

Alaska's Gender Gap Narrows

by Jeff Hadland and Todd Mosher

Although Alaska male workers, on average, continued to earn significantly more than female workers in 1995, the earnings gap between the two has narrowed significantly since 1990. Many factors can account for differences in average earnings between the genders, such as education, hours worked, or length on the job. But female workers earn less than male workers in virtually all age, industry and occupation categories, including typically female-dominated occupations.

Overall, female workers in 1995 earned 65.6% as much as men earned, a 4.4 percentage point increase since 1990. (See Table 1.) The average Alaskan male earned over \$10,000 more in wage income in 1995 than the average Alaskan female's earnings of \$19,182.

The percentage of Alaska workers that are female declined slightly from 47.3% in 1990 to 47.0% in 1995, a surprising decline given the expectation that women would continue to increase their share of the labor force. Despite a slightly lower share of employment, females' share of total wage and salary income rose from 35.5% in 1990 to 36.7% in 1995.

Gender gap by age group

Females comprised 47% of all workers in 1995, little changed from 1990. In every age group, females were employed at approximately the same rate, exceeding males as a percentage of total workers only in the 75 and older group. (See Figure 1.) In terms of average earnings by age group, females earned less than males in every age category. (See Figure 2.) Females earned nearly as much as males in the 16 to 18 age group, but the gap widens gradually through the age groups, with the "gender gap" greatest in the 55 to 59 and 65 to 74 age groups. (See Figure 3.)

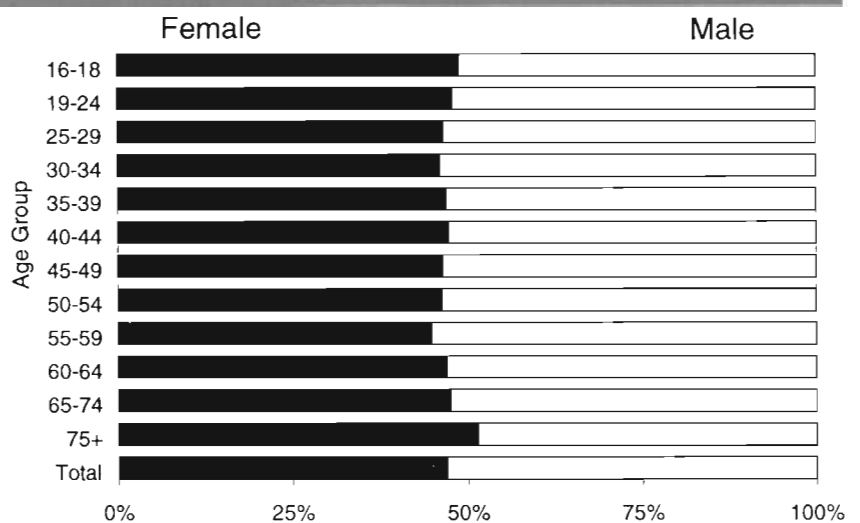
Table • 1

Wage and Salary Employment and Earnings— Alaska, 1990 and 1995

Employment (%) Distribution by Gender		1990	1995	Source: Alaska Department of Labor, Research and Analysis Section.
Male		52.7	53.0	
Female		47.3	47.0	
Annual Wage Income Distribution by Gender (%)		1990	1995	
Male		64.5	63.3	
Female		35.5	36.7	
Average Annual Wage Income (\$)		1990	1995	
Male		27,655	29,261	
Female		16,934	19,182	
Total		22,580	24,527	
Female/Male Wage Ratio		61.2	65.6	

Figure • 1

Gender Distribution of Total Employment by Age Group—Alaska, 1995



Source: Alaska Department of Labor, Research and Analysis Section.

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Workers and Earnings by Industry and Gender-Alaska 1995

	Male Workers	Female Workers	Percent Female	Avg. Male Earnings	Avg. Female Earnings	Female/ Male Ratio
Agriculture, Forestry, Fisheries						
Crops	108	149	58.0	4,907	6,196	126.2
Livestock	.	.	.	.	.	.
Agricultural Services	467	475	50.4	12,804	12,632	98.7
Forestry	.	.	.	.	.	.
Fishing, Hunting, Trapping	358	139	28.0	22,942	14,924	65.0
Mining						
Metal	879	124	12.4	41,859	31,951	76.3
Coal	.	.	.	.	.	.
Oil and Gas	7,862	1,182	13.1	60,206	45,297	75.2
Nonmetal, Nonfuel	311	47	13.1	29,676	19,422	65.4
Construction						
Building	4,865	592	10.8	23,129	16,433	71.0
Heavy	4,072	683	14.4	35,868	21,554	60.1
Special Trades	7,257	923	11.3	26,157	15,969	61.1
Manufacturing						
Food Processing (Primarily Seafood)	4,305	2,343	35.2	16,080	10,304	64.1
Textiles	.	.	.	.	.	.
Apparel	36	24	40.0	13,147	14,789	112.5
Lumber, Wood	1,562	257	14.1	26,868	14,058	52.3
Furniture	.	.	.	.	.	.
Paper	894	131	12.8	41,094	25,267	61.5
Printing	868	891	50.7	25,689	18,036	70.2
Chemicals	.	.	.	.	.	.
Petroleum Refining	291	89	23.4	69,012	39,588	57.4
Rubber, Miscellaneous	.	.	.	.	.	.
Leather	.	.	.	.	.	.
Concrete	251	33	11.6	25,844	14,095	54.5
Primary Metals	.	.	.	.	.	.
Fabricated Metals	243	31	11.3	26,866	20,567	76.6
Machinery	94	12	11.3	40,273	19,965	49.6
Electrical Machinery	.	.	.	.	.	.
Transportation Equipment	224	36	13.8	22,795	16,661	73.1
Measuring Instruments	.	.	.	.	.	.
Miscellaneous	47	41	46.6	20,203	13,364	66.1
Transportation						
Local Transit	1,194	915	43.4	11,375	8,791	77.3
Motor Freight	2,784	637	18.6	29,679	20,526	69.2
Water Transportation	1,907	487	20.3	26,212	15,726	60.0
Air Transportation	5,088	2,558	33.5	31,156	18,127	58.2
Pipelines	.	.	.	.	.	.
Transportation Services	598	1,148	65.8	21,618	17,166	79.4
Communications	2,271	1,627	41.7	45,204	29,534	65.3
Other Utilities	1,925	734	27.6	47,876	32,640	68.2

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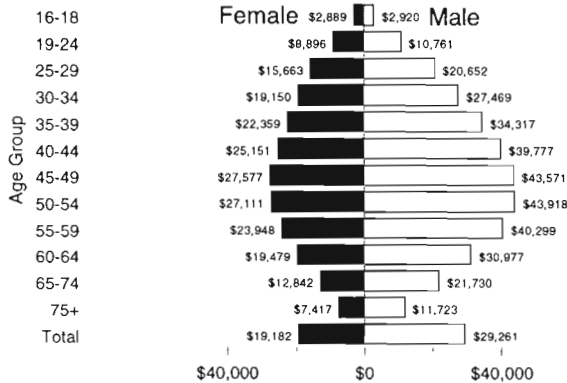
Workers and Earnings by Industry and Gender-Alaska 1995 (continued)

	Male Workers	Female Workers	Percent Female	Avg. Male Earnings	Avg. Female Earnings	Female/ Male Ratio	
Wholesale Trade							*Nondisclosable information. Source: Alaska Department of Labor, Research and Analysis Section.
Durable	3,624	1,271	26.0	31,744	19,638	61.9	
Nondurable	3,102	1,457	32.0	26,946	17,968	66.7	
Retail Trade							
Building Materials/Hardware	1,524	685	31.0	23,462	15,613	66.5	
General Merchandise	4,148	5,560	57.3	15,058	10,834	72.0	
Food Stores	4,308	4,517	51.2	18,750	13,753	73.3	
Auto Dealers/Service Stations	4,103	1,417	25.7	24,668	14,615	59.2	
Apparel	378	1,438	79.2	11,653	8,539	73.3	
Furniture	1,020	622	37.9	17,192	14,082	81.9	
Eating/Drinking	8,520	9,670	53.2	10,030	7,494	74.7	
Miscellaneous Retail	2,859	4,316	60.2	18,807	10,833	57.6	
Finance, Insurance, & Real Estate							
Banking	872	3,557	80.3	38,268	22,205	58.0	
Credit Agencies	139	281	66.9	40,072	32,963	82.3	
Brokers	138	135	49.5	76,800	32,013	41.7	
Insurance	250	596	70.4	60,809	33,930	55.8	
Insurance Agents	225	832	78.7	46,698	24,781	53.1	
Real Estate	1,689	1,322	43.9	16,058	14,913	92.9	
Holding/Investment Companies	1,160	1,356	53.9	24,178	18,457	76.3	
Services							
Hotels	2,779	3,818	57.9	14,148	10,266	72.6	
Personal Services	488	1,819	78.8	15,623	9,759	62.5	
Business Services	4,447	3,894	46.7	20,590	13,858	67.3	
Auto Repair	2,016	601	23.0	17,977	12,085	67.2	
Miscellaneous Repair	774	177	18.6	25,779	14,738	57.2	
Motion Pictures	502	602	54.5	7,170	5,945	82.9	
Recreation Services	1,903	2,054	51.9	9,928	8,457	85.2	
Health Services	2,447	11,020	81.8	37,246	26,034	69.9	
Legal Services	392	1,471	79.0	46,951	28,464	60.6	
Education Services	460	619	57.4	19,238	15,253	79.3	
Social Services	1,844	5,314	74.2	16,560	13,942	84.2	
Museums	39	86	68.8	15,006	10,215	68.1	
Membership Organizations	2,834	4,275	60.1	15,292	15,032	98.3	
Engineering, Accounting & Management	4,731	3,173	40.1	34,994	21,734	62.1	
Private Households	20	228	91.9	35,534	10,030	28.2	
Miscellaneous Services	122	64	34.4	35,874	16,465	45.9	
Nonclassifiable Private Sector	220	155	41.3	14,019	10,182	72.6	
Total Private Sector	116,818	95,196	44.9	27,635	16,509	59.7	
State Government	11,560	11,196	49.2	41,408	29,711	71.8	
Local Government	16,501	21,913	57.0	32,422	25,509	78.7	
Total	144,879	128,305	47.0	29,279	19,198	65.6	

Figure • 2

Male and Female Average Annual Wage Income by Age Group—Alaska, 1995

Source: Alaska Department of Labor, Research and Analysis Section.



When comparing 1990 to 1995, both males and females showed growth in average annual wage incomes, but the average annual wage income of females grew faster than that of males for every age group except those 75 and older (the smallest group). For those aged 25 to 39, the average annual wage income of males actually declined slightly, while females in this age range showed slow growth of about six percent over the entire five-year period. (See Figure 4.)

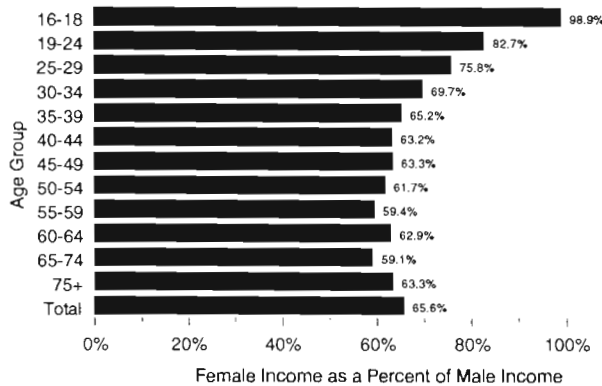
Industry makes a difference

There is a significant difference in average earnings, total earnings and percentage of workers by industry for males and females. (See Figures 5, 6, 7.) Females comprise significantly more than 50 percent of the workers in finance, insurance and real estate; services; and local government, while males hold between 85 and 90 percent of all jobs in the oil and gas, and mining and construction industries. (See Table 2.)

Figure • 3

Male and Female Average Annual Wage Income Ratios by Age Group—Alaska, 1995

Source: Alaska Department of Labor, Research and Analysis Section.

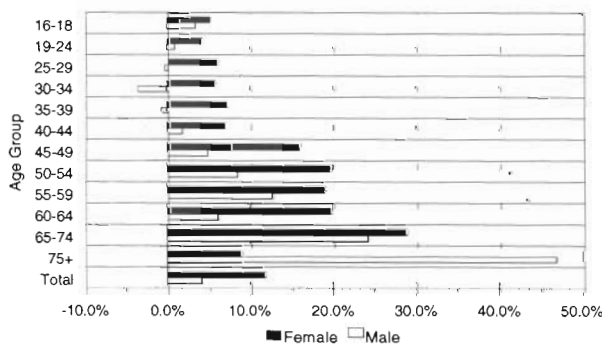


In terms of earnings, females have the highest average earnings in the oil and gas, insurance, credit agencies, other utilities, and brokers industry categories. Females had the highest total private sector earnings in health services, banking, social services and eating and drinking industries. Alaska's female wage and salary workers have found employment opportunities in both state and local government. More than 25 percent of all Alaska female wage and salary workers are employed in these two government sectors.

Figure • 4

Male and Female Percent Change in Average Wage Income by Age Group—Alaska, 1990-1995

Source: Alaska Department of Labor, Research and Analysis Section.



Male and female dominated occupations

The top occupations for men and women are very different. (See Tables 3 and 4.) The most common occupations for Alaska females are office occupations, sales clerks

Top 50 Occupations for Male Employment Alaska, 1995

Occupation	Employment			Average Annual Wage Income		
	Female	Male	Female %	Female	Male	Female/ Male Ratio
Manual Occupations, N.E.C.	1,098	4,683	19.0	7,268	11,584	62.7
Carpenters	119	4,183	2.8	12,631	19,909	63.4
Construction Laborers	433	4,005	9.8	10,129	15,837	64.0
Janitors and Cleaners	2,147	3,894	35.5	12,574	13,866	90.7
Sales Clerks	6,234	3,063	67.1	8,850	12,624	70.1
Cannery Workers, Incl. Seafood Processing	1,521	2,568	37.2	7,850	10,419	75.4
Freight, Stock, and Material Movers, N.E.	281	2,430	10.4	20,313	20,965	96.9
General Office Occupations	8,811	2,281	79.4	16,063	17,957	89.4
Cashiers	3,398	1,870	64.5	9,967	11,182	89.1
Misc. Food & Beverage Preparers Occupations	1,146	1,793	39.0	9,395	7,947	118.2
Truck Drivers, Heavy	99	1,733	5.4	23,628	30,758	76.8
Electricians	49	1,722	2.8	33,584	40,597	82.7
Operating Engineers	117	1,718	6.4	31,264	40,239	77.7
Truck Drivers, Light	294	1,683	14.9	10,209	19,212	53.1
General Managers and Other Top Executives	882	1,670	34.6	35,353	65,037	54.4
Automobile Mechanics	36	1,597	2.2	15,571	27,072	57.5
Stock Handlers and Baggers	470	1,578	22.9	6,824	12,057	56.6
Mechanics and Repairers, N.E.C.	159	1,564	9.2	27,105	37,515	72.2
Guards and Police, Except Public Service	285	1,375	17.2	15,772	21,814	72.3
Plumbers, Pipefitters and Steamfitters	38	1,313	2.8	23,522	33,967	69.2
Sheriffs, Bailiffs, and Other Law Officers	192	1,252	13.3	42,572	49,233	86.5
Maintenance Repairers, General Utility	74	1,237	5.6	16,898	27,498	61.5
Heavy Equipment Mechanics	5	1,230	0.4	23,930	44,418	53.9
Airlplane Pilots and Navigators	40	1,216	3.2	27,109	43,938	61.7
Stock and Inventory Clerks	649	1,203	35.0	14,348	21,979	65.3
Elementary School Teachers	3,176	1,130	73.8	36,388	38,895	93.6
Management Related Occupations, N.E.C.	1,299	1,091	54.4	30,283	51,301	59.0
Combined Food Prep and Service, Fast Food	1,074	1,083	49.8	4,095	4,041	101.3
Supervisors; Sales, Retail	933	1,065	46.7	22,110	35,649	62.0
Kitchen Workers, Food Preparation	1,398	1,064	56.8	9,988	11,341	88.1
Salespersons; N.E.C.	989	992	49.9	12,409	22,909	54.2
Officials and Administrators; Other, N.E.C.	584	977	37.4	40,214	53,601	75.0
Secondary School Teachers	1,255	962	56.6	33,968	41,839	81.2
Stevedores	82	943	8.0	7,534	17,548	42.9
Postsecondary Teachers	813	913	47.1	20,426	30,931	66.0
Misc. Plant or Systems Operators	70	903	7.2	64,718	74,975	86.3
Cooks, Restaurant	324	862	27.3	10,370	12,766	81.2
Bus Drivers	465	860	35.1	11,998	15,384	78.0
Waiters and Waitresses	3,372	845	80.0	7,534	9,670	77.9
Social Workers	1,676	842	66.6	25,152	30,737	81.8
Misc. Material Moving Equipment Operators	23	839	2.7	31,221	42,249	73.9
Civil Engineers	123	835	12.8	42,735	57,702	74.1
Garage and Service Station Related Occupations	118	809	12.7	6,479	10,283	63.0
Attendants, Amusement and Recreation Facilities	914	781	53.9	5,215	6,467	80.6
Adult Education and Other Teachers, N.E.C.	1,449	769	65.3	13,456	15,785	85.2
Excavating and Loading Machine Operators	27	747	3.5	24,080	34,481	69.8
Supervisors; Mechanics and Repairers	42	728	5.5	28,611	57,407	49.8
Managers; Administrative Services	1,266	710	64.1	32,369	52,498	61.7
Bookkeepers and Accounting and Auditing Clerks	4,165	701	85.6	21,794	26,990	80.7
Sailors and Deckhands	95	697	12.0	12,500	19,620	63.7

Source: Alaska Department of
Labor, Research and Analysis
Section.

T a b l e • 4

**Top 50 Occupations for Female Employment
—Alaska, 1995**

Occupation	Employment			Average Annual Wage Income		
	Female	Male	Female %	Female	Male	Female/ Male Ratio
General Office Occupations	8,811	2,281	79.4	16,063	17,957	89.4
Sales Clerks	6,234	3,063	67.1	8,850	12,624	70.1
Secretaries	4,741	247	95.0	22,716	21,153	107.4
Bookkeepers, Accounting and Auditing Clerks	4,165	701	85.6	21,794	26,990	80.7
Cashiers	3,398	1,870	64.5	9,967	11,182	89.1
Waiters and Waitresses	3,372	845	80.0	7,534	9,670	77.9
Elementary School Teachers	3,176	1,130	73.8	36,388	38,895	93.6
Teacher Aides	3,140	694	81.9	11,193	9,196	121.7
Registered Nurses	2,748	194	93.4	35,621	43,225	82.4
Receptionists	2,562	201	92.7	13,932	14,781	94.3
Janitors and Cleaners	2,147	3,894	35.5	12,574	13,866	90.7
Admin. Support Occupations, Including Clerical	1,839	435	80.9	19,619	22,870	85.8
Child Care Workers, Except Private Household	1,820	288	86.3	7,672	8,997	85.3
Maids and Housemen	1,818	453	80.1	9,084	12,976	70.0
Social Workers	1,676	842	66.6	25,152	30,737	81.8
Cannery Workers, Incl. Seafood Processing	1,521	2,568	37.2	7,850	10,419	75.4
Adult Education and Other Teachers, N.E.C.	1,449	769	65.3	13,456	15,785	85.2
Kitchen and Food Prep Workers	1,398	1,064	56.8	9,988	11,341	88.1
Food Counter, Fountain and Related Occupations	1,310	663	66.4	6,173	6,164	100.1
Management Related Occupations, N.E.C.	1,299	1,091	54.4	30,283	51,301	59.0
Nursing Aides, Orderlies, and Attendants	1,272	374	77.3	17,502	20,533	85.2
Managers; Administrative Services	1,266	710	64.1	32,369	52,498	61.7
Secondary School Teachers	1,255	962	56.6	33,968	41,839	81.2
Reservation Agents and Ticket Clerks	1,209	288	80.8	17,094	18,975	90.1
Bartenders	1,197	517	69.8	10,212	13,258	77.0
Misc. Food and Beverage Preparers	1,146	1,793	39.0	9,395	7,947	118.2
Manual Occupations, N.E.C.	1,098	4,683	19.0	7,268	11,584	62.7
Combined Food Prep and Service, Fast Food	1,074	1,083	49.8	4,095	4,041	101.3
Counter Clerks	1,031	595	63.4	8,470	13,860	61.1
Bank Tellers	1,017	93	91.6	13,820	14,140	97.7
Salespersons; N.E.C.	989	992	49.9	12,409	22,909	54.2
Supervisors; Sales, Retail	933	1,065	46.7	22,110	35,649	62.0
Attendants, Amusement and Recreation Facilities	914	781	53.9	5,215	6,467	80.6
Accountants and Auditors	906	532	63.0	38,194	49,502	77.2
General Managers and Other Top Executives	882	1,670	34.6	35,353	65,037	54.4
Teachers; Special Education	881	222	79.9	43,356	47,128	92.0
Postsecondary Teachers	813	913	47.1	20,426	30,931	66.0
Health Aides, Except Nursing	810	134	85.8	20,757	21,257	97.6
Personal Service Occupations, N.E.C.	756	420	64.3	13,295	15,722	84.6
Administrative Assistants and Officers	742	191	79.5	23,734	37,749	62.9
Technicians, N.E.C.	697	564	55.3	32,554	38,483	84.6
Salespersons; Garments and Textile Products	696	124	84.9	8,650	10,419	83.0
Supervisors; General Office Occupations	659	216	75.3	28,770	41,914	68.6
Stock and Inventory Clerks	649	1,203	35.0	14,348	21,979	65.3
Hairdressers and Cosmetologists	628	40	94.0	11,311	14,194	79.7
Information Clerks, N.E.C.	628	139	81.9	23,980	29,501	81.3
Health Technologists and Technicians, N.E.C.	610	257	70.4	23,370	31,343	74.6
Officials and Administrators; Other, N.E.C.	584	977	37.4	40,214	53,601	75.0
Prekindergarten and Kindergarten Teachers	573	39	93.6	27,167	30,800	88.2
Dental Assistants	571	25	95.8	17,597	15,743	111.8

Source: Alaska Department of Labor, Research and Analysis Section.

and waitresses. The most common male occupations are manual occupations (primarily seafood processing related jobs), carpenters, and construction laborers.

Of the top 50 occupations for male employment in 1995, only two had a female/male average annual wage income ratio exceeding 100%. Both were low-paying food service occupations. (See shading, Table 3.) A ratio over 100% means the average annual wage income of females was higher than that of males.

Of the top 50 occupations for female employment in 1995, less than one-eighth (six) had a female/male average annual wage income ratio above 100 percent. (See shading, Table 4.)

Methodology

Total earnings were computed for all workers in 1995. Workers' social security numbers were matched with historical Permanent Fund Dividend files to determine the age and gender of workers. Only those workers that were eligible for Permanent Fund Dividends in one or more years since 1992 are included in the study population. Data are available for wage and salary workers in private sector, state and local government. Federal government workers, military, and self-employed are excluded. Occupation data are derived from Alaska's Occupational Data Base. The occupation in which the worker had the most earnings is used in this analysis. Average earnings include full-time and part-time earnings. Gender information was available for a total of 273,184 workers in 1995.

Figure • 5

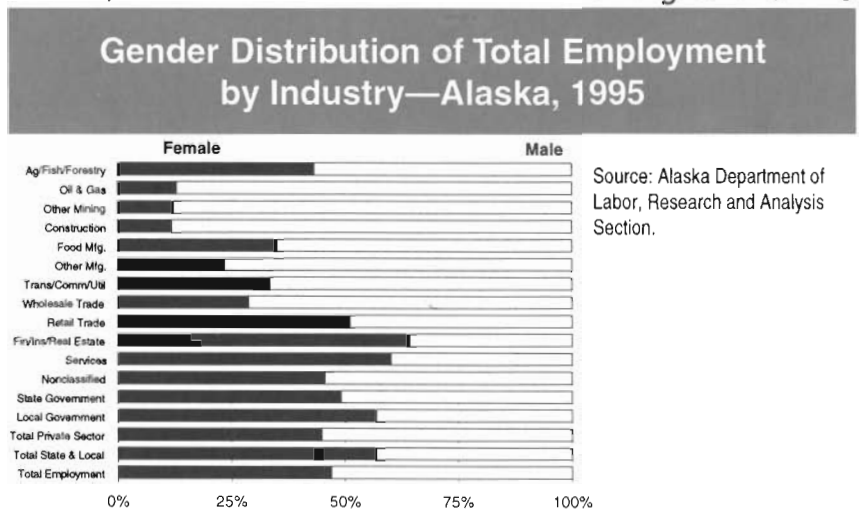


Figure • 6

Male and Female Average Annual Wage Income by Industry—Alaska, 1995

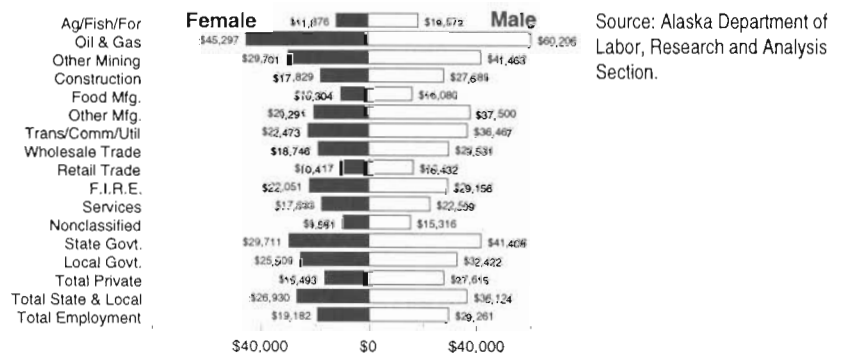


Figure • 7

Female/Male Average Annual Wage Income Ratios by Industry—Alaska, 1995

