Comparing A Firm's Occupational Wage Patterns with National Wage Patterns

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This article explains how employers can use National Compensation Survey (NCS) data to compare the wage structure in their firms with occupational pay relationships at the national level.

The National Compensation Survey (NCS) publishes a wide variety of occupational wage data for selected metropolitan and nonmetropolitan areas, for broad geographic regions known as census divisions, and for the Nation.¹ Occupational wage estimates also are presented by selected worker and establishment characteristics such as the following:

- Full- or part-time status
- Union or nonunion status
- · Paid on a time or incentive basis, and
- Establishment employment size.

At the national level, NCS publishes estimates for more than 400 detailed white-collar, blue-collar, and service occupations. In 2006, NCS published average hourly earnings estimates for full-time workers in 401 detailed occupations in private industry.² (See table 1.) Using NCS data, an employer can determine how the firm's wage structure compares with occupational pay relationships at the national level by completing a set of simple calculations. Smaller firms, which often lack the specialized expertise of wage and salary administrators, are more likely than larger firms to benefit from the method described here. While firms typically prefer to use local area or industry-specific levels for wage comparison purposes, using national data helps smooth out anomalies that may appear at the local level due to a smaller sample available for the local estimates.

An Illustration

The illustration that follows shows how to calculate and compare occupational wages at the national level with those of a hypothetical firm. The first step is to select the occupations of interest. In this example, data entry keyers are used as the occupation with which the others are compared. As **table 2** shows, messengers and janitors nationwide earned about 81 percent and 95 percent, respectively, of the earnings of data entry keyers, and payroll clerks and computer programmers earned 140 and 263 percent, respectively, of the average earnings of data entry keyers.

Occupation	(1) National average hourly pay rate (NCS data)	(2) NCS pay comparisons (Data entry keyers = 100)	(3) Hourly pay rate, firm X	(4) Firm X's pay comparisons (Data entry keyers = 100)
Data entry keyers	\$11.94	100	\$17.25	100
Messengers	9.68	81	12.01	70
Payroll clerks	16.68	140	20.01	116
Janitors	11.32	95	12.93	75
Computer programmers	31.45	263	32.23	187

Table 2. Comparing national pay levels with levels in a hypothetical firm, selected occupations, June 2005

The NCS pay comparisons shown in column 2 were produced by dividing the national average hourly pay rates of each of the selected occupations by the hourly pay rate for data entry keyers, multiplying by 100, and rounding to nearest whole number.³ Computing pay relationships in the same way for a hypothetical firm ("firm X") produces a second set of

comparative values. The hourly pay rate of data entry keyers within this hypothetical firm (column 3) is used as the basis of comparison for other occupational pay rates within the same firm (column 4). While earnings of computer programmers at the national level and at firm X are higher than workers in the other 4 occupations, the pay advantage of computer programmers over data entry keyers in firm X (87 percent) is less than the comparable advantage of computer programmers nationwide (163 percent).

The choice of which occupation to use as the "base occupation" is arbitrary: it might be selected because it's the largest occupation in the company, for example, or because it's the first occupation on the company's payroll; it might even be chosen at random. The choice merely provides a starting point for discussion. If the gap between the highest and lowest paid occupations is substantially different from what the NCS suggests is typical for those occupations (based on the pay relationships between similar occupations at the national level), the company might consider raising, lowering, or freezing the pay of some of its occupations or doing a combination of these things.

A note of caution is needed here. The method described is intended to be simple; consequently, it should be viewed as a rough tool rather than a precise mechanism for making decisions. For example, this method does not take into account all the factors that should determine a computer programmer's hourly pay rate at firm X. The national estimate for this occupation includes entry level, mid-level, and senior programmers in small and large establishments in both high- and low-paying areas, while an individual firm might have a different mix of computer programmers.

These are some of the factors that users should keep in mind when making comparisons. The NCS publishes data for different levels of skill within each occupation. In the 2005 national bulletin,⁴ for example, six levels of computer programmers are presented, with average earnings in private industry ranging from \$21.84 to \$48.03 per hour. The bulletin includes information on how firms can determine the level of work of their own jobs, which may allow for more precise comparisons.

When comparing the earnings at an individual firm with those at the national level, users should consider such factors as employees' length of service and special skills. For example, a particular firm might find it worthwhile to pay its data entry keyers more than its payroll clerks, although the latter earn more, on average, at the national level. In addition, as part of the decision-making process, users should consider the precision of a published estimate, as measured by its relative error.

Reliability Of The Data

Because the NCS is a sample survey, its estimates are subject to sampling errors. A measure of the variation among these differing estimates is called the "standard error" or "sampling error." The standard error indicates the precision with which an estimate from a particular sample approximates the average result of all possible samples. The *relative* standard error is the standard error divided by the estimate.

The standard error can be used to calculate a "confidence interval" around a sample estimate. For example, payroll clerks at the national level earned, on average, \$16.68 per hour, with a relative standard error of 2.3 percent. Thus, at the 90-percent level, the confidence interval for this estimate is \$16.05 to \$17.31.⁵ If all possible samples were selected to estimate the population value, the interval from each sample would include the true population value approximately 90 percent of the time.

Table 1 includes the relative standard errors for all of the listed occupations. Smaller relative standard errors indicate that the true population value is likely to be found in a narrow range around the estimate. Because of sampling errors, small differences in reported averages should not be used to evaluate differentials. For example, the rate for an occupation averaging 97 percent of payroll clerks ($16.68 \times .97 = 16.18$) would fall within the confidence interval for payroll clerks (16.05×17.31). That means that small differences in averages are not significantly different.⁶

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Notes

1 The NCS sample consists of 152 metropolitan and nonmetropolitan areas representing the Nation's 326 metropolitan statistical areas (MSAs), as defined by the Office of Management and Budget in 1994, and the remaining portions of the 50 States. Data are published for about 90 of these areas each year.

2 Data were collected between December 2004 and January 2006. The average reference period was June 2005. For table source, visit the NCS website on the Internet at http://www.bls.gov/ncs/; supplementary table 2.2 presents data for full-time workers in private industry.

3 For example, to compare the pay of messengers and data entry keyers in column 1, divide \$9.68 by \$11.94, multiply by 100 and round. (\$9.68 / 11.94 = .8107; $.8107 \times 100 = 81.07 = 81$ rounded.) For ease of analysis, absolute earnings were converted to relative earnings.

4 National Compensation Survey: Occupational Wages in the United States, June 2005, Bulletin 2581 (Bureau of Labor Statistics, August 2006).

5 The confidence interval for payroll clerks is calculated as follows: 16.68 plus or minus 1.645 times 2.3 percent of the mean [that is, 1.645 x . 023 x 16.68 = 0.63]; (16.68 - 0.63 = 16.05; 16.68 + 0.63 = 17.31).

6 For more information on data reliability, see National Compensation Survey: Occupational Wages in the United States, June 2005.

Table 1. Mean hourly earnings(1) of full-time workers(2) in selected occupations, private industry, National Compensation Survey,(3) June 2005

Occupation(4)	Average hourly earnings	Relative error(5) (percent)
Accountants and auditors	\$25.90	2.2
Actors and directors	33.13	17.8
Actuaries	37.23	9.4
Adjusters and calibrators	20.79	11.0
Administrative support, n.e.c.	14.93	1.5
Administrators, education and related fields	27.58	4.8
Advertising and related sales	20.61	10.5
Aerospace engineers	42.27	8.1
Agricultural and food scientists	31.29	10.1
Aircraft engine mechanics	27.35	8.7
Aircraft mechanics, except engine	24.77	4.0
Airplane pilots and navigators	97.51	13
Animal caretakers, except farm	11.29	10.2

Footnotes:

(1) Earnings are the straight-time hourly wages or salaries paid to employees and include incentive pay, cost-of-living adjustments, and hazard pay; they exclude premium pay for overtime, vacations, holidays, nonproduction bonuses, and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours.

(2) Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Therefore, a worker with a 35-hour-per-week schedule might be considered a full-time employee in one establishment, but classified as part-time in another firm, where a 40-hour week is the minimum full-time schedule.

(3) This survey covers all 50 States. Collection was conducted between December 2004 and January 2006. The average reference period was June 2005.

(4) A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. For more information, see appendix B in National Compensation Survey: Occupational Wages in the United States, on the Internet at www.bls.gov/ocs/ compub.htm.

Occupation(4)	Average hourly earnings	Relative error(5) (percent)
Announcers	40.13	29.5
Architects	29.79	7.7
Art, drama, and music teachers	39.86	7.8
Artists, performers, and related workers, n.e.c.	16.35	19.9
Assemblers	15.06	2.0
Athletes	25.95	12.5
Attendants, amusement and recreation facilities	7.22	3.1
Automobile body and related repairers	16.33	4.5
Automobile mechanic apprentices	13.81	9.7
Automobile mechanics	18.66	3.0
Baggage porters and bellhops	7.86	5.5
Bakers	12.25	5.8
Bank tellers	11.20	1.5
Bartenders	7.03	4.6
Bill and account collectors	14.44	7.8
Billing clerks	13.34	2.0
Billing, posting, and calculating machine operators	13.84	6.0
Biological and life scientists	34.13	10.2
Biological science teachers	51.59	12.8
Biological technicians	18.94	5.7
Boilermakers	19.77	9.8
Bookbinders	15.45	10.5
Bookkeepers, accounting and auditing clerks	15.02	1.6
Brickmasons and stonemasons	26.49	9.0
Broadcast equipment operators	13.91	13.2
Bus, truck, and stationary engine mechanics	19.34	3.0
Busdrivers	13.15	10.0
Business and promotional agents	23.34	5.8
Business, commerce, and marketing teachers	49.39	8.3
Butchers and meat cutters	12.35	3.8
Buyers, wholesale and retail trade, except farm products	27.18	3.8
Cabinet makers and bench carpenters	13.06	6.7

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Occupation(4)	Average hourly earnings	Relative error(5) (percent)
Carpenter apprentices	17.18	13.6
Carpenters	19.64	4.9
Carpet installers	24.45	12.9
Cashiers	9.47	2.0
Cementing and gluing machine operators	12.35	8.1
Chemical engineers	35.75	8.7
Chemical technicians	21.96	6.4
Chemistry teachers	57.08	9.8
Chemists, except biochemists	32.2	8.8
Childcare workers, n.e.c.	8.80	3.1
Civil engineers	32.51	4.2
Classified ad clerks	13.10	5.8
Clergy	15.74	13.2
Clinical laboratory technologists and technicians	18.91	3.0
Compressing and compacting machine operators	11.65	8.0
Computer operators	16.71	3.8
Computer programmers	31.45	3.2
Computer science teachers	28.71	12.0
Computer systems analysts and scientists	35.73	2.7
Concrete and terrazzo finishers	18.44	6.9
Construction inspectors	24.77	11.1
Construction laborers	14.69	4.6
Construction trades, n.e.c.	18.36	6.9
Cooks	10.29	1.5
Correspondence clerks	13.96	4.0
Cost and rate clerks	13.39	9.3
Crane and tower operators	16.64	6.2
Crushing and grinding machine operators	15.57	11.9
Data entry keyers	11.94	1.5
Data processing equipment repairers	21.03	15.0
Demonstrators, promoters, and models, sales	17.17	15.1
Dental assistants	15.42	3.6

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Occupation(4)	Average hourly earnings	Relative error(5) (percent)
Dental hygienists	32.09	4.0
Dental laboratory and medical appliance technicians	15.21	2.8
Designers	21.68	3.6
Dietitians	21.42	5.9
Dispatchers	15.83	5.1
Drafters	21.94	2.8
Dressmakers	12.48	7.8
Drillers, oil well	25.02	17.8
Drilling and boring machine operators	14.25	8.1
Driver-sales workers	15.73	6.2
Drywall installers	17.98	6.9
Duplicating machine operators	12.56	9.6
Economics teachers	55.37	12.9
Economists	34.32	8.3
Editors and reporters	26.07	7.6
Education teachers	40.68	16.6
Electrical and electronic engineers	39.28	2.6
Electrical and electronic equipment assemblers	13.99	3.7
Electrical and electronic technicians	24.03	12.2
Electrical power installers and repairers	26.66	3.8
Electrician apprentices	14.61	3.5
Electricians	26.10	3.3
Electronic repairers, communications and industrial equipment	22.08	2.8
Elementary school teachers	24.64	5.5
Elevator installers and repairers	38.94	14.6
Eligibility clerks, social welfare	13.51	4.9
Engineering teachers	62.93	13.2
Engineering technicians, n.e.c.	25.77	5.5
Engineers, n.e.c.	40.02	2.2
English teachers	40.34	7.1
Excavating and loading machine operators	16.99	4.6
Expeditors	15.92	4.8

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Occupation(4)	Average hourly earnings	Relative error(5) (percent)
Extruding and forming machine operators	13.83	3.8
Fabricating machine operators, n.e.c.	15.65	4.0
Farm equipment mechanics	15.50	7.5
File clerks	11.01	2.8
Financial managers	40.47	2.8
Folding machine operators	13.02	16.8
Food batchmakers	13.27	4.9
Food preparation, n.e.c.	8.63	1.9
Foreign language teachers	43.96	8.5
Forging machine operators	12.93	10.3
Freight, stock, and material handlers, n.e.c.	12.93	2.4
Furnace, kiln, and oven operators, except food	15.24	6.3
Furniture and wood finishers	12.13	7.0
Garage and service station related	8.98	3.6
Garbage collectors	9.30	7.0
General office clerks	13.57	1.3
Geologists and geodesists	37.13	6.8
Glaziers	16.39	11.7
Grader, dozer, and scraper operators	16.36	6.1
Graders and sorters, except agricultural	11.91	6.2
Grinding, abrading, buffing, and polishing machine operators	13.60	2.7
Groundskeepers and gardeners, except farm	11.17	4.7
Guards and police, except public service	10.36	2.4
Guides	13.90	6.0
Hairdressers and cosmetologists	13.05	10.0
Hand cutting and trimming	11.81	10.8
Hand engraving and printing	16.75	26.4
Hand inspectors, n.e.c.	12.33	8.1
Hand molders and shapers, except jewelers	14.21	14.3
Hand molding, casting, and forming	11.73	8.3
Hand packers and packagers	9.79	5.5
Hand painting, coating, and decorating	12.24	4.7

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Occupation(4)	Average hourly earnings	Relative error(5) (percent)
Health aides, except nursing	11.93	3.1
Health diagnosing practitioners, n.e.c.	33.45	8.8
Health record technologists and technicians	15.59	4.7
Health specialties teachers	56.20	14.0
Health technologists and technicians, n.e.c.	16.59	2.3
Heat treating equipment operators	15.95	5.2
Heating, air conditioning, and refrigeration mechanics	18.47	3.5
Heavy equipment mechanics	19.47	3.6
Helpers, construction trades	12.51	3.8
Helpers, mechanics and repairers	11.64	3.8
History teachers	36.76	9.6
Hoist and winch operators	12.12	19.6
Hotel clerks	9.23	1.9
Household appliance and power tool repairers	16.22	5.8
Industrial engineering technicians	24.21	5.6
Industrial engineers	33.30	2.6
Industrial machinery repairers	21.30	2.1
Industrial truck and tractor equipment operators	14.23	1.8
Information clerks, n.e.c.	13.80	2.8
Inspectors and compliance officers, except construction.	25.86	7.0
Inspectors, agricultural products	10.05	15.9
Inspectors, testers, and graders	20.22	4.1
Insulation workers	18.91	8.9
Insurance adjusters, examiners, and investigators	19.60	3.5
Insurance sales	23.09	8.5
Interviewers	12.42	4.2
Investigators and adjusters, except insurance	15.86	3.8
Janitors and cleaners	11.32	4.4
Kitchen workers, food preparation	9.05	2.4
Knitting, looping, taping, and weaving machine operators	12.23	5.8
Laborers, except construction, n.e.c.	11.07	2.5
Lathe and turning-machine operators	16.12	6.2

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Occupation(4)	Average hourly earnings	Relative error(5) (percent)
Lathe and turning-machine set-up operators	17.41	3.7
Laundering and dry cleaning machine operators	9.97	5.9
Law teachers	66.59	13.5
Lawyers	56.19	4.4
Layout workers	18.46	16.0
Legal assistants	22.78	4.2
Librarians	29.85	7.5
Library clerks	13.05	5.7
Licensed practical nurses	17.82	1.9
Locomotive operating	28.94	23.1
Machine feeders and offbearers	10.90	2.5
Machinery maintenance	16.13	4.9
Machinists	19.88	1.9
Maids and housemen	8.80	3.3
Mail clerks, except postal service	12.33	7.2
Mail preparing and paper handling machine operators	12.35	6.6
Management analysts	32.00	5.0
Management related, n.e.c.	26.31	2.7
Managers and administrators, n.e.c.	41.30	4.7
Managers, food servicing and lodging establishments	21.18	7.5
Managers, marketing, advertising, and public relations	45.40	4.3
Managers, medicine and health	35.76	3.5
Managers, properties and real estate	21.67	4.3
Managers, service organizations, n.e.c.	31.11	8.6
Marine engineers	21.37	20.9
Marine engineers and naval architects	29.94	11.6
Mathematical science teachers	39.29	14.6
Mechanical controls and valve repairers	21.09	7.1
Mechanical engineering technicians	22.78	4.3
Mechanical engineers	31.96	2.0
Mechanics and repairers, n.e.c.	16.87	3.0
Medical science teachers	61.69	8.2

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Occupation(4)	Average hourly earnings	Relative error(5) (percent)
Medical scientists	31.48	13.7
Messengers	9.68	10.0
Metal plating machine operators	14.49	7.8
Metallurgical and materials engineers	34.08	6.8
Meter readers	17.71	8.1
Milling and planing machine operators	16.14	6.9
Millwrights	22.30	6.3
Mining machine operators	18.57	9.3
Miscellaneous hand working, n.e.c.	12.80	5.8
Miscellaneous machine operators, n.e.c.	14.71	2.6
Miscellaneous material moving equipment operators, n.e.c.	16.91	6.3
Miscellaneous plant and system operators, n.e.c.	24.03	4.7
Miscellaneous precision workers, n.e.c.	14.25	12.5
Mixing and blending machine operators	15.57	4.1
Molding and casting machine operators	13.46	3.6
Motor transportation, n.e.c.	11.44	5.7
Musicians and composers	39.06	20.3
Nailing and tacking machine operators	10.46	10.9
Nuclear engineers	40.40	5.5
Numerical control machine operators	16.82	3.1
Nursery workers	11.53	8.9
Nursing aides, orderlies, and attendants	10.49	1.2
Occupational therapists	25.60	4.1
Office machine operators, n.e.c.	11.10	3.9
Office machine repairers	17.46	8.7
Operating engineers	23.50	10.4
Operations and systems researchers and analysts	35.75	5.5
Optometrists	62.86	14.1
Order clerks	14.71	3.1
Other financial officers	32.91	3.8
Other post-secondary teachers	39.93	6.1
Packaging and filling machine operators	14.43	4.0

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Occupation(4)	Average hourly earnings	Relative error(5) (percent)
Painters, construction and maintenance	15.96	4.0
Painters, sculptors, craft artists, and artist printmakers	18.66	5.4
Painting and paint spraying machine operators	15.48	4.4
Parking lot attendants	7.57	9.6
Patternmakers and modelmakers, metal	21.41	8.9
Patternmakers and modelmakers, wood	18.14	11.4
Patternmakers, layout workers, and cutters	18.63	11.4
Paving, surfacing, and tamping equipment operators	16.51	13.6
Payroll and timekeeping clerks	16.68	2.3
Peripheral equipment operators	13.68	8.9
Personnel and labor relations managers	31.26	7.8
Personnel clerks, except payroll and timekeeping	16.42	2.5
Personnel, training, and labor relations specialists	25.93	4.4
Pest control	14.06	9.6
Petroleum engineers	43.16	16.1
Pharmacists	45.74	0.8
Photoengravers and lithographers	16.66	6.3
Photographers	17.13	12.0
Photographic process machine operators	11.47	7.8
Physical education teachers	28.71	8.7
Physical scientists, n.e.c.	32.07	8.4
Physical therapists	28.98	3.5
Physicians	69.88	8.2
Physicians' assistants	37.12	7.9
Plasterers	15.15	3.0
Plumber, pipefitter, and steamfitter apprentices	14.46	4.7
Plumbers, pipefitters and steamfitters	24.73	7.0
Power plant operators	28.40	3.8
Precision assemblers, metal	20.72	6.1
Precision grinders, filers, and tool sharpeners	16.20	9.1
Precision inspectors, testers, and related workers, n.e.c.	23.35	10.4
Prekindergarten and kindergarten	12.31	3.8

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Occupation(4)	Average hourly earnings	Relative error(5) (percent)
Pressing machine operators	9.46	5.4
Printing press operators	17.01	2.9
Production coordinators	18.77	3.7
Production helpers	11.44	2.9
Production inspectors, checkers and examiners	14.12	4.7
Production samplers and weighers	13.78	8.2
Production testers	15.19	5.0
Professional, n.e.c.	32.87	9.2
Proofreaders	13.82	9.0
Protective service, n.e.c.	9.41	3.0
Psychologists	22.78	8.6
Psychology teachers	40.98	6.6
Public relations specialists	24.73	7.3
Public transportation attendants	33.37	4.6
Punching and stamping press operators	14.04	6.7
Purchasing agents and buyers, farm products	23.95	16.5
Purchasing agents and buyers, n.e.c.	27.36	4.7
Purchasing managers	35.06	8.4
Radiological technicians	24.25	2.8
Rail vehicle operators, n.e.c.	21.64	4.0
Railroad brake, signal, and switch operators	30.28	5.9
Railroad conductors and yardmasters	25.68	22.6
Real estate sales	22.06	14.7
Receptionists	12.06	1.7
Records clerks, n.e.c.	14.11	2.9
Recreation workers	13.24	7.6
Registered nurses	28.15	1.5
Religious workers, n.e.c.	18.74	15.5
Respiratory therapists	22.69	2.4
Roasting and baking machine operators, food	14.04	7.8
Rolling machine operators	16.65	11.4
Roofers	16.21	7.5

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Occupation(4)	Average hourly earnings	Relative error(5) (percent)
Sailors and deckhands	11.39	6.4
Sales counter clerks	10.57	5.3
Sales engineers	38.11	9.5
Sales representatives, mining, manufacturing, and wholesale	27.09	3.5
Sales support, n.e.c.	15.73	8.0
Sales workers, apparel	13.10	14.4
Sales workers, furniture and home furnishings	15.24	6.1
Sales workers, hardware and building supplies	13.70	5.6
Sales workers, motor vehicles and boats	21.91	6.3
Sales workers, other commodities	13.42	3.2
Sales workers, parts	14.83	2.9
Sales workers, radio, tv, hi-fi, and appliances	11.93	8.3
Sales workers, shoes	10.88	12.3
Sales, other business services	25.32	6.3
Sawing machine operators	11.11	4.9
Science technicians, n.e.c.	21.90	10.5
Secondary school teachers	30.88	4.6
Secretaries	17.13	1.2
Securities and financial services sales	41.38	7.0
Separating, filtering, and clarifying machine operators	19.56	5.4
Service, n.e.c.	11.61	5.8
Shaping and joining machine operators	13.69	2.8
Sheet metal duct installers	24.07	12.8
Sheet metal workers	17.80	10.1
Ship captains and mates, except fishing boats	19.15	15.2
Slicing and cutting machine operators	14.08	2.7
Small engine repairers	15.43	5.8
Social science teachers, n.e.c.	43.99	10.2
Social scientists, n.e.c.	34.19	2.4
Social workers	17.59	3.2
Sociology teachers	48.13	27.5
Solderers and brazers	12.17	9.0

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Occupation(4)	Average hourly earnings	Relative error(5) (percent)
Speech therapists	26.49	6.7
Stationary engineers	23.99	5.6
Statistical clerks	14.86	5.4
Statisticians	29.36	8.9
Stenographers	16.49	5.7
Stock and inventory clerks	13.26	2.0
Stock handlers and baggers	11.26	1.9
Street and door-to-door sales workers	19.92	18.3
Structural metal workers	24.17	12.7
Supervisors, agriculture-related workers	24.39	7.3
Supervisors, carpenters and related workers	24.41	6.0
Supervisors, cleaning and building service workers	16.98	4.0
Supervisors, construction trades, n.e.c.	22.54	6.6
Supervisors, distribution, scheduling, and adjusting clerks	20.53	5.4
Supervisors, electricians and power transmission installers	32.67	3.9
Supervisors, extractive	24.40	19.4
Supervisors, financial records processing	23.17	3.3
Supervisors, food preparation and service	14.01	2.8
Supervisors, general office	20.91	2.5
Supervisors, guards	17.12	11.4
Supervisors, handlers, equipment cleaners, and laborers, n.e.c.	19.80	6.7
Supervisors, material moving equipment	22.77	3.5
Supervisors, mechanics and repairers	24.76	2.8
Supervisors, motor vehicle operators	18.58	6.4
Supervisors, painters, paperhangers, and plasterers	23.54	7.8
Supervisors, personal service	14.76	6.5
Supervisors, plumbers, pipefitters, and steamfitters	27.39	8.5
Supervisors, production	22.22	2.0
Supervisors, sales	20.62	3.6
Surveying and mapping technicians	19.61	11.9
Surveyors and mapping scientists	36.16	11.4
Tailors	17.63	20.4

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Occupation(4)	Average hourly earnings	Relative error(5) (percent)
Taxicab drivers and chauffeurs	8.93	8.4
Teachers, n.e.c.	23.61	6.4
Teachers, special education	26.09	9.1
Teachers' aides	10.01	8.1
Technical and related, n.e.c.	21.13	6.0
Technical writers	35.83	14.7
Telephone installers and repairers	23.85	3.5
Telephone line installers and repairers	25.24	4.8
Telephone operators	12.82	5.6
Textile cutting machine operators	10.92	4.7
Textile sewing machine operators	10.53	9.2
Theology teachers	42.01	11.2
Therapists, n.e.c.	16.87	3.5
Tile setters, hard and soft	17.92	13.5
Tool and die maker apprentices	17.92	7.4
Tool and die makers	23.94	2.0
Tool programmers, numerical control	23.35	7.4
Traffic, shipping and receiving clerks	13.94	2.1
Transportation ticket and reservation agents	15.13	3.7
Truckdrivers	15.31	2.4
Typesetters and compositors	15.73	5.8
Typists	15.79	5.9
Underwriters	27.41	5.7
Upholsterers	15.05	11.5
Vehicle washers and equipment cleaners	10.00	3.8
Vocational and educational counselors	17.92	8.8
Waiters and waitresses	4.69	4.4
Waiters, waitresses, and bartenders	5.33	2.8
Waiters'/Waitresses' assistants	6.47	6.2
Washing, cleaning, and pickling machine operators	16.81	22.6
Water and sewer treatment plant operators	18.49	10.8
Weighers, measurers, checkers, and samplers	15.20	8.2

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Occupation(4)	Average hourly earnings	Relative error(5) (percent)
Welders and cutters	15.69	2.3
Welfare service aides	11.12	3.2
Winding and twisting machine operators	12.61	7.1
Wood lathe, routing, and planing machine operators	12.20	7.1

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(5) The relative standard error (RSE) is the standard error expressed as a percent of the estimate. It can be used to calculate a "confidence interval" around a sample estimate. For more information about RSEs, see appendix A in "National Compensation Survey: Occupational Wages in the United States" on the BLS Internet site www.bls.gov/ocs/compub.htm.

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