



Billings, MT

National Compensation Survey

August 2009

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

This summary provides results of an August 2009 survey of occupational pay in the Billings, MT, Metropolitan Statistical Area (MSA). The MSA includes Carbon and Yellowstone 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.

Material in this summary is in the public domain and, with appropriate credit, may be reproduced without permission. This information will be made available to sensory impaired individuals upon request. Voice phone: (202) 691-5200; Federal Relay Service 1-800-877-8339.

Table 1. Summary: Mean hourly earnings¹ and weekly hours for selected worker and establishment characteristics, Billings, MT, August 2009

Worker and establishment characteristics	Civilian workers			Private industry workers			State and local government workers		
	Hourly earnings		Mean weekly hours ³	Hourly earnings		Mean weekly hours ³	Hourly earnings		Mean weekly hours ³
	Mean	Relative error ² (percent)		Mean	Relative error ² (percent)		Mean	Relative error ² (percent)	
All workers	\$19.03	3.7	36.4	\$18.39	3.9	36.4	\$25.75	5.4	36.4
Worker characteristics^{4,5}									
Management, professional, and related	31.86	5.0	37.6	31.89	6.0	38.1	31.70	5.3	35.4
Management, business, and financial	31.42	8.6	40.2	32.40	9.6	40.2	—	—	—
Professional and related	32.04	5.5	36.6	31.63	6.7	37.2	33.50	7.1	34.6
Service	9.38	7.0	31.7	8.62	5.6	31.4	20.07	6.5	36.3
Sales and office	13.36	4.3	36.1	13.31	4.4	36.1	14.42	9.1	37.9
Sales and related	12.99	7.6	34.0	12.99	7.6	34.0	—	—	—
Office and administrative support	13.58	4.7	37.5	13.52	4.9	37.5	14.42	9.1	37.9
Natural resources, construction, and maintenance	17.52	9.6	40.0	17.38	10.5	40.0	18.89	10.9	40.0
Construction and extraction	17.53	14.8	40.0	17.29	17.4	40.0	18.89	10.9	40.0
Installation, maintenance, and repair	18.99	4.7	40.0	18.99	4.7	40.0	—	—	—
Production, transportation, and material moving	18.74	5.9	38.5	18.74	6.0	38.5	—	—	—
Production	21.89	12.7	35.5	21.88	12.8	35.5	—	—	—
Transportation and material moving	16.52	8.6	41.0	16.48	8.9	41.0	—	—	—
Full time	20.13	3.4	40.0	19.57	3.6	40.0	25.69	4.9	39.3
Part time	10.18	10.0	21.1	9.21	5.2	21.2	26.54	40.1	18.6
Union	27.45	4.4	38.2	26.75	6.1	38.2	28.13	6.0	38.2
Nonunion	17.78	3.8	36.1	17.76	3.9	36.2	18.45	6.0	31.9
Time	19.12	3.8	36.0	18.45	4.0	36.0	25.75	5.4	36.4
Incentive	17.25	11.5	45.4	17.25	11.5	45.4	—	—	—
Establishment characteristics									
Goods producing	(⁶)	(⁶)	(⁶)	—	—	—	(⁶)	(⁶)	(⁶)
Service providing	(⁶)	(⁶)	(⁶)	17.67	4.1	36.0	(⁶)	(⁶)	(⁶)
1-99 workers	14.81	5.0	35.6	14.75	5.1	35.7	17.46	10.9	31.9
100-499 workers	20.20	5.3	37.5	20.06	5.8	37.6	21.45	7.2	36.8
500 workers or more	35.26	1.9	38.8	38.57	1.0	39.4	28.95	5.6	37.8

¹ 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.

² 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.

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

⁴ 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.

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

⁶ 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 earnings¹ for full-time and part-time workers² by work levels³, Billings, MT, August 2009**

Occupation ⁴ and level	Total		Full-time workers		Part-time workers	
	Mean	Relative error ⁵ (percent)	Mean	Relative error ⁵ (percent)	Mean	Relative error ⁵ (percent)
All workers	\$19.03	3.7	\$20.13	3.4	\$10.18	10.0
Management occupations	38.76	11.7	38.76	11.7	—	—
Level 9	25.19	9.8	25.19	9.8	—	—
Business and financial operations occupations	22.68	10.6	22.68	10.6	—	—
Architecture and engineering occupations	21.49	13.9	21.49	13.9	—	—
Engineers	28.31	21.1	28.31	21.1	—	—
Education, training, and library occupations	31.20	9.8	31.86	10.1	13.11	16.6
Level 9	36.74	3.8	36.83	4.0	—	—
Primary, secondary, and special education school teachers	33.02	6.5	33.06	6.6	—	—
Level 9	36.97	3.9	37.06	4.1	—	—
Elementary and middle school teachers	33.04	12.6	33.19	13.0	—	—
Level 9	38.42	4.0	—	—	—	—
Elementary school teachers, except special education	33.15	13.3	33.30	13.7	—	—
Secondary school teachers	36.48	5.9	36.48	5.9	—	—
Level 9	36.48	5.9	36.48	5.9	—	—
Secondary school teachers, except special and vocational education	36.48	5.9	36.48	5.9	—	—
Level 9	36.48	5.9	36.48	5.9	—	—
Healthcare practitioner and technical occupations	44.80	2.8	45.55	3.0	—	—
Level 8	29.35	3.1	—	—	—	—
Healthcare support occupations	11.50	1.4	11.53	1.4	—	—
Nursing, psychiatric, and home health aides	11.35	.6	—	—	—	—
Protective service occupations	21.73	4.4	22.55	5.2	—	—
Food preparation and serving related occupations	8.01	6.8	8.39	10.4	7.57	2.8
Level 2	7.62	4.0	—	—	7.43	4.0
Level 3	7.49	2.3	—	—	—	—
Food service, tipped	7.31	2.4	—	—	7.12	.4
Level 2	7.37	5.9	—	—	—	—
Waiters and waitresses	7.04	1.7	—	—	—	—
Building and grounds cleaning and maintenance occupations	9.54	5.7	—	—	—	—
Building cleaning workers	9.50	6.2	—	—	—	—
Maids and housekeeping cleaners	9.24	7.6	—	—	—	—
Personal care and service occupations	8.46	6.9	8.47	7.0	—	—
Sales and related occupations	12.99	7.6	13.72	10.0	9.26	6.8
Level 3	10.47	3.7	10.67	1.9	—	—
First-line supervisors/managers, sales workers	24.31	11.0	24.31	11.0	—	—
First-line supervisors/managers of retail sales workers	24.31	11.0	24.31	11.0	—	—
Retail sales workers	11.11	5.4	11.56	3.9	9.26	6.8
Level 3	10.47	3.7	10.67	1.9	—	—
Retail salespersons	10.99	7.0	11.64	5.7	—	—
Level 3	10.30	5.0	—	—	—	—
Office and administrative support occupations	13.58	4.7	13.72	4.7	11.47	17.9
Level 3	11.00	4.4	11.02	4.4	—	—
Level 4	15.22	8.9	15.29	9.8	—	—
Level 5	14.78	5.4	14.70	5.7	—	—
Level 6	17.99	8.4	17.99	8.4	—	—
Financial clerks	13.37	8.2	13.27	8.3	—	—
Level 5	15.39	4.2	—	—	—	—
Bookkeeping, accounting, and auditing clerks	14.97	6.3	14.88	7.1	—	—
Office clerks, general	12.28	6.6	12.29	6.7	—	—
Level 3	10.86	10.1	10.87	10.1	—	—
Level 4	14.78	12.2	14.78	12.2	—	—

See footnotes at end of table.

Table 2. **Civilian workers: Mean hourly earnings¹ for full-time and part-time workers² by work levels³, Billings, MT, August 2009** — Continued

Occupation ⁴ and level	Total		Full-time workers		Part-time workers	
	Mean	Relative error ⁵ (percent)	Mean	Relative error ⁵ (percent)	Mean	Relative error ⁵ (percent)
Construction and extraction occupations	\$17.53	14.8	\$17.53	14.8	—	—
Installation, maintenance, and repair occupations	18.99	4.7	18.99	4.7	—	—
Level 6	20.91	6.6	20.91	6.6	—	—
Production occupations	21.89	12.7	24.60	10.2	—	—
Transportation and material moving occupations	16.52	8.6	16.94	9.0	—	—
Level 4	17.59	7.0	17.59	7.0	—	—
Driver/sales workers and truck drivers	16.54	8.0	17.19	6.4	—	—

¹ 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.

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 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.

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

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.

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 earnings¹ for full-time and part-time workers² by work levels³, Billings, MT, August 2009**

Occupation ⁴ and level	Total		Full-time workers		Part-time workers	
	Mean	Relative error ⁵ (percent)	Mean	Relative error ⁵ (percent)	Mean	Relative error ⁵ (percent)
All workers	\$18.39	3.9	\$19.57	3.6	\$9.21	5.2
Management occupations	39.55	12.1	39.55	12.1	—	—
Level 9	25.19	9.8	25.19	9.8	—	—
Architecture and engineering occupations	21.49	13.9	21.49	13.9	—	—
Engineers	28.31	21.1	28.31	21.1	—	—
Healthcare practitioner and technical occupations	45.01	2.9	45.69	3.0	—	—
Level 8	29.35	3.1	—	—	—	—
Healthcare support occupations	11.50	1.4	11.53	1.4	—	—
Nursing, psychiatric, and home health aides	11.35	.6	—	—	—	—
Food preparation and serving related occupations	7.98	6.8	8.36	10.3	7.56	2.8
Level 2	7.60	4.0	—	—	7.41	4.0
Food service, tipped	7.31	2.4	—	—	7.12	.4
Level 2	7.37	5.9	—	—	—	—
Waiters and waitresses	7.04	1.7	—	—	—	—
Building and grounds cleaning and maintenance occupations	9.34	6.2	—	—	—	—
Building cleaning workers	9.28	6.8	—	—	—	—
Personal care and service occupations	8.46	6.9	8.47	7.0	—	—
Sales and related occupations	12.99	7.6	13.72	10.0	9.26	6.8
Level 3	10.47	3.7	10.67	1.9	—	—
First-line supervisors/managers, sales workers	24.31	11.0	24.31	11.0	—	—
First-line supervisors/managers of retail sales workers	24.31	11.0	24.31	11.0	—	—
Retail sales workers	11.11	5.4	11.56	3.9	9.26	6.8
Level 3	10.47	3.7	10.67	1.9	—	—
Retail salespersons	10.99	7.0	11.64	5.7	—	—
Level 3	10.30	5.0	—	—	—	—
Office and administrative support occupations	13.52	4.9	13.67	5.0	—	—
Level 3	10.91	4.9	10.95	4.9	—	—
Level 4	15.30	9.1	15.38	10.1	—	—
Level 5	14.77	5.5	14.69	5.8	—	—
Financial clerks	13.36	8.3	13.25	8.4	—	—
Level 5	15.39	4.2	—	—	—	—
Bookkeeping, accounting, and auditing clerks	14.98	6.4	—	—	—	—
Office clerks, general	12.32	7.4	12.33	7.4	—	—
Level 3	10.80	11.1	10.81	11.1	—	—
Level 4	15.02	12.8	15.02	12.8	—	—
Construction and extraction occupations	17.29	17.4	17.29	17.4	—	—
Installation, maintenance, and repair occupations	18.99	4.7	18.99	4.7	—	—
Level 6	20.91	6.6	20.91	6.6	—	—
Production occupations	21.88	12.8	24.60	10.3	—	—
Transportation and material moving occupations	16.48	8.9	16.92	9.3	—	—
Driver/sales workers and truck drivers	16.54	8.0	17.19	6.4	—	—

¹ 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.

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 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.

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

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.

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 earnings¹ for full-time and part-time workers² by work levels³, Billings, MT, August 2009**

Occupation ⁴ and level	Total		Full-time workers		Part-time workers	
	Mean	Relative error ⁵ (percent)	Mean	Relative error ⁵ (percent)	Mean	Relative error ⁵ (percent)
All workers	\$25.75	5.4	\$25.69	4.9	\$26.54	40.1
Education, training, and library occupations	34.87	5.7	35.84	4.3	—	—
Level 9	36.74	3.8	36.83	4.0	—	—
Primary, secondary, and special education school teachers	35.59	.7	35.66	.9	—	—
Level 9	36.97	3.9	37.06	4.1	—	—
Elementary and middle school teachers	37.45	3.3	37.81	3.5	—	—
Level 9	38.42	4.0	—	—	—	—
Elementary school teachers, except special education	37.96	3.7	—	—	—	—
Secondary school teachers	36.48	5.9	36.48	5.9	—	—
Level 9	36.48	5.9	36.48	5.9	—	—
Secondary school teachers, except special and vocational education	36.48	5.9	36.48	5.9	—	—
Level 9	36.48	5.9	36.48	5.9	—	—
Protective service occupations	21.73	4.4	22.55	5.2	—	—
Office and administrative support occupations	14.42	9.1	14.35	9.5	—	—
Office clerks, general	11.91	2.3	—	—	—	—
Construction and extraction occupations	18.89	10.9	18.89	10.9	—	—

¹ 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.

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 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.

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

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.

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 percentiles¹, Billings, MT, August 2009

Occupation ²	10	25	Median 50	75	90
All workers	\$8.00	\$10.00	\$14.11	\$21.78	\$31.84
Management occupations	19.65	23.08	27.32	33.90	44.84
Business and financial operations occupations	18.77	18.81	20.12	25.00	31.08
Architecture and engineering occupations	11.59	13.00	20.05	23.91	34.02
Engineers	20.05	22.73	23.91	34.02	54.33
Education, training, and library occupations	11.00	21.20	31.35	43.22	46.78
Primary, secondary, and special education school teachers	20.69	25.09	33.10	42.33	46.78
Elementary and middle school teachers	23.73	25.09	29.08	42.33	46.78
Elementary school teachers, except special education	23.73	25.04	28.55	42.33	48.21
Secondary school teachers	25.05	31.35	35.62	45.87	46.78
Secondary school teachers, except special and vocational education	25.05	31.35	35.62	45.87	46.78
Healthcare practitioner and technical occupations	15.00	19.65	28.65	37.96	181.73
Healthcare support occupations	10.12	10.40	11.19	12.01	13.94
Nursing, psychiatric, and home health aides	10.12	10.25	11.19	11.79	13.11
Protective service occupations	16.32	19.56	21.91	25.17	26.47
Food preparation and serving related occupations	6.90	7.00	7.25	8.50	9.11
Food service, tipped	6.90	6.90	7.00	7.50	8.00
Waiters and waitresses	6.90	6.90	6.90	7.00	7.25
Building and grounds cleaning and maintenance occupations	7.65	8.00	9.00	10.48	11.65
Building cleaning workers	7.65	8.00	9.00	10.48	11.65
Maids and housekeeping cleaners	7.65	8.00	9.00	10.00	11.00
Personal care and service occupations	6.90	7.21	8.00	9.25	9.38
Sales and related occupations	8.74	10.00	11.00	13.96	18.72
First-line supervisors/managers, sales workers	12.05	18.27	21.84	34.13	34.13
First-line supervisors/managers of retail sales workers	12.05	18.27	21.84	34.13	34.13
Retail sales workers	8.50	9.35	10.50	12.10	14.04
Retail salespersons	8.00	9.35	10.82	11.75	14.50
Office and administrative support occupations	9.39	10.86	12.48	15.86	19.68
Financial clerks	9.65	11.75	13.75	16.00	16.00
Bookkeeping, accounting, and auditing clerks	11.75	13.75	16.00	16.00	16.43
Office clerks, general	7.39	10.34	11.58	13.53	15.25
Construction and extraction occupations	12.82	12.82	14.56	22.53	26.40
Installation, maintenance, and repair occupations	11.00	17.20	19.25	21.00	26.60
Production occupations	9.00	10.00	21.04	33.00	36.09
Transportation and material moving occupations	9.40	12.80	16.17	20.43	21.28
Driver/sales workers and truck drivers	10.00	16.17	16.17	19.75	20.43

¹ 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.

² 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 percentiles¹, Billings, MT, August 2009

Occupation ²	10	25	Median 50	75	90
All workers	\$8.00	\$10.00	\$13.53	\$20.49	\$31.09
Management occupations	19.24	23.08	27.32	33.90	44.84
Architecture and engineering occupations	11.59	13.00	20.05	23.91	34.02
Engineers	20.05	22.73	23.91	34.02	54.33
Healthcare practitioner and technical occupations	15.00	18.81	28.65	35.62	181.73
Healthcare support occupations	10.12	10.40	11.19	12.01	13.94
Nursing, psychiatric, and home health aides	10.12	10.25	11.19	11.79	13.11
Food preparation and serving related occupations	6.90	7.00	7.25	8.50	9.11
Food service, tipped	6.90	6.90	7.00	7.50	8.00
Waiters and waitresses	6.90	6.90	6.90	7.00	7.25
Building and grounds cleaning and maintenance occupations	7.65	8.00	9.00	10.26	11.00
Building cleaning workers	7.65	8.00	9.00	10.47	11.00
Personal care and service occupations	6.90	7.21	8.00	9.25	9.38
Sales and related occupations	8.74	10.00	11.00	13.96	18.72
First-line supervisors/managers, sales workers	12.05	18.27	21.84	34.13	34.13
First-line supervisors/managers of retail sales workers	12.05	18.27	21.84	34.13	34.13
Retail sales workers	8.50	9.35	10.50	12.10	14.04
Retail salespersons	8.00	9.35	10.82	11.75	14.50
Office and administrative support occupations	9.39	10.65	12.48	15.86	19.68
Financial clerks	9.65	11.75	13.75	16.00	16.00
Bookkeeping, accounting, and auditing clerks	11.75	13.75	16.00	16.00	16.43
Office clerks, general	7.39	10.00	11.64	13.53	15.25
Construction and extraction occupations	12.82	12.82	13.60	22.53	26.40
Installation, maintenance, and repair occupations	11.00	17.20	19.25	21.00	26.60
Production occupations	9.00	10.00	21.04	33.00	36.09
Transportation and material moving occupations	9.40	12.25	16.17	20.43	21.28
Driver/sales workers and truck drivers	10.00	16.17	16.17	19.75	20.43

¹ 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.

² 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 percentiles¹, Billings, MT, August 2009**

Occupation ²	10	25	Median 50	75	90
All workers	\$12.85	\$16.64	\$21.89	\$35.62	\$45.87
Education, training, and library occupations	16.76	26.45	36.18	45.81	47.67
Primary, secondary, and special education school teachers	21.66	28.21	35.62	45.14	46.78
Elementary and middle school teachers	25.04	28.21	40.11	46.78	48.21
Elementary school teachers, except special education	25.46	28.21	42.33	46.78	48.21
Secondary school teachers	25.05	31.35	35.62	45.87	46.78
Secondary school teachers, except special and vocational education	25.05	31.35	35.62	45.87	46.78
Protective service occupations	16.32	19.56	21.91	25.17	26.47
Office and administrative support occupations	11.00	11.40	12.88	15.75	24.75
Office clerks, general	10.71	11.00	11.58	13.00	13.29
Construction and extraction occupations	13.59	13.59	19.26	23.04	24.10

¹ 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 more than the rate shown, and three-fourths 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.

² 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-time¹ civilian workers: Mean and median hourly, weekly, and annual earnings and mean weekly and annual hours, Billings, MT, August 2009

Occupation ²	Hourly earnings ³		Weekly earnings ⁴			Annual earnings ⁵		
	Mean	Median	Mean	Median	Mean weekly hours	Mean	Median	Mean annual hours
All workers	\$20.13	\$15.56	\$804	\$615	40.0	\$40,766	\$31,720	2,025
Management occupations	38.76	27.32	1,563	1,093	40.3	81,256	56,826	2,096
Business and financial operations occupations	22.68	20.12	907	805	40.0	47,166	41,850	2,080
Architecture and engineering occupations	21.49	20.05	880	802	40.9	43,843	40,847	2,040
Engineers	28.31	23.91	1,182	1,044	41.8	61,471	54,288	2,171
Education, training, and library occupations	31.86	31.98	1,191	1,199	37.4	45,149	45,198	1,417
Primary, secondary, and special education school teachers	33.06	33.10	1,232	1,241	37.3	46,024	46,428	1,392
Elementary and middle school teachers	33.19	29.08	1,221	1,058	36.8	45,656	39,562	1,376
Elementary school teachers, except special education	33.30	29.08	1,220	1,058	36.6	45,636	39,562	1,370
Secondary school teachers	36.48	35.62	1,379	1,336	37.8	51,453	49,961	1,411
Secondary school teachers, except special and vocational education	36.48	35.62	1,379	1,336	37.8	51,453	49,961	1,411
Healthcare practitioner and technical occupations	45.55	28.65	1,853	1,087	40.7	96,354	56,534	2,115
Healthcare support occupations	11.53	11.19	455	448	39.5	23,683	23,275	2,055
Protective service occupations	22.55	22.17	919	957	40.7	47,775	49,777	2,118
Food preparation and serving related occupations	8.39	8.00	324	300	38.6	16,759	15,600	1,997
Personal care and service occupations	8.47	8.00	339	320	40.0	16,714	15,600	1,972
Sales and related occupations	13.72	11.50	544	440	39.6	28,273	22,880	2,061
First-line supervisors/managers, sales workers	24.31	21.84	972	874	40.0	50,555	45,427	2,080
First-line supervisors/managers of retail sales workers	24.31	21.84	972	874	40.0	50,555	45,427	2,080
Retail sales workers	11.56	11.00	457	433	39.6	23,775	22,506	2,057
Retail salespersons	11.64	11.00	457	440	39.3	23,771	22,880	2,042
Office and administrative support occupations	13.72	12.50	541	499	39.5	28,094	25,958	2,048
Financial clerks	13.27	12.92	531	517	40.0	27,599	26,874	2,080
Bookkeeping, accounting, and auditing clerks	14.88	16.00	595	640	40.0	30,941	33,280	2,080
Office clerks, general	12.29	11.58	473	452	38.5	24,430	22,277	1,988
Construction and extraction occupations	17.53	14.56	701	582	40.0	36,445	30,285	2,079
Installation, maintenance, and repair occupations	18.99	19.25	759	770	40.0	39,494	40,040	2,080
Production occupations	24.60	28.85	984	1,154	40.0	51,163	60,000	2,080

See footnotes at end of table.

Table 8. Full-time¹ civilian workers: Mean and median hourly, weekly, and annual earnings and mean weekly and annual hours, Billings, MT, August 2009 — Continued

Occupation ²	Hourly earnings ³		Weekly earnings ⁴			Annual earnings ⁵		
	Mean	Median	Mean	Median	Mean weekly hours	Mean	Median	Mean annual hours
Transportation and material moving occupations	\$16.94	\$16.17	\$739	\$770	43.6	\$38,415	\$40,040	2,267
Driver/sales workers and truck drivers	17.19	16.17	805	817	46.8	41,841	42,503	2,434

¹ 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.

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

³ 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.

⁴ 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.

⁵ 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-time¹ private industry workers: Mean and median hourly, weekly, and annual earnings and mean weekly and annual hours, Billings, MT, August 2009

Occupation ²	Hourly earnings ³		Weekly earnings ⁴			Annual earnings ⁵		
	Mean	Median	Mean	Median	Mean weekly hours	Mean	Median	Mean annual hours
All workers	\$19.57	\$14.95	\$783	\$586	40.0	\$40,241	\$29,661	2,056
Management occupations	39.55	27.32	1,595	1,093	40.3	82,938	56,826	2,097
Architecture and engineering occupations	21.49	20.05	880	802	40.9	43,843	40,847	2,040
Engineers	28.31	23.91	1,182	1,044	41.8	61,471	54,288	2,171
Healthcare practitioner and technical occupations	45.69	28.65	1,859	1,105	40.7	96,660	57,452	2,116
Healthcare support occupations	11.53	11.19	455	448	39.5	23,683	23,275	2,055
Food preparation and serving related occupations	8.36	7.50	322	300	38.5	16,751	15,600	2,004
Personal care and service occupations	8.47	8.00	339	320	40.0	16,714	15,600	1,972
Sales and related occupations	13.72	11.50	544	440	39.6	28,273	22,880	2,061
First-line supervisors/managers, sales workers	24.31	21.84	972	874	40.0	50,555	45,427	2,080
First-line supervisors/managers of retail sales workers	24.31	21.84	972	874	40.0	50,555	45,427	2,080
Retail sales workers	11.56	11.00	457	433	39.6	23,775	22,506	2,057
Retail salespersons	11.64	11.00	457	440	39.3	23,771	22,880	2,042
Office and administrative support occupations	13.67	12.48	539	499	39.4	28,022	25,958	2,050
Financial clerks	13.25	12.92	530	517	40.0	27,566	26,874	2,080
Office clerks, general	12.33	11.64	473	427	38.3	24,584	22,189	1,994
Construction and extraction occupations	17.29	13.60	691	544	40.0	35,946	28,288	2,079
Installation, maintenance, and repair occupations	18.99	19.25	759	770	40.0	39,494	40,040	2,080
Production occupations	24.60	28.85	984	1,154	40.0	51,171	60,000	2,080
Transportation and material moving occupations	16.92	16.17	740	790	43.7	38,468	41,080	2,274
Driver/sales workers and truck drivers	17.19	16.17	805	817	46.8	41,841	42,503	2,434

¹ 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.

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

³ 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.

⁴ 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.

⁵ 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-time¹ State and local government workers: Mean and median hourly, weekly, and annual earnings and mean weekly and annual hours, Billings, MT, August 2009

Occupation ²	Hourly earnings ³		Weekly earnings ⁴			Annual earnings ⁵		
	Mean	Median	Mean	Median	Mean weekly hours	Mean	Median	Mean annual hours
All workers	\$25.69	\$21.73	\$1,009	\$918	39.3	\$45,215	\$44,096	1,760
Education, training, and library occupations	35.84	37.08	1,369	1,399	38.2	52,151	52,685	1,455
Primary, secondary, and special education school teachers	35.66	35.62	1,353	1,357	37.9	50,542	50,740	1,417
Elementary and middle school teachers	37.81	42.17	1,433	1,587	37.9	53,608	59,366	1,418
Secondary school teachers	36.48	35.62	1,379	1,336	37.8	51,453	49,961	1,411
Secondary school teachers, except special and vocational education	36.48	35.62	1,379	1,336	37.8	51,453	49,961	1,411
Protective service occupations	22.55	22.17	919	957	40.7	47,775	49,777	2,118
Office and administrative support occupations	14.35	12.88	574	515	40.0	29,024	26,790	2,023
Construction and extraction occupations	18.89	19.26	756	770	40.0	39,289	40,061	2,080

¹ 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.

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

³ 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.

⁴ 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.

⁵ 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 Billings, MT, 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	3,297
Total in sample	93
Responding	70
Refused or unable to provide data	16
Out of business or not in survey scope	7

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.