

WHAT'S INSIDE

How the seasons affect Alaska industries



ALASKA DEPARTMENT OF LABOR & WORKFORCE DEVELOPMENT

Sean Parnell, Governor Dianne Blumer, Commissioner

ALASKA ECONOMIC TRENDS



Sean Parnell, Governor Dianne Blumer, Commissioner

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Alaska prepares workers to meet growing demand for health care



By Dianne Blumer, Commissioner

This month's *Trends* focuses on the latest occupational forecast for Alaska, a rolling 10-year projection of the state's job opportunities. The data show that Alaska is still a land of opportunity — we anticipate adding almost 39,000 jobs to the state's economy between 2010 and 2020. Occupational changes and retirements will create an additional 96,000 openings.

Some industries will grow faster than others, for example mining is projected to increase 19 percent. But the largest growth, a whopping 31 percent, will be in health care and social assistance. Social assistance includes vocational rehabilitation, child day care, and nonmedical home care.

Alaska's population continues to grow steadily and is projected to exceed 800,000 by 2020. More Alaskans means a greater need for health care, as we are all customers.

An additional driver for health care and social assistance jobs is a greater number of Alaskans 65 and over. From 2010 to 2020, that group is projected to grow by an astounding 89 percent to a total of nearly 105,000.

With this tremendous need, we are looking at innovative ways to fill the anticipated 5,860 new jobs in ambulatory health care, which includes lower-cost home health care, the 3,600 jobs in Alaska's hospitals, or the 2,400 jobs in social assistance.

The University of Alaska system offers more than 90 health programs statewide in allied health, public health, nutrition and dietetics, behavioral health, health information and management, medical billing and coding, nursing, and nurse practitioner. Partnership programs with other universities include medicine, pharmacy, physician assistant, occupational

therapy, and speech-language pathology. About half these programs use online or other technology-based learning. UA now awards more than 800 health-related degrees each year.

AVTEC-Alaska's Institute of Technology, part of the Alaska Department of Labor and Workforce Development, offers health career-related training at its Allied Health Campus in Anchorage. The eightweek CNA program certifies 100 graduates each year, and the 10-month LPN program produces 20, both with a near 100 percent placement rate.

Cook Inlet Tribal Council has partnered with AVTEC to provide a career ladder that includes registered nurse for students who have already achieved certified nurse assistant and licensed practical nurse.

The new associate of applied science in nursing program is at capacity, with 10 students enrolled. When they complete their classroom studies in March, they will be eligible to sit for the National Council of State Boards of Nursing exam to be licensed as registered nurses.

Another new initiative is the partnership with the Alaska Department of Health and Social Services and the Alaska Native Tribal Health Consortium to conduct a survey of all Alaskans on their wants, needs, and vision for the future of health and health care in Alaska.

Known as Healthy Alaskans 2020, the project is designed to provide a framework to improve health for all Alaskans and their communities. Alaskans can participate in the 10-15 minute online survey at ha2020.alaska.gov before Oct. 22, ranking the importance of different health related topics such as drug and alcohol abuse, violence, immunizations, or suicide prevention.

Health Care to Lead Industry Growth

Alaska Industry Forecast, 2010 to 2020

laska is expected to add 38,749 jobs between 2010 and 2020, an increase of 12 percent. Health care and social assistance, which will benefit from the needs of an aging population, is projected to grow by about 31 percent—by far the highest of any industry. The second-highest growth will be in mining, minus oil and gas, at 19 percent.

The other industries expected to grow at a slightly higher rate than the overall economy are finance and the professional and business services sectors. In contrast, construction, utilities, and government are among those projected to grow at a slower pace.

Health care leads the way

Health care and social assistance jobs will be booming through 2020 as the population of Alaskans age 65 and up is expected to grow by 89 percent, fueling increased demand for services. Ambulatory health care — which includes practitioners, outpatient care centers, and home health services — will gain 5,860 jobs, or 37 percent. Some of the growth in ambulatory health care will come from a shift in demand from higher-cost hospitals and long term care to more affordable home health care services. Even with this transition, hospital employment will grow by almost 3,600 jobs, or 28 percent, and nursing homes and community elder care facilities will also show strong growth.

The aging population will also boost social assistance, adding about 2,400 jobs — up 25 percent for the 10-year period. This industry includes a range of social services, most of which will grow at an average to above-average rate. But services for the elderly, including nonmedical home care and community food and housing for seniors, will drive social assistance job growth higher.

Aftermath of recession can skew perception of industry growth rates

The U.S. recession that officially ran from late 2007 through mid-2009 also affected Alaska, albeit less severely and for a shorter duration. The recession hit some Alaska industries harder than others, and some had not fully recovered by 2010 — therefore, comparing projected growth rates requires caution.

Industries that escaped the recession or regained any lost employment by 2010 started the forecast period at a level more in line with their long-term trend. In turn, their projected growth rates are representative of those long-term trends.

Industries that were hit hardest and failed to gain back lost jobs by 2010 started the forecast period in a recessionary trough, so part of their projected growth will reflect their recovery. This

Effect of the Recession on Select Industries' Cumulative Growth

Example Industry	Pre-Recession 2007 jobs	Post-Recession 2010 jobs	Projected jobs, 2020	Pct Chg 2007–2020	Pct Chg 2010-2020
Oil and Gas	3,246	3,551	3,737	15.1%	5.2%
Construction	17,509	15,998	17,604	0.5%	10.0%

means their 2010–2020 growth rates are higher than if they had been measured from a point prior to the recession.

The table above shows how differences in recovery times can skew perceptions when comparing the growth rates of industries. Oil and gas extraction added about 300 jobs from 2007 to 2010 and is expected to grow by 5.2 percent from 2010 to 2020. Construction, on the other hand, dropped by more than 1,500 jobs during the recession and sat at just under 16,000 in 2010. Starting from that

low point, construction is projected to grow 10 percent by 2020 — almost double the percent change for oil and gas.

This comparison may be deceptive because much of the projected construction growth is recovery of lost jobs, unlike oil and gas. If projected employment for the two industries were measured from 2007 instead of 2010, the picture would look dramatically different — oil and gas would grow by 15.1 percent and construction would grow by less than 1 percent.

1

Alaska Employment Forecast by Industry

2010 to 2020

Industry Description	2010 Estimated Employment ¹	2020 Projected Employment	Change from 2010 to 2020	Total Percentage Change ²
Total Employment, All Jobs ³	323,410	362,159	38,749	12.0%
Goods-Producing	44,880	48,264	3,384	7.5%
Natural Resources and Mining	16,140	17,478	1,338	8.3%
Mining	15,162	16,474	1,312	8.7%
Oil and Gas Extraction	3,551	3,737	186	5.2%
Mining (except Oil and Gas)	2,251	2,687	436	19.3%
Support Activities for Mining	9,360	10,050	690	7.4%
Construction	15,998	17,604	1,606	10.0%
Manufacturing	12,742	13,183	441	3.5%
Seafood Product Preparation and Packaging	9,162	9,337	175	1.9%
Services-Providing	278,283	313,648	35,366	12.7%
Trade, Transportation, and Utilities	64,867	71,342	6,476	10.0%
Wholesale Trade	6,276	6,866	590	9.49
Retail Trade	35,465	39,503	4,038	11.49
Transportation and Warehousing⁴	21,227	22,919	1,692	8.09
Utilities	1,899	2,054	155	8.29
Information	6,460	6,561	101	1.69
Financial Activities (Including Real Estate)	14,851	16,817	1,966	13.29
Professional and Business Services	26,264	29,607	3,343	12.79
Professional, Scientific, and Technical Services	13,809	15,724	1,915	13.99
Administrative and Support and Waste Management and Remediation Services	11,301	12,729	1,428	12.69
Education and Health Services	72,580	89,102	16,522	22.89
Educational Services, Public and Private ⁵	31,110	34,692	3,582	11.59
Elementary and Secondary Schools, Public and Private	21,833	24,412	2,579	11.89
Educational Services, Public and Private, All Other	9,277	10,279	1,002	10.89
Health Care and Social Assistance, Public and Private ⁶	41,470	54,410	12,940	31.29
Ambulatory Health Care Services	15,828	21,688	5,860	37.09
Hospitals	12,696	16,281	3,585	28.29
Nursing and Residential Care Facilities	3,429	4,544	1,115	32.59
Social Assistance	9,517	11,898	2,381	25.09
Leisure and Hospitality	31,516	35,446	3,930	12.59
Arts, Entertainment, and Recreation	4,414	4,949	535	12.19
Accommodation and Food Services	27,102	30,497	3,395	12.59
Other Services (Except Government)	11,403	12,467	1,064	9.39
Total Government	50,342	52,308	1,966	3.99
Total Federal Government ⁷	15,982	15,555	-428	-2.7%
Total State Government ⁸	17,753	18,881	1,128	6.4%
Total Local Government ⁹	16,607	17,873	1,266	7.6%

¹Industry sector numbers do not sum to total employment because of rounding.

In all, health care and social assistance will be responsible for a third of the total added jobs over the projection period. It will also become a larger share of the state's total employment, growing from 12.8 percent in 2010 to 15 percent in 2020.

Metal and coal mining expand

Growth in the mining sector (excluding oil and gas) is estimated to increase by 19.3 percent from 2010 to 2020. Several mining operations anticipate fur-

²Percentage change may be inconsistent with employment change due to rounding of the employment numbers.

³Excludes self-employed workers, fishermen, domestic workers, unpaid family workers, and nonprofit volunteers

⁴Includes U.S. Postal Service employment and railroad employment

⁵Includes local and state government educational service employment

⁶Includes public sector hospital employment

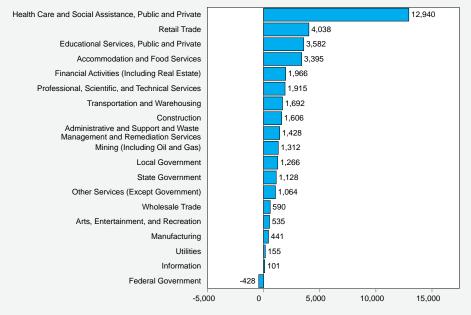
⁷Excludes uniformed military, Postal Service, and hospital employment

⁸Excludes university, railroad, and hospital employment

⁹Excludes public school and hospital employment

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

Highest Projected New Jobs Are in Health Care Select Alaska industries, 2010 to 2020



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

ther expansion, and others are expanding now.

- Usibelli Coal Mine in Healy is expected to increase production after completing its Jumbo Dome development project.
- Recent discoveries in Pogo Mine in Interior Alaska will likely keep the mine in production past its previously published closure date of 2017.
- Red Dog Mine in Northwest Alaska received a permit for the Aqqaluk deposit and is now expected to continue operations until 2031.
- Additional exploration is underway in Greens Creek Mine in Southeast Alaska, which has begun the permitting process to increase its tailings capacity.
- International Tower Hills' Livengood Gold project or Barrick and NovaGold's Donlin Creek project may produce additional employment, assuming their permitting and construction can be completed.

Any unexpected large decline in mineral prices could, however, severely hinder industry growth.

Oil and gas to grow despite lower production

The oil and gas industry is of unique importance

to Alaska because of its direct relationship to the state's budget. Despite an ongoing decline in oil production, employment is not likely to drop over the projection period. The enhanced methods that are necessary to maintain production in later stages of oil fields' life cycles are generally more labor-intensive.

High oil prices will also drive employment growth, with firms exploring or producing in marginal areas that could become economically viable at higher prices. But, all things considered, employment is projected to grow at less than half the rate of the overall economy.

Construction will continue to recover

The construction industry is expected to grow by 10 percent, adding about 1,600 jobs over the projection

period. After declining by 7.9 percent between 2007 and 2010, this would be more than a full post-recession recovery. Some of this recovery has been due to the American Recovery and Reinvestment Act the U.S. Congress passed in 2009. After the stimulus funding is exhausted, pent-up demand from population growth, business expansion, and state-funded capital projects will drive growth in residential, nonresidential, and civil engineering construction.

Retail, leisure bounce back

Construction was not the only industry to suffer from the recession, which officially ended in mid-2009. Retail lost a modest number of jobs from 2007 to 2010, but diversity in the types of businesses softened the blow. Retail growth is projected to be roughly in line with the overall economy, growing by 11.4 percent, or more than 4,000 jobs.

Retail's ability to weather the recession is primarily due to demand for essential goods and services. During a recession, when budgets are tight, consumer spending on food, gasoline and other fuels, medicine, and clothing don't decrease as much as spending on travel, entertainment, and other nonessentials. Businesses selling essentials aren't invulnerable to recessions, but

How the Department of Labor creates these projections

The Department of Labor and Workforce Development creates 10-year industry and occupational forecasts for Alaska every other year. These projections are the product of four steps:

Step 1: Project industry employment

Data from the Quarterly Census of Employment and Wages are used to determine the number of jobs for each industry during the first year, or "base year," of the projection period. Certain types of public-sector employment — such as education, hospitals, rail transportation, and U.S. Postal Service — are combined with employment in private-sector industries.

The department creates projections for each industry based on historical trends and expected economic changes, Alaska and U.S. population projections, and other industry-specific variables. The projections also take into account any knowledge of specific projects and observations of the current economic climate.

Step 2: Determine the occupational makeup, or "staffing pattern," of each industry

To estimate base year employment for each occupation, the department determines the occupational "staffing pattern" of each industry. Most industries have a variety of occupations. The staffing pattern is the breakdown of each occupation's share of the industry's total employment, referred to as "staffing ratios."

Employers in Alaska report their workers' occupations when they submit unemployment insurance quarterly contributions reports, which form the basis of Alaska's Occupational Database. The department uses an analysis of the three most recent years of ODB data to calculate occupational staffing ratios for the majority of industries. Because the ODB does not include federal workers, staffing ratios were developed using occupation data from public and private industries closely related to federal agencies. For example, for civilian employment from army commissaries, staffing patterns for "Other General Merchandise Stores" were used. The department also uses anecdotal information or survey data as available.

Step 3: Calculate base year and projected occupational employment

For each occupation, the department multiplies each industry's estimated base year employment by the staffing ratio, then sums the results to get the base year estimate.

For the projections, adjustments to staffing ratios within an industry are called "change factors." Change factors are multipliers that increase or decrease an occupation's estimated share of industry employment based on factors other than an industry's projected employment change. Some examples are changes in consumer demands, technology, or business practices.

Each industry's projected employment is then multiplied by the adjusted staffing ratio for each occupation, with the results summed by each occupation to get the projections.

Step 4: Estimate job openings

Job openings for an occupation result from both job growth and replacements of workers who leave. An occupation's growth openings are equal to its positive change over the projection period. Estimates of replacement openings use a combination of Bureau of Labor Statistics formulas and formulas derived from an analysis of historical ODB data.

they are less vulnerable than other industries.

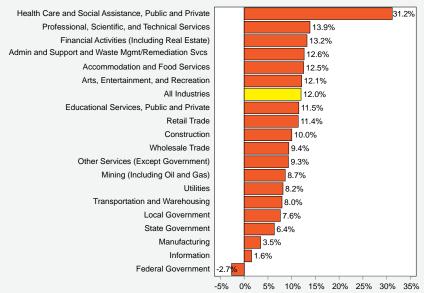
Wholesale trade felt the squeeze of the recession as well, losing 324 jobs from 2007 to 2010. Wholesalers dealing in durable goods such as home appliances were affected the most, with a 7.9 percent job loss from 2007 to 2010. Nondurable goods wholesalers — those dealing in clothes, groceries, and other short-lived prod-

ucts — declined by just 1.8 percent. Wholesale is projected to regain all of its recessionary employment losses and add more than 943 new jobs by 2020, a total increase of 9.4 percent from 2010.

The leisure and hospitality industry — which includes accommodations, restaurants, and bars — was hit hard by the recession, shedding al-

¹Estimates and projections do not include self-employed workers, private household workers, most agricultural workers and fishermen, and others who are not covered by the state's unemployment insurance program.





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

most 1,500 jobs from 2007 to 2009, a 4.5 percent drop. Accommodations lost 879 of those jobs, or almost 11 percent of its employment.

Leisure and hospitality bounced back in 2010, though, recovering about half of the lost employment, and it is projected to add 3,930 jobs by 2020. Tourism is likely to increase with the U.S. easing out of the recession, and it's likely to drive demand for leisure and recreation in combination with a growing Alaska population, boosting job growth.

Transportation a mixed bag

The transportation and warehousing sector is projected to increase by 1,692 jobs — 8 percent — from 2010 to 2020. The recession also slowed this sector and especially the air transportation industry, which lost 571 jobs between 2008 and 2010 but is expected to recover. The same can't be said of the United States Postal Service, which started on a downward trend in 2005 that's expected to continue.

Rail transportation will also likely lose some jobs, but there are bright spots as well. Sightseeing transportation is estimated to grow by 12.4 percent, and growth in courier delivery services

is expected to offset some of the Postal Service's losses.

Education will mirror population trends

Nearly 3,600 new jobs are projected in public and private education, which equates to a growth rate of 11.5 percent. Elementary and secondary schools will provide 70 percent of the employment growth, adding almost 2,600 jobs. This will closely follow population growth among those age groups.

The remaining 30 percent will be spread across a variety of other education providers, including the University of Alaska. Its Anchorage campus projects average enrollment increases of 1.5 percent a year through 2030. A projected 5.4 percent reduction in Alaska's college-age population from 2010 to 2020 means enrollment gains will have to come from some other source, such as:

- Higher demand for well-trained health care workers such as nurses and health care technicians
- Training and education programs for other high-demand jobs
- Outreach to Alaska Natives and other underrepresented populations
- Pursuit of out-of-state students
- Expansion of scientific research programs
- Efforts to increase Alaska's high school graduation rates

Rapid health care growth and outreach to rural areas could also boost private vocational and business schools. In a similar vein, other key industries' sustained requirements for well-trained workers may also contribute to employment growth, especially from industries that expect a higher-than-usual number of retirements.

Slow growth for government

Government employment is expected to grow slowly — just 3.9 percent from 2010 to 2020. State and local governments are expected to expand by 6.4 and 7.6 percent respectively, with federal employment estimated to decrease by 2.7 percent. Declining oil production will lead to lower state revenues, despite higher oil prices, which will

limit growth in state government. Departments that provide health and social services will likely grow more than others, due to expected increases in the number of older Alaskans.

Local government employment will continue to grow to meet increased demand for public services as Alaska's population increases. On the other side of the spectrum, federal employment will decline as federal spending in Alaska levels off after years of strong growth. Federal spending is not expected to decline significantly, however, because of the type of federal money that comes to Alaska. Specifically, a large military presence, extensive federal land holdings, federal health care and other programs for Alaska Natives, and the state's relatively undeveloped infrastructure will continue to draw federal dollars to Alaska.

Information is in flux

The information industry is expected to grow slowly, just 1.6 percent over the projection period, as a result of countervailing forces within and outside of the industry. For instance, publishing (predominately newspapers) will decline by 13.6 percent from 2010 to 2020, while wired and wireless telecommunications carriers are expected to increase by 5.6 percent. Increased consumer demand for digital media over print drives these crisscrossing trends. But competition for these digital services from firms outside of Alaska will likely put a cap on employment growth, because these services can often be provided remotely and at less cost.

Professional, scientific, and technical services

Professional, scientific, and technical services are expected to add 1,915 jobs, up 13.9 percent. The above-average growth in this industry is led by computer systems design; accounting, tax preparation, bookkeeping, and payroll services; and architectural and engineering services.

Legal services and scientific research and development services will lag behind the industry's overall growth rate, remaining relatively flat over the projection period. A portion of the employment in legal services is being consolidated into other industries, and federal spending reductions may inhibit funding of some research and development projects.

Top Jobs Are in Health Care

Alaska Occupational Forecast, 2010 to 2020

laskans will find opportunities in a range of occupations over the next decade, but a disproportionate share will be in the health care arena. Of the 50 highest-growth occupations, 47 are health care-related — and this growing demand is largely driven by an aging population.

The needs of an older population and more retirements will boost other categories as well. In all, Alaska will add almost 39,000 new jobs between 2010 and 2020, and more than 96,000 additional job opportunities will come from replacements — that is, positions vacated by workers who retire, change careers, or leave the job market.

More need with aging population

Alaska, like the U.S. as a whole, is aging as a large group of baby boomers — those born be-

tween 1946 and 1964 — move into their senior years. The number of Alaskans age 65 to 79 is expected to almost double from 2010 to 2020, and the number of those 80 and older will grow by 46 percent. Higher demand for an array of health care services will follow.

The hundreds of individual occupations are grouped into 22 broad categories. Of that 22, the two broad categories of 1) health care practitioners and technical occupations and 2) health care support occupations are projected to add more than 6,500 jobs by 2020, growing by 27.4 and 30.9 percent, respectively. (See Exhibits 1 and 2.)

Besides the added jobs, the need for replacement workers in those categories is expected to generate around 5,000 openings — and this doesn't include a number of health care-related occupations in

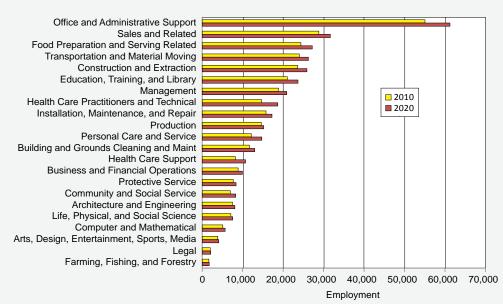
other categories, such as medical and health services managers, health care social workers, and nursing and health specialties instructors. (See Exhibit 3.)

Of the top 25 occupations for percentage growth, 21 fall under the broad umbrella of health care — but three of the four remaining occupations are also health-related: personal care aides, health care educators, and medical secretaries.

Other categories will also benefit

The personal care and service category and community and social service category will also get a boost from the needs of the growing senior population. Together, these two broad

Projected Total Jobs by Occupational Category Alaska, 2010 and 2020



Note: Occupational categories are based on the federal Standard Occupational Classification Manual. Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

categories will grow by over 20 percent, well above the 12 percent expected for all occupations combined. (See Exhibit 2.)

Personal care aides, often considered a health care-related occupation, fall into the category of personal care and service. They assist the elderly with general care and daily activities, a service that can often delay the need for a nursing home or other facility. Personal care aides are expected to grow by 40 percent, the highest growth rate for any single occupation. (See Exhibit 7, Table 1.)

In the community and social service category, occupations such as health care social workers, social and human service assistants, and community health workers also play a part in helping older Alaskans. In addition to their other clients, many social workers direct elderly clients to health services and support people and families dealing with chronic or terminal illness. Not surprisingly, these types of social service occupations are expected to grow at a faster rate than the whole.

The only other broad category expected to grow at an above-average rate is education, training, and library, at 12.6 percent. That leaves 17 categories below the overall 12 percent growth rate, ranging from 4 percent for production to 11.8 percent for business and finance.

Some outside health will also shine

When focusing on specific occupations, it's easy to lose sight of growing occupations in catego-

Health Care Jobs to Lead Overall Growth Alaska occupational categories, 2010 to 2020 Health Care Support Health Care Practitioners and Technical Personal Care and Service Community and Social Service Education, Training, and Library Alaska Overall Growth Business and Financial Operations Food Preparation and Serving Related T1.5% Food Preparation and Maintenance T27.4% 12.6% 12.6% 12.0

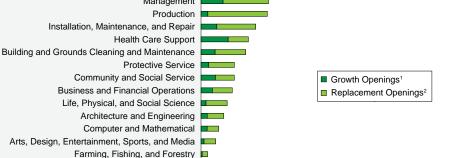


Note: Occupational categories are based on the federal Standard Occupational Classification Manual. Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Administration, Retail to Have Highest Openings

3





5.000

10.000

Note: Occupational categories are based on the federal Standard Occupational Classification Manual. ¹Growth openings are new jobs.

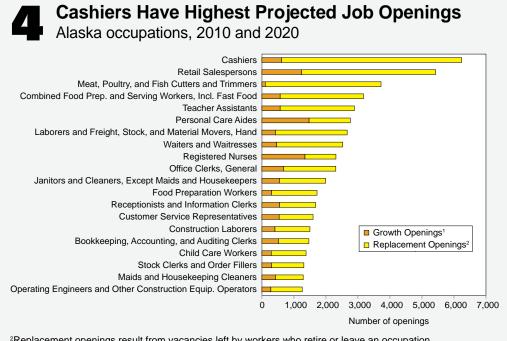
Legal Occupations

15.000

Number of Openings 20.000

25.000

²Replacement openings result from vacancies left by workers who retire or leave an occupation. Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section



²Replacement openings result from vacancies left by workers who retire or leave an occupation. Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

ries outside health care. Only one outlier made the top 25: personal and financial advisers. But, even outside the high-growth categories, many other occupations are expected to grow by 15 percent or more over the projection period.

The top 25 occupations outside health, personal care, and social services are shown in Exhibit 7,

table 2. These occupations run the gamut from teachers to business and finance occupations to billing clerks to computer systems analysts.

Three of the top 25 in this group are preschool, kindergarten, and elementary school teachers (except special education). These occupations will grow roughly in lock-step with the projected population growth for the relevant age groups.

Personal financial advisers will gain clients from the expanding number of retirees, and are expected to grow by over 35 percent. Securities, commodities, and financial services sales agents could reap similar gains, at about 17.5 percent.

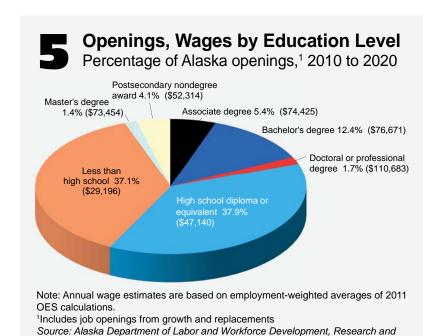
The three computer occupations in this group — applications software developers, systems software developers, and computer systems analysts — will be bolstered by increasing reliance on technological solutions to industry needs.

A small number will be in decline

Out of more than 500 occupations with employment of at least 50 in 2010, only 18 are expected to decline over the 10-year forecast period. (See Exhibit 7, Table 3.)

The Alaska Railroad has hit hard times due to the loss of fuel hauls from the Flint Hills Refinery in North Pole and reductions in federal dollars. More than 50 positions were eliminated this summer, and unless the outlook improves, railroad workers could be vulnerable. Four of the 18 occupations projected to decline are in railroads.

Four U.S. Postal Service occupations and two logging occupations are also projected decliners, part of industries that are expected to lose ground. Other declining occupations, such as sewing machine operators and file clerks, are becoming obsolete.



Analysis Section

Replacements to eclipse new jobs

When determining the long-term outlook for occupations, it's important to consider replacement openings as well as new jobs. In fact, over the projection period, replacements are expected to generate more than 96,000 openings — more than 2.5 times the number of forecasted new jobs.

Replacement openings are vacancies left when a worker permanently leaves an occupation, commonly through retirement, leaving the labor force, leaving the state, or changing careers. They do not include turnover from workers changing jobs in the same occupation. For example, if a person left a job as a baker at Bob's bakery and went to work as a baker at Jane's bakery, that wouldn't count as a replacement opening.

Despite the exclusion of this type of job turnover, many of the occupations with high turnover also have the highest replacement openings (see Exhibit 4), as they often employ younger Alaskans who move on to other careers.

A good example is cashiering, where over 90 percent of the 5,600 projected openings will be from replacements. (See Exhibit 6.) Many of the workers in this occupation are young, and a high number of cashier jobs are also seasonal. Although not all cashier jobs are the same, for many young workers it isn't a lifelong career choice.

On the flip side, occupations with higher-paying jobs that offer stable, year-round employment tend to have more openings from job growth than replacement. For example, only 27 percent of openings among personal financial advisers will be from replacements. (See Exhibit 6.)

High openings in office, sales

The three broad categories with the most projected total openings will be office and administrative support occupations, sales and related occupations, and food preparation and serving related occupations. (See Exhibit 3.)

The office and administrative occupations category will get about two-thirds of its openings from replacements while the other two categories will get over 80 percent. The difference is largely due to the dominance of lower-paying and seasonal jobs in sales and food service.



Openings vary by education level

Three-quarters of all projected openings will come from occupations that typically require a high school diploma or less. (See Exhibit 5.) However, these will mostly be low-paying jobs.

On average, positions requiring a high school diploma paid about \$47,000 annually, and those requiring less than a high school diploma paid a little over \$29,000. However, these figures are based on a 40-hour work week year-round, and many of these jobs are part-time or seasonal.

The remaining 25 percent of openings will come from occupations that require at least an associate degree or other postsecondary nondegree award. The largest percentage of these openings are in occupations requiring at least a bachelor's degree. Openings in these occupations pay higher average wages, and more of them offer full-time, year-round employment.

Alaska's Top Jobs, 2010 to 2020

Long-term occupation projections are a vital tool for workforce development agencies, job placement and counseling professionals, job seekers, and education and training providers — but it can be hard to determine which occupations should get the most attention.



Fastest and Slowest Growing Occupations and Wages

Alaska, 2010 to 2020

Fastest Growing Occupations

Occupation I	Percent Growth
Personal Care Aides	40.0%
Home Health Aides	37.7%
Personal Financial Advisers	35.2%
Dental Hygienists	34.2%
Recreational Therapists	34.1%
Dental Assistants	33.4%
Chiropractors	33.3%
Respiratory Therapists	33.3%
Diagnostic Medical Sonographers	33.3%
Opticians, Dispensing	33.3%
Phlebotomists	33.3%
Physical Therapists	32.6%
Physical Therapist Aides	32.3%
Medical Secretaries	32.0%
Medical Assistants	31.9%
Massage Therapists	31.4%
Radiologic Technologists	30.9%
Nurse Practitioners	30.7%
Surgical Technologists	30.6%
Physician Assistants	30.5%
Family and General Practitioners	29.3%
Health Educators	28.6%
Registered Nurses	27.7%
Occupational Therapists	27.6%
Medical Records and Health Information Tech	nicians 27.5%

Note: This list considers occupations with at least 50 workers and a change of at least 20 jobs. It excludes residual occupations ending with "all other" and a small number with incomplete or unreliable data.

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

Fastest Growing, excl. health care and similar*

Occupation	Percent Growth
Personal Financial Advisers	35.2%
Insurance Sales Agents	22.3%
Billing and Posting Clerks	19.5%
Preschool Teachers, Except Special Education	18.3%
Insurance Claims and Policy Processing Clerks	18.2%
Receptionists and Information Clerks	18.0%
Loan Officers	17.7%
Securities, Commodities, and Financial Services Sales Agents	17.5%
Software Developers, Applications	17.1%
Training and Development Managers	16.6%
Cargo and Freight Agents	16.5%
Computer Systems Analysts	16.3%
Bill and Account Collectors	16.0%
Management Analysts	15.6%
Mining and Geological Engineers, Including Mining Safety Engineers	15.6%
Helpers: Carpenters	15.6%
Millwrights	15.6%
Tellers	15.2%
Claims Adjusters, Examiners, and Investigators	15.1%
Customer Service Representatives	15.1%
Software Developers, Systems Software	15.0%
Insurance Underwriters	14.8%
Parts Salespersons	14.8%
Elementary School Teachers, Except Special Education	14.7%
Kindergarten Teachers, Except Special Education	14.6%

*Excludes occupations in the four highest growth categories: Community and Social Service Occupations, Health Care Practitioners and Technical Occupations, Health Care Support Occupations, and Personal Care and Service Occupations. Also excludes management and support occupations directly related to health care.

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

To help answer this question, economists at the Alaska Department of Labor and Workforce Development developed Alaska's Top Jobs list. (See Exhibit 8.)

The list focuses on occupations projected to fare well and pay well over the forecast period. Although there's no way to consider every angle in what makes one occupation a better prospect than another, the top jobs list is a good place to start.

To make the top jobs list, an occupation must meet two criteria. First, its average wages must rank in the top half of all occupations. Second, the occupation must either: 1) have projected growth of at least 75 jobs and percentage growth that is higher than the growth for all occupations combined, or 2) be among the 50 occupations with the most projected openings.

Top jobs list includes wide range

The occupations on the top jobs list are an elite group. Out of more than 600 considered occupations, only 53 made the grade. Although health care is well represented, the majority of the top occupations are in other categories. Teachers, accountants, computer professionals, pilots, captains and mates, probation officers, lawyers, and wildlife biologists are just a sampling of what made the list.

The top jobs list is heavy on more stable, careeroriented occupations. Twenty-seven typically require at least a bachelor's degree, and another 10 require an associate degree or a nondegree postsecondary award such as a vocational certificate.

Many of the remaining occupations — those requiring no postsecondary education — are well-



Fastest and Slowest Growing Occupations and Wages, continued Alaska, 2010 to 2020

Declining Occupations

Occupation	Percent Change
Railroad Brake, Signal, and Switch Operators	-13.7%
Locomotive Engineers	-12.5%
Rail-Track Laying and Maintenance Equipment Operators	-12.4%
Logging Equipment Operators	-10.4%
Fallers	-9.1%
Sewing Machine Operators	-8.8%
Postal Service Mail Carriers	-7.8%
Postal Svc Mail Sorters, Processors, Proc Machine Operators	-7.8%
Reporters and Correspondents	-7.7%
Postmasters and Mail Superintendents	-7.4%
Print Binding and Finishing Workers	-6.2%
Postal Service Clerks	-6.0%
Rail Car Repairers	-5.6%
Printing Press Operators	-5.0%
Laundry and Dry-Cleaning Workers	-4.0%
Broadcast Technicians	-2.6%
Cutting and Slicing Machine Setters, Operators, Tenders	-1.7%
File Clerks	-0.7%

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

paying construction trades and mechanics occupations such as carpenters, operating engineers and construction equipment operators, plumbers and pipefitters, and mobile heavy equipment mechanics. Although these occupations don't require postsecondary education, many require apprenticeships or considerable on-the-job training.

Wages by Occupational Category

Category	Average Annual	Wages ¹
Architecture and Engineering		\$90,073
Arts, Design, Entertainment, Sports, and	Media	\$44,463
Building and Grounds Cleaning and Mair	ntenance	\$30,041
Business and Financial Operations		\$70,833
Community and Social Service		\$48,376
Computer and Mathematical		\$76,762
Construction and Extraction		\$58,778
Education, Training, and Library		\$58,534
Farming, Fishing, and Forestry		\$41,819
Food Preparation and Serving Related		\$24,163
Health Care Practitioners and Technical		\$84,283
Health Care Support		\$38,017
Installation, Maintenance, and Repair		\$54,747
Legal		\$86,621
Life, Physical, and Social Science		\$64,753
Management		\$96,033
Office and Administrative Support		\$38,770
Personal Care and Service		\$29,062
Production		\$36,777
Protective Service		\$51,166
Sales and Related		\$32,027
Transportation and Material Moving		\$49,998

Note: Wages are based on 2011 OES occupation wage estimates for Alaska, weighted by base year (2010) employment.

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

Alaska's Top Jobs 2010 and 2020

	Employment		Openings, 2010 to 2020				
	2010	2020	Change	Growth	Replacement	Total	Wage Quartile ²
Doctoral or	Profession	nal Degre	e				
Physical Therapists	399	529	32.6%	130	52	182	\$\$\$\$
Family and General Practitioners	386	499	29.3%	113	85	198	\$\$\$\$
Pharmacists	367	459	25.1%	92	101	193	\$\$\$\$
Lawyers	993	1,048	5.5%	55	185	240	\$\$\$\$
	ster's Degr		00.50/	400			2000
Physician Assistants	338	441	30.5%	103	70	173	\$\$\$\$
Mental Health Counselors	332	419	26.2%	87	108	195	\$\$\$
Education Administrators, Elementary and Secondary School	543	604	11.2%	61	155	216	\$\$\$\$
Medical and Health Services Managers	helor's Deg		25.9%	242	250	493	\$\$\$\$
	940 624	1,183 726		243 102	250 120	493 222	
Computer Systems Analysts Social and Community Service Managers	380	726 442	16.3% 16.3%	62	126	188	\$\$\$\$ \$\$\$
Elementary School Teachers, Except Special Education	2,937	3,368	14.7%	431	671	1,102	\$\$\$\$ \$\$\$\$
Middle School Teachers, Except Special and Career/Technical Education	843	966	14.7 %	123	192	315	\$\$\$ \$\$\$
Sales Managers	670	757	13.0%	87	197	284	\$\$\$\$
Accountants and Auditors	1,945	2,195	12.9%	250	428	678	\$\$\$
Network and Computer Systems Administrators	639	720	12.7%	81	105	186	\$\$\$\$
Airline Pilots, Copilots, and Flight Engineers	1,625	1,812	11.5%	187	500	687	\$\$\$\$ \$\$\$\$
Probation Officers and Correctional Treatment Specialists	712	793	11.4%	81	157	238	\$\$\$
Secondary School Teachers, Exc Special and Career/Tech Education	1,504	1,670	11.0%	166	420	586	\$\$\$
Computer and Information Systems Managers	580	644	11.0%	64	140	204	\$\$\$\$
Financial Managers	1,280	1,421	11.0%	141	234	375	\$\$\$\$
Captains, Mates, and Pilots of Water Vessels	612	678	10.8%	66	232	298	\$\$\$
Chief Executives	1,331	1,451	9.0%	120	197	317	\$\$\$\$
Compliance Officers	714	774	8.4%	60	143	203	\$\$\$
Civil Engineers	736	796	8.2%	60	150	210	\$\$\$\$
Computer Programmers	731	786	7.5%	55	169	224	\$\$\$\$
Environmental Scientists and Specialists, Including Health	899	961	6.9%	62	213	275	\$\$\$
Zoologists and Wildlife Biologists	937	965	3.0%	28	207	235	\$\$\$
Associate Degree or P	ostsecond	lary Nonc	degree Aw	ard			
Dental Hygienists	546	733	34.2%	187	124	311	\$\$\$\$
Massage Therapists	306	402	31.4%	96	53	149	\$\$\$\$
Radiologic Technologists	431	564	30.9%	133	75	208	\$\$\$
Registered Nurses	4,862	6,208	27.7%	1,346	968	2,314	\$\$\$\$
Emergency Medical Technicians and Paramedics	440	543	23.4%	103	94	197	\$\$\$
Commercial Pilots	876	987	12.7%	111	314	425	\$\$\$\$
Construction Managers	1,010	1,120	10.9%	110	254	364	\$\$\$\$
Aircraft Mechanics and Service Technicians	1,130	1,249	10.5%	119	290	409	\$\$\$
Geological and Petroleum Technicians	864	939	8.7%	75	253	328	\$\$\$
General and Operations Managers	3,519	3,735	6.1%	216	649	865	\$\$\$\$
High school							
Insurance Sales Agents	394	482	22.3%	88	95	183	\$\$\$
Loan Officers	436	513	17.7%	77	118	195	\$\$\$\$
Administrative Services Managers	1,968	2,252	14.4%	284	501	785	\$\$\$\$
First-Line Supervisors of Office and Administrative Support Workers	2,382	2,697	13.2%	315	649	964	\$\$\$
Mobile Heavy Equipment Mechanics, Except Engines	774	865	11.8%	91	203	294	\$\$\$
Carpenters Output in a set of Construction and Enteretion Works	2,770	3,089	11.5%	319	599	918	\$\$\$
Supervisors of Construction and Extraction Workers	970	1,071	10.4%	101	225	326	\$\$\$\$
Welders, Cutters, Solderers, and Brazers	681	751	10.3%	70	180	250	\$\$\$
Bus and Truck Mechanics and Diesel Engine Specialists First Line Supervisors of Mechanics Installers, and Repairers	705 733	771 790	9.4%	66 67	151	217	\$\$\$ ¢¢¢¢
First-Line Supervisors of Mechanics, Installers, and Repairers	722 1 505	789 1 7/1	9.3%	67 146	190 463	257 609	\$\$\$\$ eee
Plumbers, Pipefitters, and Steamfitters Operating Engineers and Other Construction Equipment Operators	1,595 3,233	1,741 3,514	9.2% 8.7%	146 281	463 979		\$\$\$ \$\$\$
Electricians	3,233 2,163		8.7% 8.6%	281 185		1,260 771	ֆֆֆ \$\$\$
Police and Sheriff's Patrol Officers		2,348			586 321	771 409	
Correctional Officers and Jailers	1,188 900	1,276 960	7.4% 6.7%	88 60	321 158	409 218	\$\$\$ \$\$\$
	han high s		0.7 /0	00	100	210	444
Service Unit Operators, Oil, Gas, and Mining	nan nign s 842	899	6.8%	57	177	234	\$\$\$
Gervice Grit Operators, Gil, Gas, and Milling	042	033	0.070	31	1//	234	φφφ

¹To rank as a top job, the occupation must 1) rank in the top two wage quartiles, and 2) have projected growth of at least 75 jobs and greater percentage growth than all occupations combined, OR be among the 50 occupations with the most projected openings (of those with wages in the top two quartiles).

²Earnings: \$\$\$ = \$54,675 to \$72,060 (\$26.28 to \$34.64 hourly), \$\$\$\$ = More than \$72,060 (\$34.64 hourly).

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

Employment Scene

How seasons affect industries

s Alaska transitions from summer to winter, the days get shorter, the temperature drops, and the economy undergoes its own seasonal changes.

Alaska's summer economy is well known for its abundant construction projects and the service sector that caters to residents as well as visitors. As winter approaches, most construction projects come to a close, visitors leave, and Alaskans stay closer to home. This typical seasonal slowdown produces equally typical changes in jobs and earnings.

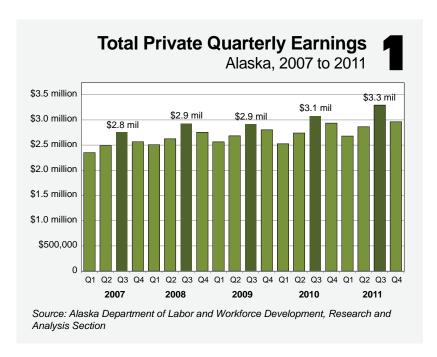
Statewide, total earnings for private employment decline from the third to the fourth quarter as seasonal employment in various industries falls off. (See Exhibit 1.) Over the past five years, earnings have fallen by between 4 and 7 percent from the third to the fourth quarters. In that period during 2011, earnings fell by 5 percent and employment fell 7 percent.

Employment and earnings in the highly seasonal construction industry drop sharply from the third to the fourth quarter. In 2011, total earnings in the industry declined by 27 percent and employment by nearly 18 percent — that's more than \$100 million and 3,300 jobs, respectively. That decline in earnings was the largest over the past five years.

The leisure and hospitality industry shrinks as dramatically as the construction industry in the fourth quarter. Last year, earnings declined by 29 percent, or \$62.5 million, while employment dropped by 24 percent, or 9,300 jobs. The earnings decline in this industry continues through the first quarter, which is typically the low point of the year.

Oil and gas, health care steady

Not all industries cool off in the winter, though. Oil and gas extraction employment changes very little, and total earnings actually increased from



the third to the fourth quarter in 2011. Health care and utilities are also unaffected by seasonal shifts.

Local government busier in winter

On the opposite side of the spectrum, local government employment and earnings follow a different seasonal pattern, with winter being the busiest season.

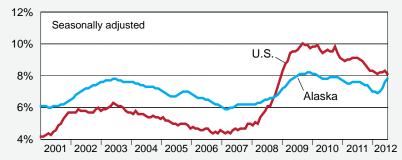
Because public school districts are part of local government, many support staff jobs end when school recesses for the summer. The fourth quarter also marks the beginning of the snow season, which means city plow employment and earnings ramp up.

Seasonality varies by region

Around the state, seasonality varies dramatically by borough and census area. Total earnings drop by more than half in the fourth quarter in tourist

Continued on page 18

Unemployment Rates January 2001 to August 2012



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

Statewide Employment Nonfarm wage and salary

	Preliminary	Revi	ised	Year-O	er-Year C	Change
Alacka					90% Con	
Alaska	8/12	7/12	8/11	8/11	Inter	val
Total Nonfarm Wage and Salary ¹	352,000	353,100	351,300	700	-5,377	6,777
Goods-Producing ²	53,200	56,100	56,600	-3,400	_	_
Service-Providing ³	298,800	297,000	294,700	4,100	_	_
Mining and Logging	17,400	17,300	16,700	700	-535	1,935
Mining	16,900	16,900	16,400	500	_	_
Oil and Gas	13,500	13,500	13,400	100	_	_
Construction	16,000	16,000	18,100	-2,100	-3,613	-587
Manufacturing	19,800	22,800	21,800	-2,000	-4,359	359
Wholesale Trade	7,000	7,000	6,700	300	-39	639
Retail Trade	37,200	37,400	37,400	-200	-984	584
Food and Beverage Stores	6,400	6,500	6,400	0	_	_
General Merchandise Stores	10,400	10,800	10,100	300	_	_
Transportation, Warehousing, Utilitie	es 25,200	24,800	24,800	400	-434	1,234
Air Transportation	6,400	6,500	6,300	100	_	_
Information	6,500	6,500	6,400	100	-175	375
Telecommunications	4,100	4,100	4,200	-100	_	_
Financial Activities	15,400	15,700	15,200	200	-667	1,067
Professional and Business	29,100	29,100	29,200	-100	-1,456	1,256
Services						
Educational 4 and Health Services	,	46,200	44,300	1,600	465	2,735
Health Care	32,500	32,500	31,700	800	_	_
Leisure and Hospitality	40,400	39,900	39,900	500	-2,169	3,169
Other Services	11,300	11,100	10,700	600	-221	1,421
Government	80,800	79,300	80,100	700	_	_
Federal Government ⁵	16,800	17,000	17,800	-1,000	_	_
State Government ⁶	25,200	24,800	24,300	900	_	_
State Government Education ⁷	6,600	5,800	5,700	900	_	_
Local Government	38,800	37,500	38,000	800	_	_
Local Government Education ⁸	20,500	18,900	19,600	900	_	_
Tribal Government	4,300	4,500	4,100	200	-	_

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

Sources for Exhibits 2, 3, and 4: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Department of Labor, Bureau of Labor Statistics

Unemployment Rates Boroughs and census areas

SEASONALLY ADJUSTED United States Alaska Statewide NOT SEASONALLY ADJUSTED United States Alaska Statewide Anchorage/Mat-Su Region	8/12 8.1 7.8	7/12 8.3 7.6	8/11 9.1 7.6
Alaska Statewide NOT SEASONALLY ADJUSTED United States Alaska Statewide Anchorage/Mat-Su Region	7.8 8.2		
NOT SEASONALLY ADJUSTED United States Alaska Statewide Anchorage/Mat-Su Region	8.2	7.6	7.6
United States Alaska Statewide Anchorage/Mat-Su Region			
Alaska Statewide Anchorage/Mat-Su Region			
Anchorage/Mat-Su Region		8.6	9.1
	6.6	7.2	6.7
	6.1	6.6	6.3
Municipality of Anchorage	5.7	6.1	6.0
Matanuska-Susitna Borough	7.5	8.5	7.7
Gulf Coast Region	6.8	7.4	6.9
Kenai Peninsula Borough	7.3	7.9	7.6
Kodiak Island Borough	5.3	6.1	5.4
Valdez-Cordova Census Area	6.0	6.7	5.8
Interior Region	6.5	7.2	6.7
Denali Borough	4.3	4.5	3.6
Fairbanks North Star Borough	5.8	6.6	6.1
Southeast Fairbanks Census Area	9.4	10.4	9.2
Yukon-Koyukuk Census Area	13.7	15.6	13.8
Northern Region	10.2	11.1	10.1
Nome Census Area	12.2	14.3	12.5
North Slope Borough	5.8	6.2	5.6
Northwest Arctic Borough	15.5	15.7	14.7
Southeast Region	5.5	6.1	5.6
Haines Borough	4.3	5.0	4.3
Hoonah-Angoon Census Area	10.5	11.8	10.2
Juneau, City and Borough of	4.6	5.0	4.7
Ketchikan Gateway Borough	5.1	5.8	5.3
Petersburg Census Area ¹	7.9	8.8	6.2
Prince of Wales-Hyder Census Area	11.5	12.7	12.7
Sitka, City and Borough of	4.4	5.2	4.6
Skagway, Municipality of	2.9	2.3	3.9
Wrangell, City and Borough of	6.2	5.8	5.4
Yakutat, City and Borough of	7.0	7.7	7.3
Southwest Region	12.2	11.4	11.1
Aleutians East Borough	9.1	8.8	8.1
Aleutians West Census Area	6.9	7.1	5.8
Bethel Census Area	16.3	16.5	14.9
Bristol Bay Borough	2.2	1.3	1.8
Dillingham Census Area	8.1	8.0	8.1
Lake and Peninsula Borough	5.9	4.6	6.0
Wade Hampton Census Area	22.5	24.4	20.8

EMPLOYMENT SCENE, cont.

hot spots such as Denali Borough and the Municipality of Skagway.

Most of Alaska's boroughs and census areas lose earnings in the fourth quarter compared to the third, but not all. Earnings in the northern boroughs and census areas are just as likely to increase as to decrease. The predominant private industries in these areas — mining, oil and gas, and health care — press on regardless of the time of year.

ALASKA ECONOMIC TRENDS

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

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

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

⁴Private education only

⁵Excludes uniformed military

⁶This number is not a count of state government positions, but the number of people who worked during any part of the pay period that included the 12th of the month (the same measure used for all employment numbers in this table). The numbers can vary significantly from month to month; when attempting to identify trends, annual averages are more useful.

⁷Includes the University of Alaska. Variations in academic calendars from year to year occasionally create temporarily large over-the-year changes.

⁸Includes public school systems. Variations in academic calendars from year to year occasionally create temporarily large over-the-year changes.

Employer Resources

Health Career Academy prepares students for a booming industry

The story began in 2006 when the construction industry said, "We have good jobs, and Alaskans aren't getting them." To meet that demand, the Anchorage School District and the Alaska Department of Labor and Workforce Development entered into a partnership to help create the Anchorage Construction Academy. The vision for another academy became clear with the increasing demand for a trained health care workforce, and in 2009, the department and the district created the Health Career Academy.

The academy, in partnership with more than 30 other entities, prepares high school students for entry-level jobs in health care. It also gives them the knowledge they need to continue their education and training for a range of health care occupations.

Before the Health Career Academy, three health care courses were available for students in the Anchorage district — as of 2012, that number has grown to 13. More than 700 students took classes during the 2011–2012 school year, three years after the academy's inception. Students who complete the coursework

receive a certification, college credit, or both.

Tammy Williamson serves as the health care career guide at the Youth Job Center on the Anchorage School District's King Career Center campus. The position, which is funded by the department, provides workshops and one-on-one assistance in interviewing, resume building, work ethics, and appropriate work attire. Williamson establishes partnerships with Anchorage hospitals and businesses, and assists throughout the application and selection process to reduce the number of hours a participating organization needs to invest.

For students who qualify, the department may also provide funding through its On-the-Job Training program to offset employer training costs for permanent entry-level positions.

For more information about the Health Career Academy or recruiting for entry-level health care positions, contact Tammy Williamson at tammy.williamson@alaska.gov or (907) 334-2562.

Safety Minute

Personal protective equipment prevents harm at work and home

Personal protective equipment such as safety glasses, hard hats, ear plugs, and gloves is the last line of defense against injury on the job — but PPE isn't just for the workplace. Alaskans can sustain injuries off the job, losing significant income and their ability to work. Many of these injuries can be prevented or minimized through use of PPE.

Whether on the job or at play, evaluate the risks for all activities and select the proper safety equipment. PPE also has to be readily available, or it won't be worn.

Safety consultants with the Alaska Department of La-

bor and Workforce Development's Occupational Safety and Health section provide free assistance and tools to help employers reduce injuries, including developing and implementing a comprehensive safety and health management program. Employers who have an exemplary system may also be eligible to participate in the Voluntary Protection Program or the Safety and Health Achievement Recognition Program.

AKOSH is within the Labor Standards and Safety Division. For more information or assistance, call (800) 656-4972 or visit:

labor.alaska.gov/lss/oshhome.htm