

# ALASKA ECONOMIC **TRENDS**

OCTOBER 2011

## Gender and Earnings in Alaska

### WHAT'S INSIDE

**Alaska's \$49 Billion Economy**

The makeup of the state's gross domestic product



ALASKA DEPARTMENT OF LABOR  
& WORKFORCE DEVELOPMENT

Governor Sean Parnell  
Commissioner Click Bishop

# ALASKA ECONOMIC TRENDS



ALASKA DEPARTMENT OF LABOR  
& WORKFORCE DEVELOPMENT

Governor Sean Parnell  
Commissioner Click Bishop

October 2011  
Volume 31  
Number 10  
ISSN 0160-3345

To contact us for more information, a free subscription, mailing list changes, or back copies, e-mail [trends@alaska.gov](mailto:trends@alaska.gov) or call (907) 465-4500.

*Alaska Economic Trends* is a monthly publication dealing with a wide variety of economic issues in the state. Its purpose is to inform the public about those issues.

*Alaska Economic Trends* is funded by the Employment Security Division of the Alaska Department of Labor and Workforce Development. It's published by the Research and Analysis Section.

*Alaska Economic Trends* is printed and distributed by Assets, Inc., a vocational training and employment program, at a cost of \$1.37 per copy.

Material in this publication is public information, and with appropriate credit may be reproduced without permission.

Cover:

This blended image is taken from two 1903 photos from the Alaska State Library Historical Collections. The woman in the cotton parka is an Eskimo from Nome; she has a traditional chin tattoo. The man in the fur parka is an Eskimo from Kotzebue.

**Brynn Keith**  
Director, Administrative Services

**Dan Robinson**  
Chief, Research and Analysis

**Sara Whitney**  
Editor / Graphics Artist

**Sam Dapcevich**  
Cover Artist

To contact *Trends* authors or request a free electronic or print subscription, e-mail [trends@alaska.gov](mailto:trends@alaska.gov) or call (907) 465-4500. *Trends* is on the Web at [labor.alaska.gov/trends](http://labor.alaska.gov/trends).

---

|  |    |
|--|----|
| Gender and Earnings in Alaska                    | 4  |
| Women's earnings vary widely by occupation       |    |
| Alaska's \$49 Billion Economy                    | 14 |
| The makeup of the state's gross domestic product |    |
| Employment Scene                                 | 17 |
| Unemployment rate at 7.7 percent in August       |    |

---

## Trends Authors



Caroline Schultz, an Alaska Department of Labor and Workforce Development economist in Juneau, specializes in housing market research. To reach her, call (907) 465-6027 or e-mail her at [Caroline.Schultz@alaska.gov](mailto:Caroline.Schultz@alaska.gov).



Neal Fried, a Department of Labor economist in Anchorage, specializes in the Anchorage/Mat-Su region's employment, wages, and the cost of living. To reach him, call (907) 269-4861 or e-mail him at [Neal.Fried@alaska.gov](mailto:Neal.Fried@alaska.gov).

# Alaska remains in an enviable place among states



**By Commissioner  
Click Bishop**

Since the first humans could communicate, we have compared one thing to another — what are the similarities and differences, and what is the relative importance and size?

So, how are we doing in Alaska?

Alaska's economy is in better shape than many of its counterparts. Each month, the Alaska Department of Labor and Workforce Development releases employment statistics — and in this issue, you'll read that August's unemployment remained the same as July's: 7.7 percent in contrast to the U.S. rate of 9.1 percent. Unemployment in August 2010 was also at 7.7 percent. Although our unemployment hasn't dropped this year, that rate is the 19th lowest in the nation.

Comparing August 2011 employment to August 2010 shows Alaska added 6,000 jobs, for a total of more than 352,000. Because our employment rates are better than most of the nation, it appears more people are headed north and fewer Alaskans are leaving the state. The department's intercensal data show Alaska's largest population gains were in 2009 and 2010.

## The earnings gap

In this month's *Trends*, Caroline Schultz reports that women in Alaska earn an average of 67 cents for every dollar earned by their male counterparts. This so-called "gender gap" is shrinking — when first penciled out in 1988, Alaska women's annual average earnings were 61.7 percent of men's.

The earnings gap is smallest among young people, and widest among workers over 65. Even among the highest trained and educated, men still earn more than women.

## Gross domestic product

Also this month, we compare Alaska's gross domestic product — what businesses and government produce within our borders — with the rest of the states.

Alaska's GDP is more than \$49 billion, with private industry accounting for \$40 billion. Twenty-five percent of our GDP comes from the oil and gas industry, with government at 19 percent and financial activities at 12 percent.

In per capita GDP, Alaska ranks highest at more than \$63,424, followed by Delaware at \$62,587, and Wyoming at \$61,049. Mississippi is the lowest at \$29,345.

## Hiring our heroes

Alaska also ranks highest in the number of veterans per capita. Alaskans have a long history of service to our nation, including the Alaska Territorial Guard that helped defend the U.S. before statehood. The Alaska Department of Labor has held one of the nation's most successful job fairs for veterans each year.

This year's event to help secure meaningful employment for veterans, active-duty military, and their spouses will be Nov. 2 at the University Center in Anchorage. The fair coincides with "Hire a Veteran Month" in Alaska and the national celebration of Veteran's Day on Nov. 11.

Veterans have a great work ethic, understand the importance of team work, and have experience with leadership roles. More than 90 percent of military personnel have also had background checks for various levels of security. If you are an employer, I urge you to participate. For details, call (907) 269-4777, TTY/TDD (800) 770-8973, or visit [Jobs.Alaska.Gov](http://Jobs.Alaska.Gov).



# Gender and Earnings in Alaska

What women make varies widely among occupations

**O**n average, women in Alaska earn less than men, and that gap exists across all industries, age groups, geographic areas, and most occupations. In 2010, an Alaska woman earned 67 cents to a man's dollar — a 5 cent increase from 1990. (See Exhibit 1.)

Nearly half of Alaska workers are female, but women here make less than 40 percent of total state earnings. This disparity translates into lower average annual earnings for women and a gap of \$14,361 from men's earnings in 2010. The average Alaska woman earned \$29,323 — 67 percent of the average man's \$43,684.

The discrepancy isn't easy to explain. Within the same occupation, earning differences by gender may be a result of training and experience disparities, the number of hours worked in a year, or discrimination. This report doesn't examine these variables, which are not measured by any currently available data source.

## Earnings gap waxes and wanes

The earnings gap was first calculated in 1988, when women made 61.7 percent of men's average annual earnings. Alaska was in the midst

### About the data

This analysis only included workers covered by Alaska unemployment insurance who applied for a Permanent Fund Dividend in 2010 or 2011 and indicated their gender. Federal civilian and military employees, the self-employed, nonresidents, and workers with unknown gender were excluded from this analysis.

When workers had more than one job or worked in more than one area in 2010, their employment and earnings were assigned to the industry, employer, and area where they made the largest portion of their earnings. For individual occupations, however, workers who held multiple jobs in a year were reported in each occupation they worked, which means some workers could be counted more than once.

The average earnings are calculated by dividing total earnings in a specific area, industry, or occupation by the number of workers. This does not account for seasonality or whether a worker was full-time or part-time.

of a serious recession in the late 1980s, but the earnings gap shrunk as the economy recovered in the early 1990s. Women's earnings as a percentage of men's hovered between 65 and 66 percent through most of the 1990s, and by 2002, it in-

## 1 Women in Alaska's Workforce 1988 to 2010

|   |       | 1988     | 1990     | 1992     | 1994     | 1996     | 1998     | 2000     | 2002     | 2004     | 2006     | 2008     | 2010     |
|---|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>Employment (percent)</b>                 | Women | 47.0%    | 46.1%    | 46.3%    | 46.2%    | 46.7%    | 47.1%    | 47.4%    | 47.6%    | 47.8%    | 48.1%    | 48.0%    | 47.9%    |
|   | Men   | 53.0%    | 53.9%    | 53.7%    | 53.8%    | 53.3%    | 52.9%    | 52.6%    | 52.4%    | 52.2%    | 51.9%    | 52.0%    | 52.1%    |
| <b>Earnings (percent)</b>                   | Women | 35.4%    | 34.7%    | 35.9%    | 36.1%    | 36.4%    | 36.7%    | 37.3%    | 37.8%    | 38.2%    | 38.2%    | 37.6%    | 38.2%    |
|   | Men   | 64.6%    | 65.3%    | 64.1%    | 63.9%    | 63.6%    | 63.3%    | 62.7%    | 62.2%    | 61.8%    | 61.8%    | 62.4%    | 61.8%    |
| <b>Avg. annual earnings</b>                 | Women | \$14,962 | \$16,710 | \$18,256 | \$18,838 | \$18,578 | \$19,498 | \$20,582 | \$22,172 | \$23,657 | \$25,486 | \$27,515 | \$29,323 |
|   | Men   | \$24,232 | \$26,867 | \$28,064 | \$28,707 | \$28,477 | \$29,909 | \$31,243 | \$33,090 | \$35,062 | \$38,287 | \$42,236 | \$43,684 |
| <b>Ratio women's to men's avg. earnings</b> |       | 61.7%    | 62.2%    | 65.1%    | 65.6%    | 65.2%    | 65.2%    | 65.9%    | 67.0%    | 67.5%    | 66.6%    | 65.1%    | 67.1%    |

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

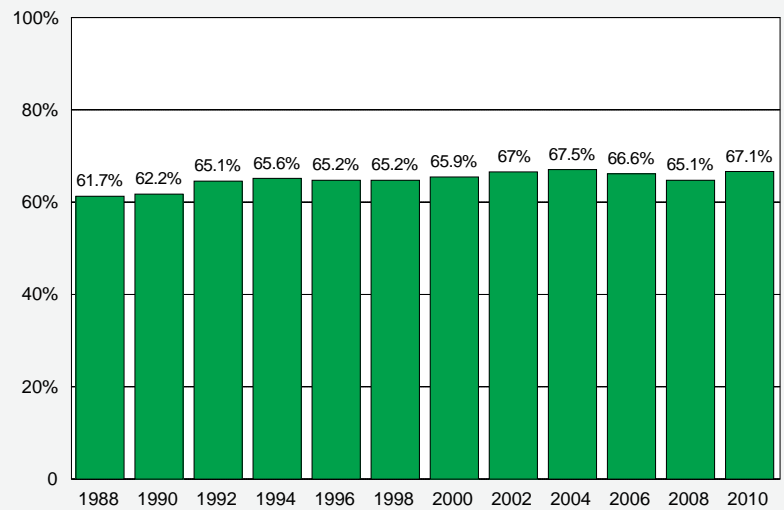
creased to 67 percent. The gap was smallest in 2004, when women earned 67.5 percent of what men made. However, those gains disappeared by 2008, when women's earnings shrunk back to 65.1 percent, about the same level as the decade before. (See Exhibit 2.)

## Women earn less in private sector

Women constituted 46 percent of private-sector workers in 2010, and made 35 percent of private-sector earnings. Their average earnings were 63 percent of men's in the private sector. (See Exhibit 3.)

Women made less money than men in every major industry group in Alaska. (See Exhibits 4, 5, and 6.) Their average earnings were highest in natural resources and mining at \$65,634 a year, but women made up only 14 percent of workers in that industry. Men also made \$26,328 more, at \$91,962 a year. Although natural resources and mining employed just 5 percent of Alaska workers last year, it had a disproportionate effect on the earnings gap. Excluding natural resources and mining from the private sector would increase the ratio of women's earnings from 63 to 79 percent of men's.

## Women's Average Annual Earnings As percentage of men's, Alaska, 1988 to 2010



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

The largest private industry for women in 2010 was education and health services, which includes private schools, hospitals, and private social service and health care employers. Education and health services is one of Alaska's fastest-

## Workers and Earnings by Industry Alaska, 2010

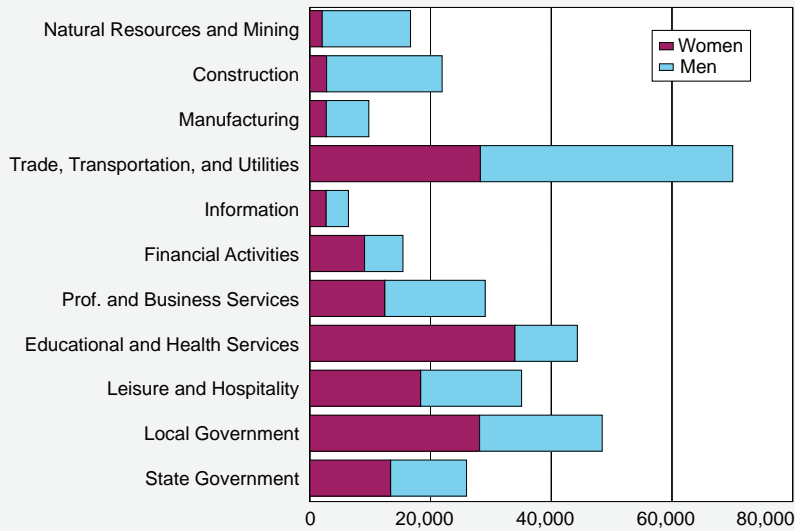
| Industry                             | Women   | Men     | Percent women | Percent women's earnings | Women's avg annual earnings | Men's avg annual earnings | Ratio women's to men's avg ann earnings |
|--------------------------------------|---------|---------|---------------|--------------------------|-----------------------------|---------------------------|---|
| Natural Resources and Mining         | 2,411   | 14,964  | 14%           | 10%                      | \$65,634                    | \$91,962                  | 71%                                     |
| Construction                         | 3,124   | 19,498  | 14%           | 10%                      | \$31,359                    | \$46,594                  | 67%                                     |
| Manufacturing                        | 3,094   | 7,380   | 30%           | 21%                      | \$19,766                    | \$31,873                  | 62%                                     |
| Trade, Transportation, and Utilities | 28,610  | 42,146  | 40%           | 28%                      | \$22,069                    | \$38,633                  | 57%                                     |
| Information                          | 3,056   | 4,024   | 43%           | 36%                      | \$41,201                    | \$56,131                  | 73%                                     |
| Financial Activities                 | 9,412   | 6,712   | 58%           | 53%                      | \$38,492                    | \$47,465                  | 81%                                     |
| Professional and Business Services   | 12,787  | 16,968  | 43%           | 34%                      | \$31,155                    | \$46,255                  | 67%                                     |
| Educational and Health Services      | 34,350  | 10,659  | 76%           | 70%                      | \$34,114                    | \$46,639                  | 73%                                     |
| Leisure and Hospitality              | 18,716  | 17,071  | 52%           | 47%                      | \$12,618                    | \$15,548                  | 81%                                     |
| Other/Unassigned                     | 7,106   | 6,031   | 54%           | 48%                      | \$23,608                    | \$29,899                  | 79%                                     |
| Total Private                        | 122,666 | 145,453 | 46%           | 35%                      | \$27,808                    | \$44,140                  | 63%                                     |
| Local Government                     | 28,470  | 20,672  | 58%           | 54%                      | \$31,102                    | \$36,439                  | 85%                                     |
| State Government                     | 13,738  | 12,918  | 52%           | 45%                      | \$39,168                    | \$50,154                  | 78%                                     |
| Total Government                     | 42,208  | 33,590  | 56%           | 50%                      | \$33,728                    | \$41,713                  | 81%                                     |
| Total All Industries                 | 164,874 | 179,043 | 48%           | 38%                      | \$29,323                    | \$43,684                  | 67%                                     |

Notes: For industry-level aggregations, if workers held multiple jobs during the year, their employment and earnings were assigned to the area, employer, and industry where they earned the majority of their wages in 2010. Worker counts only include individuals with known gender. These data do not include self-employed workers or federal employees.

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

## 4 Women and Men by Industry

### Alaska workers, 2010



Note: Worker counts only include those with known gender. These data do not include self-employed workers or federal employees.

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

growing industries, and that trend is expected to continue into the next decade.

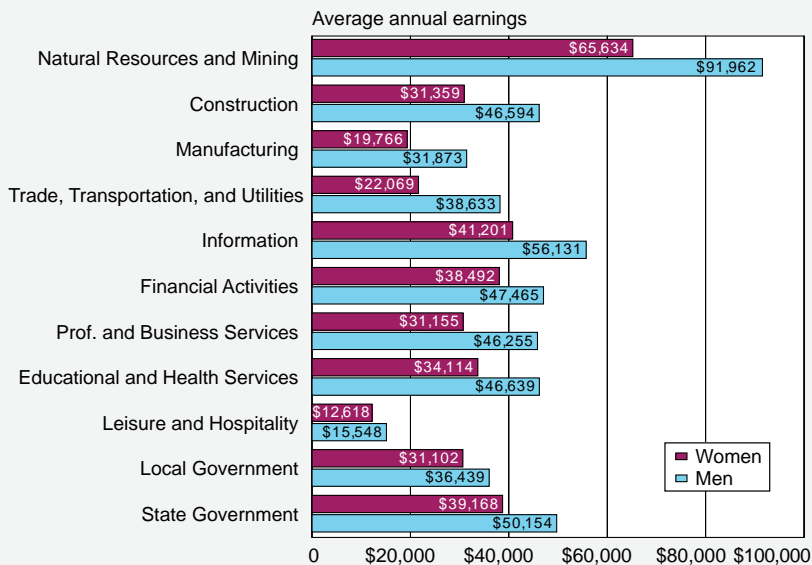
Education and health services employed 34,350 women in 2010, or 76 percent of all workers in the industry. Women's earnings were 73 percent of men's in 2010 — a much narrower gap than in the private sector as a whole.

Women made up 40 percent of workers in trade, transportation, and utilities — the largest private industry for men and women combined, and the second-largest for women. However, it also had the largest disparity in pay. Compared to men, women earned 57 cents on the dollar.

The third-largest industry in 2010 was leisure and hospitality, which employed 18,716 women, or 52 percent of its total workers. This industry had the smallest earnings gap in the private sector, but also the lowest average annual earnings.

## 5 Average Annual Earnings

### By sex and industry, Alaska, 2010



Note: These data do not include self-employed workers or federal employees.

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

### Smaller gap in public earnings

Women's earnings were higher and the gap was smaller in the public sector. Women earned \$33,728 on an average annual basis, 21 percent more than the \$27,808 they made in the private sector. In contrast, men earned 5 percent less in the public sector (\$41,713) than in the private sector (\$44,140).

About one-quarter of all female workers were employed in the public sector, compared to one-fifth of male workers. Women were 56 percent of the public workforce in 2010, and took home 50 percent of total public earnings. On average, women earned 81 cents for every dollar men earned.

Women's average earnings were 78 percent of men's in state government, where women made up 50 percent of the workforce. State government was among the highest-paying industries for both genders. Female state workers earned an average of \$39,168 in 2010, while men earned \$50,154 — \$10,986 more.

Earnings in local government were lower than state government for both genders, with a nar-

rower gap in pay. Women made \$31,102 in 2010, 85 percent of men's average earnings of \$36,439. There were 28,470 women working in local government in 2010, making up 58 percent of workers in the industry.

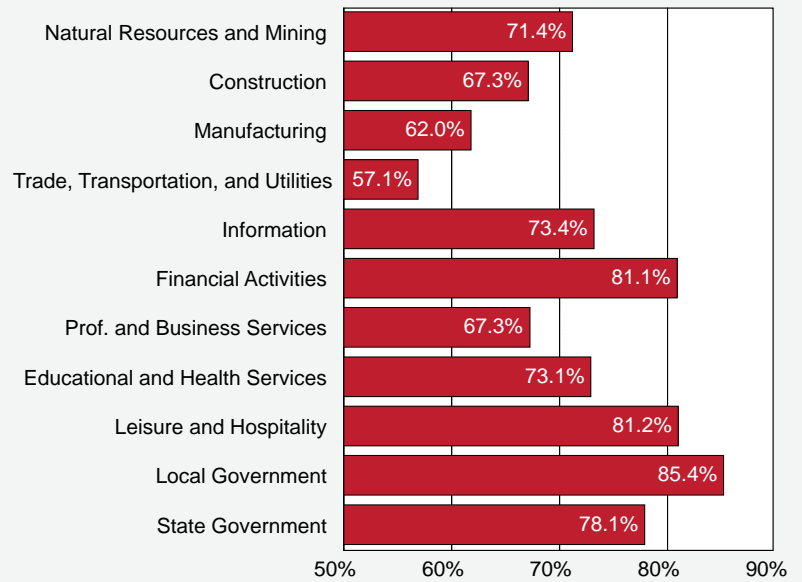
## Men outearn throughout state

Women earned less than men in every borough and census area in Alaska in 2010, as shown in Exhibit 7. The ratio of women's earnings to men's in each borough or census area often depended on the region's dominant industries.

For example, in Bethel and Dillingham, where local government is the largest employer, women made over 90 percent of what men made, on average. At the other end of the spectrum, women in boroughs and census areas where natural resources and mining were major employers made significantly less on average than men.

## Ratio of Women's to Men's Earnings **6**

By industry, Alaska, 2010

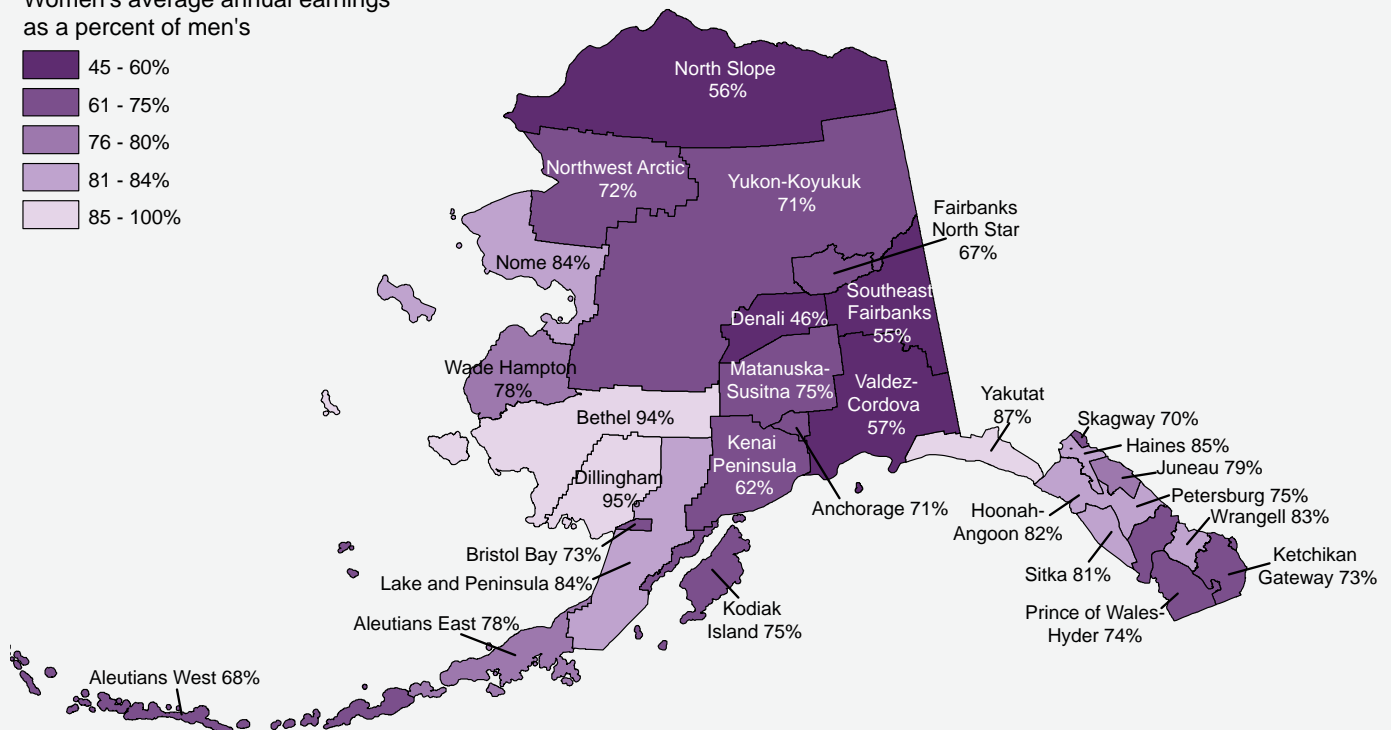
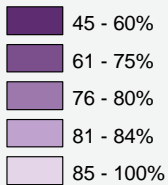


Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

## Earnings Gap is Wider in Some Parts of the State **7**

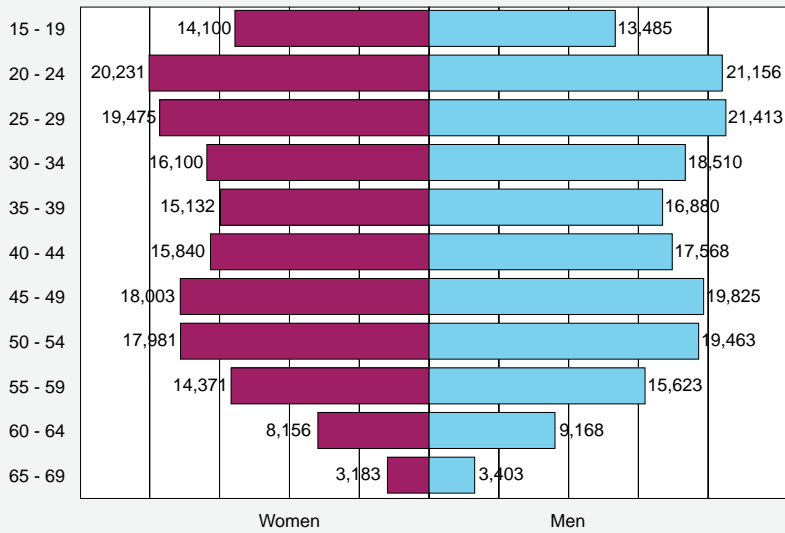
Alaska, 2010

Women's average annual earnings as a percent of men's



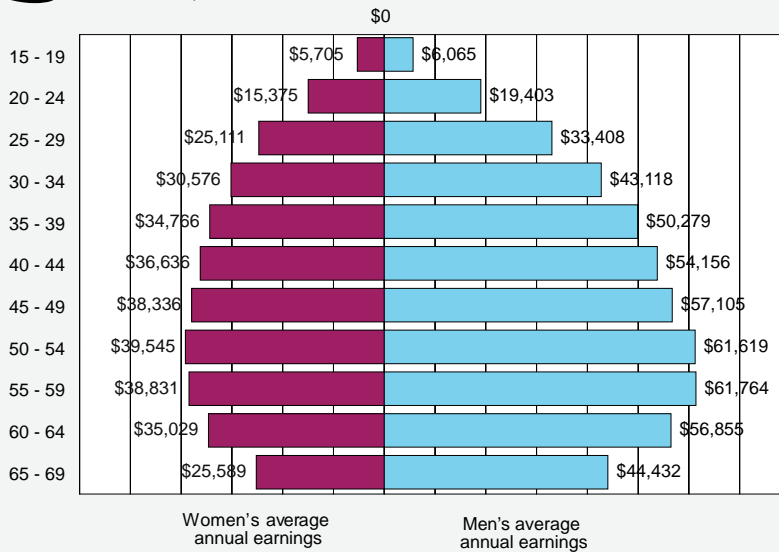
Note: For area-level aggregations, if workers held multiple jobs during the year, their employment and earnings were assigned to the area, employer, and industry where they earned the majority of their wages in 2010.  
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

## 8 Female and Male Workers by Age Alaska, 2010



Note: Worker counts only include those with known gender.  
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

## 9 Average Annual Earnings by Age Alaska, 2010



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

## Earnings gap widens with age

Over the past decade, the earnings gap shrunk for every age group, as shown in Exhibit 10. However, the gap varied widely among age groups.

The difference was smallest among young people. Female workers in the 15-to-19 age group made 94 percent of what their male counterparts earned. It was also the only age group with more women than men. (See Exhibit 8.) Workers in that age group also earned the least overall, as most employed 15-to-19-year-olds did not work full-time because they were in high school or college. (See Exhibit 9.)

Women between 50 and 54 earned the most of any age group, but only 64 percent of men's pay. Men earned the most between the ages of 55 and 59, but only slightly more than the average among 50-to-54-year-old men. The 55-to-59-year-old cohort also had the largest nominal disparity: men made \$61,764, but women earned just \$38,831 — a \$22,933 difference.

The widest earnings gap was in the 65-to-69 age group, where a woman made 58 cents on a man's dollar. Earnings in this age group were lower than those of younger and middle-aged workers — because many in this age group are retired, they may not have worked full-time.

## Women earn more in some jobs

Women outearned men in a handful of occupations in Alaska in 2010, many of which were in health care. Female postsecondary nursing instructors and teachers, and obstetricians/gynecologists made more than double the pay of their male peers. Other occupations with higher average pay for women included dietitians and nutritionists, occupational therapy assistants, postsecondary health specialties teachers, and nurse midwives. (See Exhibit 11.)

Most of these occupations were also dominated by women, but there were a few notable exceptions. Women's average earnings were higher than men's among packaging and filling machine operators and tenders, electrician's help-



ers, and auto damage insurance appraisers — all jobs where less than 25 percent of workers were women.

## Female-dominated jobs

While women tend to earn more than men in jobs where they also outnumber them, that's not always the case. Though women made up 94 percent of dental hygienists and 89 percent of flight attendants, their average earnings were less than 70 percent of men's in both categories. (See Exhibit 12.)

## Male-dominated jobs

Occupations with mostly male workers played a bigger role in Alaska's economy than those with mostly women. There were 223 occupations with over 80 percent men, but only 76 with the same percentage of women. These male-dominated occupations employed 117,781 workers, while the 76 female-dominated jobs employed just 56,643.

Men usually outearn women in male-dominated occupations — often significantly. Though women's average annual earnings in female-dominated jobs were 5 percent higher, men made 74 percent more in occupations they dominated. (See Exhibit 12.)

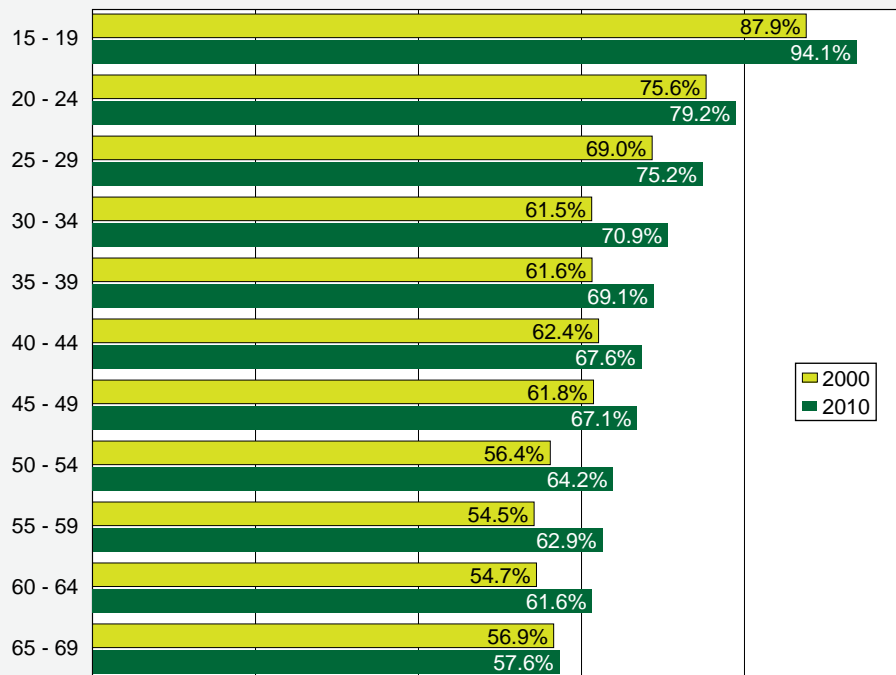
In several occupations that were mostly male, a woman's average annual earnings were less than half of a man's. Twenty-four women were bus and truck mechanics and diesel engine specialists, and 26 women worked as welders, cutters, solderers, and brazers — but they earned just 35 and 27 percent of their male counterparts' pay, respectively. In 2010, the 21 women working as boilermakers made less than 30 percent of what the men made, and the 31 female power plant operators earned just one-quarter of the male wage.

## Large occupations

The largest occupational category in 2010 for women alone and for men and women combined

## Ratio of Women's to Men's Earnings **10**

By age group, Alaska, 2000 and 2010



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

was retail salespersons, which employed 10,454 women that year. Although women held 58 percent of retail sales positions, they earned less than men — \$9,164 per year compared to \$14,006.

The second-largest occupational category for men was construction laborers, with 8,646 men employed. Construction laborers were 89 percent men, and women in these jobs made 63 percent as much as their male counterparts. Exhibit 13 details a selection of large occupations.

## Top-earning jobs for women

The highest-paying occupations for women were in health care, topped by physicians and surgeons, all other, in which the average woman earned \$166,411 per year. Male physicians and surgeons in the same category made \$229,312.

The second-highest earnings for women were among obstetricians and gynecologists at \$153,350 on average — more than twice the male average of \$61,149. (See Exhibit 14.)

# 11

## Jobs In Which Women Earn More Than Men

Select occupations, Alaska 2010

| Occupation  | Women | Men | Percent women | Women's average annual earnings | Men's average annual earnings | Ratio women's to men's earnings |
|---|-------|-----|---------------|---------------------------------|-------------------------------|---------------------------------|
| Court, Municipal, and License Clerks                    | 648   | 141 | 82%           | \$27,838                        | \$18,315                      | 152%                            |
| Police, Fire, and Ambulance Dispatchers                 | 362   | 146 | 71%           | \$36,746                        | \$25,085                      | 146%                            |
| Farmworkers and Laborers, Crop, Nursery, and Greenhouse | 337   | 574 | 37%           | \$11,418                        | \$5,423                       | 211%                            |
| Gaming Dealers  | 335   | 159 | 68%           | \$5,047                         | \$3,297                       | 153%                            |
| Tax Preparers   | 270   | 129 | 68%           | \$8,478                         | \$5,943                       | 143%                            |
| Dancers   | 239   | 50  | 83%           | \$6,393                         | \$3,402                       | 188%                            |
| Health Educators  | 239   | 40  | 86%           | \$24,646                        | \$16,900                      | 146%                            |
| Health Care Social Workers                              | 199   | 40  | 83%           | \$34,557                        | \$24,972                      | 138%                            |
| Interviewers, Except Eligibility and Loan               | 194   | 60  | 76%           | \$14,192                        | \$7,236                       | 196%                            |
| Veterinary Technologists and Technicians                | 172   | 15  | 92%           | \$19,118                        | \$11,242                      | 170%                            |
| Dietitians and Nutritionists                            | 149   | 14  | 91%           | \$33,297                        | \$19,632                      | 170%                            |
| Legislators   | 138   | 205 | 40%           | \$7,312                         | \$4,158                       | 176%                            |
| Health Specialties Teachers, Postsecondary              | 77    | 19  | 80%           | \$46,424                        | \$29,646                      | 157%                            |
| Nursing Instructors and Teachers, Postsecondary         | 70    | 7   | 91%           | \$40,486                        | \$14,218                      | 285%                            |
| Interpreters and Translators                            | 66    | 10  | 87%           | \$18,324                        | \$10,843                      | 169%                            |
| Statistical Assistants                                  | 46    | 18  | 72%           | \$27,292                        | \$19,082                      | 143%                            |
| Credit Authorizers, Checkers, and Clerks                | 32    | 6   | 84%           | \$27,217                        | \$18,376                      | 148%                            |
| Barbers   | 30    | 14  | 68%           | \$21,331                        | \$13,254                      | 161%                            |
| Physical Scientists, All Other                          | 30    | 113 | 21%           | \$29,810                        | \$19,027                      | 157%                            |
| Helpers: Electricians                                   | 23    | 224 | 9%            | \$50,362                        | \$34,896                      | 144%                            |
| Packaging and Filling Machine Operators and Tenders     | 20    | 118 | 14%           | \$32,184                        | \$17,098                      | 188%                            |
| Machine Feeders and Offbearers                          | 18    | 47  | 28%           | \$7,657                         | \$5,012                       | 153%                            |
| Compensation and Benefits Managers                      | 16    | 9   | 64%           | \$56,893                        | \$41,414                      | 137%                            |
| Obstetricians and Gynecologists                         | 15    | 8   | 65%           | \$153,350                       | \$61,149                      | 251%                            |
| Occupational Therapy Assistants                         | 14    | 6   | 70%           | \$26,670                        | \$15,954                      | 167%                            |
| Audio-Visual and Multimedia Collections Specialists     | 12    | 7   | 63%           | \$45,654                        | \$30,139                      | 151%                            |
| Information Security Analysts                           | 11    | 33  | 25%           | \$57,692                        | \$40,605                      | 142%                            |

## Jobs In Which Men Earn More Than Women

| Occupation   | Women | Men   | Percent women | Women's average annual earnings | Men's average annual earnings | Ratio women's to men's earnings |
|--|-------|-------|---------------|---------------------------------|-------------------------------|---------------------------------|
| Production Workers, All Other                                | 340   | 1,422 | 19%           | \$22,160                        | \$70,017                      | 32%                             |
| Firefighters   | 170   | 955   | 15%           | \$10,686                        | \$43,565                      | 25%                             |
| Welders, Cutters, Solderers, and Brazers                     | 26    | 857   | 3%            | \$11,200                        | \$42,252                      | 27%                             |
| Bus and Truck Mechanics and Diesel Engine Specialists        | 24    | 807   | 3%            | \$16,848                        | \$47,717                      | 35%                             |
| Mobile Heavy Equipment Mechanics, Except Engines             | 12    | 772   | 2%            | \$18,243                        | \$57,520                      | 32%                             |
| Refuse and Recyclable Material Collectors                    | 175   | 689   | 20%           | \$2,559                         | \$13,761                      | 19%                             |
| First-Line Supervisors of Production and Operating Workers   | 128   | 654   | 16%           | \$12,617                        | \$75,610                      | 17%                             |
| Power Plant Operators  | 31    | 608   | 5%            | \$9,429                         | \$38,927                      | 24%                             |
| Electrical Power-Line Installers and Repairers               | 12    | 463   | 3%            | \$24,864                        | \$78,351                      | 32%                             |
| Maintenance Workers, Machinery                               | 26    | 435   | 6%            | \$10,691                        | \$39,139                      | 27%                             |
| Helpers: Extraction Workers                                  | 14    | 259   | 5%            | \$11,438                        | \$41,792                      | 27%                             |
| Helpers: Pipelayers, Plumbers, Pipefitters, and Steamfitters | 15    | 242   | 6%            | \$7,609                         | \$24,593                      | 31%                             |
| Door-to-Door Sales Workers, News/Street Vendors, Related     | 172   | 207   | 45%           | \$1,214                         | \$4,691                       | 26%                             |
| Miners, Except Drillers and Machine Operators                | 19    | 192   | 9%            | \$24,741                        | \$69,173                      | 36%                             |
| Paving, Surfacing, and Tamping Equipment Operators           | 8     | 188   | 4%            | \$4,596                         | \$21,218                      | 22%                             |
| Crane and Tower Operators                                    | 7     | 153   | 4%            | \$11,144                        | \$47,163                      | 24%                             |
| Carpet Installers  | 7     | 125   | 5%            | \$5,271                         | \$20,618                      | 26%                             |
| Boilermakers   | 21    | 124   | 14%           | \$10,707                        | \$36,863                      | 29%                             |
| Coin, Vending, Amusement Machine Servicers and Repairers     | 17    | 109   | 13%           | \$7,092                         | \$20,498                      | 35%                             |
| Logging Workers, All Other                                   | 6     | 91    | 6%            | \$1,997                         | \$10,151                      | 20%                             |
| Pump Operators, Except Wellhead Pumps                        | 9     | 80    | 10%           | \$9,733                         | \$57,369                      | 17%                             |
| Photographers  | 130   | 67    | 66%           | \$6,296                         | \$21,507                      | 29%                             |
| Maintenance and Repair Workers, General                      | 8     | 65    | 11%           | \$2,221                         | \$6,221                       | 36%                             |
| Telemarketers  | 67    | 63    | 52%           | \$11,655                        | \$31,304                      | 37%                             |
| Chiropractors  | 36    | 51    | 41%           | \$26,221                        | \$73,024                      | 36%                             |
| Craft Artists  | 7     | 24    | 23%           | \$4,779                         | \$16,857                      | 28%                             |
| Economics Teachers, Postsecondary                            | 22    | 23    | 49%           | \$9,873                         | \$70,329                      | 14%                             |
| Pesticide Handlers, Sprayers, and Applicators, Vegetation    | 17    | 19    | 47%           | \$2,677                         | \$9,151                       | 29%                             |
| Models   | 14    | 8     | 64%           | \$11,921                        | \$46,264                      | 26%                             |

Notes: For occupation aggregations, workers who held multiple jobs in a year will be reported in each occupation they worked, which means some workers will be counted more than once. Occupation totals should not be used for total worker counts. Worker counts only include individuals with known gender. These data do not include self-employed workers or federal employees.

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

# 12 Female-Dominated Jobs

Select occupations, Alaska 2010

| Occupation   | Women | Men | Percent women | Women's average annual earnings | Men's average annual earnings | Ratio women's to men's earnings |
|--|-------|-----|---------------|---------------------------------|-------------------------------|---------------------------------|
| Registered Nurses  | 4,358 | 526 | 89%           | \$51,033                        | \$53,651                      | 95%                             |
| Receptionists and Information Clerks                       | 4,033 | 379 | 91%           | \$15,460                        | \$15,431                      | 100%                            |
| Secretaries/Admin Assistants, Exc Legal, Medical, and Exec | 3,277 | 384 | 90%           | \$21,362                        | \$17,301                      | 123%                            |
| Child Care Workers   | 2,469 | 354 | 87%           | \$8,630                         | \$7,495                       | 115%                            |
| Nursing Assistants   | 2,003 | 292 | 87%           | \$21,458                        | \$21,773                      | 99%                             |
| Billing and Posting Clerks                                 | 1,494 | 193 | 89%           | \$25,731                        | \$25,050                      | 103%                            |
| Dental Assistants  | 1,230 | 80  | 94%           | \$22,692                        | \$20,893                      | 109%                            |
| Preschool Teachers, Except Special Education               | 924   | 63  | 94%           | \$12,448                        | \$11,227                      | 111%                            |
| Hairdressers, Hairstylists, and Cosmetologists             | 846   | 76  | 92%           | \$16,252                        | \$14,302                      | 114%                            |
| Medical Secretaries  | 662   | 49  | 93%           | \$21,078                        | \$16,692                      | 126%                            |
| Legal Secretaries  | 612   | 56  | 92%           | \$30,015                        | \$22,702                      | 132%                            |
| Licensed Practical and Licensed Vocational Nurses          | 592   | 80  | 88%           | \$35,699                        | \$43,146                      | 83%                             |
| Medical Records and Health Information Technicians         | 571   | 85  | 87%           | \$26,856                        | \$34,347                      | 78%                             |
| Dental Hygienists  | 447   | 27  | 94%           | \$46,868                        | \$48,338                      | 97%                             |
| Loan Interviewers and Clerks                               | 425   | 47  | 90%           | \$32,236                        | \$26,606                      | 121%                            |
| Flight Attendants  | 355   | 46  | 89%           | \$23,798                        | \$34,996                      | 68%                             |
| Massage Therapists   | 338   | 47  | 88%           | \$17,948                        | \$13,589                      | 132%                            |
| Librarians   | 308   | 46  | 87%           | \$37,007                        | \$37,472                      | 99%                             |
| Speech-Language Pathologists                               | 208   | 28  | 88%           | \$48,843                        | \$58,570                      | 83%                             |
| Nurse Practitioners  | 204   | 15  | 93%           | \$48,913                        | \$36,813                      | 133%                            |
| Veterinary Technologists and Technicians                   | 172   | 15  | 92%           | \$19,118                        | \$11,242                      | 170%                            |
| Occupational Therapists                                    | 172   | 25  | 87%           | \$39,733                        | \$34,526                      | 115%                            |
| Kindergarten Teachers, Except Special Education            | 170   | 13  | 93%           | \$42,574                        | \$37,684                      | 113%                            |
| Dietitians and Nutritionists                               | 149   | 14  | 91%           | \$33,297                        | \$19,632                      | 170%                            |
| Floral Designers   | 148   | 21  | 88%           | \$10,233                        | \$12,243                      | 84%                             |
| Educ Administrators, Preschool and Child Care              | 111   | 13  | 90%           | \$24,357                        | \$28,096                      | 87%                             |
| Special Education Teachers, Preschool                      | 95    | 11  | 90%           | \$32,615                        | \$45,794                      | 71%                             |

## Male-Dominated Jobs

| Occupation  | Women | Men   | Percent women | Women's average annual earnings | Men's average annual earnings | Ratio women's to men's earnings |
|---|-------|-------|---------------|---------------------------------|-------------------------------|---------------------------------|
| Carpenters  | 171   | 4,891 | 3%            | \$15,480                        | \$28,337                      | 55%                             |
| Electricians  | 97    | 2,639 | 4%            | \$33,637                        | \$56,214                      | 60%                             |
| Automotive Service Technicians and Mechanics                | 63    | 2,289 | 3%            | \$13,313                        | \$29,187                      | 46%                             |
| Plumbers, Pipefitters, and Steamfitters                     | 58    | 2,150 | 3%            | \$24,037                        | \$50,714                      | 47%                             |
| Roustabouts, Oil and Gas                                    | 82    | 1,863 | 4%            | \$24,644                        | \$48,900                      | 50%                             |
| Aircraft Mechanics and Service Technicians                  | 50    | 1,209 | 4%            | \$25,142                        | \$45,032                      | 56%                             |
| Welders, Cutters, Solderers, and Brazers                    | 26    | 857   | 3%            | \$11,200                        | \$42,252                      | 27%                             |
| Bus and Truck Mechanics and Diesel Engine Specialists       | 24    | 807   | 3%            | \$16,848                        | \$47,717                      | 35%                             |
| Service Unit Operators, Oil, Gas, and Mining                | 39    | 775   | 5%            | \$46,035                        | \$68,366                      | 67%                             |
| Mobile Heavy Equipment Mechanics, Except Engines            | 12    | 772   | 2%            | \$18,243                        | \$57,520                      | 32%                             |
| Painters, Construction and Maintenance                      | 38    | 749   | 5%            | \$20,193                        | \$21,740                      | 93%                             |
| First-Line Supervisors of Mechanics, Installers, Repairers  | 30    | 731   | 4%            | \$53,909                        | \$62,064                      | 87%                             |
| Tire Repairers and Changers                                 | 19    | 598   | 3%            | \$8,224                         | \$13,643                      | 60%                             |
| Roofers   | 6     | 504   | 1%            | \$25,978                        | \$27,744                      | 94%                             |
| Sheet Metal Workers   | 13    | 493   | 3%            | \$39,896                        | \$49,920                      | 80%                             |
| Electrical Power-Line Installers and Repairers              | 12    | 463   | 3%            | \$24,864                        | \$78,351                      | 32%                             |
| Structural Iron and Steel Workers                           | 9     | 440   | 2%            | \$18,561                        | \$40,536                      | 46%                             |
| Heating, Air Conditioning, and Refrig Mechanics, Installers | 8     | 439   | 2%            | \$30,179                        | \$34,706                      | 87%                             |
| Petroleum Pump Sys Operators, Refinery Opers, Gaugers       | 15    | 414   | 3%            | \$72,982                        | \$110,448                     | 66%                             |
| Cement Masons and Concrete Finishers                        | 8     | 400   | 2%            | \$12,999                        | \$20,388                      | 64%                             |
| Automotive Body and Related Repairers                       | 13    | 340   | 4%            | \$12,913                        | \$32,088                      | 40%                             |
| Excavating and Loading Machine and Dragline Operators       | 11    | 337   | 3%            | \$19,298                        | \$32,321                      | 60%                             |
| Rotary Drill Operators, Oil and Gas                         | 9     | 335   | 3%            | \$55,822                        | \$62,812                      | 89%                             |
| Insulation Workers, Floor, Ceiling, and Wall                | 9     | 270   | 3%            | \$17,332                        | \$25,644                      | 68%                             |
| Electrical/Electronics Repair, Commercial/Industrial Equip  | 10    | 220   | 4%            | \$39,833                        | \$66,473                      | 60%                             |
| Ship Engineers  | 6     | 215   | 3%            | \$49,623                        | \$72,745                      | 68%                             |
| Millwrights   | 6     | 205   | 3%            | \$64,022                        | \$67,883                      | 94%                             |
| Paving, Surfacing, and Tamping Equipment Operators          | 8     | 188   | 4%            | \$4,596                         | \$21,218                      | 22%                             |
| Extraction Workers, All Other                               | 9     | 180   | 5%            | \$31,761                        | \$61,301                      | 52%                             |

Notes: For occupation aggregations, workers who held multiple jobs in a year will be reported in each occupation they worked, which means some workers will be counted more than once. Occupation totals should not be used for total worker counts. Worker counts only include individuals with known gender. These data do not include self-employed workers or federal employees.

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

# 13 Large Occupations

## Select occupations, Alaska 2010

| Occupation  | Women  | Men   | Percent women | Women's average annual earnings | Men's average annual earnings | Ratio women's to men's earnings |
|---|--------|-------|---------------|---------------------------------|-------------------------------|---------------------------------|
| Retail Salespersons   | 10,454 | 7,653 | 58%           | \$9,164                         | \$14,006                      | 65%                             |
| Cashiers  | 9,088  | 4,765 | 66%           | \$9,327                         | \$11,906                      | 78%                             |
| Construction Laborers   | 1,104  | 8,646 | 11%           | \$11,922                        | \$18,833                      | 63%                             |
| Office Clerks, General  | 7,527  | 2,183 | 78%           | \$17,220                        | \$17,197                      | 100%                            |
| Office and Administrative Support Workers, All Other              | 6,936  | 2,556 | 73%           | \$19,598                        | \$19,691                      | 100%                            |
| Combined Food Prep and Serving Workers, Including Fast Food       | 5,151  | 3,968 | 56%           | \$6,955                         | \$7,762                       | 90%                             |
| Janitors and Cleaners, Except Maids and Housekeeping Cleaners     | 3,342  | 5,752 | 37%           | \$10,754                        | \$12,777                      | 84%                             |
| Laborers and Freight, Stock, and Material Movers, Hand            | 1,041  | 6,997 | 13%           | \$9,331                         | \$12,299                      | 76%                             |
| Waiters and Waitresses  | 5,162  | 2,023 | 72%           | \$8,971                         | \$10,365                      | 87%                             |
| Bookkeeping, Accounting, and Auditing Clerks                      | 5,176  | 886   | 85%           | \$24,780                        | \$25,204                      | 98%                             |
| Food Preparation Workers  | 3,106  | 2,909 | 52%           | \$6,698                         | \$7,421                       | 90%                             |
| Teacher Assistants  | 4,590  | 1,213 | 79%           | \$10,701                        | \$8,811                       | 121%                            |
| Executive Secretaries and Executive Administrative Assistants     | 4,852  | 924   | 84%           | \$25,649                        | \$19,712                      | 130%                            |
| Personal Care Aides   | 4,251  | 1,129 | 79%           | \$11,761                        | \$11,938                      | 99%                             |
| Maids and Housekeeping Cleaners                                   | 3,987  | 1,270 | 76%           | \$10,643                        | \$13,026                      | 82%                             |
| Carpenters  | 171    | 4,891 | 3%            | \$15,480                        | \$28,337                      | 55%                             |
| General and Operations Managers                                   | 1,933  | 3,100 | 38%           | \$42,143                        | \$73,535                      | 57%                             |
| Registered Nurses   | 4,358  | 526   | 89%           | \$51,033                        | \$53,651                      | 95%                             |
| Seafood Processing Workers, Except Surimi and Fish Roe            | 1,594  | 3,261 | 33%           | \$10,171                        | \$11,286                      | 90%                             |
| Operating Engineers and Other Construction Equip Operators        | 226    | 4,255 | 5%            | \$28,626                        | \$44,823                      | 64%                             |
| Receptionists and Information Clerks                              | 4,033  | 379   | 91%           | \$15,460                        | \$15,431                      | 100%                            |
| Sales and Related Workers, All Other                              | 2,067  | 2,238 | 48%           | \$14,954                        | \$19,444                      | 77%                             |
| Stock Clerks and Order Fillers                                    | 1,133  | 3,069 | 27%           | \$10,328                        | \$13,114                      | 79%                             |
| Maintenance and Repair Workers, General                           | 356    | 3,784 | 9%            | \$12,664                        | \$28,986                      | 44%                             |
| Customer Service Representatives                                  | 2,836  | 1,040 | 73%           | \$19,304                        | \$19,526                      | 99%                             |
| Heavy and Tractor-Trailer Truck Drivers                           | 199    | 3,585 | 5%            | \$24,883                        | \$38,272                      | 65%                             |
| Secretaries/Admin Assistants, Except Legal, Medical, and Exec     | 3,277  | 384   | 90%           | \$21,362                        | \$17,301                      | 123%                            |
| Home Health Aides   | 2,786  | 870   | 76%           | \$13,800                        | \$16,064                      | 86%                             |
| Elementary School Teachers, Except Special Education              | 2,891  | 765   | 79%           | \$44,110                        | \$43,675                      | 101%                            |
| Healthcare Support Workers, All Other                             | 2,779  | 812   | 77%           | \$15,338                        | \$17,366                      | 88%                             |
| Food Preparation and Serving Related Workers, All Other           | 1,732  | 1,841 | 48%           | \$8,082                         | \$9,426                       | 86%                             |
| Teachers and Instructors, All Other                               | 2,540  | 1,026 | 71%           | \$18,068                        | \$25,414                      | 71%                             |
| Security Guards   | 684    | 2,626 | 21%           | \$16,230                        | \$23,358                      | 70%                             |
| Managers, All Other   | 1,470  | 1,762 | 45%           | \$45,716                        | \$91,566                      | 50%                             |
| Secondary School Teachers, Exc Special and Career/Tech Educ       | 1,979  | 1,169 | 63%           | \$46,323                        | \$49,344                      | 94%                             |
| Substitutes, Teachers and Instructors, Multi-Level Except Postsec | 2,232  | 887   | 72%           | \$5,975                         | \$6,115                       | 98%                             |
| Cooks, Restaurant   | 692    | 2,361 | 23%           | \$8,376                         | \$11,909                      | 70%                             |
| Bartenders  | 2,061  | 873   | 70%           | \$8,707                         | \$10,168                      | 86%                             |
| Child Care Workers  | 2,469  | 354   | 87%           | \$8,630                         | \$7,495                       | 115%                            |
| Electricians  | 97     | 2,639 | 4%            | \$33,637                        | \$56,214                      | 60%                             |
| Dishwashers   | 531    | 2,189 | 20%           | \$4,981                         | \$5,859                       | 85%                             |
| First-Line Supervisors of Office and Admin Support Workers        | 2,002  | 658   | 75%           | \$34,219                        | \$46,965                      | 73%                             |
| Administrative Services Managers                                  | 1,880  | 773   | 71%           | \$32,650                        | \$48,893                      | 67%                             |
| First-Line Supervisors of Retail Sales Workers                    | 1,313  | 1,125 | 54%           | \$25,279                        | \$37,067                      | 68%                             |
| Counter Attendants, Cafeteria, Food Concession, Coffee Shop       | 1,919  | 510   | 79%           | \$4,889                         | \$5,553                       | 88%                             |
| Sales Representatives, Services, All Other                        | 1,002  | 1,397 | 42%           | \$25,144                        | \$34,949                      | 72%                             |
| Automotive Service Technicians and Mechanics                      | 63     | 2,289 | 3%            | \$13,313                        | \$29,187                      | 46%                             |
| Nursing Assistants  | 2,003  | 292   | 87%           | \$21,458                        | \$21,773                      | 99%                             |
| Education, Training, and Library Workers, All Other               | 1,409  | 873   | 62%           | \$8,588                         | \$6,854                       | 125%                            |
| Plumbers, Pipefitters, and Steamfitters                           | 58     | 2,150 | 3%            | \$24,037                        | \$50,714                      | 47%                             |
| Counter and Rental Clerks   | 1,179  | 1,023 | 54%           | \$9,618                         | \$12,943                      | 74%                             |
| Chief Executives  | 861    | 1,264 | 41%           | \$68,197                        | \$119,799                     | 57%                             |
| Installation, Maintenance, and Repair Workers, All Other          | 177    | 1,912 | 8%            | \$34,913                        | \$43,405                      | 80%                             |
| Personal Care and Service Workers, All Other                      | 1,607  | 475   | 77%           | \$9,285                         | \$11,570                      | 80%                             |
| Grounds Maintenance Workers, All Other                            | 360    | 1,715 | 17%           | \$5,488                         | \$9,709                       | 57%                             |
| Material Moving Workers, All Other                                | 259    | 1,793 | 13%           | \$14,817                        | \$25,697                      | 58%                             |
| Accountants and Auditors  | 1,494  | 554   | 73%           | \$46,178                        | \$58,146                      | 79%                             |
| Special Education Teacher Assistants                              | 1,636  | 334   | 83%           | \$15,095                        | \$14,669                      | 103%                            |
| Light Truck or Delivery Services Drivers                          | 234    | 1,719 | 12%           | \$11,976                        | \$23,744                      | 50%                             |
| Roustabouts, Oil and Gas  | 82     | 1,863 | 4%            | \$24,644                        | \$48,900                      | 50%                             |
| Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop          | 1,459  | 471   | 76%           | \$4,751                         | \$6,237                       | 76%                             |

Notes: For occupation aggregations, workers who held multiple jobs in a year will be reported in each occupation they worked, so some workers will be counted more than once. Occupation totals should not be used for total worker counts. Worker counts only include individuals with known gender. These data do not include self-employed workers or federal employees.

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

## Jobs with High Average Earnings for Women

Select occupations, Alaska 2010

# 14

| Occupation  | Women | Men   | Percent women | Women's average annual earnings | Men's average annual earnings | Ratio women's to men's earnings |
|---|-------|-------|---------------|---------------------------------|-------------------------------|---------------------------------|
| Chief Executives  | 861   | 1,264 | 41%           | \$68,197                        | \$119,799                     | 57%                             |
| Lawyers   | 568   | 515   | 52%           | \$68,120                        | \$89,611                      | 76%                             |
| Engineers, All Other  | 232   | 1,062 | 18%           | \$68,616                        | \$92,268                      | 74%                             |
| Pharmacists   | 197   | 143   | 58%           | \$78,228                        | \$86,884                      | 90%                             |
| Geoscientists, Except Hydrologists and Geographers              | 103   | 278   | 27%           | \$80,444                        | \$108,919                     | 74%                             |
| Physicians and Surgeons, All Other                              | 98    | 159   | 38%           | \$166,411                       | \$229,312                     | 73%                             |
| Petroleum Engineers   | 78    | 397   | 16%           | \$123,581                       | \$157,511                     | 78%                             |
| Airline Pilots, Copilots, and Flight Engineers                  | 78    | 1,237 | 6%            | \$79,536                        | \$90,130                      | 88%                             |
| Architectural and Engineering Managers                          | 67    | 400   | 14%           | \$102,105                       | \$146,801                     | 70%                             |
| Personal Financial Advisors                                     | 67    | 95    | 41%           | \$72,364                        | \$173,840                     | 42%                             |
| Health/Safety Engineers, Exc Mining Safety Engineers/Inspectors | 60    | 202   | 23%           | \$68,409                        | \$85,368                      | 80%                             |
| Dentists, General   | 51    | 106   | 32%           | \$66,622                        | \$122,342                     | 55%                             |
| Designers, All Other  | 36    | 142   | 20%           | \$79,021                        | \$112,676                     | 70%                             |
| Psychiatrists   | 27    | 37    | 42%           | \$87,583                        | \$137,073                     | 64%                             |
| Pediatricians, General  | 27    | 18    | 60%           | \$76,284                        | \$103,865                     | 73%                             |
| Atmospheric, Earth, Marine, Space Sciences Teachers, Postsec    | 26    | 34    | 43%           | \$69,495                        | \$75,552                      | 92%                             |
| Nurse Anesthetists  | 22    | 6     | 79%           | \$97,542                        | \$171,819                     | 57%                             |
| Obstetricians and Gynecologists                                 | 15    | 8     | 65%           | \$153,350                       | \$61,149                      | 251%                            |
| Medical Scientists, Except Epidemiologists                      | 15    | 32    | 32%           | \$132,470                       | \$209,870                     | 63%                             |
| Petroleum Pump Sys Operators, Refinery Operators, and Gaugers   | 15    | 414   | 3%            | \$72,982                        | \$110,448                     | 66%                             |
| First-Line Supervisors of Fire Fighting and Prevention Workers  | 13    | 137   | 9%            | \$70,898                        | \$73,096                      | 97%                             |
| Anesthesiologists   | 9     | 16    | 36%           | \$126,206                       | \$193,454                     | 65%                             |

## Jobs With High Average Earnings for Men

| Occupation  | Women | Men   | Percent women | Women's average annual earnings | Men's average annual earnings | Ratio women's to men's earnings |
|---|-------|-------|---------------|---------------------------------|-------------------------------|---------------------------------|
| Managers, All Other   | 1,470 | 1,762 | 45%           | \$45,716                        | \$91,566                      | 50%                             |
| Chief Executives  | 861   | 1,264 | 41%           | \$68,197                        | \$119,799                     | 57%                             |
| Airline Pilots, Copilots, and Flight Engineers                  | 78    | 1,237 | 6%            | \$79,536                        | \$90,130                      | 88%                             |
| Engineers, All Other  | 232   | 1,062 | 18%           | \$68,616                        | \$92,268                      | 74%                             |
| Financial Managers  | 847   | 531   | 61%           | \$64,688                        | \$91,031                      | 71%                             |
| Lawyers   | 568   | 515   | 52%           | \$68,120                        | \$89,611                      | 76%                             |
| Petroleum Pump System Operators, Refinery Oper, Gaugers         | 15    | 414   | 3%            | \$72,982                        | \$110,448                     | 66%                             |
| Architectural and Engineering Managers                          | 67    | 400   | 14%           | \$102,105                       | \$146,801                     | 70%                             |
| Petroleum Engineers   | 78    | 397   | 16%           | \$123,581                       | \$157,511                     | 78%                             |
| Geoscientists, Except Hydrologists and Geographers              | 103   | 278   | 27%           | \$80,444                        | \$108,919                     | 74%                             |
| Mechanical Engineers  | 27    | 265   | 9%            | \$43,344                        | \$80,185                      | 54%                             |
| Electrical Engineers  | 32    | 250   | 11%           | \$56,260                        | \$84,214                      | 67%                             |
| Family and General Practitioners                                | 278   | 233   | 54%           | \$64,849                        | \$83,071                      | 78%                             |
| Health/Safety Engineers, Exc Mining Safety Engineers/Inspectors | 60    | 202   | 23%           | \$68,409                        | \$85,368                      | 80%                             |
| Financial Analysts  | 217   | 163   | 57%           | \$60,254                        | \$101,967                     | 59%                             |
| Physicians and Surgeons, All Other                              | 98    | 159   | 38%           | \$166,411                       | \$229,312                     | 73%                             |
| Pharmacists   | 197   | 143   | 58%           | \$78,228                        | \$86,884                      | 90%                             |
| Designers, All Other  | 36    | 142   | 20%           | \$79,021                        | \$112,676                     | 70%                             |
| Mining and Geological Engineers, Incl Mining Safety Engineers   | 33    | 122   | 21%           | \$46,982                        | \$94,482                      | 50%                             |
| Dentists, General   | 51    | 106   | 32%           | \$66,622                        | \$122,342                     | 54%                             |
| Personal Financial Advisors                                     | 67    | 95    | 41%           | \$72,364                        | \$173,840                     | 42%                             |
| Psychiatrists   | 27    | 37    | 42%           | \$87,583                        | \$137,073                     | 64%                             |
| Medical Scientists, Except Epidemiologists                      | 15    | 32    | 32%           | \$132,470                       | \$209,870                     | 63%                             |
| Optometrists  | 19    | 19    | 50%           | \$55,603                        | \$119,349                     | 47%                             |
| Pediatricians, General  | 27    | 18    | 60%           | \$76,284                        | \$103,865                     | 73%                             |
| Anesthesiologists   | 9     | 16    | 36%           | \$126,206                       | \$193,454                     | 65%                             |
| Radiation Therapists  | 19    | 8     | 70%           | \$53,518                        | \$121,923                     | 44%                             |
| Nurse Anesthetists  | 22    | 6     | 79%           | \$97,542                        | \$171,819                     | 57%                             |

Notes: For occupation aggregations, workers who held multiple jobs in a year will be reported in each occupation they worked, so some workers will be counted more than once. Occupation totals should not be used for total worker counts. Note: Worker counts only include individuals with known gender. These data do not include self-employed workers or federal employees.

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

# Alaska's \$49 Billion Economy

## The makeup of the state's gross domestic product

**G**ross domestic product is the “big” economic number — the statistic that commands more attention from the nation’s pundits and the stock market than any other. GDP, unveiled quarterly by the federal Bureau of Economic Analysis, is considered the nation’s broadest measure of economic health because it measures everything businesses and government produce within United States borders.

Unlike the national gross domestic product, there’s a good chance you’ve never heard of Alaska’s gross domestic product. Comparable state GDPs are produced by the same national source and are calculated for Alaska, the other 49 states, and many metro areas. They, too, measure the market value of all goods and services produced within the given borders.

Alaska’s number gets little attention because it’s only produced annually and isn’t released until halfway through the following year. It’s often perceived

as last year’s news when most people are looking for more current economic data or trying to evaluate future trends.

The state GDP is also a blunter and less nuanced statistic than the national GDP, so it can be problematic to base conclusions on its subtle and sometimes not-so-subtle year-to-year changes.

Still, state GDP can provide an important look at our state’s economy. It gives us the rare opportunity to measure Alaska’s productivity relative to other states, and to explain our product mix and its differences from the rest of the nation. These differences in what we produce are likely why Alaska weathered the recession of the past decade so much better than the other states. Also, because these data have been produced since 1963, they add historical perspective to the analysis.

### Oil and public sector dominate

In 2010, Alaska produced \$49 billion in goods and services. (See Exhibit 1.) The single largest slice of Alaska’s GDP is mining, and most of that is oil.

Oil and gas represented approximately 25 percent of the state’s GDP in 2010. Although direct employment in the oil and gas industry makes up just 4 percent of total state employment, these GDP figures illustrate oil’s far-reaching influence on Alaska’s economy.

Oil’s slice of the pie has not always been so large. In 1970, prior to Prudhoe Bay production, it represented just 14 percent of the state’s GDP — but by the mid-1980s, it topped 50 percent.

Alaska’s public sector makes up 19 percent of the state’s gross product, making it the second-largest contributor after oil. The single largest public share comes from the federal government, and that piece is dominated by federal military. In 2000, the federal civilian share of state GDP was larger than the military’s, but by 2002 the military surpassed the civilian value and by 2009, it was 50 percent larger

### 1 Alaska Gross Domestic Product By industry, 2010

|                                    | 2010                   | Percent share |
|------------------------------------|------------------------|---------------|
| <b>Total</b>                       | <b>\$49.12 billion</b> | <b>100%</b>   |
| Government                         | \$9.19 billion         | 19%           |
| Private Industry                   | \$39.93 billion        | 81%           |
| Agriculture, Forestry, Fishing     | \$444 million          | 1%            |
| Mining (mostly oil)                | \$12.51 billion        | 25%           |
| Utilities                          | \$688 million          | 1%            |
| Construction                       | \$1.86 billion         | 4%            |
| Manufacturing                      | \$1.88 billion         | 4%            |
| Wholesale Trade                    | \$1.06 billion         | 2%            |
| Retail Trade                       | \$1.90 billion         | 4%            |
| Transportation and Warehousing     | \$4.32 billion         | 9%            |
| Information                        | \$1.14 billion         | 2%            |
| Financial Activities               | \$5.92 billion         | 12%           |
| Professional and Business Services | \$3.05 billion         | 6%            |
| Educational Services (private)     | \$132 million          | 0%            |
| Health Care and Social Assistance  | \$2.86 billion         | 6%            |
| Leisure and Hospitality            | \$1.39 billion         | 3%            |
| Other Services                     | \$790 million          | 2%            |

Source: U.S. Department of Commerce, Bureau of Economic Analysis

than the civilian share of federal government. This is largely due to troop levels skyrocketing in Alaska between 2002 and 2009, and to the billions of dollars spent on military infrastructure.

Transportation and warehousing is another industry that captures a big slice of the state's GDP: 9 percent in Alaska compared to 3 percent for the nation. Its prominence isn't surprising given the volume of international cargo and the effort it takes to move goods and services within the state. However, the most important part of the sector's value is pipeline transportation, which represented 54 percent of transportation and warehousing in 2009, the most recent year for which detailed data are available. The trans-Alaska pipeline plays a vital role in the life of Alaska's economy, and the value it adds to the state GDP is equally remarkable.

There are plenty of smaller categories represented in Alaska's GDP. For example, retail trade accounts for just 4 percent of the GDP but 11 percent of all wage and salary employment. For other important industries in Alaska such as seafood, the numbers are not clear. The seafood industry is reported in several pieces in these figures. The harvesting share is under the forestry, fishing, and related category; and the processing share is in food product manufacturing. Fishing represents big parts of these categories, but it is difficult to calculate one solid figure for the industry.

## Alaska is No. 1 in per capita GDP

At \$63,424, Alaska's per capita GDP is highest in the nation. Although there is typically a correlation between per capita income — for which Alaska

## 2 Per Capita GDP

By state, 2010

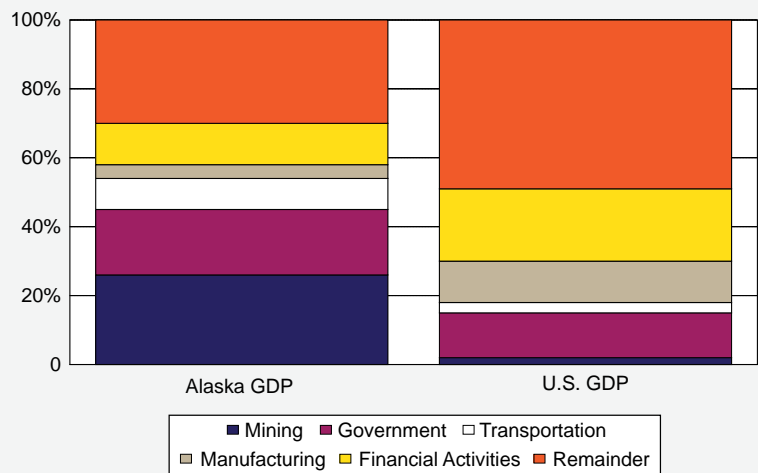
| Area            | Per capita GDP | Percent of U.S. |
|-----------------|----------------|-----------------|
| United States   | \$42,429       | 100%            |
| 1 Alaska        | \$63,424       | 149%            |
| 2 Delaware      | \$62,587       | 148%            |
| 3 Wyoming       | \$61,049       | 144%            |
| 4 Connecticut   | \$59,132       | 139%            |
| 5 New York      | \$53,377       | 126%            |
| 6 Massachusetts | \$52,251       | 123%            |
| 7 New Jersey    | \$49,901       | 118%            |
| 8 Virginia      | \$47,570       | 112%            |
| 9 Colorado      | \$46,757       | 110%            |
| 10 California   | \$46,488       | 110%            |

Source: U.S. Department of Commerce, Bureau of Economic Analysis

## A Tale of Two Economies

Alaska and U.S. GDP, 2010

# 3



Source: U.S. Department of Commerce, Bureau of Economic Analysis

ranks eighth in the nation — and per capita GDP, there is an important difference. While income data are for Alaska residents only, GDP measures the market value of goods and services produced in the state without differentiating between residents and nonresidents.

For example, wages and salaries paid to people working in Alaska are part of the state's GDP, regardless of where the workers live. Similarly, the profits — or in GDP terms, the “net operating surplus” — of companies operating in Alaska are part of the state's GDP, whether or not these profits stay in Alaska.

Alaska's high per capita GDP numbers show the state's economy is especially productive relative to its population, but much of that is tied to the high value in recent years of Alaska's commodities, especially oil and minerals.

## Very different from the nation

The contrast between Alaska's GDP and that of the nation and other states is dramatic. (See Exhibit 3.) Alaska's economy has a unique blend of products — the big standout is oil and gas, which represents less than 2 percent of national GDP but a whopping 20 to 25 percent in Alaska, depending on the price of oil in a given year. Oil does not play as important a role in any other state in the nation.

The public sector is also significantly larger in Alaska, due to the large presence of the military and federal civilian sectors. Another major difference is manufacturing, which accounts for 12 percent of the na-

tion's gross domestic product but only 4 percent in Alaska. The small amount of manufacturing here is dominated by seafood processing and oil refining, which are a tiny piece of the nation's manufacturing sector. Financial activities — made up largely of banks, mortgage companies, brokerage houses, and real estate companies — also play a much bigger role nationally.

These four differences helped cushion Alaska through the recent recession, as oil and mineral prices reached record levels during those years.

High oil prices also kept Alaska's state and local governments in the black while most other states operated deeply in the red and cut their workforces.

The nation's manufacturing sector also took a severe beating — but this was not the case in Alaska, due to its small size and makeup. Alaska's financial sector is also smaller and avoided much of the pain felt elsewhere, while the nation's financial sector was hit hard.

## Alaska GDP grew faster

During the past decade, Alaska's GDP grew at approximately 3 percent per year versus 2 percent nationally. The recession pummeled the nation's gross domestic product figures over the past three years.

During the 1990s, which were haunted by low oil prices, GDP grew very little in Alaska. But before that, double-digit growth was the norm during the 1960s and 1970s, fueled by Prudhoe Bay exploration and Cook Inlet oil production as well as expansion in fisheries, tourism, and the service sector.

## Ignore year-to-year changes

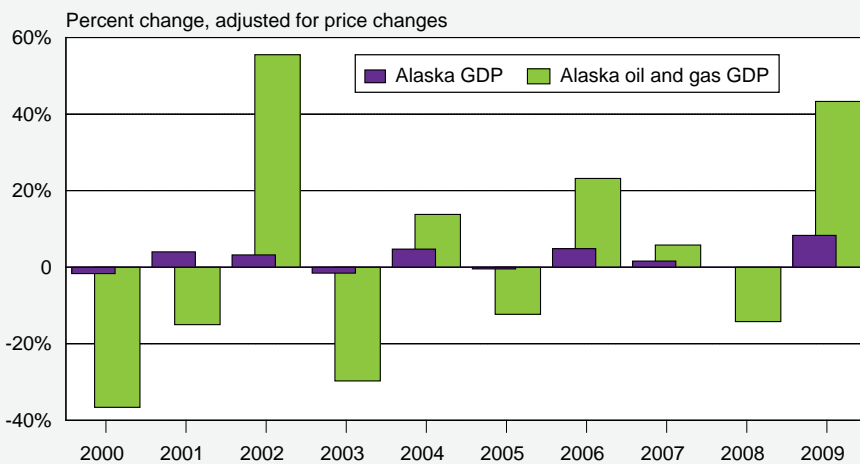
Oil gives Alaska GDP much of its year-to-year volatility and contributes mightily to its overall value. This is due to wild swings in oil prices. (See Exhibits 4 and 5.)

These year-to-year GDP fluctuations in Alaska have much less effect on the state's overall economy than they do on the national economy. For example, Alaska's inflation-adjusted GDP growth turned negative in 2000, 2003, and 2005 but employment and income in the state kept growing. That kind of year-to-year change at the national level would have spurred three near back-to-back recessions.

A more dramatic illustration is what happened in 2009. In the past 23 years, 2009 was the only year in which employment and income fell in Alaska. However, due to record oil prices, the state's GDP grew by 9 percent that same year — the decade's largest increase. This is an example of how year-to-year changes in Alaska's GDP might say very little about what's happening on the ground level of the state's economy.

## 4 Oil Adds Volatility to State GDP

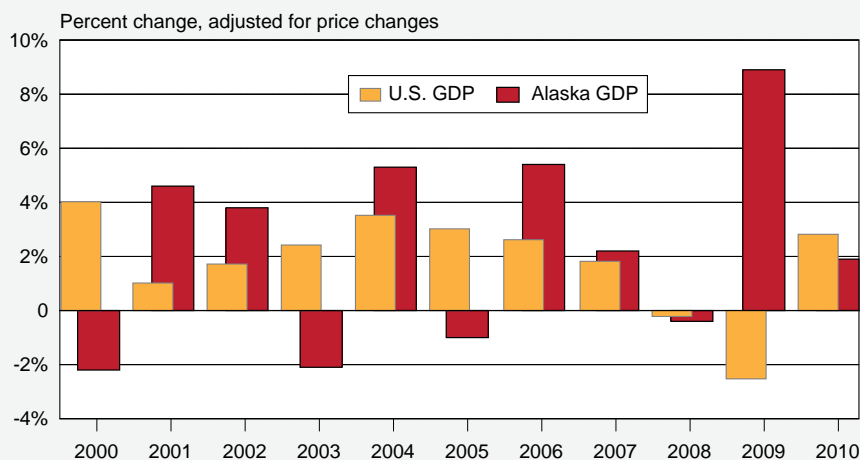
Alaska, 2000 to 2009



Source: U.S. Department of Commerce, Bureau of Economic Analysis

## 5 Alaska GDP Fluctuates More Than National

Alaska and U.S., 2000 to 2010



Source: U.S. Department of Commerce, Bureau of Economic Analysis



# Employment Scene

## Unemployment rate at 7.7 percent in August

Alaska's seasonally adjusted unemployment rate for August remained unchanged from July's revised rate of 7.7 percent. The national rate was 9.1 percent, also unchanged from the previous month. (See Exhibit 1.)

These jobless rates have also remained relatively static throughout 2011. In January, the nation's rate was 9.0 percent and the state's rate was 7.8 percent. (See Exhibit 2.)

Even though Alaska's unemployment hasn't changed much in 2011, Alaska remains in an enviable place among most states with an August rate that was 17th lowest in the nation. This is a historically unusual place for Alaska, whose unemployment ranked second-highest in the nation as recently as August 2007.

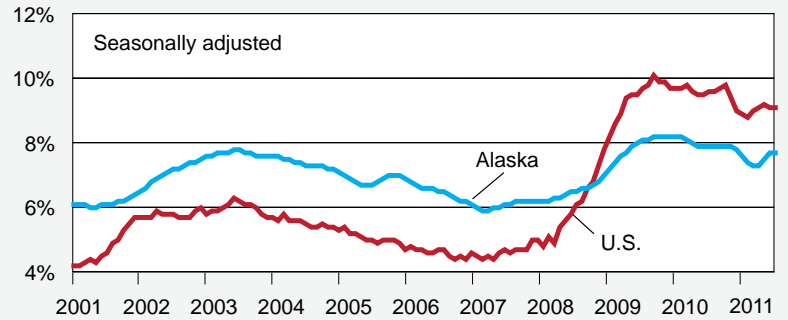
### Alaska, national labor forces linked

It's not unusual for the state's jobless rate to follow the national trend, as the two labor forces are inextricably linked.

Because Alaska's relative employment picture remains brighter than in most of the nation, fewer Alaskan job seekers are leaving the state — and more job seekers are heading north, putting upward pressure on the state's unemployment rate. This is evidenced by the Alaska Department of Labor and Workforce Development's recently released intercensal data, which show the decade's largest population gains were in 2009 and 2010. (See Exhibit 3.) Most of these gains were due to in-migration, or more people moving in.

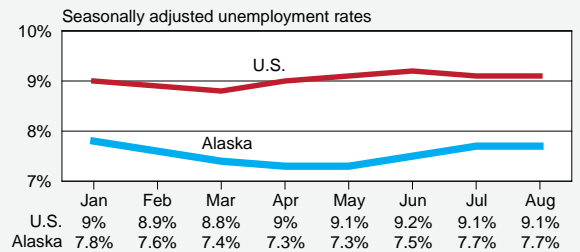
Previous research shows that when the nation is in a recession and U.S. jobless rates are above 7 percent, Alaska typically gains residents. (See *Alaska Economic Trends*, June 2009.) The national unemployment rate hit 7.3 percent in December of 2008 and is not likely to drop below that level any time soon. So, as long as Alaska's labor market continues to outperform the nation's and U.S. joblessness remains high, higher-than-average in-migration will likely continue in the state.

### Unemployment Rates 1 Alaska and U.S., January 2001 to August 2011



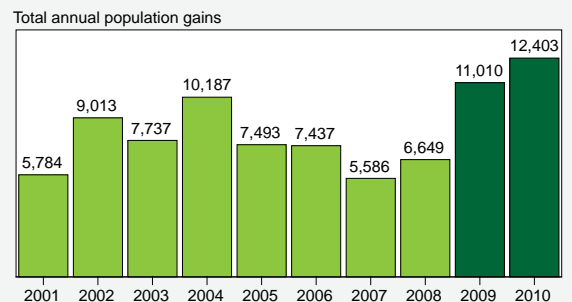
Source: Alaska Department of Labor and Workforce Development, Research and Analysis

### Rates Change Little in 2011 2 Alaska and U.S.



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

### Recession and Population 3 Alaska, 2001 to 2010



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section, population intercensal estimates 2001 to 2009; and U.S. Census Bureau, 2000 and 2010 censuses

# 4 Statewide Employment

Nonfarm wage and salary

|  | Preliminary |         | Revised |        | Year-Over-Year Change   |        |  |
|--|-------------|---------|---------|--------|-------------------------|--------|--|
|  | 8/11        | 7/11    | 8/10    | 8/10   | 90% Confidence Interval |        |  |
| <b>Alaska</b>                                      |             |         |         |        |                         |        |  |
| <b>Total Nonfarm Wage and Salary</b> <sup>1</sup>  | 352,400     | 355,300 | 346,400 | 6,000  | -1,383                  | 13,383 |  |
| Goods-Producing <sup>2</sup>                       | 58,500      | 61,000  | 56,100  | 2,400  | -484                    | 5,284  |  |
| Service-Providing <sup>3</sup>                     | 293,900     | 294,300 | 290,300 | 3,600  | -                       | -      |  |
| <b>Mining and Logging</b>                          | 17,200      | 17,200  | 16,500  | 700    | -93                     | 1,493  |  |
| Mining   | 16,700      | 16,700  | 16,200  | 500    | -                       | -      |  |
| Oil and Gas  | 13,600      | 13,600  | 13,400  | 200    | -                       | -      |  |
| <b>Construction</b>                                | 19,100      | 19,000  | 19,800  | -700   | -3,283                  | 1,883  |  |
| <b>Manufacturing</b>                               | 22,200      | 24,800  | 19,800  | 2,400  | 1,406                   | 3,394  |  |
| Seafood Processing                                 | 15,000      | 17,500  | 16,000  | -1,000 | -                       | -      |  |
| <b>Trade, Transportation, Utilities</b>            | 69,700      | 69,400  | 67,500  | 2,200  | -172                    | 4,572  |  |
| Wholesale Trade                                    | 6,700       | 6,700   | 6,700   | 0      | -556                    | 556    |  |
| Retail Trade                                       | 37,900      | 37,900  | 36,900  | 1,000  | -1,028                  | 3,028  |  |
| Food and Beverage Stores                           | 6,500       | 6,600   | 6,500   | 0      | -                       | -      |  |
| General Merchandise Stores                         | 10,500      | 10,300  | 10,200  | 300    | -                       | -      |  |
| Transportation, Warehousing, Utilities             | 25,100      | 24,800  | 23,900  | 1,200  | 162                     | 2,238  |  |
| Air Transportation                                 | 6,400       | 6,400   | 6,000   | 400    | -                       | -      |  |
| Truck Transportation                               | 3,900       | 3,700   | 3,400   | 500    | -                       | -      |  |
| <b>Information</b>                                 | 6,600       | 6,600   | 6,400   | 200    | -381                    | 781    |  |
| Telecommunications                                 | 4,500       | 4,500   | 4,200   | 300    | -                       | -      |  |
| <b>Financial Activities</b>                        | 15,000      | 15,000  | 15,400  | -400   | -2,343                  | 1,543  |  |
| <b>Professional and Business Services</b>          | 28,700      | 28,600  | 27,600  | 1,100  | -693                    | 2,893  |  |
| <b>Educational<sup>4</sup> and Health Services</b> | 42,900      | 42,700  | 41,600  | 1,300  | 32                      | 2,568  |  |
| Health Care  | 31,900      | 31,800  | 30,200  | 1,700  | -                       | -      |  |
| <b>Leisure and Hospitality</b>                     | 40,800      | 41,400  | 38,200  | 2,600  | 563                     | 4,637  |  |
| Accommodations                                     | 8,300       | 8,300   | 10,900  | -2,600 | -                       | -      |  |
| Food Services and Drinking Places                  | 24,000      | 24,400  | 21,800  | 2,200  | -                       | -      |  |
| <b>Other Services</b>                              | 11,000      | 11,600  | 11,900  | -900   | -4,076                  | 2,276  |  |
| <b>Government</b>                                  | 79,200      | 79,000  | 81,700  | -2,500 | -                       | -      |  |
| Federal Government <sup>5</sup>                    | 17,500      | 17,700  | 18,400  | -900   | -                       | -      |  |
| State Government                                   | 24,300      | 24,900  | 25,000  | -700   | -                       | -      |  |
| State Government Education <sup>6</sup>            | 5,700       | 6,000   | 6,200   | -500   | -                       | -      |  |
| Local Government                                   | 37,400      | 36,400  | 38,300  | -900   | -                       | -      |  |
| Local Government Education <sup>7</sup>            | 19,200      | 17,800  | 19,700  | -500   | -                       | -      |  |
| Tribal Government                                  | 3,800       | 3,900   | 4,100   | -300   | -                       | -      |  |

# 6 Regional Employment

Nonfarm wage and salary

|             | Preliminary |         | Revised |      | Changes from |      | Percent Change |        | 90% confidence interval |  |
|-------------|-------------|---------|---------|------|--------------|------|----------------|--------|-------------------------|--|
|             | 8/11        | 7/11    | 8/10    | 7/11 | 8/10         | 7/11 | 8/10           | Low    | High                    |  |
| Anch/Mat-Su | 176,500     | 177,000 | 175,700 | -500 | 800          | 0.5% | 0.0%           | -2,752 | 4,352                   |  |
| Anchorage   | 155,800     | 155,200 | 154,600 | 600  | 1,200        | 0.8% | 0.5%           | -      | -                       |  |

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

<sup>1</sup>Excludes 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](http://labor.alaska.gov/research/seafood/seafood.htm).

<sup>2</sup>Goods-producing sectors include natural resources and mining, construction, and manufacturing.

<sup>3</sup>Service-providing sectors include all others not listed as goods-producing sectors.

<sup>4</sup>Private education only

<sup>5</sup>Excludes uniformed military

<sup>6</sup>Includes the University of Alaska

<sup>7</sup>Includes public school systems

Sources for Exhibits 1, 4, and 5: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and U.S. Department of Labor, Bureau of Labor Statistics

Sources for Exhibit 6: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Department of Labor, Bureau of Labor Statistics, for Anchorage/Mat-Su

# 5 Unemployment Rates

Boroughs and census areas

|   | Prelim. Revised |      |      |
|---|-----------------|------|------|
|   | 8/11            | 7/11 | 8/10 |
| <b>SEASONALLY ADJUSTED</b>                      |                 |      |      |
| <b>United States</b>                            | 9.1             | 9.1  | 9.6  |
| <b>Alaska Statewide</b>                         | 7.7             | 7.7  | 7.9  |
| <b>NOT SEASONALLY ADJUSTED</b>                  |                 |      |      |
| <b>United States</b>                            | 9.1             | 9.3  | 9.5  |
| <b>Alaska Statewide</b>                         | 6.7             | 6.8  | 7.0  |
| <b>Anchorage/Mat-Su Region</b>                  | 6.2             | 6.4  | 6.9  |
| Municipality of Anchorage                       | 5.8             | 6.0  | 6.6  |
| Matanuska-Susitna Borough                       | 7.6             | 8.0  | 7.9  |
| <b>Gulf Coast Region</b>                        | 7.1             | 7.3  | 7.2  |
| Kenai Peninsula Borough                         | 7.7             | 7.8  | 7.9  |
| Kodiak Island Borough                           | 6.0             | 6.4  | 5.8  |
| Valdez-Cordova Census Area                      | 5.9             | 6.2  | 5.8  |
| <b>Interior Region</b>                          | 6.5             | 6.7  | 6.5  |
| Denali Borough                                  | 3.6             | 3.9  | 3.3  |
| Fairbanks North Star Borough                    | 5.9             | 6.1  | 6.1  |
| Southeast Fairbanks Census Area                 | 9.2             | 9.7  | 8.6  |
| Yukon-Koyukuk Census Area                       | 14.7            | 16.9 | 12.5 |
| <b>Northern Region</b>                          | 9.6             | 10.2 | 9.7  |
| Nome Census Area                                | 12.8            | 14.3 | 13.6 |
| North Slope Borough                             | 4.7             | 5.0  | 5.0  |
| Northwest Arctic Borough                        | 14.1            | 14.5 | 13.1 |
| <b>Southeast Region</b>                         | 5.5             | 5.7  | 5.8  |
| Haines Borough                                  | 4.6             | 4.9  | 4.7  |
| Hoonah-Angoon Census Area <sup>1</sup>          | 10.1            | 10.9 | 9.1  |
| Juneau, City and Borough of                     | 4.6             | 4.7  | 5.1  |
| Ketchikan Gateway Borough <sup>1</sup>          | 5.3             | 5.5  | 5.4  |
| Petersburg Census Area <sup>1</sup>             | 6.2             | 7.4  | -    |
| Prince of Wales-Hyder Census Area <sup>1</sup>  | 12.4            | 12.6 | -    |
| Prince of Wales-Outer Ketchikan CA <sup>1</sup> | -               | -    | 12.5 |
| Sitka, City and Borough of <sup>1</sup>         | 4.6             | 4.9  | 4.9  |
| Skagway, Municipality of <sup>1</sup>           | 3.9             | 2.8  | 2.5  |
| Wrangell, City and Borough of <sup>1</sup>      | 5.6             | 5.3  | -    |
| Wrangell-Petersburg Census Area <sup>1</sup>    | -               | -    | 6.8  |
| Yakutat, City and Borough of                    | 7.2             | 7.1  | 7.6  |
| <b>Southwest Region</b>                         | 11.3            | 10.6 | 11.1 |
| Aleutians East Borough                          | 8.3             | 7.6  | 6.5  |
| Aleutians West Census Area                      | 6.0             | 5.9  | 5.0  |
| Bethel Census Area                              | 14.4            | 15.1 | 14.9 |
| Bristol Bay Borough                             | 1.8             | 1.0  | 1.8  |
| Dillingham Census Area                          | 8.8             | 7.8  | 8.2  |
| Lake and Peninsula Borough                      | 6.2             | 4.7  | 6.0  |
| Wade Hampton Census Area                        | 21.4            | 24.5 | 21.0 |

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

## Changes in producing the estimates

Beginning with the production of preliminary estimates for March 2011, production of state and metropolitan area Current Employment Statistics estimates transitioned from the Alaska Department of Labor and Workforce Development's Research and Analysis Section to the U.S. Bureau of Labor Statistics. Concurrent with this transition, BLS implemented several changes to the methods to help standardize estimation across states. While these changes reduce the potential for statistical bias in state and metropolitan area estimates, they may increase month-to-month variability. More detailed information on the CES changes is available on the BLS Web site at <http://www.bls.gov/sae/cesprocs.htm>.

For more current state and regional employment and unemployment data, visit our Web site: [laborstats.alaska.gov](http://laborstats.alaska.gov)

# Employer Resources

## Health Career Academy trains students to meet growing demand

The Anchorage School District and Alaska Department of Labor and Workforce Development partnered to create the Health Career Academy, intended to meet the increasing demand for a trained health care workforce. The academy, along with more than 30 other entities, trains high school students for entry-level jobs in health care.

The Department of Labor funds the health care career guide position at the Youth Job Center on the school district's King Career Center Campus. Tammy Williamson, the center's health care career guide, leads workshops and trains students one-on-one in interview techniques, resume building, work ethics, and appropriate work attire.

The Health Career Academy offers eight classes: Medical Terminology, Health Occupation Essentials, Advanced Health Care Practices, Introduction to Pharmacy Technology, Certified Nurse Assistant, Emergency Medical Technician, Emergency Trauma Technician, and Personal Care Assistant. Students who complete the coursework receive certification, college credit, or both.

For students who qualify, some funding may be available through the Department of Labor-funded On-the-Job

Training Program. OJT offsets employer training costs for permanent entry-level positions.

The academy has formed partnerships with Anchorage's hospitals and businesses, and Williamson's assistance in the application and competitive selection process reduces the number of hours a participating organization must invest. Williamson recently guided this process for the 2011 Providence Summer Externship Program at the Providence Alaska Medical Center in Anchorage, in partnership with South Central Area Health Education Center. Three Health Career Academy graduates from the Anchorage School District were hired and have proven themselves to be competent members of Providence's health care team. Providence and South Central AHEC plan to expand the competition for summer 2012.

Youths who complete the Health Career Academy program are motivated, ready, and willing to work — many also continue their education in the health care field and maintain their positions throughout college.

For more information about the program, to fill entry-level positions, or to reach health care career guide Tammy Williamson, e-mail [tammy.williamson@alaska.gov](mailto:tammy.williamson@alaska.gov) or call (907) 334-2562.

# A Safety Minute

## Most trench accidents are sudden and happen at shallow depths

Workers can die if they enter an improperly prepared trench and the walls cave in, which can happen without warning.

If a trench fails suddenly, workers don't have time to escape. A cubic yard of soil can weigh more than 1.5 tons — even seemingly small, solid pieces of dirt can cause serious injury, and most trench fatalities happen at depths of less than 10 feet.

According to the U.S. Bureau of Labor Statistics, 350 workers died in trenching or excavation cave-ins between 2000 and 2009, and absence of a protective system was the main cause. Most injuries and fatalities were related to water and sewer utilities, pipelines, and communications and power line construction.

Excavation and trench hazards are defined by OSHA

standard 29 CFR 1926 Subpart P. OSHA requires that all excavations 5 feet or deeper use one of the following protective systems: sloping or benching the sides, supporting the sides, or placing a shield between the side of the excavation and the work area.

Trench construction requires a competent person to consider traffic, proximity and physical conditions of nearby structures, soil characteristics, surface and ground water, location of the water table, overhead and underground utilities, and weather to determine and install the ideal protective system. Workers should not enter a trench without a protective system in place.

For additional information see: <http://www.osha.gov/Publications/OSHA2226/2226.html> or contact the Alaska Occupational Safety and Health Consultation and Training program at (800) 656-4972 or 269-4955 in Anchorage.

