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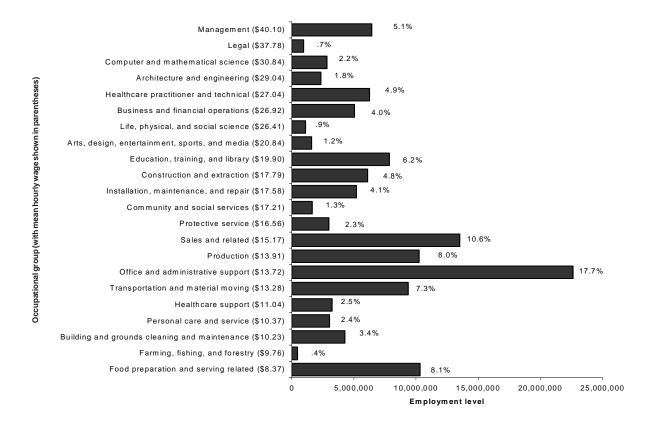
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OCCUPATIONAL EMPLOYMENT AND WAGES, NOVEMBER 2003

Healthcare practitioner and technical occupations such as specialist physicians and dentists accounted for 8 out of the 10 highest-paying occupations in November 2003, according to the Bureau of Labor Statistics of the U.S. Department of Labor. The average hourly wages for these health-related occupations ranged from \$87.83 for surgeons to \$62.04 for dentists. The lowest-paying occupation was fast food cooks who earned \$7.28 per hour. Five of the six lowest-paying occupations were related to food preparation and serving.

Retail salespersons and cashiers were the largest occupations in the United States, with about 4.1 million and 3.4 million employees, respectively. Other occupations with more than 2 million workers included general office clerks; hand laborers and material movers; registered nurses; waiters and waitresses; janitors and cleaners, except maids and housekeeping cleaners; and combined food preparation and serving workers, including fast food. The average hourly wages for these occupations ranged from \$7.36 for combined food

Chart 1. Mean hourly wage and percent of total employment by major occupational group



preparation and serving workers, including fast food to \$11.44 for general office clerks, with the exception of registered nurses who earned \$25.39. (See table 1.)

These statistics for wage and salary workers are from the Occupational Employment Statistics (OES) survey, a federal-state cooperative program between BLS and State Workforce Agencies. The OES survey provides estimates of employment and hourly and annual wages for wage and salary workers in 22 major occupational groups and in 770 detailed occupations.

Management and legal occupational groups were the highest paying of the 22 major occupational groups. Over 30 percent of the workers in these occupational groups earned more than \$43.75 per hour. (See table A.) The major occupational group with the highest employment level in November 2003 was office and administrative support workers, followed by sales and related workers, food preparation and serving workers, and production workers. (See chart 1.)

The major occupational groups with the lowest average wages were food preparation and serving related; farming, fishing, and forestry; building and grounds cleaning and maintenance; and personal care and

Table A. Wage distribution by major occupational group, November 2003 (Percent distribution)

	Wage range								
Major occupational group	Under	\$8.50	\$10.75	\$13.50	\$17.00	\$21.50	\$27.25	\$34.50	Over
See Frank	\$8.50	to	\$43.75						
	φοο	\$10.74	\$13.49	\$16.99	\$21.49	\$27.24	\$34.49	\$43.74	Ψ.ε
Management	1.3	1.2	2.8	5.5	9.2	13.5	16.0	17.0	33.5
Business and financial operations	1.7	2.1	5.6	12.2	18.9	21.4	17.5	11.1	9.4
Computer and mathematical science	.7	1.4	3.2	7.0	12.6	18.3	21.9	19.9	14.9
Architecture and engineering	.6	1.7	4.1	8.3	14.2	20.7	21.1	17.7	11.6
Life, physical, and social science	1.9	3.5	7.2	13.2	17.7	18.9	16.0	11.4	10.3
Community and social services	7.0	10.7	17.9	21.4	19.0	13.7	7.1	2.4	.7
Legal	1.4	2.2	5.5	10.7	14.5	13.3	11.2	10.8	30.3
Education, training, and library	11.3	8.7	9.9	14.7	18.8	16.8	11.2	5.2	3.5
Arts, design, entertainment, sports, and media	12.2	9.8	12.2	14.9	16.1	13.6	9.3	5.8	6.1
Healthcare practitioner and technical	2.4	4.8	8.0	12.6	19.5	21.0	13.7	7.5	10.6
Healthcare support	24.4	31.1	23.8	13.7	5.2	1.3	.3	.1	-
Protective service	16.3	14.6	15.0	14.8	13.7	13.0	8.2	3.4	1.0
Food preparation and serving related	66.4	17.9	9.0	4.1	1.8	.6	.2	.1	-
Building and grounds cleaning and									
maintenance	41.3	25.2	16.4	9.7	5.2	1.7	.4	.1	-
Personal care and service	48.7	22.1	12.1	7.3	4.9	2.5	1.2	.6	.6
Sales and related	35.9	16.9	11.5	9.5	8.2	6.4	4.4	3.1	4.2
Office and administrative support	14.8	19.6	22.7	19.7	14.0	6.5	1.9	.6	.3
Farming, fishing, and forestry	56.3	17.5	11.5	7.3	4.3	2.0	.7	.3	.1
Construction and extraction	6.9	12.0	16.5	18.6	17.7	14.8	9.2	3.3	.9
Installation, maintenance, and repair	7.3	10.4	15.0	19.5	20.8	16.7	7.7	2.1	.7
Production	17.3	19.6	20.5	17.8	12.4	8.4	3.0	.8	.2
Transportation and material moving	26.1	19.3	18.1	15.1	11.3	6.2	2.2	.8	.9

service. At least 40 percent of all workers in each of these groups earned less than \$8.50 per hour. (See table A.)

Major groups in which 50 percent or more of the employment was concentrated in the middle three wage ranges (from \$13.50 mean hourly wage to \$27.24 mean hourly wage) included business and financial operations occupations; life, physical, and social science occupations; community and social services occupations; education, training, and library occupations; healthcare practitioner and technical occupations; construction and extraction occupations; and installation, maintenance, and repair occupations.

Table 1 shows employment and wage estimates for detailed occupations within each major group. The OES program also provides national occupational employment and wage data by industry, and cross-industry estimates for all states and 334 metropolitan areas. November 2003 OES data for states and metropolitan areas and the national employment and wage data by industry will be available on the BLS Web site in November.

The OES survey is designed to estimate employment and wages at detailed industry and area levels with a desired level of reliability based on a sample of 1.2 million establishments, collected in six semiannual panels over a 3-year period.

Technical Note

Scope of the survey

The Occupational Employment Statistics (OES) survey is a semiannual mail survey measuring occupational employment and wage rates for wage and salary workers in nonfarm establishments, by industry, in the United States (Guam, Puerto Rico, and the Virgin Islands also are surveyed, but their data are not included in this release). In 2002, the OES survey switched from industry coding based on the Standard Industrial Classification (SIC) system to that based on the North American Industry Classification System (NAICS).

In November 2002, the OES survey changed from an annual survey of 400,000 establishments to a semiannual survey of 200,000 establishments per panel. The OES survey samples and contacts establishments in May and November of each year, and over 3 years, or the equivalent of six panels, contacts approximately 1.2 million establishments. The full 3-year sample allows the production of estimates at fine levels of geographic, industry, and occupational detail. The nationwide response rate for the November 2003 panel was 79 percent for establishments, covering 73 percent of weighted employment.

The Standard Occupational Classification system

In 1999, the OES survey began using the Office of Management and Budget's (OMB) occupational classification system, the Standard Occupational Classification (SOC) system. The SOC system is the first OMB-required occupational classification system for federal agencies. The OES survey categorizes workers in 1 of about 770 detailed occupations. Together, these detailed occupations comprise 23 major occupational groups. The major groups are as follows:

Management occupations

Business and financial operations occupations

Computer and mathematical science occupations

Architecture and engineering occupations

Life, physical, and social science occupations

Community and social services occupations

Legal occupations

Education, training, and library occupations

Arts, design, entertainment, sports, and media occupations

Healthcare practitioner and technical occupations

Healthcare support occupations

Protective service occupations

Food preparation and serving related occupations

Building and grounds cleaning and maintenance occupations

Personal care and service occupations

Sales and related occupations

Office and administrative support occupations

Farming, fishing, and forestry occupations

Construction and extraction occupations

Installation, maintenance, and repair occupations

Production occupations

Transportation and material moving occupations

Military specific occupations (not surveyed in OES)

For more information about the SOC system, please see the Bureau of Labor Statistics (BLS) Web site at http://www.bls.gov/soc.

The industry coding system

As noted earlier, in 2002, the OES survey switched from using the Standard Industrial Classification (SIC) system to using the North American Industry Classification System (NAICS). For more information about NAICS, see the BLS Web site at http://www.bls.gov/bls/naics.htm.

The OES survey includes establishments in NAICS sectors 11 (logging and agricultural support activities only), 21, 22, 23, 31-33, 42, 44-45, 48-49, 51, 52, 53, 54, 55, 56, 61, 62, 71, 72, 81 (except private households), state government, and local government. Data for the U.S. Postal Service and the federal government are universe counts obtained from the Postal Service and the Office of Personnel Management, respectively. An establishment is defined as an economic unit that processes goods or provides services, such as a factory, mine, or store. The establishment is generally at a single physical location and is engaged primarily in one type of economic activity.

The OES survey covers all full- and part-time wage and salary workers in nonfarm industries. The survey does not include the self-employed owners and partners in unincorporated firms, household workers, or unpaid family workers.

Survey coverage

BLS funds the survey and provides the procedures and technical support, while the State Workforce Agencies (SWAs) collect the data. BLS produces cross-industry NAICS estimates for the nation, states, and metropolitan statistical areas (MSAs). NAICS estimates are produced for sector, 3-digit, 4-digit, and selected 5-digit industry levels. BLS releases all cross-industry and national estimates, and the SWAs release industry estimates at the state and MSA levels.

State Unemployment Insurance (UI) files provide the universe from which the OES survey draws its sample. The employment benchmarks are obtained from reports submitted by employers to the UI program. Supplemental sources are used for rail transportation (NAICS 4821) and Guam because they do not report to the UI program. The OES survey sample is stratified by area, industry, and size class. Size classes are defined as follows:

Size class	Number of employees
1	1 to 4
2	5 to 9
3	10 to 19
4	20 to 49
5	50 to 99
6	100 to 249
7	250 and above

UI reporting units with 250 or more employees are sampled with virtual certainty across a 3-year period. Generally, one-sixth of the certainty units are sampled in each panel in each state.

Concepts

Occupational employment is the estimate of total wage and salary employment in an occupation across the industries in which that occupation was reported. The OES survey defines employment as the number of workers who can be classified as full-time or part-time employees, including workers on paid vacations or other types of leave; workers on unpaid short-term absences; salaried officers, executives, and staff members of incorporated firms; employees temporarily assigned to other units; and employees for whom the reporting unit is their permanent duty station regardless of whether that unit prepares their paycheck.

The OES survey form sent to an establishment contains between 50 and 225 SOC occupations selected on the basis of the sampled establishment's industry classification and size class. To reduce paperwork and respondent burden, no survey form contains every SOC occupation. Thus, data for specific occupations are collected primarily from establishments in industries that are the predominant employers of workers in those occupations. Each survey form is structured, however, to allow a respondent to provide detailed occupational information for each worker at the establishment; that is, unlisted occupations can be added to the survey form.

Wages for the OES survey are straight-time, gross pay, exclusive of premium pay. Base rate, cost-of-living allowances, guaranteed pay, hazardous-duty pay, incentive pay including commissions and production bonuses, tips, and on-call pay are included. Excluded are back pay, jury duty pay, overtime pay, severance pay, shift differentials, non-production bonuses, employer cost for supplementary benefits, and tuition reimbursements.

The OES survey collects wage data in 12 intervals. Employers report the number of employees in an occupation for each wage range. The wage intervals used for the November 2003 survey are as follows:

T / 1	Wages				
Interval	Hourly	Annual			
Range A	Under \$6.75	Under \$14,040			
Range B	\$6.75 to \$8.49	\$14,040 to \$17,679			
Range C	\$8.50 to \$10.74	\$17,680 to \$22,359			
Range D	\$10.75 to \$13.49	\$22,360 to \$28,079			
Range E	\$13.50 to \$16.99	\$28,080 to \$35,359			
Range F	\$17.00 to \$21.49	\$35,360 to \$44,719			
Range G	\$21.50 to \$27.24	\$44,720 to \$56,679			
Range H	\$27.25 to \$34.49	\$56,680 to \$71,759			
Range I	\$34.50 to \$43.74	\$71,760 to \$90,999			
Range J	\$43.75 to \$55.49	\$91,000 to \$115,439			
Range K	\$55.50 to \$69.99	\$115,440 to \$145,599			
Range L	\$70.00 and over	\$145,600 and over			

Mean hourly wage. The mean hourly wage rate for an occupation is the total wages that all workers in the occupation earn in an hour divided by the total employment of the occupation. To calculate the mean hourly wage of each occupation, total weighted hourly wages are summed across all

intervals and divided by the occupation's weighted survey employment. The mean wage for each interval is based on occupational wage data collected by the BLS Office of Compensation and Working Conditions for the National Compensation Survey (NCS).

The mean hourly wage value for the highest wage interval, \$70.00 and over, is calculated after excluding data for pilots. Pilots comprise a large portion of the employment from the NCS that falls into the highest interval, and about 1 percent of the workers reported for the OES survey makes \$70.00 and over. Since pilots work fewer hours than workers in other occupations, their hourly wage rates are much higher than other occupations. After excluding pilots from the calculation, the mean wage rate for the highest interval was computed separately for each panel or annual sample (November 2003, May 2003, November 2002, 2001, and 2000). Then the average of these five mean wage rates was derived and used for all of the \$70.00 and over data in the November 2003 survey. The wage rates for this interval do not go through any wage updating procedures.

Percentile wage. The p-th percentile wage range for an occupation is the wage where p percent of all workers earn that amount or less and where (100-p) percent of all workers earn that amount or more. This statistic is calculated by uniformly distributing the workers inside each wage interval, ranking the workers from lowest paid to highest paid, and calculating the product of the total employment for the occupation and the desired percentile to determine the worker that earns the p-th percentile wage rate.

Annual wage. Many employees are paid at an hourly rate by their employers and may work more than or less than 40 hours per week. Annual wage estimates in this release are calculated by multiplying the mean hourly wage by a "yearround, full-time" figure of 2,080 hours (52 weeks by 40 hours). Thus, annual wage estimates may not represent the actual annual pay received by the employee if they work more or less than 2,080 hours per year. Alternatively, some workers are paid based on an annual amount, but they generally do not work the usual 2,080 hours per year. Since the OES survey does not collect the actual number of hours worked, hourly rates cannot be calculated with a reasonable degree of confidence from annual rates. For this reason, the annual salary is directly calculated from reported survey data, and only annual wages are estimated for these occupations. Occupations that typically have a work year of less than 2,080 hours include musical and entertainment occupations, pilots and flight attendants, and teachers.

Hourly versus annual wage reporting. For each occupation, respondents are asked to report the number of employees paid within specific wage intervals. The intervals are defined both as hourly rates and the corresponding annual rates, where the annual rate for an occupation is calculated by multiplying the hourly wage rate by a typical work year of 2,080 hours. The responding establishment can reference either the

hourly or the annual rate, but they are instructed to report the hourly rate for part-time workers.

Estimation methodology

Beginning in the November 2002, the OES survey samples approximately 200,000 establishments semiannually in November and May of each year, for a combined sample of 1.2 million different establishments over six semiannual panels. Until 2002, the survey sampled approximately 400,000 establishments in the fourth quarter of each year, for a 3-year combined sample size of 1.2 million. While estimates can be made from a single year or 2 years of data, the OES survey has been designed to produce estimates at a desired level of precision using the full 3 years, or 6 panels, of data. The 3-year sample allows the production of estimates at fine levels of geographic, industry, and occupational detail.

Producing estimates using the 3 years of sample data provides significant sampling error reductions (particularly for small geographic areas and occupations); however, it also has some quality limitations in that it requires the adjustment of earlier year's data to the current reference period, a procedure referred to as "wage updating."

Wage updating. As noted above, combining multiple years of data has both statistical advantages and limitations. Significant reductions in sampling error can be achieved by taking advantage of 3 years of data, which covers over 70 percent of the employment in the United States. This feature is particularly important in improving the reliability of estimates for small domains in the population (that is, wage and employment estimates for detailed occupations in small areas). Combining multiple years of data also has been necessary to obtain full coverage of establishments with 250 or more workers that are sampled with certainty.

Starting with the 1997 estimates, the OES program has used the BLS Employment Cost Index to adjust survey data from prior years or panels before combining them with the current panel's data. The wage updating procedure assumes that each occupation's wage rate, as measured in the earlier year or panel, moves according to the average movement of the broader occupation division that encompasses it and that there are no major geographic, industry, or detailed occupational differences.

November 2003 OES survey estimates. The November 2003 OES survey estimates are based on data collected from establishments in the November 2003, May 2003, and the November 2002, 2001, and 2000 samples. The November 2003 estimates used the wage-updating methodology introduced in 1997. In addition, a "nearest neighbor" hot deck imputation procedure was used to impute occupational employment totals for establishments that reported no employment data. For establishments that reported (or imputed) occupational employment totals but did not report an employment distribution across the wage intervals, a variation of mean imputation was used to impute the distribution. During estimates processing, OES employment data were benchmarked to the average employment for May and

November 2003 from the BLS Quarterly Census of Employment and Wages.

Reliability of the estimates. Estimates calculated from a sample survey are subject to two types of error: sampling and nonsampling. Sampling error occurs when estimates are calculated from a subset (i.e., sample) of the population instead of the full population. When a sample of the population is surveyed, there is a chance that the sample estimate of the characteristic of interest may differ from the population value of that characteristic. Differences between the sample estimate and the population value will vary depending on the sample selected. This variability can be estimated by calculating the standard error (SE) of the sample estimate. If we were to repeat the sampling and estimation process countless times using the same survey design, approximately 90 percent of the intervals created by adding and subtracting 1.645 SEs from the sample estimate would include the population value. These intervals are called 90-percent confidence intervals. The OES survey, however, usually uses the relative standard error (RSE) of a sample estimate instead of its SE to measure sampling error. RSE is defined as the SE of a sample estimate divided by the sample estimate itself. This statistic provides the user with a measure of the relative precision of the sample estimate. RSEs are calculated for both occupational employment and mean wage rate estimates. Occupational employment RSEs are calculated using a subsample, random group replication technique called the Jackknife. Mean wage rate RSEs are calculated using a variance components model that accounts for both the observed and unobserved components of the wage data. The variances of the unobserved components are estimated using wage data from the BLS National Compensation Survey. In general, estimates based on many establishments have lower RSEs than estimates based on few establishments. If the distributional assumptions of the models are violated, the resulting confidence intervals may not reflect the prescribed level of confidence.

Nonsampling error occurs for a variety of reasons, none of which are directly connected to sampling. Examples of nonsampling error include: nonresponse, data incorrectly reported by the respondent, mistakes made in entering collected data into the database, and mistakes made in editing and processing the collected data.

Additional information

The November 2003 OES national data by occupation, comparable to data in table 1, will be available soon on the Internet (http://www.bls.gov/oes). Users also may access each occupation's definition and percentile wages. The November 2003 cross-industry data for states and metropolitan areas will be available on the BLS Web site in November. Industry staffing patterns at the sector, 3-, 4-, and selected 5-digit NAICS levels also will be available from the Internet beginning in November. These data will include industry-specific occupational employment and wage data.

For additional information, contact the Office of Employment and Unemployment Statistics, Division of Occupational Employment Statistics, Room 2135, 2 Massachusetts Avenue, NE, Washington, DC, 20212; telephone 202-691-6569 (e-mail: oesinfo@bls.gov).

Information in this release will be made available to sensory impaired individuals upon request. Voice phone: 202-691-5200; TDD message referral phone number: 1-800-877-8339.

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, November 2003

Occupation	Complex on t	Mean v	Median hourly	
Occupation	Employment	Hourly	Annual ¹	wages
nagement occupations				
Chief executives	372,170	\$66.53	\$138,380	\$65.5
General and operations managers	1,841,470	42.94	89,310	35.8
Legislators	64,570	15.03	31,260	7.9
Advertising and promotions managers	64,390	35.60	74,050	29.5
Marketing managers	176,270	45.16	93,930	40.9
Sales managers	310,320	44.53	92,610	39.4
Public relations managers	54,490	37.00	76,960	32.6
Administrative services managers	266,330	31.11	64,710	27.9
Computer and information systems managers	257,860	46.13	95,960	43.5
Financial managers	509,690	42.54	88,470	38.0
Human resources managers	158,560	36.84	76,620	33.8
Industrial production managers	159,820	37.38	77,750	34.4
Purchasing managers	84,750	35.32	73,470	32.6
Transportation, storage, and distribution managers	90,940	34.06	70,830	31.1
Farm, ranch, and other agricultural managers	5,000	25.08	52,180	22.9
Construction managers	194,820	36.44	75,800	32.5
Education administrators, preschool and child care center/program	54,570	19.68	40,940	16.9
Education administrators, elementary and secondary school	208,850	(2)	75,420	
Education administrators, postsecondary	102,200	36.12	75,120	32.5
Engineering managers	188,350	48.31	100,490	45.9
Food service managers	218,920	20.18	41,980	18.2
Funeral directors	24.220	26.83	55,810	22.1
Gaming managers	3,580	31.19	64,880	27.8
	,		,	
Lodging managers	31,570	20.20	42,030	17.4
Medical and health services managers	223,940	35.74	74,340	31.9
Natural sciences managers	39,780	45.41	94,440	41.
Postmasters and mail superintendents	26,230	24.55	51,050	24.
Property, real estate, and community association managers		23.18	48,210	18.
Social and community service managers	116,210	24.13	50,180	22.3
siness and financial operations occupations				
Agents and business managers of artists, performers, and athletes	12,240	32.76	68,150	26.
Purchasing agents and buyers, farm products	14,940	24.05	50,020	21.
Wholesale and retail buyers, except farm products	139,140	23.61	49,120	20.
Purchasing agents, except wholesale, retail, and farm products	244,940	24.33	50,610	22.
Claims adjusters, examiners, and investigators	236,810	22.54	46,890	21.
Insurance appraisers, auto damage	11,260	21.72	45,170	21.
Compliance officers, except agriculture, construction, health and safety,				
and transportation	159,640	24.12	50,160	22.
Cost estimators	186,710	25.43	52,900	23.
Emergency management specialists		23.65	49,180	21.
Employment, recruitment, and placement specialists	171,660	23.14	48,140	19.
Compensation, benefits, and job analysis specialists	87,090	23.79	49,480	22.
Training and development specialists	196,880	22.85	47,530	21.
Management analysts	433,830	35.15	73,110	30.
Meeting and convention planners	33,290	20.42	42,470	18.
Accountants and auditors	954,270	26.98	56,110	23.
Appraisers and assessors of real estate	65,770	23.85	49,610	20.
Budget analysts	53,430	27.90	58,030	26.
Credit analysts	68,420	26.44	55,000	22.
Financial analysts	171,170	34.06	70,850	29.
Personal financial advisors		38.46	79,990	28.
Insurance underwriters	93,770	25.96	53,990	23
Financial examiners	23,300	30.69	63,830	28
Loan counselors	31,620	18.36	38,190	16.
Loan officers	262,920	27.19	56,550	22.
			,	
Tax examiners, collectors, and revenue agents	69,950	22.78	47,390	20.
Tax preparers	46,260	16.38	34,070	13
mputer and mathematical science occupations Computer and information scientists, research	23.770	40.98	85,240	39
Computer programmers	-, -		,	29.
	403,220	31.33	65,170	-
Computer software engineers, applications	410,580	36.66	76,260	35.
Computer software engineers, systems software		38.36	79,790	37.
Computer support specialists	480,520	20.74	43,140	19.
Computer systems analysts	485,720	32.23	67,040	31
	97,540	29.86	62,100	28
Database administrators	244,610	28.90	60,100	27.
Network and computer systems administrators				- 00
	156,270	29.92	62,220	28.
Network and computer systems administrators		29.92 41.84 37.62	62,220 87,040 78,240	36 37

 $Table \ 1. \ \ National \ employment \ and \ wage \ data \ from \ the \ Occupational \ Employment \ Statistics \ survey \ by \ occupation, \ November \ 2003\% \ Continued$

		Mean wages	wages	Median hourly
Occupation	Employment	Hourly	Annual ¹	wages
Computer and mathematical science occupations ¾ Continued				
Operations research analysts	53,620	\$29.98	\$62,360	\$28.41
Statisticians	-,	30.87	64,210	30.92
Mathematical technicians	1,790	20.56	42,760	17.97
Architecture and engineering occupations				
Architects, except landscape and naval		31.31	65,120	28.19
Landscape architects		26.45 23.19	55,010 48,230	24.41 21.90
Surveyors	· · · · · · · · · · · · · · · · · · ·	21.54	44,800	20.16
Agranged angineers	71 750	27.92	70 660	27.10
Aerospace engineers Agricultural engineers	, , , , , , , , , , , , , , , , , , ,	37.82 27.90	78,660 58,040	37.19 25.17
Biomedical engineers	· · · · · · · · · · · · · · · · · · ·	32.49	67,580	31.14
Chemical engineers		37.70	78,410	36.21
Civil engineers		31.55	65,620	30.21
Computer hardware engineers	70,110	39.44	82,040	38.02
Electrical engineers		35.27	73,370	34.05
Electronics engineers, except computer		35.96	74,800	35.32
Environmental engineers		31.76	66,070	30.79
Health and safety engineers, except mining safety engineers and inspectors		30.62	63,680	29.53 30.79
Industrial engineers Marine engineers and naval architects		31.50 35.07	65,530 72,940	34.28
Materials engineers		32.16	66,900	31.25
Mechanical engineers	, , , , , , , , , , , , , , , , , , ,	32.42	67,430	31.35
Mining and geological engineers, including mining safety engineers		32.31	67,200	30.86
Nuclear engineers	16,320	41.08	85,440	40.03
Petroleum engineers	13,340	42.33	88,050	40.73
Architectural and civil drafters	97,200	19.06	39,630	18.36
Electrical and electronics drafters	34,600	22.18	46,120	20.49
Mechanical drafters	, , , , , , , , , , , , , , , , , , ,	21.35	44,410	20.37
Aerospace engineering and operations technicians		25.47	52,970	24.85
Civil engineering technicians		19.04	39,610	18.38
Electrical and electronic engineering technicians Electro-mechanical technicians		22.20 20.22	46,190 42,070	21.82 19.58
Environmental engineering technicians.		19.48	40,510	18.35
Industrial engineering technicians		22.33	46,440	20.61
Mechanical engineering technicians		21.22	44,140	20.51
Surveying and mapping technicians	57,970	15.54	32,320	14.41
Life, physical, and social science occupations				
Agricultural and food scientists	17,530	25.81	53,690	23.85
Biochemists and biophysicists	- ,	33.70	70,100	30.96
Microbiologists	, , , , , , , , , , , , , , , , , , ,	27.69	57,600	25.05
Zoologists and wildlife biologists		24.83	51,650	23.71
Foresters	,	25.09 23.16	52,200 48,180	24.60 22.63
Epidemiologists	·	27.46	57,110	25.80
Medical scientists, except epidemiologists		32.77	68,170	28.94
Astronomers	810	40.12	83,440	41.30
Physicists		41.33	85,960	40.18
Atmospheric and space scientists		31.53	65,590	31.44
Chemists	81,750	28.82	59,940	26.42
Materials scientists		35.14	73,080	34.18
Environmental scientists and specialists, including health		26.25	54,600	24.07
Geoscientists, except hydrologists and geographers		37.26 30.04	77,490 62,480	32.97 28.37
Economists		37.68 29.87	78,370 62,120	33.90
Survey researchers	, , , , , , , , , , , , , , , , , , ,	29.87 15.61	62,130 32,470	26.36 12.97
Clinical, counseling, and school psychologists		28.19	58,640	25.59
Industrial-organizational psychologists		35.06	72,930	32.57
Sociologists		28.90	60,120	26.74
Urban and regional planners		26.31	54,720	25.33
Anthropologists and archeologists		21.63	44,990	19.84
Geographers		27.35	56,890	27.06
HistoriansPolitical scientists		22.19 39.14	46,160 81,400	20.37 39.27
	,			
Agricultural and food science technicians		15.09 17.00	31,390 35,360	14.03 16.04
Biological technicians	52,950	17.00	35,360	10.04

See footnotes at end of table.

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, November 2003¾ Continued

			vages	Median hourly
Occupation	Employment	Hourly	Annual ¹	wages
Life, physical, and social science occupations ¾ Continued				
Chemical technicians	61,870	\$18.82	\$39,130	\$18.09
Geological and petroleum technicians		20.88	43,420	19.60
Nuclear technicians		28.77	59,840	28.97
Environmental science and protection technicians, including health		18.11	37,660	17.21
Forensic science technicians		22.22	46,220	20.77
Forest and conservation technicians		16.43	34,160	15.38
Community and social services occupations				
Substance abuse and behavioral disorder counselors	64,900	16.15	33,580	15.15
Educational, vocational, and school counselors	217,570	22.52	46,850	21.63
Marriage and family therapists		19.92	41,420	18.37
Mental health counselors		16.86	35,060	15.41
Rehabilitation counselors		14.47	30,100	13.18
Child, family, and school social workers		17.88	37,190	16.49
Medical and public health social workers		19.49	40,540	18.83
Mental health and substance abuse social workers		17.24	35,860	16.18
Health educators		19.92	41,430	18.32
Probation officers and correctional treatment specialists		20.31	42,240	18.85
Social and human service assistants		12.29	25,570	11.54
Clergy Directors, religious activities and education	- ,	18.47 16.33	38,410 33,960	16.80 14.06
Directors, religious activities and education	12,120	10.55	33,900	14.00
Legal occupations Lawyers	512,070	51.56	107,250	44.58
Administrative law judges, adjudicators, and hearing officers.		34.15	71,040	32.37
Arbitrators, mediators, and conciliators		29.88	62,150	25.80
Judges, magistrate judges, and magistrates			,	
		42.04	87,430	43.86
Paralegals and legal assistants		19.78	41,130	18.48
Court reporters		22.66	47,130	20.29
Law clerks Title examiners, abstractors, and searchers		16.26 18.50	33,820 38,490	15.75 16.30
			,	
Education, training, and library occupations Business teachers, postsecondary	68,040	(2)	64,410	(2
Computer science teachers, postsecondary		(2)	57,480	(2
Mathematical science teachers, postsecondary		(2)	56,480	(2
Architecture teachers, postsecondary		(2)	64,680	(2
Engineering teachers, postsecondary		(2)	76,110	(2
Agricultural sciences teachers, postsecondary		(2)	67,010	(2
Biological science teachers, postsecondary		(²)	71,820	(2
Forestry and conservation science teachers, postsecondary		(2)	66,570	(2
Atmospheric, earth, marine, and space sciences teachers, postsecondary		(²)	68,940	(2
Chemistry teachers, postsecondary			63,040	(2
Environmental science teachers, postsecondary		(2)	,	(2
Physics teachers, postsecondary		(2) (2)	65,440 68,400	(2
Anthropology and archeology teachers, postsecondary	4,910	(2)	65,310	(2
Area, ethnic, and cultural studies teachers, postsecondary		(2)	62,390	(2
Economics teachers, postsecondary		(2)	72,300	(2
Geography teachers, postsecondary		(2)	60,150	(2
Political science teachers, postsecondary		(2)	64,280	(2
Psychology teachers, postsecondary		(2)	59,780	(2
Sociology teachers, postsecondary		(2)	58,720	(2
Health specialties teachers, postsecondary		(2)	75,760	(2
Nursing instructors and teachers, postsecondary		(2)	54,860	(2
Education teachers, postsecondary	, , , , , , , , , , , , , , , , , , ,	(2)	51,350	(2
Library science teachers, postsecondary	3,850	(2)	54,260	(2
Criminal justice and law enforcement teachers, postsecondary		(2)	49,440	(2
Law teachers, postsecondary.		(2)	94,620	(2
Social work teachers, postsecondary		(2)	55,860	(2
Art, drama, and music teachers, postsecondary		(2)	52,210	(2
Communications teachers, postsecondary		(2)	52,610	(2
English language and literature teachers, postsecondary		(2)	52,080	(2
Foreign language and literature teachers, postsecondary		(2)	51,050	(2
History teachers, postsecondary		(2)	57,450	(2
Philosophy and religion teachers, postsecondary		(2)	54,990	(2
Graduate teaching assistants	116,520	(2)	27,340	(2
Home economics teachers, postsecondary		(2)	50,530	(2
Recreation and fitness studies teachers, postsecondary		(2)	47,000	(3
Vocational education teachers, postsecondary		20.80	43,320	19.1
Preschool teachers, except special education	363,790	11.26	23,430	9.8
Kindergarten teachers, except special education		(2)	43,530	(2
, , , , , , , , , , , , , , , , , , , ,		(2)	44,960	(2
Elementary school teachers, except special education	1,418,570	(-) (

 $Table \ 1. \ \ National\ employment\ and\ wage\ data\ from\ the\ Occupational\ Employment\ Statistics\ survey\ by\ occupation,\ November\ 2003\%\ Continued$

		Mean	Median hourly	
Occupation	Employment	Hourly	Annual ¹	wages
ducation, training, and library occupations ¾ Continued				
Middle school teachers, except special and vocational education	611,440	(2)	\$45,600	
Vocational education teachers, middle school	. 16,820	(2)	45,610	
Secondary school teachers, except special and vocational education	. 1,033,020	(2)	47,810	
Vocational education teachers, secondary school		(2)	47,160	
Special education teachers, preschool, kindergarten, and elementary school	. 202,100	(2)	45,230	
Special education teachers, middle school	. 96,160	(2)	47,750	
Special education teachers, secondary school		(2)	48,760	
Adult literacy, remedial education, and GED teachers and instructors		20.52 16.67	42,670 34,680	18. 14.
Archivists, curators, and museum technicians		19.40	40,360	17.
Librarians	,	22.18	46,140	21.
Library technicians		12.54	26,080	11.
Audio-visual collections specialists		17.35	36,090	16.
Farm and home management advisors		20.12	41,860	19.
Instructional coordinators		24.20	50,330	22
Teacher assistants		(2)	20,100	
ts, design, entertainment, sports, and media occupations				
Art directors Fine artists, including painters, sculptors, and illustrators		34.39 20.48	71,530 42,610	30 17
Multi-media artists and animators		25.73	53,530	22
Commercial and industrial designers.		26.97	56,110	25
Fashion designers		30.78	64,030	26
· ·				
Floral designers		10.22	21,260	4=
Graphic designers		20.01	41,620	17
Interior designers		21.42	44,550	19
Merchandise displayers and window trimmers		12.46 18.96	25,910 39,430	10 17
Actors	. 57,580	(2)	47,650	
Producers and directors		(2)	73,030	
Athletes and sports competitors.		(2)	85,040	
Coaches and scouts		(²)	33,190	
Umpires, referees, and other sports officials		(²)	28,740	
			,	١,
Dancers		12.73	26,480	15
Choreographers		17.65	36,700	18
Music directors and composers		(2) (2)	42,960 51,450	
Announcers	. 48,760	14.48	30,110	10
News analysts, reporters and correspondents	. 61,200	19.38	40,320	15
Public relations specialists	. 157,050	23.36	48,590	20
Editors		23.18	48,210	20
Technical writers		26.56	55,250	2
Writers and authors		25.49	53.020	20
Interpreters and translators		17.55	36,500	1
Audio and video equipment technicians	40,060	17.12	35,610	1.
Broadcast technicians	. 30,940	16.11	33,510	1:
Radio operators	1,840	16.14	33,570	14
Sound engineering technicians	. 11,550	22.11	45,980	17
Photographers		14.63	30,430	1:
Camera operators, television, video, and motion picture		20.25	42,120	1
Film and video editors		23.20	48,260	2
althcare practitioner and technical occupations	20.000	40.00	20.055	_
Chiropractors		40.02	83,230	32
Dentists		62.04	129,040	57
Dietitians and nutritionists		20.93	43,520	20
Optometrists		46.45	96,610	4
Pharmacists	219,790	39.03	81,180	3:
Anesthesiologists		86.72 67.24	180,380 139.860	60
		76.84	159,820	
Internists, general				
Obstetricians and gynecologists		84.92	176,630	
Pediatricians, general		68.18	141,800	6
Psychiatrists		66.63 87.83	138,590 182,690	6
Physician assistants	. 61,850	32.02	66,600	3:
Podiatrists		51.63	107,390	45
Registered nurses		25.39	52,810	24
	, ,	25.47	52,990	24
		20.41	JZ,93U	. 2.
Audiologists Occupational therapists		26.39	54,890	2

 $Table \ 1. \ \ National \ employment \ and \ wage \ data \ from \ the \ Occupational \ Employment \ Statistics \ survey \ by \ occupation, \ November \ 2003\% \ Continued$

	Mean wages		9	Mean wages		ean wages Madian hou	Median hourly
Occupation	Employment	Hourly	Annual ¹	wages			
Healthcare practitioner and technical occupations 3/4 Continued							
Physical therapists	. 137,370	\$29.44	\$61,240	\$28.22			
Radiation therapists		28.35	58,970	26.71			
Recreational therapists		16.25	33,800	15.64			
Respiratory therapists		20.64	42,930	20.22			
Speech-language pathologistsVeterinarians		25.80	53,670	24.47			
		36.13	75,160	31.39			
Medical and clinical laboratory technologists		21.82 15.11	45,380 31,420	21.37 14.49			
Dental hygienists		28.23	58,730	27.25			
Cardiovascular technologists and technicians		18.73	38,950	18.17			
Diagnostic medical sonographers		24.90	51,800	24.51			
Nuclear medicine technologists	·	27.67	57,540	25.81			
Radiologic technologists and technicians	,	20.87	43,410	20.12			
Emergency medical technicians and paramedics		13.02	27,080	11.90			
Dietetic technicians	25,690	12.04	25,030	10.99			
Pharmacy technicians		11.80	24,540	11.26			
Psychiatric technicians		13.55	28,180	12.34			
Respiratory therapy technicians	25,530	17.64	36,700	17.29			
Surgical technologists	77,980	16.27	33,830	15.94			
Veterinary technologists and technicians		12.19	25,350	11.63			
Licensed practical and licensed vocational nurses	691,110	16.31	33,930	15.92			
Medical records and health information technicians	152,220	12.97	26,990	11.98			
Opticians, dispensing	61,990	14.18	29,500	13.15			
Orthotists and prosthetists	4,930	27.26	56,700	23.97			
Occupational health and safety specialists and technicians	44,700	23.85	49,610	23.24			
Athletic trainers	12,860	(2)	35,720	(2)			
Healthcare support occupations							
Home health aides		9.08	18,890	8.75			
Nursing aides, orderlies, and attendants		10.27	21,370	9.98			
Psychiatric aides		11.61	24,140	11.11			
Occupational therapist assistants		18.33	38,130	18.33			
Occupational therapist aides Physical therapist assistants		12.49 17.92	25,970 37,270	11.09 17.93			
Physical therapist assistants		10.76	22,390	10.13			
Massage therapists	,	16.83	35,000	14.40			
Dental assistants	271,200	13.72	28,550	13.41			
Medical assistants		12.08	25,130	11.69			
Medical equipment preparers	,	11.92	24,800	11.51			
Medical transcriptionists		13.72	28,530	13.36			
Pharmacy aides		9.51	19,770	8.89			
Veterinary assistants and laboratory animal caretakers		9.42	19,590	8.83			
Protective service occupations							
First-line supervisors/managers of correctional officers	35,570	22.53	46,870	21.29			
First-line supervisors/managers of police and detectives		30.68	63,820	30.38			
First-line supervisors/managers of fire fighting and prevention workers	55,700	28.59	59,460	27.56			
Fire fighters	274,590	18.66	38,810	17.99			
Fire inspectors and investigators	,	22.88	47,600	22.03			
Forest fire inspectors and prevention specialists	1,540	19.57	40,700	18.52			
Bailiffs	16,690	16.83	35,000	16.48			
Correctional officers and jailers		17.11	35,580	15.98			
Detectives and criminal investigators	85,670	26.53	55,190	25.65			
Fish and game wardens	7,010	23.43	48,730	20.40			
Parking enforcement workers	9,690	14.30	29,740	13.64			
Police and sheriff's patrol officers	612,420	21.90	45,560	21.41			
Transit and railroad police	4,790	22.29	46,350	21.28			
Animal control workers		12.97	26,970	12.44			
Private detectives and investigators		16.96	35,270	14.65			
Gaming surveillance officers and gaming investigators	· · · · · · · · · · · · · · · · · · ·	13.54	28,150	12.39			
Security guards	961,660	10.48 9.82	21,790 20,430	9.60 9.18			
Crossing guards	68,910		.,	1			
Crossing guards		0.02					
Crossing guards Food preparation and serving related occupations	68,910		22.200	1110			
Food preparation and serving related occupations Chefs and head cooks	68,910 117,370	16.00	33,280 27,100				
Food preparation and serving related occupations Chefs and head cooks First-line supervisors/managers of food preparation and serving workers	68,910 117,370 705,070	16.00 13.03	27,100	12.01			
Food preparation and serving related occupations Chefs and head cooks First-line supervisors/managers of food preparation and serving workers. Cooks, fast food	68,910 117,370 705,070 620,300	16.00 13.03 7.28	27,100 15,130	12.01 7.01			
Food preparation and serving related occupations Chefs and head cooks	68,910 117,370 705,070 620,300 405,480	16.00 13.03 7.28 9.42	27,100 15,130 19,590	7.01 8.93			
Food preparation and serving related occupations Chefs and head cooks First-line supervisors/managers of food preparation and serving workers Cooks, fast food Cooks, institution and cafeteria Cooks, restaurant.	68,910 117,370 705,070 620,300 405,480 742,160	16.00 13.03 7.28 9.42 9.68	27,100 15,130 19,590 20,140	12.01 7.01 8.93 9.33			
Food preparation and serving related occupations Chefs and head cooks	68,910 117,370 705,070 620,300 405,480 742,160	16.00 13.03 7.28 9.42	27,100 15,130 19,590	12.01 7.01 8.93			

 $Table \ 1. \ \ National \ employment \ and \ wage \ data \ from \ the \ Occupational \ Employment \ Statistics \ survey \ by \ occupation, \ November \ 2003\% \ Continued$

		Mean v	Median hourly	
Occupation	Employment	Hourly	Annual ¹	wages
Food preparation and serving related occupations 3/4 Continued				
Bartenders	. 479,330	\$8.15	\$16,950	\$7.29
Combined food preparation and serving workers, including fast food	. 2,072,980	7.36	15,320	7.05
Counter attendants, cafeteria, food concession, and coffee shop	473,560	7.79	16,210	7.47
Waiters and waitresses	2,170,120	7.63	15,870	6.79
Food servers, nonrestaurant	184,180	8.44	17,560	7.82
Dining room and cafeteria attendants and bartender helpers	. 389,660	7.41	15,420	7.06
Dishwashers		7.47	15,550	7.27
Hosts and hostesses, restaurant, lounge, and coffee shop	299,190	7.79	16,210	7.45
Building and grounds cleaning and maintenance occupations				
First-line supervisors/managers of housekeeping and janitorial workers	. 202,410	15.15	31,510	14.02
First-line supervisors/managers of landscaping, lawn service, and				
groundskeeping workers		17.83	37,090	16.41
Janitors and cleaners, except maids and housekeeping cleaners	. 2,073,410	9.85	20,480	8.98
Maids and housekeeping cleaners	. 894,170	8.53	17,740	8.06
Pest control workers	. 58,340	13.12	27,290	12.38
Landscaping and groundskeeping workers	838,740	10.51	21,850	9.70
Pesticide handlers, sprayers, and applicators, vegetation	23.040	12.71	26,450	12.38
Tree trimmers and pruners		13.24	27,540	12.44
Personal care and service occupations				
Gaming supervisors		19.96	41,520	19.54
Slot key persons		12.07	25,110	10.95
First-line supervisors/managers of personal service workers		15.79	32,840	14.36
Animal trainers		12.86	26,740	10.99
Nonfarm animal caretakers		9.28	19,310	8.40
Gaming dealers	. 78,660	7.76	16,140	6.84
Gaming and sports book writers and runners		10.02	20,840	9.13
Motion picture projectionists		9.79	20,360	8.21
Ushers, lobby attendants, and ticket takers		8.03	16,690	7.17
Amusement and recreation attendants		7.99	16,610	7.35
Costume attendants		13.76	28,620	12.17
Locker room, coatroom, and dressing room attendants	. 22,800	8.77	18,240	8.40
Embalmers	- /	17.59	36,590	16.59
Funeral attendants		9.83	20,450	9.15
Barbers	. 17,680	11.20	23,300	9.75
Hairdressers, hairstylists, and cosmetologists	334,660	10.66	22,170	9.28
Makeup artists, theatrical and performance	. 760	15.77	32,810	11.47
Manicurists and pedicurists	41,070	9.67	20,120	8.41
Shampooers	. 15,210	7.45	15,490	7.00
Skin care specialists		13.23	27,510	11.38
Baggage porters and bellhops	57,190	10.64	22,130	8.67
Concierges	17,740	11.72	24,370	11.03
Tour guides and escorts	. 28,140	9.86	20,500	9.17
Travel guides	. 5,240	16.49	34,310	13.47
Flight attendants		(2)	49,900	(2)
Transportation attendants, except flight attendants and baggage porters		9.98	20,750	9.08
Child care workers		8.47	17,610	7.96
Personal and home care aides		8.31	17,290	8.05
Fitness trainers and aerobics instructors	,	14.58	30,340	11.83
Recreation workers	261,740	10.28	21,370	9.11
Residential advisors	50,040	11.08	23,040	10.27
Sales and related occupations				
First-line supervisors/managers of retail sales workers		17.49	36,380	15.18
First-line supervisors/managers of non-retail sales workers		32.98	68,600	27.26
Cashiers	3,425,840	8.21	17,070	7.68
Gaming change persons and booth cashiers	. 29,940	10.00	20,790	9.79
Counter and rental clerks		10.11	21,030	8.55
Parts salespersons		13.19	27,430	11.93
Retail salespersons	4,083,810	10.84	22,540	8.82
Advertising sales agents	141,840	23.35	48,560	18.85
Insurance sales agents		25.92	53,920	19.41
Securities, commodities, and financial services sales agents				-
		41.23	85,760	30.14
Travel agents	. 98,410	14.15	29,430	13.11
Sales representatives, wholesale and manufacturing, technical and scientific	. 385,020	24 02	66 100	27.00
products		31.82	66,190	27.80
products	. 300,020		,	
products		25.49	53,020	21.41

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, November 2003¾ Continued

Occupation	Faralasasas	Mean	Median hourly	
Occupation	Employment	Hourly	Annual ¹	wages
es and related occupations ¾ Continued				
Demonstrators and product promoters	97,650	\$11.98	\$24,920	\$9.75
Models		14.59	30,340	10.88
Real estate brokers	42,670	35.63	74,100	26.14
Real estate sales agents	123,680	21.94	45,640	16.27
Sales engineers		35.16	73,120	32.94
Telemarketers	· ·	11.08	23,060	9.75
Door-to-door sales workers, news and street vendors, and related workers	18,730	13.64	28,370	11.06
ice and administrative support occupations				
First-line supervisors/managers of office and administrative support workers	1,402,290	20.66	42,960	19.19
Switchboard operators, including answering service	210,190	10.80	22,460	10.3
Telephone operators	39,440	14.61	30,390	13.9
Bill and account collectors	417,430	13.84	28,790	13.0
Billing and posting clerks and machine operators	490,960	13.26	27,590	12.7
Bookkeeping, accounting, and auditing clerks		14.06	29,250	13.4
Gaming cage workers		10.97	22,830	10.6
Payroll and timekeeping clerks		14.82	30,820	14.2
Procurement clerks		14.85	30,880	14.5
Tellers		10.15	21,100	10.0
Brokerage clerks	72,360	17.79	37,010	16.5
Correspondence clerks	· ·	13.75	28,600	13.1
Court, municipal, and license clerks		14.35	29,840	13.4
Credit authorizers, checkers, and clerks		14.40	29,940	
		-	,	13.2
Customer service representatives		13.81	28,720	12.7
Eligibility interviewers, government programs		16.03	33,340	15.6
File clerks		10.50 8.81	21,850 18,320	9.9 8.4
Interviewers, except eligibility and loan		11.58 10.25	24,090 21,320	11.0 9.6
Loan interviewers and clerks		14.49		13.7
New accounts clerks	· ·		30,150	
	/	13.25	27,560	12.5
Order clerks		12.82	26,670	12.0
Human resources assistants, except payroll and timekeeping		15.56	32,370	15.0
Receptionists and information clerks		10.71 13.99	22,280 29,090	10.3 12.7
Cargo and traight agents	69,380	16.95	35,250	16.2
Cargo and freight agents				
Couriers and messengers		10.17	21,160	9.5
Police, fire, and ambulance dispatchers		14.36	29,860	13.7
Dispatchers, except police, fire, and ambulance		15.83	32,920	14.7
Meter readers, utilities		15.14	31,490	14.2
Postal service clerks	,	19.69	40,950	19.6
Postal service mail carriers		20.87	43,410	21.4
Postal service mail sorters, processors, and processing machine operators	221,930	18.05	37,540	18.9
Production, planning, and expediting clerks	281,030	17.60	36,610	16.9
Shipping, receiving, and traffic clerks	757,750	12.25	25,490	11.5
Stock clerks and order fillers	1,540,270	10.44	21,710	9.5
Weighers, measurers, checkers, and samplers, recordkeeping	82,440	13.18	27,410	11.8
Executive secretaries and administrative assistants	1,436,190	17.35	36,080	16.5
Legal secretaries	273,900	17.94	37,310	17.1
Medical secretaries	361,780	13.11	27,260	12.5
Secretaries, except legal, medical, and executive		12.81	26,640	12.2
Computer operators	150,030	15.48	32,190	14.5
Data entry keyers	, , , , , , , , , , , , , , , , , , ,	11.43	23,780	10.9
Word processors and typists		13.87	28,860	13.2
Desktop publishers		16.07	33,430	15.1
Insurance claims and policy processing clerks		14.47	30,090	13.8
Mail clerks and mail machine operators, except postal service		10.99	22,860	10.5
			,	10.5
Office clerks, general Office machine operators, except computer		11.44 11.71	23,800 24,360	10.7
Proofreaders and copy markers		12.75 15.14	26,520 31,490	11.8 14.4
ming fishing and forestry occupations				
ming, fishing, and forestry occupations First-line supervisors/managers of farming, fishing, and forestry workers	19,810	18.43	38,340	17.0
Farm labor contractors		10.21	21,230	8.
		15.42	32,070	
Agricultural inspectors	· ·		,	14.0
Animal breeders.		14.73	30,630	12.2
Graders and sorters, agricultural products		8.64	17,970	7.9
Agricultural equipment operators		9.68	20,130	8.8
Farmworkers and laborers, crop, nursery, and greenhouse	236,710	8.01	16,660	7.5

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, November 2003¾ Continued

Table 1. National employment and wage data from the Occupational Employment Sta			Mean wages	O 74 CONTINUED
Occupation	Employment	ivieari	wayes	Median hourly
Cooquilon	Zmpioymoni	Hourly	Annual ¹	wages
Farming, fishing, and forestry occupations ¾ Continued				
Farmworkers, farm and ranch animals	42,290	\$9.01	\$18,740	\$8.27
Forest and conservation workers	9,330	11.24	23,380	9.39
Fallers	11,090	14.48	30,120	12.86
Logging equipment operators	27,910	13.93	28,970	13.37
Log graders and scalers	4,470	13.90	28,910	12.89
Construction and extraction occupations				
First-line supervisors/managers of construction trades and extraction workers	518,660	25.32	52,660	23.75
Boilermakers	17,970	21.25	44,190	20.77
Brickmasons and blockmasons	109,660	20.60	42,850	20.23
Stonemasons	14,420	17.43	36,260	16.44
Carpenters	873,840	18.04	37,520	16.77
Carpet installers	38,860	17.01	35,370	15.79
Floor layers, except carpet, wood, and hard tiles	15,030	16.99	35,330	15.81
Floor sanders and finishers	7,000	14.49	30,140	13.28
Tile and marble setters	37,710	18.03	37,500	17.08
Cement masons and concrete finishers	187,900	16.25	33,790	14.88
Terrazzo workers and finishers Construction laborers	6,820	15.02 13.85	31,250	13.45 12.03
	845,890		28,810 32.630	14.12
Paving, surfacing, and tamping equipment operators	60,210 4,170	15.69 23.12	48,090	23.42
Pile-driver operators Operating engineers and other construction equipment operators	343,600	18.47	38,410	16.85
Drywall and ceiling tile installers	111,980	17.90	37,230	16.37
Tapers	32,380	19.64	40,850	18.95
Electricians	575,980	21.29	44,290	20.16
Glaziers	45.910	17.45	36,300	15.49
Insulation workers	52,590	16.55	34,420	14.57
Painters, construction and maintenance	245,560	15.49	32,210	14.21
Paperhangers	7,930	16.59	34,500	15.77
Pipelayers	53,900	15.44	32,120	13.96
Plumbers, pipefitters, and steamfitters	422,360	20.97	43,620	19.70
Plasterers and stucco masons	52,410	17.36	36,110	15.98
Reinforcing iron and rebar workers	33,740	19.49	40,540	17.17
Roofers	116,070	16.15	33,580	14.63
Sheet metal workers	189,130	18.43	38,330	17.02
Structural iron and steel workers	71,090	20.79	43,240	20.10
Helpersbrickmasons, blockmasons, stonemasons, and tile and marble setters	59,250	13.15	27,350	11.85
Helperscarpenters	101,740	11.01	22,910	10.51
Helperselectricians	90,790	11.97	24,900	11.27
Helperspainters, paperhangers, plasterers, and stucco masons	27,760	10.63	22,110	9.74
Helperspipelayers, plumbers, pipefitters, and steamfitters	77,940	11.56	24,040	10.87
Helpersroofers	21,310	10.52	21,890	9.92
Construction and building inspectors	82,080	21.59	44,910	20.72
Elevator installers and repairers	21,910	26.80	55,750	26.88
Fence erectors	23,090	12.29	25,560	11.14
Hazardous materials removal workers	37,710	17.47	36,330	15.90
Highway maintenance workers	139,810	14.42	29,990	14.00
Rail-track laying and maintenance equipment operators	12,120	16.71	34,750	17.23
Septic tank servicers and sewer pipe cleaners	17,270 1,860	14.81 13.67	30,810 28,440	13.81 12.97
Derrick operators, oil and gas	14,130	15.40	32,030	14.59
Rotary drill operators, oil and gas	13,480	18.22	37,890	16.78
Service unit operators, oil, gas, and mining	14,030	16.28	33,860	14.83
Earth drillers, except oil and gas	18,730	16.67	34,670	15.88
Explosives workers, ordnance handling experts, and blasters	5,170	17.55	36,510	17.07
Continuous mining machine operators	8,300	17.75	36,920	17.83
Mine cutting and channeling machine operators	4,580	17.75	36,920	17.79
Rock splitters, quarry	3,350	13.33	27,730	12.48
Roof bolters, mining	4,070	18.57	38,620	18.60
Roustabouts, oil and gas	35,010	11.74	24,420	10.53
Helpersextraction workers	27,260	13.35	27,770	12.68
Installation, maintenance, and repair occupations				
First-line supervisors/managers of mechanics, installers, and repairers	447,750	24.92	51,820	23.70
Computer, automated teller, and office machine repairers	142,910	17.04	35,450	16.32
Radio mechanics	6,320	18.41	38,280	17.55
Telecommunications equipment installers and repairers, except line installers	193,780	22.55	46,900	23.43
Avionics technicians	21,020	21.06	43,800	20.95
Electric motor, power tool, and related repairers	25,130	16.66	34,650	15.78
Electrical and electronics installers and repairers, transportation equipment	17,130	19.26	40,070	19.17
Electrical and electronics repairers, commercial and industrial equipment	72,680	20.19	41,990	20.04
See footnotes at end of table.				<u> </u>

 $Table \ 1. \ \ National \ employment \ and \ wage \ data \ from \ the \ Occupational \ Employment \ Statistics \ survey \ by \ occupation, \ November \ 2003\% \ Continued$

		Mean		
Occupation	Employment			Median hourly wages
		Hourly	Annual ¹	wayes
Installation, maintenance, and repair occupations ¾ Continued				
Electrical and electronics repairers, powerhouse, substation, and relay	20,310	\$24.90	\$51,790	\$25.35
Electronic equipment installers and repairers, motor vehicles	15,070	13.99	29,090	12.52
Electronic home entertainment equipment installers and repairers	34,700	14.20	29,540	13.36
Security and fire alarm systems installers	47,690	17.80	37,020	16.39
Aircraft mechanics and service technicians	113,470	21.52	44,770	21.15
Automotive body and related repairers	168,630	17.35	36,080	16.04
Automotive glass installers and repairers	18,040	13.59	28,260	13.08
Automotive service technicians and mechanics	689,630	16.19	33,680	15.18
Bus and truck mechanics and diesel engine specialists	249,230	17.37	36,120	16.90
Farm equipment mechanics	31,850	13.72	28,550	13.30
Mobile heavy equipment mechanics, except engines	112,070	18.27	38,010	17.87
Rail car repairers	16,790	19.04	39,600	19.42
Motorboat mechanics	17,990	14.85	30,890	14.30
Motorcycle mechanics Outdoor power equipment and other small engine mechanics	15,000 25,010	14.28 12.44	29,690 25,870	13.39 11.89
Bicycle repairers	7,560	9.87	20,530	9.52
Recreational vehicle service technicians.	12,520	14.45	30,060	13.63
Tire repairers and changers	85,030	10.72	22,300	10.01
	35,555			
Mechanical door repairers	10,730	15.62	32,480	14.11
Control and valve installers and repairers, except mechanical door	35,900	20.61	42,870	20.81
Heating, air conditioning, and refrigeration mechanics and installers	217,130	17.93	37,290	17.15
Home appliance repairers	36,810	15.47	32,170	14.56
Industrial machinery mechanics	199,090	19.16	39,850	18.63
Maintenance and repair workers, general	1,245,160	15.20	31,620	14.49
Maintenance workers, machinery	85,060	16.30	33,890	15.73
Millwrights	60,470 3,740	21.14 18.44	43,970 38,360	20.76 18.02
Electrical power-line installers and repairers	99,290	22.95	47,730	23.62
Telecommunications line installers and repairers	146,410	19.63	40,840	19.72
Camera and photographic equipment repairers	4,220	15.61	32,470	14.81
Medical equipment repairers	24,390	18.92	39,360	18.39
Musical instrument repairers and tuners	5,260	15.34	31,920	13.68
Watch repairers	3,750	15.25	31,710	13.56
Coin, vending, and amusement machine servicers and repairers	35,540	13.78	28,660	13.32
Commercial divers	2,660	18.13	37,700	16.38
Fabric menders, except garment	1,990	14.72	30,610	14.07
Locksmiths and safe repairers	18,730	15.06	31,330	14.11
Manufactured building and mobile home installers	14,470	11.50	23,920	10.99
Riggers	12,780	17.01	35,390	16.51
Signal and track switch repairers Helpersinstallation, maintenance, and repair workers	7,600 151,820	21.44 11.26	44,590 23,420	21.12 10.23
	.0.,020	0	20, .20	10.20
Production occupations First-line supervisors/managers of production and operating workers	690.910	22.65	47 120	21.23
Aircraft structure, surfaces, rigging, and systems assemblers	19,830	17.40	47,120 36,190	16.95
Coil winders, tapers, and finishers	28,400	12.28	25,550	11.76
Electrical and electronic equipment assemblers	228,100	12.45	25,890	11.54
Electromechanical equipment assemblers	51,040	13.12	27,290	12.60
Engine and other machine assemblers	47,520	16.97	35,290	16.30
Structural metal fabricators and fitters	88,190	14.72	30,620	14.03
Fiberglass laminators and fabricators	31,600	12.41	25,810	11.94
Team assemblers	1,185,060	12.23	25,430	11.26
Timing device assemblers, adjusters, and calibrators	4,390	13.75	28,590	12.86
Bakers	159,420	10.90	22,680	10.13
Butchers and meat cutters	131,250	13.21	27,470	12.51
Meat, poultry, and fish cutters and trimmers	142,640	9.35	19,440	8.90
Slaughterers and meat packers	130,880	10.10	21,000	9.95
Food and tobacco roasting, baking, and drying machine operators and tenders	17,450	12.44	25,870	11.67
Food batchmakers	80,080	11.40	23,710	10.67
Food cooking machine operators and tenders	38,780	10.74	22,330	10.05
Computer-controlled machine tool operators, metal and plastic	123,700	14.98	31,170	14.43
Numerical tool and process control programmers	17,370	19.62	40,800	18.78
Extruding and drawing machine setters, operators, and tenders, metal and plastic	90,940	13.20	27,450	12.82
Forging machine setters, operators, and tenders, metal and plastic	40,600	13.76	28,620	12.91
Rolling machine setters, operators, and tenders, metal and plastic	40,330	14.44	30,040	14.01
Cutting, punching, and press machine setters, operators, and tenders,	040.000	40.00	20.000	40.00
metal and plastic Drilling and boring machine tool setters, operators, and tenders, metal and plastic	249,360 46,360	12.80 14.44	26,620 30,030	12.23 13.46
Grinding, lapping, polishing, and buffing machine tool setters, operators, and tenders,	40,300	14.44	30,030	13.40
metal and plastic	95,740	14.00	29,120	12.99
Lathe and turning machine tool setters, operators, and tenders, metal and plastic	73,080	14.99	31,170	14.48
See footnotes at end of table				L

Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, November 2003¾ Continued

Occupation	Employment	Mean wages		Median hourly
		Hourly	Annual ¹	wages
roduction occupations ¾ Continued				
Milling and planing machine setters, operators, and tenders, metal and plastic	. 29,110	\$14.82	\$30,820	\$14.49
Machinists	361,240	16.56	34,440	16.15
Metal-refining furnace operators and tenders	. 17,070	15.96	33,190	15.55
Pourers and casters, metal	13,540	14.51	30,180	13.69
Model makers, metal and plastic	. 8,300	21.57	44,860	21.43
Patternmakers, metal and plastic	. 5,730	18.68	38,840	18.11
Foundry mold and coremakers	. 18,680	13.95	29,010	13.03
Molding, coremaking, and casting machine setters, operators, and tenders,				
metal and plastic		12.40	25,800	11.57
Multiple machine tool setters, operators, and tenders, metal and plastic	95,650	14.71	30,600	13.84
Tool and die makers	. 101,090	21.13	43,940	20.59
Welders, cutters, solderers, and brazers	. 350,230	15.16	31,530	14.39
Welding, soldering, and brazing machine setters, operators, and tenders	50,280	15.12	31,460	14.03
Heat treating equipment setters, operators, and tenders, metal and plastic		14.57	30,310	14.01
Lay-out workers, metal and plastic		15.88	33,040	15.39
Plating and coating machine setters, operators, and tenders, metal and plastic		13.35	27,760	12.62
Tool grinders, filers, and sharpeners		15.08	31,370	14.41
Bindery workers	76.510	12.02	24.990	11.03
Bookbinders	- ,	14.84	30,870	14.06
Job printers	- ,	15.85	32,970	15.06
Prepress technicians and workers		15.05	33,090	15.00
Printing machine operators		15.30	31,820	14.30
	, i		·	
Laundry and dry-cleaning workers		8.66	18,010	8.16
Pressers, textile, garment, and related materials		8.54	17,760	8.20
Sewing machine operators		9.16	19,040	8.53
Shoe and leather workers and repairers	7,830	9.92	20,640	9.40
Shoe machine operators and tenders	5,000	10.39	21,620	9.81
Sewers, hand	. 15,490	9.68	20,140	8.76
Tailors, dressmakers, and custom sewers	. 31,540	11.49	23,900	10.43
Textile bleaching and dyeing machine operators and tenders	22,960	10.69	22,230	10.44
Textile cutting machine setters, operators, and tenders	. 27,300	10.46	21,760	9.90
Textile knitting and weaving machine setters, operators, and tenders		11.34	23,590	11.32
Textile winding, twisting, and drawing out machine setters, operators, and tenders		11.19	23,280	10.73
Extruding and forming machine setters, operators, and tenders, synthetic and glass fibers		13.79	28,680	13.64
Fabric and apparel patternmakers Upholsterers		16.69 12.84	34,720 26,710	14.19 12.10
Cabinetmakers and bench carpenters	126,490	12.69	26,390	11.98
Furniture finishers		11.82	24,590	11.17
Model makers, wood	,	14.29	29,710	12.10
Patternmakers, wood	- ,	15.55	32,350	14.85
Sawing machine setters, operators, and tenders, wood		11.28	23,470	10.81
Woodworking machine setters, operators, and tenders, except sawing		11.29	23,470	10.78
Woodworking machine sectors, operators, and terracis, except sawing	00,040	11.23	20,470	10.70
Nuclear power reactor operators		30.56	63,560	30.42
Power distributors and dispatchers		27.62	57,450	27.36
Power plant operators		24.60	51,170	24.78
Stationary engineers and boiler operators		21.46	44,650	21.09
Water and liquid waste treatment plant and system operators	,	16.99	35,340	16.43
Chemical plant and system operators		21.33	44,370	21.29
Gas plant operators Petroleum pump system operators, refinery operators, and gaugers	,	23.85 23.09	49,600 48,030	23.86 24.06
1 choleum pump system operators, reimery operators, and gaugers	40,000	25.05	40,000	24.00
Chemical equipment operators and tendersSeparating, filtering, clarifying, precipitating, and still machine setters, operators,	51,070	18.81	39,120	18.64
and tenders	37,850	16.08	33,440	15.53
Crushing, grinding, and polishing machine setters, operators, and tenders		13.39	27,840	12.68
Grinding and polishing workers, hand		11.96	24,870	11.16
Mixing and blending machine setters, operators, and tenders		13.99	29,110	13.41
Cutters and trimmers, hand		11.74	24,430	10.70
Cutting and slicing machine setters, operators, and tenders		13.31	27,690	12.74
Extruding, forming, pressing, and compacting machine setters, operators, and tenders		13.76	28,630	13.07
Furnace, kiln, oven, drier, and kettle operators and tenders		14.95	31,100	14.24
Inspectors, testers, sorters, samplers, and weighers		14.91	31,010	13.56
Jewelers and precious stone and metal workers		14.68	30,540	13.22
Dental laboratory technicians		15.94	33,160	14.62
		15.09	31,380	13.68
Medical appliance technicians		11.93	24,810	11.04
Medical appliance technicians Ophthalmic laboratory technicians				
Ophthalmic laboratory technicians				
Ophthalmic laboratory technicians Packaging and filling machine operators and tenders		11.44	23,790	
Ophthalmic laboratory technicians Packaging and filling machine operators and tenders Coating, painting, and spraying machine setters, operators, and tenders	92,710	13.07	27,200	12.46
Ophthalmic laboratory technicians Packaging and filling machine operators and tenders	92,710 47,390		,	10.56 12.46 16.52 10.73

 $Table \ 1. \ \ National \ employment \ and \ wage \ data \ from \ the \ Occupational \ Employment \ Statistics \ survey \ by \ occupation, \ November \ 2003\% \ Continued$

Occupation	Employment	Mean wages		Median hourly
		Hourly	Annual ¹	wages
Production occupations ¾ Continued				
Photographic process workers	28,730	\$11.05	\$22,970	\$9.84
Photographic processing machine operators	54,090	10.09	20,990	9.15
Semiconductor processors	43,970	13.85	28,810	13.21
Cementing and gluing machine operators and tenders	24,850	12.11	25,190	11.29
Cleaning, washing, and metal pickling equipment operators and tenders	16,650	12.36	25,710	11.46
Cooling and freezing equipment operators and tenders	7,980	11.90	24,740	10.64
Etchers and engravers	8,840	12.23	25,440	10.86
Molders, shapers, and casters, except metal and plastic	37,210	12.67	26,350	11.77
Paper goods machine setters, operators, and tenders	109,210	14.57	30,300	14.11
Tire builders	16,400	17.35	36,080	18.64
Helpersproduction workers	457,200	10.24	21,290	9.58
Transportation and material moving occupations				
Aircraft cargo handling supervisors	8,580	19.12	39,760	16.65
First-line supervisors/managers of helpers, laborers, and material movers, hand	159,780	19.42	40,400	18.37
First-line supervisors/managers of transportation and material-moving machine				
and vehicle operators	211,960	22.88	47,590	21.32
Airline pilots, copilots, and flight engineers	76,940	(2)	129,230	(2)
Commercial pilots	19,940	(2)	58,720	(2)
Air traffic controllers	22,610	45.31	94,240	46.64
Airfield operations specialists	4,670	20.22	42,050	17.65
Ambulance drivers and attendants, except emergency medical technicians	18,420	9.80	20,380	9.10
Bus drivers, transit and intercity	187,900	14.77	30,730	13.96
Bus drivers, school	471,130	11.11	23,100	10.92
Driver/sales workers	397,630	11.34	23,580	9.79
Truck drivers, heavy and tractor-trailer	1,520,740	16.49	34,290	15.98
Truck drivers, light or delivery services	951,400	12.86	26,750	11.65
Taxi drivers and chauffeurs	131,880	10.23	21,280	9.25
Locomotive engineers	30,070	25.98	54,050	24.45
Locomotive firers	630	22.73	47,290	22.22
Rail yard engineers, dinkey operators, and hostlers	6,020	18.81	39,130	17.60
Railroad brake, signal, and switch operators	15,310	23.26	48,370	21.97
Railroad conductors and yardmasters	35,120	25.21	52,430	22.25
Subway and streetcar operators	8,720	22.52	46,850	23.49
Sailors and marine oilers	27,170	15.25	31,710	14.33
Captains, mates, and pilots of water vessels	24,050	25.52	53,090	24.47
Motorboat operators	3,130	17.42	36,230	16.04
Ship engineers	10,230	27.20	56,570	26.23
Bridge and lock tenders	3,490	16.48	34,270	17.61
Parking lot attendants	109,890	8.54	17,770	8.08
Service station attendants	96,450	8.86	18,420	8.22
Traffic technicians	5,980	16.97	35,300	16.20
Transportation inspectors	23,860	24.07	50,060	23.79
Conveyor operators and tenders	52,920	12.73	26,480	12.17
Crane and tower operators	44,610	18.48	38,430	17.65
Dredge operators	2,190	14.33	29,810	13.39
Excavating and loading machine and dragline operators	67,540	16.31	33,920	15.29
Loading machine operators, underground mining	3,520	16.04	33,370	15.79
Hoist and winch operators	6,440	17.63	36,660	15.18
Industrial truck and tractor operators	605,390	13.50	28,080	12.72
Cleaners of vehicles and equipment	321,630	9.28	19,290	8.34
Laborers and freight, stock, and material movers, hand	2,269,700	10.45	21,740	9.61
Machine feeders and offbearers	150,190	11.21	23,320	10.59
Packers and packagers, hand	868,390	8.86	18,430	8.17
Gas compressor and gas pumping station operators	5,250	21.56	44,840	21.07
Pump operators, except wellhead pumpers	10,540	18.01	37,470	17.04
Wellhead pumpers	8,640	15.95	33,170	15.60
Refuse and recyclable material collectors	137,510	12.98	27,000	12.06
Shuttle car operators	3,220	18.03	37,510	18.66
Tank car, truck, and ship loaders	15,910	16.73	34,800	15.59
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¹ Annual wages have been calculated by multiplying the hourly mean wage by a "year-round, full-time" hours figure of 2,080 hours; for those occupations where there is not an hourly mean wage published, the annual wage has been directly calculated from the reported survey data.

² Hourly wage rates for occupations where workers typically work fewer than 2,080 hours per year are not available.

³ Represents a wage above \$70.00 per hour.