

# Madison, WI National Compensation Survey October 2009



U.S. Department of Labor  
U.S. Bureau of Labor Statistics  
June 2010

This summary provides results of an October 2009 survey of occupational pay in the Madison, WI, Metropolitan Statistical Area (MSA). The MSA includes Columbia, Dane, and Iowa Counties. Data shown in this summary were collected as part of the Bureau of Labor Statistics (BLS) National Compensation Survey (NCS). The NCS provides comprehensive measures of occupational earnings, compensation cost trends, benefit incidence, and detailed plan provisions. This summary is limited to data on occupational wages and salaries.

Table 1 presents an overview of all tables in this bulletin. Mean hourly earnings, weekly hours, and relative standard errors are given for all industries, private industry, and State and local government for selected worker and establishment characteristics.

Table 2 presents mean hourly earnings data by work level for occupational major groups and for detailed occupations. Separate data are also shown for full-time and part-time workers. Table 3 provides work level data for private industry workers. Table 4 provides similar data for State and local government workers.

Tables 5 through 7 present hourly wage percentiles that describe the distribution of hourly earnings for individual workers within each published occupation. Data are provided for the 10th, 25th, 50th, 75th, and 90th percentiles for detailed occupations within all industries, private industry, and State and local government.

Table 8 presents mean and median hourly, weekly, and annual earnings, and the associated hours, for major occupational groups and detailed occupations for full-time workers. Table 9 provides the same type of information for private industry workers. Table 10 provides similar data for State and local government workers.

The survey could not have been conducted without the cooperation of the many government agencies that provided pay data included in this summary. The Bureau thanks these respondents for their cooperation. Field economists of the Bureau of Labor Statistics collected and reviewed the survey data. The Office of Compensation and Working Conditions, in cooperation with the Office of Field Operations and the Office of Technology and Survey Processing in the BLS National Office, designed the survey, processed the data, and prepared the survey for publication.

## Where to find more information

The data contained in this summary are available at <http://www.bls.gov/ncs/ocs/compub.htm>, the BLS Internet site. Data are presented in a Portable Document Format (PDF) file, and in an ASCII file containing the published table formats.

For additional information regarding this survey, including a list of occupational classifications, please contact any BLS regional office at the address and telephone number listed on the back cover of this summary. You may also write to the Bureau of Labor Statistics at: Division of Compensation Data Analysis and Planning, 2 Massachusetts Avenue, NE., Room 4175, Washington, DC 20212-0001, telephone (202) 691-6199, or send an e-mail to [NCSinfo@bls.gov](mailto:NCSinfo@bls.gov).

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Table 1. Summary: Mean hourly earnings<sup>1</sup> and weekly hours for selected worker and establishment characteristics, Madison, WI, October 2009

Worker and establishment characteristics	Civilian workers			Private industry workers			State and local government workers		
	Hourly earnings		Mean weekly hours <sup>3</sup>	Hourly earnings		Mean weekly hours <sup>3</sup>	Hourly earnings		Mean weekly hours <sup>3</sup>
	Mean	Relative error <sup>2</sup> (percent)		Mean	Relative error <sup>2</sup> (percent)		Mean	Relative error <sup>2</sup> (percent)	
<b>All workers</b> .....	\$21.35	3.2	33.4	\$19.73	4.4	33.0	\$27.16	2.6	34.7
<b>Worker characteristics<sup>4,5</sup></b>									
Management, professional, and related .....	28.44	5.4	34.4	25.83	7.3	34.1	32.67	1.1	34.7
Management, business, and financial .....	30.14	5.9	37.5	28.25	7.3	41.0	34.40	8.1	31.6
Professional and related .....	27.87	6.9	33.4	24.87	9.5	32.0	32.23	2.0	35.6
Service .....	14.16	7.6	26.2	12.60	9.7	24.0	18.49	10.6	35.2
Sales and office .....	17.77	10.5	34.7	17.80	12.8	34.0	17.62	4.4	38.2
Sales and related .....	—	—	—	—	—	—	—	—	—
Office and administrative support .....	17.30	3.4	38.6	17.17	4.1	38.8	17.80	4.2	38.1
Natural resources, construction, and maintenance .....	18.81	9.5	36.0	18.82	9.8	35.8	—	—	—
Construction and extraction .....	—	—	—	—	—	—	—	—	—
Installation, maintenance, and repair .....	17.43	10.7	40.0	17.47	11.0	40.0	—	—	—
Production, transportation, and material moving .....	18.44	15.6	35.1	18.45	16.0	36.3	—	—	—
Production .....	16.68	11.1	40.0	16.68	11.1	40.0	—	—	—
Transportation and material moving .....	19.77	22.4	32.1	19.85	23.1	33.9	—	—	—
Full time .....	22.15	3.6	39.5	20.70	4.7	39.4	27.16	3.6	39.9
Part time .....	17.09	8.9	18.3	14.83	7.2	18.2	27.15	9.4	18.8
Union .....	24.79	4.0	35.2	26.17	13.0	29.8	24.45	3.5	36.8
Nonunion .....	20.58	3.9	33.0	19.41	4.5	33.2	32.66	3.2	31.1
Time .....	21.22	3.0	33.2	19.47	4.1	32.7	27.16	2.6	34.7
Incentive .....	—	—	—	—	—	—	—	—	—
<b>Establishment characteristics</b>									
Goods producing .....	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	—	—	—	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
Service providing .....	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	—	—	—	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
1-99 workers .....	18.92	6.7	31.2	18.73	7.0	31.5	24.55	17.8	23.6
100-499 workers .....	21.02	7.7	37.6	19.19	10.1	37.9	29.05	10.7	36.3
500 workers or more .....	25.34	3.8	35.5	23.36	5.6	34.8	27.10	1.9	36.1

<sup>1</sup> Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are 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. See appendix A for more information.

<sup>2</sup> 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.

<sup>3</sup> Mean weekly hours are the hours an employee is scheduled to work in a week, exclusive of overtime.

<sup>4</sup> Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Union workers are those whose wages are determined through collective bargaining. Wages of time workers are based solely on

hourly rate or salary; incentive workers are those whose wages are at least partially based on productivity payments such as piece rates, commissions, and production bonuses.

<sup>5</sup> Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

<sup>6</sup> Estimates for goods-producing and service-providing industries are published for private industry only. Industries are determined by the 2007 North American Industry Classification System (NAICS).

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria.

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

Table 2. **Civilian workers: Mean hourly earnings<sup>1</sup> for full-time and part-time workers<sup>2</sup> by work levels<sup>3</sup>, Madison, WI, October 2009**

Occupation <sup>4</sup> and level	Total		Full-time workers		Part-time workers	
	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)
<b>All workers</b> .....	\$21.35	3.2	\$22.15	3.6	\$17.09	8.9
<b>Management occupations</b> .....	32.24	10.5	32.99	11.0	—	—
Level 9 .....	28.58	9.7	28.58	9.7	—	—
Not able to be leveled .....	32.55	6.4	—	—	—	—
Education administrators .....	36.08	24.2	—	—	—	—
<b>Business and financial operations occupations</b> .....	27.41	3.9	27.38	4.0	—	—
Level 7 .....	21.95	4.6	21.95	4.6	—	—
Level 9 .....	27.25	7.7	27.25	7.7	—	—
Management analysts .....	29.70	.3	29.70	.3	—	—
<b>Computer and mathematical science occupations</b> .....	28.95	11.1	31.15	7.2	—	—
Level 11 .....	30.85	10.6	30.85	10.6	—	—
Computer systems analysts .....	36.00	5.2	36.00	5.2	—	—
Level 11 .....	36.00	5.2	36.00	5.2	—	—
<b>Community and social services occupations</b> .....	25.49	8.0	25.47	8.3	—	—
<b>Legal occupations</b> .....	29.49	18.2	29.49	18.2	—	—
<b>Education, training, and library occupations</b> .....	34.02	4.4	35.04	5.0	25.10	5.4
Level 9 .....	31.41	2.5	32.08	2.3	—	—
Postsecondary teachers .....	41.78	8.8	42.45	10.9	—	—
Primary, secondary, and special education school teachers .....	32.53	.5	32.73	1.4	—	—
Level 9 .....	32.53	.5	32.73	1.4	—	—
Elementary and middle school teachers .....	32.39	2.9	—	—	—	—
Level 9 .....	32.39	2.9	—	—	—	—
<b>Healthcare practitioner and technical occupations</b> .....	28.66	9.1	24.99	8.9	—	—
Level 9 .....	34.17	5.5	—	—	—	—
Registered nurses .....	33.91	6.0	—	—	—	—
Level 9 .....	32.81	2.8	—	—	—	—
<b>Healthcare support occupations</b> .....	16.39	4.8	17.68	9.8	—	—
<b>Protective service occupations</b> .....	22.04	14.3	23.03	14.7	—	—
<b>Food preparation and serving related occupations</b> .....	11.80	19.9	—	—	7.93	12.1
Level 3 .....	6.86	14.2	—	—	6.53	23.0
<b>Building and grounds cleaning and maintenance occupations</b> .....	13.39	5.5	—	—	—	—
Level 3 .....	11.78	10.0	11.60	11.8	—	—
Building cleaning workers .....	12.20	6.2	12.99	11.9	—	—
Level 3 .....	13.46	2.4	13.76	2.6	—	—
Janitors and cleaners, except maids and housekeeping cleaners .....	13.46	8.0	15.25	13.0	—	—
Level 3 .....	13.76	2.6	13.76	2.6	—	—
<b>Sales and related occupations</b> .....	—	—	—	—	9.92	3.9
Retail sales workers .....	9.96	3.9	—	—	—	—
Cashiers, all workers .....	10.09	3.0	—	—	—	—
Cashiers .....	10.09	3.0	—	—	—	—
<b>Office and administrative support occupations</b> .....	17.30	3.4	17.11	3.2	—	—
Level 4 .....	15.45	2.5	15.45	2.5	—	—
Level 5 .....	18.10	5.0	18.09	5.1	—	—
Level 6 .....	20.36	6.5	19.48	5.8	—	—
Financial clerks .....	16.53	4.4	16.61	4.7	—	—
Secretaries and administrative assistants .....	18.70	6.8	18.70	6.8	—	—
Executive secretaries and administrative assistants .....	20.95	5.5	20.95	5.5	—	—
Office clerks, general .....	18.23	7.2	18.14	7.5	—	—
<b>Installation, maintenance, and repair occupations</b> .....	17.43	10.7	17.43	10.7	—	—
Level 5 .....	16.78	8.6	16.78	8.6	—	—

See footnotes at end of table.

Table 2. **Civilian workers: Mean hourly earnings<sup>1</sup> for full-time and part-time workers<sup>2</sup> by work levels<sup>3</sup>, Madison, WI, October 2009** — Continued

Occupation <sup>4</sup> and level	Total		Full-time workers		Part-time workers	
	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)
<b>Production occupations</b> .....	\$16.68	11.1	\$16.68	11.1	—	—
<b>Transportation and material moving occupations</b> .....	19.77	22.4	22.24	20.7	\$9.78	14.8
Level 1 .....	8.51	9.5	—	—	—	—
Level 3 .....	15.11	4.9	—	—	—	—
Driver/sales workers and truck drivers .....	21.40	24.6	—	—	—	—
Laborers and material movers, hand .....	12.11	7.1	—	—	—	—

<sup>1</sup> Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are 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. See appendix A for more information.

<sup>2</sup> 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.

<sup>3</sup> Each occupation for which data are collected in an establishment is evaluated based on four factors, including knowledge, job controls and complexity, contacts, and physical environment. The knowledge factor is tailored to 24 families of closely related jobs. Points are assigned based on the

occupation's rank within each factor. The points are summed to determine the overall level of the occupation. See appendix A for more information.

<sup>4</sup> Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

<sup>5</sup> 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.

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately.

Table 3. Private industry workers: Mean hourly earnings<sup>1</sup> for full-time and part-time workers<sup>2</sup> by work levels<sup>3</sup>, Madison, WI, October 2009

Occupation <sup>4</sup> and level	Total		Full-time workers		Part-time workers	
	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)
<b>All workers</b> .....	\$19.73	4.4	\$20.70	4.7	\$14.83	7.2
<b>Management occupations</b> .....	29.64	12.5	29.64	12.5	–	–
<b>Business and financial operations occupations</b> .....	26.25	6.3	26.25	6.3	–	–
Level 9 .....	26.89	8.6	26.89	8.6	–	–
<b>Computer and mathematical science occupations</b> .....	27.28	11.3	29.72	7.6	–	–
Level 11 .....	29.48	11.0	29.48	11.0	–	–
<b>Healthcare practitioner and technical occupations</b> .....	26.55	8.2	23.37	4.8	–	–
<b>Food preparation and serving related occupations</b> .....	11.13	25.7	–	–	7.70	13.3
Level 3 .....	6.79	14.4	–	–	–	–
<b>Building and grounds cleaning and maintenance occupations</b> .....	13.08	7.3	–	–	–	–
Building cleaning workers .....	10.85	4.3	–	–	–	–
<b>Sales and related occupations</b> .....	–	–	–	–	9.92	3.9
Retail sales workers .....	9.77	3.8	–	–	–	–
<b>Office and administrative support occupations</b> .....	17.17	4.1	16.93	3.9	–	–
Level 4 .....	15.76	2.2	15.76	2.2	–	–
Level 5 .....	17.78	6.3	17.78	6.3	–	–
Level 6 .....	21.11	7.5	19.92	7.0	–	–
<b>Installation, maintenance, and repair occupations</b> .....	17.47	11.0	17.47	11.0	–	–
Level 5 .....	16.82	9.0	16.82	9.0	–	–
<b>Production occupations</b> .....	16.68	11.1	16.68	11.1	–	–
<b>Transportation and material moving occupations</b> .....	19.85	23.1	22.24	20.7	–	–
Level 1 .....	8.51	9.5	–	–	–	–
Driver/sales workers and truck drivers .....	21.40	24.6	–	–	–	–
Laborers and material movers, hand .....	12.06	7.5	–	–	–	–

<sup>1</sup> Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are 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. See appendix A for more information.

<sup>2</sup> 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.

<sup>3</sup> Each occupation for which data are collected in an establishment is evaluated based on four factors, including knowledge, job controls and complexity, contacts, and physical environment. The knowledge factor is tailored to 24 families of closely related jobs. Points are assigned based on the

occupation's rank within each factor. The points are summed to determine the overall level of the occupation. See appendix A for more information.

<sup>4</sup> Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

<sup>5</sup> 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.

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately.

Table 4. State and local government workers: Mean hourly earnings<sup>1</sup> for full-time and part-time workers<sup>2</sup> by work levels<sup>3</sup>, Madison, WI, October 2009

Occupation <sup>4</sup> and level	Total		Full-time workers		Part-time workers	
	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)
<b>All workers</b> .....	\$27.16	2.6	\$27.16	3.6	\$27.15	9.4
<b>Management occupations</b> .....	38.98	12.6	44.16	6.1	—	—
<b>Business and financial operations occupations</b> .....	29.59	.6	29.63	.8	—	—
Management analysts .....	29.75	.0	29.75	.0	—	—
<b>Computer and mathematical science occupations</b> .....	35.87	8.0	35.87	8.0	—	—
Level 11 .....	36.94	4.5	36.94	4.5	—	—
<b>Community and social services occupations</b> .....	27.07	4.9	26.92	5.4	—	—
<b>Education, training, and library occupations</b> .....	34.14	4.6	34.92	5.2	24.92	7.4
Level 9 .....	31.72	2.6	32.08	2.3	—	—
Primary, secondary, and special education school teachers .....	32.53	.5	32.73	1.4	—	—
Level 9 .....	32.53	.5	32.73	1.4	—	—
Elementary and middle school teachers .....	32.39	2.9	—	—	—	—
Level 9 .....	32.39	2.9	—	—	—	—
<b>Healthcare practitioner and technical occupations</b> .....	36.90	6.1	31.92	15.2	48.05	15.8
<b>Protective service occupations</b> .....	24.42	8.5	25.41	8.5	—	—
<b>Building and grounds cleaning and maintenance occupations</b> .....	15.03	13.5	15.03	13.5	—	—
<b>Office and administrative support occupations</b> .....	17.80	4.2	17.82	4.1	—	—
Level 5 .....	18.93	6.7	18.95	6.5	—	—
Level 6 .....	17.77	2.3	—	—	—	—
Secretaries and administrative assistants .....	19.10	8.1	19.10	8.1	—	—
Executive secretaries and administrative assistants .....	20.58	7.7	20.58	7.7	—	—

<sup>1</sup> Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are 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. See appendix A for more information.

<sup>2</sup> 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.

<sup>3</sup> Each occupation for which data are collected in an establishment is evaluated based on four factors, including knowledge, job controls and complexity, contacts, and physical environment. The knowledge factor is tailored to 24 families of closely related jobs. Points are assigned based on the

occupation's rank within each factor. The points are summed to determine the overall level of the occupation. See appendix A for more information.

<sup>4</sup> Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

<sup>5</sup> 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.

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately

Table 5. Civilian workers: Hourly wage percentiles<sup>1</sup>, Madison, WI, October 2009

Occupation <sup>2</sup>	10	25	Median 50	75	90
<b>All workers</b> .....	\$10.61	\$14.35	\$18.00	\$26.68	\$34.62
<b>Management occupations</b> .....	18.22	21.37	29.54	34.28	50.59
Education administrators .....	19.23	20.26	33.33	57.25	57.25
<b>Business and financial operations occupations</b> .....	18.54	21.00	25.74	30.30	39.73
Management analysts .....	18.54	20.78	28.23	37.85	45.10
<b>Computer and mathematical science occupations</b> .....	18.00	23.08	28.85	33.98	40.53
Computer systems analysts .....	30.12	32.04	35.81	39.58	43.93
<b>Community and social services occupations</b> .....	15.95	22.73	24.70	29.86	33.57
<b>Legal occupations</b> .....	15.95	17.70	25.29	39.49	52.85
<b>Education, training, and library occupations</b> .....	22.64	25.26	31.24	40.94	52.23
Postsecondary teachers .....	22.87	23.13	43.25	52.32	67.97
Primary, secondary, and special education school teachers .....	24.64	29.25	31.24	36.02	40.55
Elementary and middle school teachers .....	23.66	27.35	30.70	37.02	41.55
<b>Healthcare practitioner and technical occupations</b> .....	16.76	18.86	28.26	35.25	40.69
Registered nurses .....	29.16	29.16	30.80	35.58	37.73
<b>Healthcare support occupations</b> .....	11.50	13.27	14.81	20.31	20.31
<b>Protective service occupations</b> .....	11.10	14.89	22.96	28.44	32.79
<b>Food preparation and serving related occupations</b> .....	7.25	8.25	10.93	15.39	16.83
<b>Building and grounds cleaning and maintenance occupations</b> .....	9.00	10.36	12.73	13.73	21.16
Building cleaning workers .....	10.00	10.36	10.36	13.28	14.77
Janitors and cleaners, except maids and housekeeping cleaners .....	10.00	10.00	12.81	14.62	15.97
<b>Sales and related occupations</b>					
Retail sales workers .....	8.25	9.04	9.15	10.67	12.93
Cashiers, all workers .....	8.05	8.40	9.55	11.70	13.30
Cashiers .....	8.05	8.40	9.55	11.70	13.30
<b>Office and administrative support occupations</b> .....	12.00	14.00	16.68	20.31	23.08
Financial clerks .....	13.77	14.00	16.38	18.23	20.59
Secretaries and administrative assistants .....	15.16	16.00	17.17	21.02	25.95
Executive secretaries and administrative assistants .....	16.03	17.62	19.09	25.95	26.44
Office clerks, general .....	13.08	15.07	20.98	21.00	21.00
<b>Installation, maintenance, and repair occupations</b> .....	13.39	14.76	17.00	17.69	22.18
<b>Production occupations</b> .....	11.75	15.20	17.00	17.31	18.85
<b>Transportation and material moving occupations</b> .....	8.25	12.00	15.53	31.73	34.62
Driver/sales workers and truck drivers .....	8.25	13.50	17.00	32.21	35.10
Laborers and material movers, hand .....	7.55	8.00	13.47	13.47	14.48

<sup>1</sup> Percentiles designate position in the earnings distribution and are calculated from individual-worker earnings and the hours they are scheduled to work. At the 50th percentile, the median, half of the hours are paid the same as or more than the rate shown, and half are paid the same as or less than the rate shown. At the 25th percentile, one-fourth of the hours are paid the same as or less than the rate shown. At the 75th percentile, one-fourth are paid the same as or more than the rate shown. The 10th and 90th percentiles follow the same logic. Hourly wages are the straight-time wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, and holidays;

nonproduction bonuses; and tips.

<sup>2</sup> Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately

Table 6. Private industry workers: Hourly wage percentiles<sup>1</sup>, Madison, WI, October 2009

Occupation <sup>2</sup>	10	25	Median 50	75	90
<b>All workers</b> .....	\$10.00	\$13.77	\$17.00	\$24.00	\$33.33
<b>Management occupations</b> .....	18.22	18.22	29.23	34.28	37.14
<b>Business and financial operations occupations</b> .....	19.33	21.00	24.68	27.96	36.48
<b>Computer and mathematical science occupations</b> .....	18.00	18.77	26.20	32.71	35.93
<b>Healthcare practitioner and technical occupations</b> .....	16.76	18.86	28.26	30.58	35.58
<b>Food preparation and serving related occupations</b> .....	7.25	7.50	10.25	15.39	16.83
<b>Building and grounds cleaning and maintenance occupations</b> .....	9.00	10.00	12.68	13.73	21.16
Building cleaning workers .....	10.00	10.00	10.36	10.36	12.68
<b>Sales and related occupations</b>					
Retail sales workers .....	8.10	9.04	9.04	9.90	11.85
<b>Office and administrative support occupations</b> .....	12.00	13.77	16.60	20.96	23.08
<b>Installation, maintenance, and repair occupations</b> .....	13.39	14.50	17.00	17.69	22.60
<b>Production occupations</b> .....	11.75	15.20	17.00	17.31	18.85
<b>Transportation and material moving occupations</b> .....	8.25	12.00	15.50	31.73	34.62
Driver/sales workers and truck drivers .....	8.25	13.50	17.00	32.21	35.10
Laborers and material movers, hand .....	7.35	8.00	13.47	13.47	14.48

<sup>1</sup> Percentiles designate position in the earnings distribution and are calculated from individual-worker earnings and the hours they are scheduled to work. At the 50th percentile, the median, half of the hours are paid the same as or more than the rate shown, and half are paid the same as or less than the rate shown. At the 25th percentile, one-fourth of the hours are paid the same as or less than the rate shown. At the 75th percentile, one-fourth are paid the same as or more than the rate shown. The 10th and 90th percentiles follow the same logic. Hourly wages are the straight-time wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, and holidays;

nonproduction bonuses; and tips.

<sup>2</sup> Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately



Table 7. State and local government workers: Hourly wage percentiles<sup>1</sup>, Madison, WI, October 2009

Occupation <sup>2</sup>	10	25	Median 50	75	90
<b>All workers</b> .....	\$14.34	\$17.79	\$23.96	\$32.61	\$45.10
<b>Management occupations</b> .....	20.14	23.92	30.89	46.99	89.50
<b>Business and financial operations occupations</b> .....	18.54	21.72	28.31	36.70	46.42
Management analysts .....	18.54	20.78	27.73	37.85	45.10
<b>Computer and mathematical science occupations</b> .....	23.39	31.29	37.89	41.05	43.55
<b>Community and social services occupations</b> .....	22.73	23.47	25.77	32.67	34.19
<b>Education, training, and library occupations</b> .....	22.64	24.26	31.09	41.55	52.23
Primary, secondary, and special education school teachers .....	24.64	29.25	31.24	36.02	40.55
Elementary and middle school teachers .....	23.66	27.35	30.70	37.02	41.55
<b>Healthcare practitioner and technical occupations</b> .....	20.91	27.87	32.61	48.56	53.13
<b>Protective service occupations</b> .....	14.89	19.52	24.80	30.03	33.26
<b>Building and grounds cleaning and maintenance   occupations</b> .....	11.20	12.27	13.82	15.34	24.10
<b>Office and administrative support occupations</b> .....	13.37	15.20	17.06	20.09	22.60
Secretaries and administrative assistants .....	15.16	15.66	17.62	22.40	25.95
Executive secretaries and administrative assistants .....	15.37	17.62	19.04	25.95	25.95

<sup>1</sup> Percentiles designate position in the earnings distribution and are calculated from individual-worker earnings and the hours they are scheduled to work. At the 50th percentile, the median, half of the hours are paid the same as or more than the rate shown, and half are paid the same as or less than the rate shown. At the 25th percentile, one-fourth of the hours are paid the same as or less than the rate shown. At the 75th percentile, one-fourth are paid the same as or more than the rate shown. The 10th and 90th percentiles follow the same logic. Hourly wages are the straight-time wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, and holidays;

nonproduction bonuses; and tips.

<sup>2</sup> Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately

Table 8. Full-time<sup>1</sup> civilian workers: Mean and median hourly, weekly, and annual earnings and mean weekly and annual hours, Madison, WI, October 2009

Occupation <sup>2</sup>	Hourly earnings <sup>3</sup>		Weekly earnings <sup>4</sup>			Annual earnings <sup>5</sup>		
	Mean	Median	Mean	Median	Mean weekly hours	Mean	Median	Mean annual hours
<b>All workers</b> .....	\$22.15	\$18.50	\$875	\$731	39.5	\$43,660	\$36,810	1,971
<b>Management occupations</b> .....	32.99	33.33	1,377	1,346	41.8	71,102	70,678	2,155
<b>Business and financial operations occupations</b> .....	27.38	25.59	1,078	1,021	39.4	56,061	53,102	2,048
Management analysts .....	29.70	28.23	1,188	1,129	40.0	61,772	58,710	2,080
<b>Computer and mathematical science occupations</b> .....	31.15	30.19	1,239	1,179	39.8	64,411	61,318	2,068
Computer systems analysts .....	36.00	35.81	1,440	1,432	40.0	74,880	74,487	2,080
<b>Community and social services occupations</b> .....	25.47	24.70	1,010	967	39.7	52,509	50,294	2,062
<b>Legal occupations</b> .....	29.49	25.29	1,173	1,012	39.8	60,977	52,609	2,067
<b>Education, training, and library occupations</b> .....	35.04	32.24	1,383	1,303	39.5	56,816	53,150	1,622
Postsecondary teachers .....	42.45	43.25	1,658	1,730	39.1	70,249	70,540	1,655
Primary, secondary, and special education school teachers .....	32.73	31.70	1,309	1,268	40.0	49,695	48,179	1,518
<b>Healthcare practitioner and technical occupations</b> .....	24.99	23.39	989	935	39.6	51,407	48,641	2,057
<b>Healthcare support occupations</b> .....	17.68	20.31	707	812	40.0	36,775	42,236	2,080
<b>Protective service occupations</b> .....	23.03	24.07	926	958	40.2	48,169	49,837	2,092
<b>Building and grounds cleaning and maintenance occupations</b> .....								
Building cleaning workers .....	12.99	11.44	520	458	40.0	27,015	23,795	2,080
Janitors and cleaners, except maids and housekeeping cleaners .....	15.25	14.16	610	566	40.0	31,710	29,453	2,080
<b>Office and administrative support occupations</b> .....	17.11	16.62	677	664	39.5	35,187	34,530	2,056
Financial clerks .....	16.61	16.40	665	656	40.0	34,559	34,114	2,080
Secretaries and administrative assistants .....	18.70	17.17	744	687	39.8	38,698	35,749	2,069
Executive secretaries and administrative assistants .....	20.95	19.09	828	760	39.5	43,039	39,499	2,055
Office clerks, general .....	18.14	20.98	723	839	39.9	37,610	43,628	2,073
<b>Installation, maintenance, and repair occupations</b> .....	17.43	17.00	697	680	40.0	36,245	35,360	2,080
<b>Production occupations</b> .....	16.68	17.00	667	680	40.0	34,686	35,360	2,080
<b>Transportation and material moving occupations</b> .....	22.24	17.00	1,021	644	45.9	53,085	33,488	2,387

<sup>1</sup> 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.

<sup>2</sup> Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

<sup>3</sup> Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are 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. See appendix A for more information.

<sup>4</sup> Mean weekly earnings are the straight-time weekly wages or salaries

paid to employees. Median weekly earnings designates position - one-half of the hours are paid the same as or more than the rate shown. Mean weekly hours are the hours an employee is scheduled to work in a week, exclusive of overtime.

<sup>5</sup> Mean annual earnings are the straight-time annual wages or salaries paid to employees. Median annual earnings designates position - one-half of the hours are paid the same as or more than the rate shown. Mean annual hours are the hours an employee is scheduled to work in a year, exclusive of overtime.

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately

Table 9. Full-time<sup>1</sup> private industry workers: Mean and median hourly, weekly, and annual earnings and mean weekly and annual hours, Madison, WI, October 2009

Occupation <sup>2</sup>	Hourly earnings <sup>3</sup>		Weekly earnings <sup>4</sup>			Annual earnings <sup>5</sup>		
	Mean	Median	Mean	Median	Mean weekly hours	Mean	Median	Mean annual hours
<b>All workers</b> .....	\$20.70	\$17.69	\$815	\$690	39.4	\$40,971	\$35,360	1,980
<b>Management occupations</b> .....	29.64	29.23	1,256	1,250	42.4	65,310	64,999	2,204
<b>Business and financial operations occupations</b> .....	26.25	24.68	1,026	956	39.1	53,339	49,691	2,032
<b>Computer and mathematical science occupations</b> .....	29.72	29.48	1,180	1,179	39.7	61,341	61,318	2,064
<b>Healthcare practitioner and technical occupations</b> .....	23.37	23.39	922	935	39.4	47,945	48,641	2,051
<b>Office and administrative support occupations</b> .....	16.93	16.60	667	660	39.4	34,709	34,320	2,050
<b>Installation, maintenance, and repair occupations</b> .....	17.47	17.00	699	680	40.0	36,342	35,360	2,080
<b>Production occupations</b> .....	16.68	17.00	667	680	40.0	34,686	35,360	2,080
<b>Transportation and material moving occupations</b> .....	22.24	17.00	1,021	644	45.9	53,085	33,488	2,387

<sup>1</sup> 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.

<sup>2</sup> Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

<sup>3</sup> Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are 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. See appendix A for more information.

<sup>4</sup> Mean weekly earnings are the straight-time weekly wages or salaries

paid to employees. Median weekly earnings designates position - one-half of the hours are paid the same as or more than the rate shown. Mean weekly hours are the hours an employee is scheduled to work in a week, exclusive of overtime.

<sup>5</sup> Mean annual earnings are the straight-time annual wages or salaries paid to employees. Median annual earnings designates position - one-half of the hours are paid the same as or more than the rate shown. Mean annual hours are the hours an employee is scheduled to work in a year, exclusive of overtime.

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately

Table 10. Full-time<sup>1</sup> State and local government workers: Mean and median hourly, weekly, and annual earnings and mean weekly and annual hours, Madison, WI, October 2009

Occupation <sup>2</sup>	Hourly earnings <sup>3</sup>		Weekly earnings <sup>4</sup>			Annual earnings <sup>5</sup>		
	Mean	Median	Mean	Median	Mean weekly hours	Mean	Median	Mean annual hours
<b>All workers</b> .....	\$27.16	\$23.92	\$1,083	\$957	39.9	\$52,728	\$48,443	1,942
<b>Management occupations</b> .....	44.16	46.11	1,757	1,821	39.8	88,705	81,934	2,009
<b>Business and financial operations occupations</b> .....	29.63	27.45	1,185	1,098	40.0	61,623	57,096	2,080
Management analysts .....	29.75	27.73	1,190	1,109	40.0	61,884	57,678	2,080
<b>Computer and mathematical science occupations</b> .....	35.87	37.89	1,435	1,516	40.0	74,606	78,811	2,080
<b>Community and social services occupations</b> .....	26.92	25.25	1,077	1,010	40.0	55,994	52,520	2,080
<b>Education, training, and library occupations</b> .....	34.92	32.04	1,381	1,282	39.6	56,686	52,647	1,623
Primary, secondary, and special education school teachers .....	32.73	31.70	1,309	1,268	40.0	49,695	48,179	1,518
<b>Healthcare practitioner and technical occupations</b> .....	31.92	27.87	1,277	1,115	40.0	66,389	57,970	2,080
<b>Protective service occupations</b> .....	25.41	25.29	1,023	1,050	40.3	53,214	54,588	2,094
<b>Building and grounds cleaning and maintenance occupations</b> .....	15.03	13.82	601	553	40.0	26,726	28,101	1,779
<b>Office and administrative support occupations</b> .....	17.82	17.14	712	687	39.9	37,006	35,720	2,077
Secretaries and administrative assistants .....	19.10	17.62	761	705	39.8	39,569	36,650	2,071
Executive secretaries and administrative assistants .....	20.58	19.04	816	762	39.7	42,449	39,603	2,062

<sup>1</sup> 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.

<sup>2</sup> Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

<sup>3</sup> Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are 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. See appendix A for more information.

<sup>4</sup> Mean weekly earnings are the straight-time weekly wages or salaries

paid to employees. Median weekly earnings designates position - one-half of the hours are paid the same as or more than the rate shown. Mean weekly hours are the hours an employee is scheduled to work in a week, exclusive of overtime.

<sup>5</sup> Mean annual earnings are the straight-time annual wages or salaries paid to employees. Median annual earnings designates position - one-half of the hours are paid the same as or more than the rate shown. Mean annual hours are the hours an employee is scheduled to work in a year, exclusive of overtime.

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately

# Appendix: Technical Note

## Survey scope

This survey of the Madison, WI, Metropolitan Statistical Area (MSA) covered establishments employing one worker or more in private goods-producing industries (mining, construction, and manufacturing); private service-providing industries (trade, transportation, and utilities, information, financial activities, professional and business services, education and health services, leisure and hospitality, and other services); State governments; and local governments. Agriculture, forestry, fishing and hunting, private households, and the Federal Government were excluded from the scope of the survey. For purposes of this survey, an establishment is an economic unit that produces goods or services, a central administrative office, or an auxiliary unit providing support services to a company. For private industries in this survey, the establishment is usually at a single physical location. For State and local governments, an establishment is defined as all locations of a government agency within the sampled area.

## Sampling frame

The list of establishments from which the survey sample was selected (sampling frame) was developed from State unemployment insurance reports. Due to the volatility of industries within the private sector, sampling frames were developed using the most recent month of reference available at the time the sample was selected.

## Sample design

The sample for this survey area was selected using a two-stage stratified design with probability proportional to employment sampling at each stage. The first stage of sample selection was a probability-proportional-to-size sample of establishments. Use of this technique means that the larger an establishment's employment, the greater its chance of selection. The second stage of sample selection, detailed below, was a probability sample of occupations within a sampled establishment.

## Occupational selection and classification

Identification of the occupations for which wage data were to be collected was a multistep process:

1. Probability-proportional-to-size selection of establishment jobs
2. Classification of jobs into occupations based on the 2000 Standard Occupational Classification (SOC) system
3. Characterization of jobs as full-time or part-time, union or nonunion, and time or incentive
4. Determination of the level of work of each job

For each occupation, wage data were collected for those workers whose jobs could be characterized by the criteria identified in the last three steps. In step one, the jobs to be sampled were selected at each establishment by the BLS field economist. A complete list of employees was used for sampling, with each selected worker representing a job within the establishment. The greater the number of people working in a job in the establishment, the greater its chance of selection.

The second step of the process entailed classifying the selected jobs into occupations based on their duties. NCS uses the 2000 Standard Occupational Classification (SOC) system. A selected job may fall into any one of about 800 occupational classifications, from accountant to zoologist. When workers could be classified in more than one occupation, they were classified in the occupation that required the higher skill level. When there was no perceptible difference in skill level, the workers were classified in the occupation that described their primary activity.

Each occupational classification is an element of a broader classification known as a major group. Occupations can fall into any of 22 major groups. A complete list of all individual occupations, classified by the major group to which they belong, is available from BLS.

In step three, certain other job characteristics of the chosen worker were identified. First, the worker was identified as holding either a full-time or part-time job, based on the establishment's definition of those terms. Then, the worker was classified as having a time versus incentive job and also identified as being in a union or a nonunion job.

## Occupational leveling

In the last step before wage data were collected, the work level of each selected job was determined using a "point factor leveling" process. Point factor leveling matches certain aspects of a job to specific levels of work with assigned point values. Points for each factor are then totaled to determine the overall work level for the job.

The NCS program is in the process of converting from a nine-factor to a four-factor occupational leveling system. The conversion is being phased in via annual NCS sample replenishment groups and will require several years for full implementation. The four occupational leveling factors are:

- Knowledge
- Job controls and complexity
- Contacts (nature and purpose)
- Physical environment

Each factor consists of several levels, and each level has an associated description and assigned points. A knowledge guide for 24 families of closely related occupations contains short definitions of the point levels of knowledge expected for the occupations and presents relevant examples. The other three factors use identical descriptions for all occupational categories and contain a definition of each point level within each factor.

The description within each factor best matching the job is chosen. The point levels within each factor are designed to describe the thresholds of distinct levels of work. When a job does not meet the full description of a point level, the next lowest point level is used. Points for the four factors are totaled to determine the overall work level. NCS publishes data for up to 15 work levels.

Most supervisory occupations are evaluated based on their duties and responsibilities. A modified approach is used for professional and administrative supervisors when they direct professional work and are paid primarily to supervise. Such supervisory occupations are leveled based on the work level of the highest position reporting to them.

For a complete description of point factor leveling, refer to the publication “National Compensation Survey: Guide for Evaluating Your Firm’s Jobs and Pay,” available at the BLS National Compensation Survey Internet site at <http://www.bls.gov/ncs/ocs/sp/ncbr0004.pdf>.

### Collection period

Survey data were collected over a 14-month period for the larger areas in the NCS program. For the smaller areas, data were collected over a 5-month period. For each establishment in the survey, the data reflect the establishment’s most recent information at the time of collection. The payroll reference month shown in the tables reflects the average date of this information for all sample units.

### Earnings

Earnings were defined as regular payments from the employer to the employee as compensation for straight-time hourly work, or for any salaried work performed. The following components were included as part of earnings:

- Incentive pay, including commissions, production bonuses, and piece rates
- Cost-of-living allowances
- Hazard pay
- Payments of income deferred due to participation in a salary reduction plan
- Deadhead pay, defined as pay given to transportation workers returning in a vehicle without freight or passengers

The following forms of payments were *not* considered part of straight-time earnings:

- Shift differentials, defined as extra payment for working a schedule that varies from the norm, such as night or weekend work
- Premium pay for overtime, holidays, and weekends
- Bonuses not directly tied to production (such as Christmas and profit-sharing bonuses)
- Uniform and tool allowances
- Free or subsidized room and board
- Payments made by third parties (for example, tips)
- On-call pay

To calculate earnings for various periods (hourly, weekly, and annual), data on work schedules also were collected. For hourly workers, scheduled hours worked per day and per week, exclusive of overtime, were recorded. Annual weeks worked were determined. Because salaried workers who are exempt from overtime provisions often work beyond the assigned work schedule, their typical number of hours actually worked was collected.

### Weighting and nonresponse

Sample weights were calculated for each establishment and occupation in the survey. These weights reflected the relative size of the occupation within the establishment and of the establishment within the sample universe. Weights were used to aggregate data for the individual establishments or occupations into the various data series.

If data were not provided by a sample member during the initial interview, the weights of responding sample members in the same or similar “cells” were adjusted to account for the missing data. This technique assumes that the mean value of data for the nonrespondents equals the mean value of data for the respondents at some detailed “cell” level. Responding and nonresponding establishments were classified into these cells according to industry and employment size. Responding and nonresponding occupations within responding establishments were classified into cells that were additionally defined by major occupation group.

If average hourly earnings data were not provided by a sample member during the update interview, then missing average hourly earnings were imputed by multiplying prior average hourly earnings by the rate of change in the average hourly earnings of respondents. The regression model that takes into account available establishment characteristics is used to derive the rate of change in the average hourly earnings.

Establishments that were determined to be out of business or outside the scope of the survey had their weights changed to zero.

### Survey response

	<i>Establish- ments</i>
Total in sampling frame	11,462
Total in sample	81
Responding	59
Refused or unable to provide data	20
Out of business or not in survey scope	2

### Estimation

The wage series in the tables are computed by combining the wages for each sampled occupation. Before being combined, individual wage rates are weighted by the number of workers; the sample weight, adjusted for nonresponding establishments and other factors; and the occupation's scheduled hours of work.

The sample weight reflects the inverse of each unit's probability of selection at each sample selection stage and four weight adjustment factors. The first factor adjusts for establishment nonresponse and the second factor adjusts for occupational nonresponse. The third factor adjusts for any special situations that may have occurred during data collection. The fourth factor, post-stratification, also called benchmarking, is introduced to adjust estimated employment totals to the current counts of employment by industry. The latest available employment counts were used to derive average hourly earnings in this publication.

Not all calculated series met the criteria for publication. Before any series was published, it was reviewed to make sure that the number of observations underlying it was suf-

ficient. This review prevented the publication of a series that could have revealed information about a specific establishment.

### Data reliability

The data in this summary are estimates from a scientifically selected probability sample. There are two types of errors possible in an estimate based on a sample survey, sampling and nonsampling.

*Sampling errors* occur because observations come only from a sample and not from an entire population. The sample used for this survey is one of a number of possible samples of the same size that could have been selected using the sample design. Estimates derived from the different samples would differ from each other.

A measure of variation among these differing estimates is called the standard error or sampling error. It indicates the precision with which an estimate from a particular sample approximates the average result of all possible samples. The relative standard error (RSE) is the standard error divided by the estimate. RSE data are provided alongside the earnings data in the summary tables.

The standard error can be used to calculate a "confidence interval" around a sample estimate. As an example, suppose a table shows that mean hourly earnings for all workers were \$17.75, with a relative standard error of 1.0 percent for this estimate. At the 90-percent level, the confidence interval for this estimate is from \$17.46 to \$18.04 (\$17.75 minus and plus \$0.29, where \$0.29 is the product of 1.645 times 1.0 percent times \$17.75). 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.

*Nonsampling errors* also affect survey results. They can stem from many sources, such as inability to obtain information for some establishments, difficulties with survey definitions, inability of the respondents to provide correct information, or mistakes in recording or coding the data obtained. Although they were not specifically measured, the nonsampling errors were expected to be minimal due to the extensive training of the field economists who gathered the survey data, computer edits of the data, and detailed data review.