oil & Gas	21.3	\$\$\$	Dispatchers: Non-emergency	65	\$\$\$
Excavating & Loading Machine Operators	20.6	\$\$\$\$	Bakers: Bread & Pastry	60	\$
Hazardous Materials Removal Workers	20.2	\$\$\$	Bus Drivers	53	\$\$
Sales Reps, exc. Scientific Prod & Retail	19.9	\$\$\$	Tax Preparers	46	\$\$\$
Salespeople: Parts	19.1	\$\$	Insurance Claims Takers	41	\$\$
Painters & Paperhangers	19.0	\$\$\$	Sheet Metal Duct Installers	39	\$\$\$
Less Than One Month of On-the-Job Training					N/A
Home Health Aides	57.0	\$\$	Salespeople: Retail	1,589	\$
Transportation Agents	51.1	\$\$	Cashiers	1,580	\$
Interviewing Clerks, exc. Personnel	45.5	\$\$	Child Care Workers	1,321	\$
Amusement & Recreation Attendants	45.5	\$	General Office Clerks	1,209	\$\$
Vehicle Washers & Equipment Cleaners	40.2	\$	Receptionists	1,017	\$\$
Guides	37.5	\$	Truck Drivers: Light, including Delivery/Route	902	\$\$
Parking Lot Attendants	35.4	N/A	Amusement & Recreation Attendants	751	\$
Child Care Workers	34.4	\$	Waiters & Waitresses	744	\$
Porters & Bellhops	34.3	\$	Teacher Aides	677	\$\$
Ticket Agents	34.0	\$\$	Ticket Agents	574	\$\$
Personal & Home Care Aides	33.5	N/A	Truck Drivers: Heavy or Tractor Trailer	544	\$\$\$
Truck Drivers: Light, including Delivery/Route	33.2	\$\$	Housekeeping Cleaners	515	\$
Nursing Aides & Orderlies	32.2	\$\$	Combined Food Preparation/Service Workers	476	\$
Flaggers/Crossing Guards	32.1	\$\$\$	Janitors/Cleaners, exc. Maid/House Cleaner	450	\$
Pharmacy Assistants	32.0	N/A	Home Health Aides	432	\$\$
Utilities Customer Service Representatives	30.4	\$\$	Hand Packers & Packagers	430	\$
Bill & Account Collectors	29.1	\$\$	Transportation Agents	429	\$\$
Tire Repairers & Changers	28.8	\$	Food Preparation Workers	404	\$
Bus Drivers: School	28.8	\$\$	Landscaping & Groundskeeping Laborers	398	\$\$
Receptionists	28.6	\$\$	Counter & Rental Clerks	371	\$
Adjustment Clerks	28.0	\$	Guards & Watch Guards	364	\$
Animal Caretakers, exc. Farm	26.6	\$	Nursing Aides & Orderlies	343	\$\$
Mechanics & Repairers Helpers	26.2	\$\$	Bus Drivers: School	289	\$\$
Guards & Watch Guards	25.7	\$	Vehicle Washers & Equipment Cleaners	278	\$
Taxi Drivers & Chauffeurs	25.3	\$	Utilities Customer Service Reps	236	\$\$
Counter & Rental Clerks	24.9	\$	Stock Clerk: Stock/Warehouse/Storage Yard	209	\$\$
Hand Packers & Packagers	24.7	\$	Counter Attendants: Lunchroom/Coffee Shop	192	\$
Cashiers	24.3	\$	Guides	189	\$
Landscaping & Groundskeeping Laborers	24.2	\$\$	Personal & Home Care Aides	164	N/A
Billing, Cost & Rate Clerks	23.8	\$\$	Mechanics & Repairers Helpers	161	\$\$
Housekeeping Cleaners	23.4	\$	Bartenders	157	\$
Duplicating Machine Operators	23.3	\$	Billing, Cost & Rate Clerks	150	\$\$
Cooks: Specialty Fast Food	23.3	\$	Stock Clerks: Sales Floor	150	\$
Hosts/Hostess: Rest/Lounge/Coffee Shop	23.0	\$	Hotel Desk Clerks	142	\$
Hotel Desk Clerks	22.9	\$	Helpers: Carpenters & Related	108	\$\$
Cooks: Short Order	22.3	\$	Interviewing Clerks, exc. Personnel	105	\$\$
Assemblers/Fabricators, exc. Machine/Electrical	21.5	\$\$	Hosts/Hostess: Rest/Lounge/Coffee Shop	100	\$
Truck Drivers: Heavy or Tractor Trailer	21.3	\$\$\$	Traffic, Shipping & Receiving Clerks	99	\$\$

"Best Bet" occupations, those with both good employment opportunity and good wages, are bolded. N/A – not available
 Total employment is divided into four equal groups, or quartiles. Pay ranges are represented by \$ for the lowest and \$\$\$\$ for the highest quartile.

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

Economy Shows Typical August Hum

Employment fairly steady; unemployment still declining

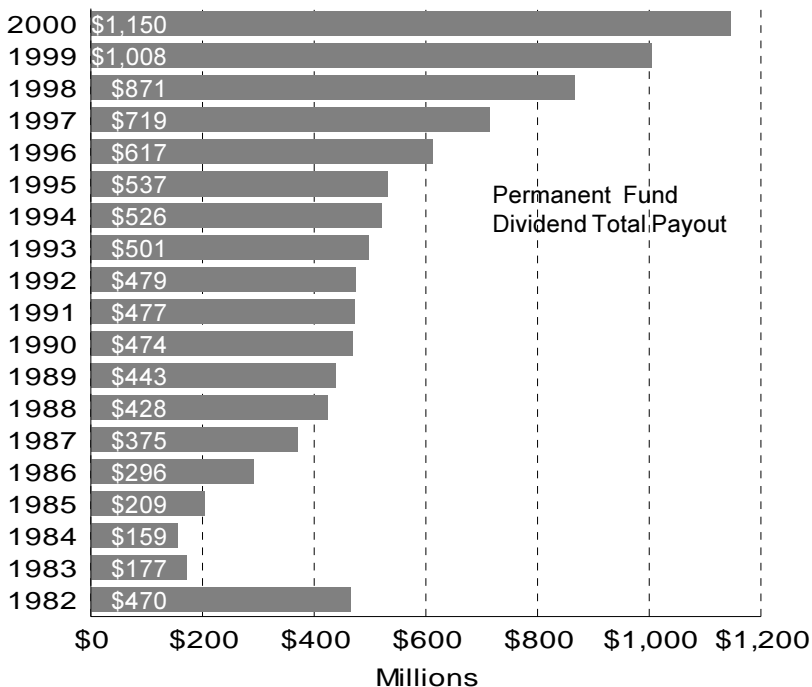
Alaska Employment Scene

by
Rachel Baker
Labor Economist

In August, Alaska's economy continued to operate near its peak. Wage and salary employment held fairly steady from the previous month, and the unemployment rate declined for the sixth straight month. Many industries gained jobs, but the

1,000 jobs lost in the seafood processing sector were enough to bring total employment down over the month. This is a fairly typical scenario for August. Seafood processing employment usually peaks in July, coinciding with the western Alaska salmon harvest.

1 PFD Checks are Biggest Ever \$1,963 each, \$1.15 billion total



The trade sector also experienced job declines in August, with most of the job losses coming from eating and drinking establishments. Hotels and lodging places also cut back employment in August by 200 as Alaska's visitor season wound down. Air transportation and the federal government were the only other sectors to lose jobs from July to August. The decline in federal government employment stemmed from the layoff of temporary workers as the 2000 Census came to an end.

Services dominates job growth

In an over-the-year comparison, Alaska was running 5,100 jobs ahead of August 1999. Services was the largest contributor to this growth. The services industry added 2,200 jobs, 43 percent of total over-the-year job growth. Other employment gains came from construction, transportation, retail trade, and the public sector.

Source: Alaska Department of Revenue, Permanent Fund Dividend Division

The oil and gas sector was also a strong contributor to the over-the-year gain with 900 jobs added since August 1999. This employment gain is primarily from oil field support service industries, which specialize in oil field development. High oil prices are creating an incentive for Alaska's oil producers to develop marginal oil fields. Even though this exploration is likely to continue, the oil field services workforce could contract in the next few months after the Alpine project is completed.

Retail sector continues to churn

The over-the-month loss of 200 jobs in the retail sector is not surprising considering the closure of Alaska's Lamonts stores. Gottschalks purchased the Lamonts stores and re-opened the Alaska stores in September. Gottschalks plans to rehire former Lamonts employees, so most of the job losses from the closure should be regained in the next few months. Employment dropped at Lamonts just prior to the closure in June, leaving the company with about 140 workers in Alaska. Lamonts averaged about 280 employees for the first five months of 2000.

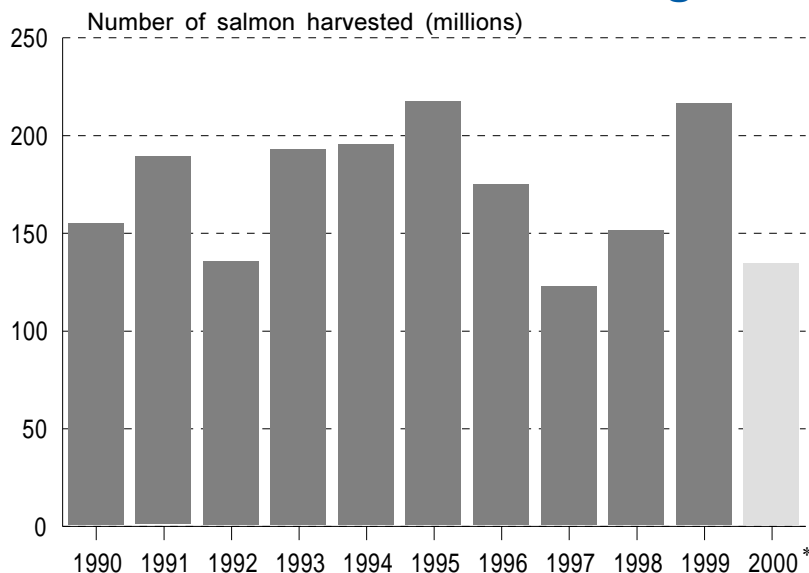
Despite setbacks in the food stores sector with the closure of three Alaska Marketplace grocery stores, Alaska's retail sector is expected to forge ahead. General merchandise employment is still strong and there are plans for a new Fred Meyer store in south Anchorage. Ground will be broken in spring 2001 and the store is scheduled to open in 2002. Alaska's retail sector also got a big boost in October with the payment of the Permanent Fund Dividend (PFD). This year's dividend was the highest ever at \$1,963 per person, and a total payout of \$1.15 billion. (See Exhibit 1.) Although it is not clear exactly how much of the dividend is spent in Alaska stores, the state's retailers clearly reap a substantial benefit from the PFD payment each fall.

Low pink salmon returns held down 2000 harvest

Overall, the 2000 salmon harvest was a bit disappointing. Preliminary estimates of the total harvest came in at 135 million fish, which fell short of the Alaska Department of Fish and Game (ADF&G) forecast of 150 million fish. The shortfall was primarily due to a significant drop in the Southeast pink salmon return. This year's total catch was also well short of last year's harvest of 216 million salmon. (See Exhibit 2.) Some regions in the state had a reasonable harvest, but another year of negligible salmon returns in western Alaska, along with the low pink salmon catch in Southeast, held the total harvest down. The smaller harvest also held down seafood processing employment in August, which came in 300 jobs below August 1999.

(continued on page 22)

2000 Salmon Catch Below 1990s Average **2**



* 2000 catch data are preliminary

Source: Alaska Department of Fish and Game, Division of Commercial Fisheries

3 Nonagricultural Wage and Salary Employment

By place of work

Alaska	preliminary	revised	Changes from:		
	8/00	7/00	8/99	7/00	8/99
Total Nonag. Wage & Salary	302,100	302,300	297,000	-200	5,100
Goods-producing	47,600	47,900	46,900	-300	700
Service-producing	254,500	254,400	250,100	100	4,400
Mining	10,100	10,000	9,200	100	900
Oil & Gas Extraction	8,400	8,300	7,500	100	900
Construction	17,800	17,200	17,400	600	400
Manufacturing	19,700	20,700	20,300	-1,000	-600
Durable Goods	3,000	3,000	3,300	0	-300
Lumber & Wood Products	1,800	1,800	2,100	0	-300
Nondurable Goods	16,700	17,700	17,000	-1,000	-300
Seafood Processing	14,100	15,100	14,400	-1,000	-300
Transportation/Comm/Utilities	29,400	29,100	28,900	300	500
Trucking & Warehousing	3,200	3,200	3,100	0	100
Water Transportation	2,400	2,400	2,400	0	0
Air Transportation	10,300	10,400	10,100	-100	200
Communications	5,200	5,200	5,100	0	100
Electric, Gas & Sanitary Svcs.	2,900	2,900	2,800	0	100
Trade	62,200	62,600	61,900	-400	300
Wholesale Trade	9,400	9,600	9,600	-200	-200
Retail Trade	52,800	53,000	52,300	-200	500
Gen. Merchandise & Apparel	9,800	9,700	9,700	100	100
Food Stores	7,100	7,100	7,200	0	-100
Eating & Drinking Places	19,000	19,100	18,800	-100	200
Finance/Insurance/Real Estate	13,300	13,200	13,300	100	0
Services & Misc.	78,200	78,400	76,000	-200	2,200
Hotels & Lodging Places	10,200	10,400	9,700	-200	500
Business Services	9,400	9,400	9,600	0	-200
Health Services	16,900	16,700	15,800	200	1,100
Legal Services	1,700	1,700	1,700	0	0
Social Services	8,000	8,000	7,700	0	300
Engineering & Mgmt. Svcs.	8,300	8,300	8,200	0	100
Government	71,400	71,100	70,000	300	1,400
Federal	17,800	17,900	17,400	-100	400
State	21,200	21,300	20,400	-100	800
Local	32,400	31,900	32,200	500	200

Municipality of Anchorage	preliminary	revised	Changes from:		
	8/00	7/00	8/99	7/00	8/99
Total Nonag. Wage & Salary	137,600	137,400	134,800	200	2,800
Goods-producing	14,200	14,000	13,800	200	400
Service-producing	123,400	123,400	121,000	0	2,400
Mining	2,700	2,700	2,600	0	100
Oil & Gas Extraction	2,500	2,500	2,400	0	100
Construction	9,200	8,900	9,000	300	200
Manufacturing	2,300	2,400	2,200	-100	100
Transportation/Comm/Utilities	15,000	15,000	14,600	0	400
Air Transportation	6,300	6,300	6,100	0	200
Communications	3,500	3,500	3,400	0	100
Trade	32,400	32,600	32,300	-200	100
Wholesale Trade	6,500	6,600	6,600	-100	-100
Retail Trade	25,900	26,000	25,700	-100	200
Gen. Merchandise & Apparel	4,900	4,900	4,700	0	200
Food Stores	2,800	2,700	2,800	100	0
Eating & Drinking Places	9,600	9,600	9,400	0	200
Finance/Insurance/Real Estate	7,800	7,800	7,800	0	0
Services & Misc.	40,700	40,800	39,300	-100	1,400
Hotels & Lodging Places	3,700	3,700	3,400	0	300
Business Services	6,700	6,700	6,700	0	0
Health Services	9,000	9,000	8,200	0	800
Legal Services	1,200	1,200	1,200	0	0
Social Services	4,000	4,000	3,900	0	100
Engineering & Mgmt. Svcs.	6,000	6,000	6,000	0	0
Government	27,500	27,200	27,000	300	500
Federal	10,000	9,800	9,900	200	100
State	8,300	8,200	8,100	100	200
Local	9,200	9,200	9,000	0	200

Notes to Exhibits 3, 4, & 5—Nonagricultural excludes self-employed workers, fishers, domestics, and unpaid family workers as well as agricultural workers. Government category includes employees of public school systems and the University of Alaska.

Exhibits 3 & 4—Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

Exhibit 5—Prepared in part with funding from the Employment Security Division.

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

4 Hours and Earnings

For selected industries

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
	preliminary 8/00	revised 7/00	8/99	preliminary 8/00	revised 8/00	8/99	preliminary 8/00	revised 7/00	8/99
Mining	\$1,461.79	\$1,380.39	\$1,436.35	55.9	53.4	54.1	\$26.15	\$25.85	\$26.55
Construction	1,404.52	1,353.15	1,305.27	49.7	48.5	46.7	28.26	27.90	27.95
Manufacturing	612.42	578.16	679.77	53.3	48.1	58.5	11.49	12.02	11.62
Seafood Processing	563.03	538.38	643.63	56.7	50.6	63.6	9.93	10.64	10.12
Transportation/Comm/Utilities	726.14	766.58	694.08	33.9	35.1	34.6	21.42	21.84	20.06
Trade	466.48	489.88	450.23	35.1	36.1	34.5	13.29	13.57	13.05
Wholesale Trade	642.57	716.60	657.41	37.1	39.9	38.4	17.32	17.96	17.12
Retail Trade	436.18	449.93	413.71	34.7	35.4	33.8	12.57	12.71	12.24
Finance/Insurance/Real Estate	621.85	616.24	636.53	35.8	35.6	36.9	17.37	17.31	17.25

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

Benchmark: March 1999

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

5 Nonagricultural Wage and Salary Employment

By place of work

	preliminary		Changes from:			preliminary 8/00	revised 7/00	Changes from:			
	8/00	7/00	8/99	7/00	8/99			8/99	7/00	8/99	
Fairbanks						Interior Region					
North Star Borough						Total Nonag. Wage & Salary					
	36,000	36,150	35,150	-150	850	42,850	43,200	42,100	-350	750	
Total Nonag. Wage & Salary						Goods-producing	4,500	4,350	4,450	150	
Goods-producing	4,200	4,050	4,100	150	100	Service-producing	38,350	38,850	37,650	-500	
Service-producing	31,800	32,100	31,050	-300	750	Mining	1,200	1,150	1,100	50	
Mining	1,100	1,050	950	50	150	Construction	2,600	2,500	2,650	100	
Construction	2,450	2,350	2,500	100	-50	Manufacturing	700	700	700	0	
Manufacturing	650	650	650	0	0	Transportation/Comm/Utilities	4,550	4,550	4,450	0	
Transportation/Comm/Utilities	3,650	3,650	3,500	0	150	Trade	9,000	9,150	9,100	-150	
Trucking & Warehousing	700	750	650	-50	50	Finance/Insurance/Real Estate	1,350	1,400	1,350	-50	
Air Transportation	1,000	950	1,000	50	0	Services & Misc.	11,000	11,050	10,700	-50	
Communications	450	450	450	0	0	Hotels & Lodging Places	1,950	2,050	1,900	-100	
Trade	7,100	7,200	7,200	-100	-100	Government	12,450	12,700	12,050	-250	
Wholesale Trade	750	800	850	-50	-100	Federal	4,200	4,250	4,050	-50	
Retail Trade	6,350	6,400	6,350	-50	0	State	4,450	4,700	4,200	-250	
Gen. Merchandise & Apparel	1,100	1,100	1,200	0	-100	Local	3,800	3,750	3,800	50	
Food Stores	750	750	750	0	0	Anchorage/Mat-Su Region					
Eating & Drinking Places	2,350	2,350	2,300	0	50	Total Nonag. Wage & Salary	152,050	151,350	148,700	700	
Finance/Insurance/Real Estate	1,300	1,300	1,300	0	0	Goods-producing	15,800	15,450	15,400	350	
Services & Misc.	9,400	9,400	9,150	0	250	Service-producing	136,250	135,900	133,300	350	
Hotels & Lodging Places	1,250	1,350	1,200	-100	50	Mining	2,750	2,750	2,650	0	
Health Services	2,050	2,000	1,950	50	100	Construction	10,600	10,150	10,350	450	
Government	10,350	10,550	9,900	-200	450	Manufacturing	2,450	2,550	2,400	-100	
Federal	3,550	3,550	3,400	0	150	Transportation/Comm/Utilities	16,150	16,000	15,800	150	
State	4,200	4,400	3,900	-200	300	Trade	36,350	36,400	36,000	-50	
Local	2,600	2,600	2,600	0	0	Finance/Insurance/Real Estate	8,250	8,350	8,350	-100	
Southeast Region						Services & Misc.	44,750	44,700	43,050	50	
Total Nonag. Wage & Salary	41,050	40,850	40,350	200	700	Government	30,750	30,450	30,100	300	
Goods-producing	7,150	6,950	7,250	200	-100	Federal	10,200	10,100	10,050	100	
Service-producing	33,900	33,900	33,100	0	800	State	9,100	9,050	8,800	50	
Mining	300	300	300	0	0	Local	11,450	11,300	11,250	150	
Construction	2,000	2,050	1,850	-50	150	Southwest Region					
Manufacturing	4,850	4,600	5,100	250	-250	Total Nonag. Wage & Salary	19,400	19,850	19,650	-450	
Durable Goods	1,500	1,500	1,750	0	-250	Goods-producing	6,250	6,800	6,400	-550	
Lumber & Wood Products	1,250	1,250	1,550	0	-300	Service-producing	13,150	13,050	13,250	100	
Nondurable Goods	3,350	3,100	3,350	250	0	Seafood Processing	5,950	6,500	6,100	-550	
Seafood Processing	3,000	2,800	3,050	200	-50	Government	5,250	5,300	5,250	-50	
Transportation/Comm/Utilities	3,650	3,600	3,600	50	50	Federal	350	400	350	-50	
Trade	7,550	7,550	7,500	0	50	State	550	550	500	0	
Wholesale Trade	700	650	700	50	0	Local	4,350	4,350	4,400	0	
Retail Trade	6,850	6,900	6,800	-50	50	Gulf Coast Region					
Food Stores	1,300	1,300	1,350	0	-50	Total Nonag. Wage & Salary	31,800	32,650	31,700	-850	
Finance/Insurance/Real Estate	1,300	1,300	1,250	0	50	Goods-producing	8,350	9,150	8,750	-800	
Services & Misc.	9,250	9,250	9,000	0	250	Service-producing	23,450	23,500	22,950	-50	
Health Services	1,750	1,750	1,700	0	50	Mining	1,050	1,050	1,100	0	
Government	12,150	12,200	11,750	-50	400	Oil & Gas Extraction	1,000	1,000	1,050	0	
Federal	2,050	2,100	1,950	-50	100	Construction	1,650	1,600	1,650	50	
State	5,200	5,250	5,000	-50	200	Manufacturing	5,650	6,500	6,000	-850	
Local	4,900	4,850	4,800	50	100	Seafood Processing	4,750	5,550	5,000	-800	
Northern Region						Transportation/Comm/Utilities	2,750	2,700	2,700	50	
Total Nonag. Wage & Salary	15,050	15,000	14,350	50	700	Trade	6,550	6,650	6,400	-100	
Goods-producing	5,450	5,400	4,650	50	800	Wholesale Trade	800	800	800	0	
Service-producing	9,600	9,600	9,700	0	-100	Retail Trade	5,750	5,850	5,600	-100	
Mining	4,750	4,750	4,000	0	750	Eating & Drinking Places	2,100	2,100	2,050	0	
Oil & Gas Extraction	4,250	4,250	3,500	0	750	Finance/Insurance/Real Estate	900	900	850	0	
Government	4,250	4,150	4,350	100	-100	Services & Misc.	6,700	6,850	6,550	-150	
Federal	150	150	200	0	-50	Health Services	1,150	1,150	1,150	0	
State	350	300	300	50	50	Government	6,550	6,400	6,450	150	
Local	3,750	3,700	3,850	50	-100	Federal	850	900	800	-50	
						State	1,500	1,500	1,500	0	
						Local	4,200	4,000	4,150	200	

6 Unemployment Rates

By region and census area

Not Seasonally Adjusted	Percent Unemployed		
	preliminary		revised
	8/00	7/00	8/99
United States	4.1	4.2	4.2
Alaska Statewide	4.3	4.7	4.7
Anch/Mat-Su Region	3.8	4.0	4.1
Municipality of Anchorage	3.4	3.6	3.7
Mat-Su Borough	5.2	5.8	6.1
Gulf Coast Region	5.0	5.2	6.2
Kenai Peninsula Borough	5.7	5.9	7.5
Kodiak Island Borough	3.4	3.7	3.6
Valdez-Cordova	4.0	4.2	4.3
Interior Region	4.3	4.8	4.6
Denali Borough	2.7	2.5	2.6
Fairbanks North Star Borough	3.9	4.4	4.3
Southeast Fairbanks	7.7	7.9	6.4
Yukon-Koyukuk	9.6	11.5	10.8
Northern Region	10.1	10.4	10.3
Nome	10.1	10.7	10.4
North Slope Borough	9.5	9.1	8.1
Northwest Arctic Borough	10.9	12.0	13.3
Southeast Region	4.0	4.2	4.2
Haines Borough	2.3	3.2	4.3
Juneau Borough	3.4	3.6	3.9
Ketchikan Gateway Borough	4.3	4.2	4.2
Prince of Wales-Outer Ketchikan	8.0	8.6	7.3
Sitka Borough	3.1	3.3	3.7
Skagway-Hoonah-Angoon	3.5	4.5	3.7
Wrangell-Petersburg	3.8	4.5	3.9
Yakutat Borough	5.7	8.6	5.2
Southwest Region	7.6	8.1	7.1
Aleutians East Borough	1.6	1.6	1.2
Aleutians West	4.5	6.5	4.5
Bethel	8.3	8.8	8.1
Bristol Bay Borough	4.4	4.1	2.7
Dillingham	4.5	4.2	5.8
Lake & Peninsula Borough	7.9	6.6	6.4
Wade Hampton	15.9	16.7	13.4
Seasonally Adjusted			
United States	4.1	4.0	4.2
Alaska Statewide	5.8	5.5	6.1

March 1999 Benchmark

Comparisons between different time periods are not as meaningful as other time series produced by Research and Analysis. The official definition of unemployment currently in place excludes anyone who has not made an active attempt to find work in the four-week period up to and including the week that includes the 12th of the reference month. Due to the scarcity of employment opportunities in rural Alaska, many individuals do not meet the official definition of unemployed because they have not conducted an active job search. They are considered not in the labor force.

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

(continued from page 19)

About half as many pink salmon were harvested statewide in 2000 as in the previous year, and the 2000 pink salmon catch in Southeast was only 26 percent of last year's harvest. The salmon catch in Bristol Bay was average for that area, but prices for sockeye were a bit low. Prince William Sound had good pink and chum salmon returns and prices stayed solid through the season. Overall prices were reasonable for salmon this year, but the smaller number of fish will limit the value of the 2000 harvest, which is estimated to fall between \$280 and \$300 million. The value of the 1999 salmon harvest was \$371 million.

Another piece of bad news for the seafood industry was Alaska Seafood International's (ASI) recent layoff of 40 employees. ASI indicated that cash shortages necessitated letting the employees go, while the company tries to negotiate with a new investor to replace one that dropped out earlier this year. Employment had ratcheted up at ASI to about 125 employees before the layoff announcement. The fishing industry had some good news, however. ADF&G announced that a limited snow crab (opilio) harvest would be allowed in January, with a harvest level similar to last year's. Most fishers thought that low stocks would keep the opilio fishery closed this year.

Tourism season was lackluster as well

Although numbers from this year's tourist season are still being tallied, preliminary figures suggest that in many places around the state visitor activity was flat or down from 1999. High gas prices may have affected this year's tourist traffic. Passenger entries on the Alaska Highway and Poker Creek border crossings dropped 8 percent in May and 3 percent in June compared to 1999. Visitor traffic through the recently opened Whittier tunnel also fell short of expectations, even though passage was toll free this year.

Reports of flat to declining visitor numbers also came from the Kenai Peninsula, Anchorage, and Fairbanks. In Juneau, cruise ship traffic increased about 4 percent over 1999, but some business owners cited ferry cancellations and concerns about Alaska Airlines as possible reasons for smaller numbers of independent travelers to Alaska in the 2000 season.

Employer Resources

Employers have basic legal obligations toward employees and job applicants. In essence, laws dealing with workers require fair treatment, job safety, and prompt and full payment of wages for legitimate hours worked. Do you have some basic labor law questions concerning race, color, religion, or national origin? Information on the web sites shown here will answer some of your pre-employment questions.

