


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

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

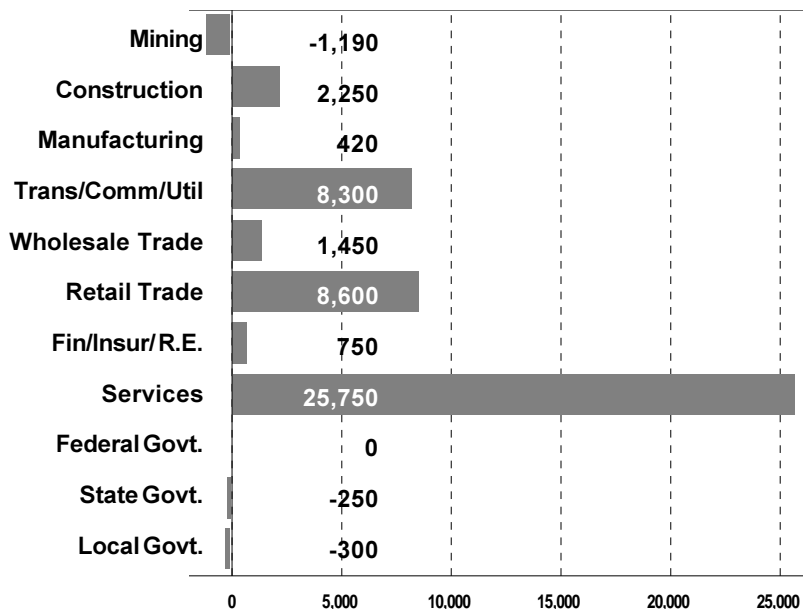
Occupational employment in Alaska is projected to increase by 16.6 percent, from 292,431* to 341,090,* between 1998 and 2008. The types of jobs created by this growth reflect a variety of economic and technological changes.

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.

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.

1 Alaska Employment Growth 1998–2008 forecast



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

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

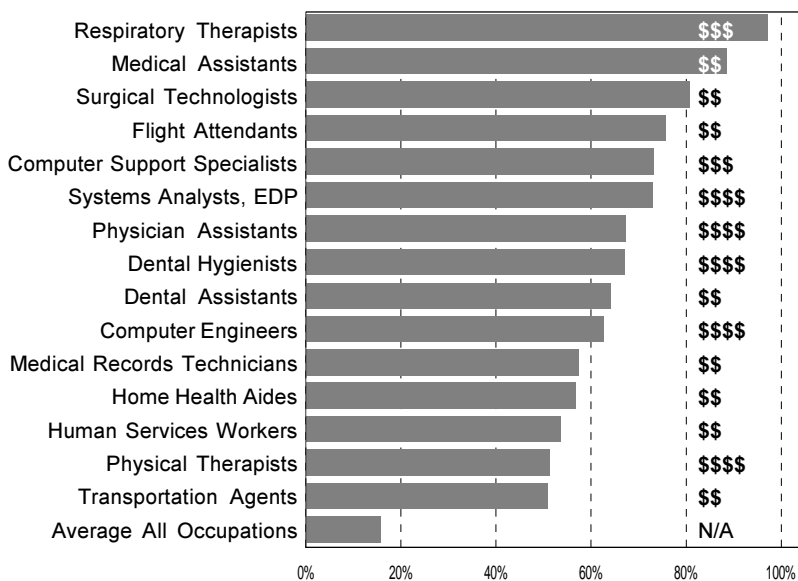
will account for 1.7 percent of total employment in 2008. Technological changes or organizational shifts will affect many of these occupations. For example, the demand for computer operators will slide as a result of mainframe computer system automation. (See Exhibit 5.) The occupation of bank teller 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

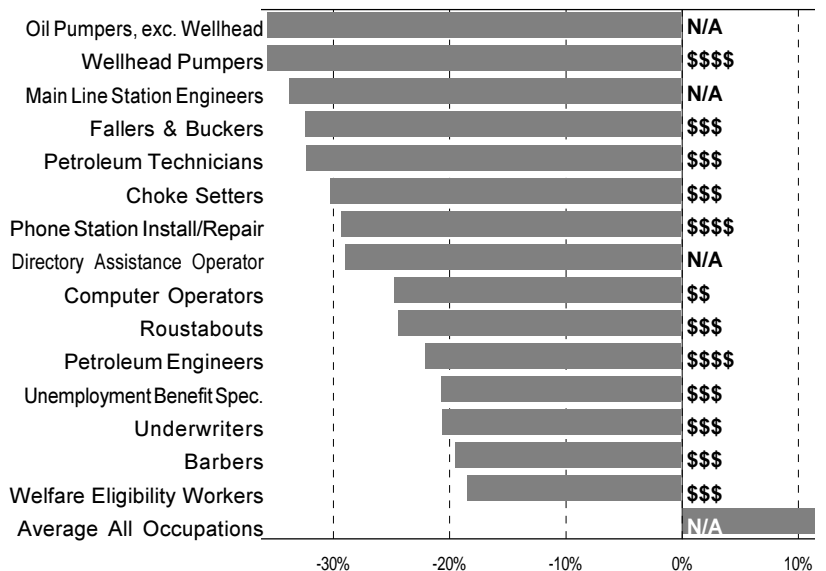
Occupational employment forecasts are the end product of a three-part system: employer surveys, construction of a matrix of industries and occupations, and industry employment forecasts.

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.

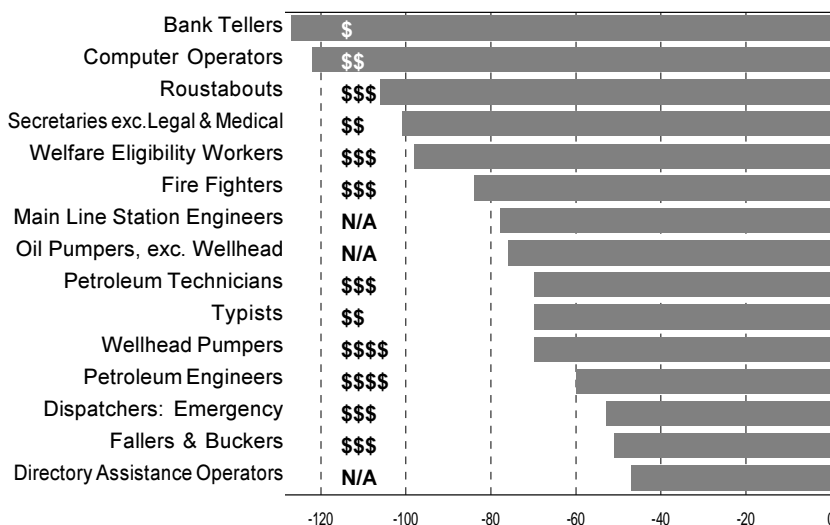
Estimates of self-employed workers are made by applying ratios of self-employed workers in each occupation to estimates of wage and salary workers in the same occupation.

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