

Kalamazoo-Battle Creek, MI National Compensation Survey February 1999



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Preface

Data shown in this bulletin were collected as part of the Bureau of Labor Statistics' (BLS) National Compensation Survey (NCS). The survey could not have been conducted without the cooperation of the many private firms and government jurisdictions that provided pay data included in this bulletin. 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.

For additional information regarding this survey, please contact any BLS regional office at the address and telephone number listed on the inside back cover of this bulletin. 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, or call (202) 606-6199, or send e-mail to ocltinfo@bls.gov.

The data contained in this bulletin are also available at <http://stats.bls.gov/comhome.htm>, the BLS Internet site. Data are in three formats: An ASCII file containing the published table formats; an ASCII file containing positional columns of data for manipulation as a data base or spreadsheet; and a Portable Document Format (PDF) file containing the entire bulletin.

Results of earlier surveys of this area are also available from BLS regional offices, the Division of Compensation Data Analysis, or at the BLS Internet site.

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Introduction

The tables in this bulletin summarize the NCS survey results for the Kalamazoo-Battle Creek, MI metropolitan area. Tabulations provide information on earnings of workers in a variety of occupations and at a wide range of work levels. Also contained in this bulletin are information on the program, a technical note describing survey procedures, and several appendixes with detailed information on occupational classifications and the generic leveling methodology.

NCS products

The National Compensation Survey of the Bureau of Labor Statistics provides data on the occupational wages and employee benefits for localities, broad geographic regions, and the Nation as a whole. The Employment Cost Index, a quarterly measure of the change in employer costs for wages and benefits, will be derived from the NCS. Another product, Employer Costs for Employee Compensation, measures employers' average hourly costs for total compensation, that is, wages and benefits. Still another NCS product measures the incidence of benefit plans and their provisions. This bulletin is limited to data on occupational wages and salaries.

About the tables

The tables that follow present data on straight-time occupational earnings. Straight-time earnings include wages and salaries, incentive pay, cost-of-living adjustments, and hazard pay. These earnings exclude premium pay for overtime, vacations, holidays, nonproduction bonuses, and tips. A total of 480 detailed occupations are used to describe all occupations in the civilian nonfarm economy (excluding the Federal Government and private households).

Table A-1 presents straight-time earnings for detailed occupations. Data are not shown for any occupations if they would raise concerns about the confidentiality of the survey respondent or if the data are insufficient to support reliable estimates. The earnings shown include the mean for each occupation, as well as earnings for selected percentiles in each occupation.

Table A-2 compares the type of data and details shown in table A-1 for the private industry and State and local government sector.

Table A-3 compares the type of data and details shown in table A-1 for full-time and part-time workers. The definitions of full-time and part-time workers are those used in the surveyed establishments.

Table A-4 presents the weekly and annual straight-time earnings for full-time employees in specific occupations across all industries. For the weekly and annual earnings, the mean and median earnings and the mean hours are shown. The mean hours reflect hours employees are scheduled to work, excluding overtime hours.

Table B-1 presents mean straight-time hourly earnings for groups of occupations and for levels of job requirements related to occupations in the group. Separate data are also shown for private industry and government workers, and for full-time and part-time workers in all industries. (See appendix C, Generic Leveling Criteria, for more information on job ranking in this survey. Average work levels for published occupation groups and their component occupations are presented in appendix table 3.)

Table B-2 also presents mean straight-time hourly earnings, but for detailed occupations at several levels of job requirements for each detailed occupation.

Table C-1 presents mean straight-time hourly earnings for occupation groups and selected occupation characteristics. The occupation characteristics include full-time and part-time status, union and nonunion status, and time or incentive pay status. Union workers' wages are determined through collective bargaining. Time workers' wages are based solely on hourly rate or salary. Incentive workers' wages are at least partially based on productivity payments such as piece rates, commissions and production bonuses.

Table C-2 presents mean straight-time hourly earnings for occupation groups and industry division of employers; these are limited to the private sector.

Table C-3 presents mean straight-time hourly earnings for occupation groups and the employment size of employers; these are also limited to the private sector.

Table C-4 presents the employment scope of this survey. The occupation employment estimates shown relate to all employers in the area surveyed, not just the surveyed employers.

Table A-1. Hourly earnings¹ for selected occupations, all workers², all industries, Kalamazoo-Battle Creek, MI, February 1999

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
All occupations	\$15.44	\$7.00	\$9.25	\$13.47	\$19.11	\$26.54
All occupations excluding sales	15.68	7.23	9.75	13.82	19.35	26.57
White-collar occupations	19.04	8.50	11.35	16.87	23.63	33.47
White-collar occupations excluding sales	20.01	9.62	12.88	17.87	24.54	34.46
Professional specialty and technical occupations	23.45	13.28	16.91	21.31	28.52	37.79
Professional specialty occupations	25.45	15.38	18.99	22.59	31.34	39.57
Engineers, architects, and surveyors	27.81	20.52	22.61	23.92	35.02	39.16
Mechanical engineers	25.66	19.23	21.25	23.02	27.45	38.37
Mathematical and computer scientists	23.36	17.24	21.21	23.20	26.22	27.98
Computer systems analysts and scientists	24.05	21.21	22.09	23.37	26.27	28.13
Natural scientists	-	-	-	-	-	-
Health related occupations	21.48	15.82	17.39	20.27	21.80	28.28
Registered nurses	21.60	16.43	18.05	20.30	21.77	22.20
Teachers, college and university	34.27	22.79	24.33	29.77	39.76	52.02
Teachers, except college and university	29.96	15.93	22.67	31.34	39.13	40.01
Elementary school teachers	31.88	20.32	25.48	34.09	39.13	40.01
Librarians, archivists, and curators	-	-	-	-	-	-
Social scientists and urban planners	-	-	-	-	-	-
Social, recreation, and religious workers	18.12	12.75	16.44	18.99	20.95	22.44
Social workers	18.28	12.75	16.69	18.99	20.95	22.44
Lawyers and judges	-	-	-	-	-	-
Writers, authors, entertainers, athletes, and professionals, N.E.C.	23.97	12.49	17.78	25.49	30.29	33.69
Technical occupations	17.23	11.20	13.12	16.61	20.22	26.33
Licensed practical nurses	13.12	11.72	12.79	13.10	13.71	14.44
Computer programmers	15.98	13.00	14.41	15.00	17.00	22.00
Technical and related occupations, N.E.C.	20.47	17.50	17.50	19.40	22.50	26.45
Executive, administrative, and managerial occupations ...	24.44	13.94	16.81	21.33	29.60	39.12
Executives, administrators, and managers	27.31	13.93	17.88	25.00	33.65	42.07
Financial managers	22.80	13.93	14.76	18.10	25.00	30.35
Managers and administrators, N.E.C.	26.27	16.07	20.34	25.00	32.81	36.05
Management related occupations	20.01	14.12	16.39	19.22	21.50	27.78
Accountants and auditors	18.30	13.24	15.94	17.78	20.80	21.54
Management related occupations, N.E.C.	21.43	18.50	18.50	20.14	22.79	27.78
Sales occupations	10.94	5.90	6.50	8.05	11.34	24.72
Supervisors, sales occupations	17.34	7.25	9.49	15.58	26.54	28.65
Sales workers, other commodities	12.06	5.70	6.45	8.37	12.41	26.21
Cashiers	7.70	5.79	6.24	6.91	9.25	9.40
Administrative support occupations, including clerical	12.24	8.09	9.29	11.30	14.43	17.31
Secretaries	12.89	9.95	10.84	12.75	14.43	16.46
Receptionists	8.53	6.25	7.90	8.50	9.25	10.00
Order clerks	11.75	8.50	10.02	11.30	13.00	14.67
Records clerks, N.E.C.	12.12	8.50	10.25	12.46	14.54	15.03
Bookkeepers, accounting and auditing clerks	11.72	8.50	10.00	11.71	13.99	13.99
Stock and inventory clerks	14.08	8.35	9.94	13.83	19.86	20.67
Investigators and adjusters except insurance	9.92	8.65	8.65	9.62	10.38	10.43
General office clerks	10.31	7.76	8.50	9.88	10.80	15.10
Bank tellers	8.45	7.50	7.75	8.15	9.00	9.71
Teachers' aides	8.50	7.30	8.00	8.54	8.91	9.59
Administrative support occupations, N.E.C.	14.06	10.64	11.70	12.91	16.00	17.75
Blue-collar occupations	13.45	7.43	9.75	12.69	15.90	21.26
Precision production, craft, and repair occupations	18.93	13.43	15.06	17.50	23.48	25.69
Supervisors, mechanics and repairers	21.18	15.50	20.38	21.81	23.87	24.15
Industrial machinery repairers	17.58	13.96	15.20	16.88	19.03	23.00
Mechanics and repairers, N.E.C.	17.61	13.61	15.06	16.95	22.02	23.80
Electricians	21.30	14.55	16.30	24.07	26.57	26.57
Supervisors, production occupations	19.53	13.70	15.91	18.99	23.42	25.71
Machine operators, assemblers, and inspectors	12.15	7.50	9.50	11.39	15.01	17.13
Numerical control machine operators	13.09	9.03	10.45	12.50	16.30	17.54
Fabricating machine operators, N.E.C.	12.35	8.54	9.14	11.28	13.84	21.49
Molding and casting machine operators	9.60	8.09	8.50	9.25	10.32	12.37
Packaging and filling machine operators	12.20	10.50	11.83	12.35	13.05	13.82
Miscellaneous machine operators, N.E.C.	14.49	10.69	13.29	15.32	16.09	17.89

See footnotes at end of table.

Table A-1. Hourly earnings¹ for selected occupations, all workers², all industries, Kalamazoo-Battle Creek, MI, February 1999 — Continued

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
Blue-collar occupations (-Continued)						
Machine operators, assemblers, and inspectors (-Continued)						
Welders and cutters	\$18.86	\$11.71	\$11.89	\$18.23	\$24.73	\$24.73
Assemblers	9.92	7.00	8.72	10.09	10.91	12.39
Production inspectors, checkers and examiners ..	10.94	7.00	8.00	9.12	15.01	15.67
Transportation and material moving occupations	13.51	9.00	10.97	13.73	15.90	16.50
Truck drivers	14.05	8.85	10.99	15.61	15.90	17.14
Industrial truck and tractor equipment operators ..	12.71	9.00	10.53	11.72	14.71	16.78
Handlers, equipment cleaners, helpers, and laborers	10.21	5.83	7.25	9.45	12.63	15.19
Groundskeepers and gardeners except farm	11.18	6.75	10.88	11.40	11.96	14.99
Production helpers	11.40	8.20	8.76	12.63	12.77	14.32
Stock handlers and baggers	8.43	5.35	5.80	7.30	9.75	14.94
Freight, stock, and material handlers, N.E.C.	10.97	8.00	8.50	10.13	12.50	15.48
Hand packers and packagers	9.47	7.18	7.66	8.11	12.69	12.69
Laborers except construction, N.E.C.	11.91	10.94	10.94	12.63	13.31	13.70
Service occupations						
Protective service occupations	8.98	5.50	6.50	8.05	10.50	14.02
Food service occupations	13.70	6.36	6.62	12.35	16.97	26.52
Waiters and waitresses	6.74	2.65	5.50	6.78	8.50	10.00
Cooks	3.55	2.65	2.65	2.81	2.88	6.90
Food preparation occupations, N.E.C.	8.46	6.70	7.10	8.30	9.75	11.62
Health service occupations	6.52	5.50	5.70	6.11	6.94	8.19
Nursing aides, orderlies and attendants	8.84	6.92	7.84	8.30	9.41	11.09
Cleaning and building service occupations	8.83	6.92	7.84	8.28	9.20	11.18
Janitors and cleaners	10.36	6.49	7.51	10.50	12.65	15.60
Personal service occupations	10.65	6.50	8.43	11.05	12.93	15.60
Child care workers, N.E.C.	9.83	6.24	7.70	9.78	11.34	13.81
Service occupations, N.E.C.	9.63	7.23	8.11	9.75	10.55	12.47
	11.17	6.34	10.00	10.73	13.81	14.59

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. The 10th, 25th, 50th, 75th and 90th percentiles designate position in the earnings distribution. At the 50th percentile, the median, half of the workers receive the same as or more than the rate shown, and half receive the same as or less than the rate shown. At the 25th percentile, one-fourth of the workers earn the same as or less than the rate shown. At the 75th percentile, one-fourth earn the same as or more than the rate shown. The 10th and 90th percentiles follow the same logic.

² All workers include full-time and part-time workers. 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 A classification system including about 480 individual

occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means not elsewhere classified. IN THIS SURVEY, THE NONRESPONSE RATE FOR ALL INDUSTRIES AND PRIVATE INDUSTRY EXCEEDED REGULAR SURVEY STANDARDS FOR PUBLICATION. ACCORDINGLY, USERS SHOULD INTERPRET THESE RESULTS WITH THIS LIMITATION IN MIND.

NOTE: Individual and average wage rates were collected in this update survey. A procedure was put into place to "move" the positional statistics where averages were collected. This procedure compares current locality survey data—at the quote level—with the same quote from the prior survey. Individual rates from the prior survey are moved by the average change in mean wages for the occupation.

Table A-2. Hourly earnings¹ for selected occupations, all workers², private industry and State and local government, Kalamazoo-Battle Creek, MI, February 1999

Occupation ³	Private industry						State and local government					
	Mean	Percentiles					Mean	Percentiles				
		10	25	Median 50	75	90		10	25	Median 50	75	90
All occupations	\$14.55	\$6.79	\$8.94	\$12.75	\$17.75	\$24.60	\$20.14	\$9.23	\$12.55	\$16.95	\$26.52	\$36.91
All occupations excluding sales	14.78	7.00	9.13	13.10	17.91	24.60	20.14	9.23	12.55	16.95	26.52	36.91
White-collar occupations	17.93	7.90	10.79	16.00	21.80	29.81	22.52	9.95	13.99	20.27	30.20	39.57
White-collar occupations excluding sales	19.08	9.36	12.72	17.22	22.57	30.35	22.52	9.95	13.99	20.27	30.20	39.57
Professional specialty and technical occupations	21.12	12.75	15.12	19.49	24.04	31.56	28.46	19.21	20.68	27.83	35.65	40.01
Professional specialty occupations	23.16	14.67	16.91	21.21	26.54	35.77	28.86	19.21	21.70	28.88	35.65	40.01
Engineers, architects, and surveyors	28.10	20.07	22.50	24.04	35.38	39.16	-	-	-	-	-	-
Mechanical engineers	25.66	19.23	21.25	23.02	27.45	38.37	-	-	-	-	-	-
Mathematical and computer scientists	23.69	16.35	21.63	24.29	26.77	29.48	-	-	-	-	-	-
Computer systems analysts and scientists	24.67	20.16	22.50	24.50	26.81	29.48	-	-	-	-	-	-
Natural scientists	-	-	-	-	-	-	-	-	-	-	-	-
Health related occupations	21.61	15.37	17.13	20.30	21.80	30.14	-	-	-	-	-	-
Registered nurses	21.79	16.25	17.72	20.56	21.80	22.31	-	-	-	-	-	-
Teachers, college and university	-	-	-	-	-	-	-	-	-	-	-	-
Teachers, except college and university	-	-	-	-	-	-	31.22	19.47	24.31	33.47	39.57	40.01
Elementary school teachers	-	-	-	-	-	-	32.83	22.16	27.78	34.31	39.22	40.01
Librarians, archivists, and curators	-	-	-	-	-	-	-	-	-	-	-	-
Social scientists and urban planners	-	-	-	-	-	-	-	-	-	-	-	-
Social, recreation, and religious workers	-	-	-	-	-	-	-	-	-	-	-	-
Lawyers and judges	-	-	-	-	-	-	-	-	-	-	-	-
Writers, authors, entertainers, athletes, and professionals, N.E.C.	24.37	11.52	17.75	26.54	31.21	33.93	-	-	-	-	-	-
Technical occupations	17.10	11.06	12.98	15.87	20.22	26.45	-	-	-	-	-	-
Licensed practical nurses	13.12	11.72	12.79	13.10	13.71	14.44	-	-	-	-	-	-
Computer programmers	15.98	13.00	14.41	15.00	17.00	22.00	-	-	-	-	-	-
Technical and related occupations, N.E.C.	20.77	16.76	17.50	18.80	24.77	26.80	-	-	-	-	-	-
Executive, administrative, and managerial occupations	24.61	13.44	17.78	21.54	29.60	39.12	23.53	15.24	16.07	20.14	31.25	42.07
Executives, administrators, and managers	27.77	13.44	18.10	25.00	33.73	45.77	25.44	15.24	16.07	20.34	33.65	42.07
Financial managers	22.80	13.93	14.76	18.10	25.00	30.35	-	-	-	-	-	-
Managers and administrators, N.E.C.	28.11	19.23	22.57	26.40	32.87	36.05	-	-	-	-	-	-
Management related occupations	20.26	14.12	16.39	19.22	21.66	28.44	-	-	-	-	-	-
Accountants and auditors	18.56	13.02	16.27	18.84	21.29	21.54	-	-	-	-	-	-
Management related occupations, N.E.C.	21.56	18.26	18.50	19.71	22.85	27.78	-	-	-	-	-	-
Sales occupations	10.94	5.90	6.50	8.05	11.34	24.72	-	-	-	-	-	-
Supervisors, sales occupations	17.34	7.25	9.49	15.58	26.54	28.65	-	-	-	-	-	-
Sales workers, other commodities	12.06	5.70	6.45	8.37	12.41	26.21	-	-	-	-	-	-
Cashiers	7.70	5.79	6.24	6.91	9.25	9.40	-	-	-	-	-	-
Administrative support occupations, including clerical	12.38	8.08	9.29	11.14	15.00	17.93	11.86	8.09	9.81	11.84	13.99	14.54
Secretaries	12.94	9.13	10.00	13.21	14.52	17.93	12.84	10.56	11.11	12.75	14.43	15.80
Receptionists	8.53	6.25	7.90	8.50	9.25	10.00	-	-	-	-	-	-
Order clerks	11.75	8.50	10.02	11.30	13.00	14.67	-	-	-	-	-	-
Records clerks, N.E.C.	11.82	7.73	9.32	10.25	15.03	15.80	-	-	-	-	-	-
Bookkeepers, accounting and auditing clerks	10.72	8.00	9.27	10.79	11.71	14.61	-	-	-	-	-	-
Stock and inventory clerks	14.08	8.35	9.94	13.83	19.86	20.67	-	-	-	-	-	-
Investigators and adjusters except insurance	9.92	8.65	8.65	9.62	10.38	10.43	-	-	-	-	-	-
General office clerks	10.43	7.73	8.50	9.81	11.09	15.74	-	-	-	-	-	-
Bank tellers	8.45	7.50	7.75	8.15	9.00	9.71	-	-	-	-	-	-
Teachers' aides	-	-	-	-	-	-	8.55	7.30	8.00	8.68	8.91	9.71
Administrative support occupations, N.E.C.	14.06	10.64	11.70	12.91	16.00	17.75	-	-	-	-	-	-
Blue-collar occupations	13.42	7.30	9.60	12.61	15.90	21.52	13.98	11.16	11.96	13.70	16.25	16.95
Precision production, craft, and repair occupations	19.23	13.50	15.20	18.16	23.80	25.69	15.71	11.84	13.43	16.25	16.95	17.49
Supervisors, mechanics and repairers	21.18	15.50	20.38	21.81	23.87	24.15	-	-	-	-	-	-

See footnotes at end of table.

Table A-2. Hourly earnings¹ for selected occupations, all workers², private industry and State and local government, Kalamazoo-Battle Creek, MI, February 1999 — Continued

Occupation ³	Private industry						State and local government					
	Mean	Percentiles					Mean	Percentiles				
		10	25	Median 50	75	90		10	25	Median 50	75	90
Blue-collar occupations (-Continued)												
Precision production, craft, and repair occupations (-Continued)												
Industrial machinery repairers	\$17.58	\$13.96	\$15.20	\$16.88	\$19.58	\$23.00	-	-	-	-	-	-
Mechanics and repairers, N.E.C.	17.72	13.61	15.06	16.28	22.02	23.80	-	-	-	-	-	-
Supervisors, production occupations ..	19.53	13.70	15.91	18.99	23.42	25.71	-	-	-	-	-	-
Machine operators, assemblers, and inspectors	12.15	7.50	9.50	11.39	15.01	17.13	-	-	-	-	-	-
Numerical control machine operators	13.09	9.03	10.45	12.50	16.30	17.54	-	-	-	-	-	-
Fabricating machine operators, N.E.C.	12.35	8.54	9.14	11.28	13.84	21.49	-	-	-	-	-	-
Molding and casting machine operators	9.60	8.09	8.50	9.25	10.32	12.37	-	-	-	-	-	-
Packaging and filling machine operators	12.20	10.50	11.83	12.35	13.05	13.82	-	-	-	-	-	-
Miscellaneous machine operators, N.E.C.	14.49	10.69	13.29	15.32	16.09	17.89	-	-	-	-	-	-
Welders and cutters	18.86	11.71	11.89	18.23	24.73	24.73	-	-	-	-	-	-
Assemblers	9.92	7.00	8.72	10.09	10.91	12.39	-	-	-	-	-	-
Production inspectors, checkers and examiners	10.94	7.00	8.00	9.12	15.01	15.67	-	-	-	-	-	-
Transportation and material moving occupations	13.61	9.00	10.97	13.78	15.90	16.78	-	-	-	-	-	-
Truck drivers	14.05	8.85	10.99	15.61	15.90	17.14	-	-	-	-	-	-
Industrial truck and tractor equipment operators	12.71	9.00	10.53	11.72	14.71	16.78	-	-	-	-	-	-
Handlers, equipment cleaners, helpers, and laborers	9.98	5.80	7.10	8.94	12.00	15.21	-	-	-	-	-	-
Production helpers	11.40	8.20	8.76	12.63	12.77	14.32	-	-	-	-	-	-
Stock handlers and baggers	8.35	5.35	5.80	7.10	9.75	14.94	-	-	-	-	-	-
Freight, stock, and material handlers, N.E.C.	10.97	8.00	8.50	10.13	12.50	15.48	-	-	-	-	-	-
Hand packers and packagers	9.47	7.18	7.66	8.11	12.69	12.69	-	-	-	-	-	-
Laborers except construction, N.E.C.	11.19	7.00	10.94	11.63	13.31	13.31	-	-	-	-	-	-
Service occupations	7.80	5.15	6.29	7.50	9.42	11.34	\$14.12	\$8.56	\$9.82	\$12.93	\$15.93	\$25.49
Protective service occupations	-	-	-	-	-	-	19.65	14.02	14.94	16.97	26.52	27.00
Food service occupations	6.55	2.65	5.50	6.51	7.62	10.13	-	-	-	-	-	-
Waiters and waitresses	3.55	2.65	2.65	2.81	2.88	6.90	-	-	-	-	-	-
Cooks	8.39	6.55	7.00	7.50	9.75	11.94	-	-	-	-	-	-
Food preparation occupations, N.E.C.	6.32	5.50	5.65	6.00	6.65	7.48	-	-	-	-	-	-
Health service occupations	8.45	6.92	7.84	8.25	9.15	10.50	-	-	-	-	-	-
Nursing aides, orderlies and attendants	8.40	6.73	7.65	8.21	8.89	10.50	-	-	-	-	-	-
Cleaning and building service occupations	9.84	6.41	7.15	8.82	12.02	15.60	-	-	-	-	-	-
Janitors and cleaners	10.17	6.41	7.50	8.85	13.08	15.60	-	-	-	-	-	-
Personal service occupations	9.29	6.24	7.46	9.78	10.66	11.51	11.13	6.26	7.93	12.33	14.06	15.29

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. The 10th, 25th, 50th, 75th and 90th percentiles designate position in the earnings distribution. At the 50th percentile, the median, half of the workers receive the same as or more than the rate shown, and half receive the same as or less than the rate shown. At the 25th percentile, one-fourth of the workers earn the same as or less than the rate shown. At the 75th percentile, one-fourth earn the same as or more than the rate shown. The 10th and 90th percentiles follow the same logic.

² All workers include full-time and part-time workers. 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 A classification system including about 480 individual occupations is used to cover

all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means not elsewhere classified. IN THIS SURVEY, THE NONRESPONSE RATE FOR ALL INDUSTRIES AND PRIVATE INDUSTRY EXCEEDED REGULAR SURVEY STANDARDS FOR PUBLICATION. ACCORDINGLY, USERS SHOULD INTERPRET THESE RESULTS WITH THIS LIMITATION IN MIND.

NOTE: Individual and average wage rates were collected in this update survey. A procedure was put into place to "move" the positional statistics where averages were collected. This procedure compares current locality survey data—at the quote level—with the same quote from the prior survey. Individual rates from the prior survey are moved by the average change in mean wages for the occupation.

Table A-3. Hourly earnings¹ for selected occupations, full-time and part-time workers², all industries, Kalamazoo-Battle Creek, MI, February 1999

Occupation ³	All industries											
	Full-time						Part-time					
	Mean	Percentiles					Mean	Percentiles				
10		25	Median 50	75	90	10		25	Median 50	75	90	
All occupations	\$16.30	\$8.00	\$10.19	\$14.32	\$20.08	\$27.10	\$8.48	\$5.25	\$5.93	\$6.99	\$9.20	\$15.88
All occupations excluding sales	16.38	8.04	10.32	14.42	20.14	27.00	8.85	5.15	5.83	7.27	9.85	17.43
White-collar occupations	19.98	9.29	12.75	17.77	24.98	35.06	10.86	5.95	6.50	8.50	14.73	20.42
White-collar occupations excluding sales	20.43	9.96	13.13	18.27	25.00	35.39	13.98	7.50	8.97	13.63	19.11	21.77
Professional specialty and technical occupations	24.00	13.51	17.31	21.80	29.34	38.55	17.19	9.23	14.04	17.98	21.27	21.77
Professional specialty occupations	26.16	15.93	19.47	23.26	32.60	39.57	18.08	9.23	15.88	18.95	21.77	21.77
Engineers, architects, and surveyors	27.81	20.52	22.61	23.92	35.02	39.16	-	-	-	-	-	-
Mechanical engineers	25.66	19.23	21.25	23.02	27.45	38.37	-	-	-	-	-	-
Mathematical and computer scientists	23.36	17.24	21.21	23.20	26.22	27.98	-	-	-	-	-	-
Computer systems analysts and scientists	24.05	21.21	22.09	23.37	26.27	28.13	-	-	-	-	-	-
Natural scientists	-	-	-	-	-	-	-	-	-	-	-	-
Health related occupations	22.14	15.77	17.42	20.30	21.80	31.31	19.53	15.82	17.39	19.57	21.77	21.77
Registered nurses	22.32	16.50	18.32	20.38	21.80	23.02	19.54	16.43	17.72	20.17	21.77	21.77
Teachers, college and university	34.27	22.79	24.33	29.77	39.76	52.02	-	-	-	-	-	-
Teachers, except college and university	30.94	18.72	23.95	32.59	39.22	40.01	10.22	7.40	8.55	9.23	11.00	20.00
Elementary school teachers	31.88	20.32	25.48	34.09	39.13	40.01	-	-	-	-	-	-
Librarians, archivists, and curators	-	-	-	-	-	-	-	-	-	-	-	-
Social scientists and urban planners	-	-	-	-	-	-	-	-	-	-	-	-
Social, recreation, and religious workers	18.12	12.75	16.44	18.99	20.95	22.44	-	-	-	-	-	-
Social workers	18.28	12.75	16.69	18.99	20.95	22.44	-	-	-	-	-	-
Lawyers and judges	-	-	-	-	-	-	-	-	-	-	-	-
Writers, authors, entertainers, athletes, and professionals, N.E.C.	24.08	12.49	17.78	25.49	30.58	33.69	-	-	-	-	-	-
Technical occupations	17.49	11.51	13.23	17.33	20.35	26.45	12.99	7.25	12.64	13.93	14.49	14.73
Licensed practical nurses	13.10	11.72	12.79	13.10	13.52	14.44	-	-	-	-	-	-
Computer programmers	15.98	13.00	14.41	15.00	17.00	22.00	-	-	-	-	-	-
Technical and related occupations, N.E.C.	20.47	17.50	17.50	19.40	22.50	26.45	-	-	-	-	-	-
Executive, administrative, and managerial occupations	24.51	13.94	17.04	21.33	29.71	39.12	-	-	-	-	-	-
Executives, administrators, and managers	27.45	13.94	18.00	25.00	33.65	42.07	-	-	-	-	-	-
Financial managers	22.80	13.93	14.76	18.10	25.00	30.35	-	-	-	-	-	-
Managers and administrators, N.E.C.	26.39	16.07	20.34	25.00	32.81	36.05	-	-	-	-	-	-
Management related occupations	20.01	14.12	16.39	19.22	21.50	27.78	-	-	-	-	-	-
Accountants and auditors	18.30	13.24	15.94	17.78	20.80	21.54	-	-	-	-	-	-
Management related occupations, N.E.C.	21.43	18.50	18.50	20.14	22.79	27.78	-	-	-	-	-	-
Sales occupations	13.90	6.31	8.00	10.23	16.74	28.65	6.94	5.70	6.00	6.50	7.17	8.85
Supervisors, sales occupations	17.34	7.25	9.49	15.58	26.54	28.65	-	-	-	-	-	-
Sales workers, other commodities	15.95	6.30	7.69	10.32	18.82	35.41	7.74	5.70	6.00	6.95	8.76	10.87
Cashiers	8.79	5.95	7.17	9.25	9.40	11.15	6.91	5.70	6.10	6.50	7.43	8.85
Administrative support occupations, including clerical	12.51	8.32	9.62	11.84	14.52	17.58	8.89	6.25	8.09	8.97	9.94	10.25
Secretaries	12.99	10.00	11.11	12.75	14.52	17.01	-	-	-	-	-	-
Receptionists	8.89	7.90	8.32	8.50	9.75	10.00	-	-	-	-	-	-
Order clerks	12.22	9.75	10.44	11.60	13.00	15.38	-	-	-	-	-	-
Records clerks, N.E.C.	12.91	7.73	10.90	13.02	15.03	15.03	-	-	-	-	-	-
Bookkeepers, accounting and auditing clerks	11.72	8.50	10.00	11.71	13.99	13.99	-	-	-	-	-	-
Stock and inventory clerks	15.22	9.00	11.30	14.52	20.42	20.67	-	-	-	-	-	-
General office clerks	10.59	7.76	8.50	10.48	12.46	15.10	8.40	5.75	7.91	8.97	8.97	9.81
Administrative support occupations, N.E.C.	14.06	10.64	11.70	12.91	16.00	17.75	-	-	-	-	-	-
Blue-collar occupations	13.80	8.00	10.00	12.99	16.09	21.74	7.10	5.25	5.50	6.27	8.13	10.75
Precision production, craft, and repair occupations	18.98	13.43	15.20	17.50	23.48	25.69	-	-	-	-	-	-
Supervisors, mechanics and repairers	21.18	15.50	20.38	21.81	23.87	24.15	-	-	-	-	-	-
Industrial machinery repairers	17.58	13.96	15.20	16.88	19.03	23.00	-	-	-	-	-	-

See footnotes at end of table.

Table A-3. Hourly earnings¹ for selected occupations, full-time and part-time workers², all industries, Kalamazoo-Battle Creek, MI, February 1999 — Continued

Occupation ³	All industries											
	Full-time					Part-time						
	Mean	Percentiles					Mean	Percentiles				
10		25	Median 50	75	90	10		25	Median 50	75	90	
Blue-collar occupations (-Continued)												
Precision production, craft, and repair occupations (-Continued)												
Mechanics and repairers, N.E.C.	\$17.61	\$13.61	\$15.06	\$16.95	\$22.02	\$23.80	-	-	-	-	-	-
Electricians	21.30	14.55	16.30	24.07	26.57	26.57	-	-	-	-	-	-
Supervisors, production occupations ..	19.53	13.70	15.91	18.99	23.42	25.71	-	-	-	-	-	-
Machine operators, assemblers, and inspectors	12.16	7.50	9.54	11.39	15.01	17.13	-	-	-	-	-	-
Numerical control machine operators	13.09	9.03	10.45	12.50	16.30	17.54	-	-	-	-	-	-
Fabricating machine operators, N.E.C.	12.35	8.54	9.14	11.28	13.84	21.49	-	-	-	-	-	-
Molding and casting machine operators	9.60	8.09	8.50	9.25	10.32	12.37	-	-	-	-	-	-
Packaging and filling machine operators	12.20	10.50	11.83	12.35	13.05	13.82	-	-	-	-	-	-
Miscellaneous machine operators, N.E.C.	14.49	10.69	13.29	15.32	16.09	17.89	-	-	-	-	-	-
Welders and cutters	18.86	11.71	11.89	18.23	24.73	24.73	-	-	-	-	-	-
Assemblers	9.92	7.00	8.72	10.09	10.91	12.39	-	-	-	-	-	-
Production inspectors, checkers and examiners	10.94	7.00	8.00	9.12	15.01	15.67	-	-	-	-	-	-
Transportation and material moving occupations	13.67	9.22	11.00	13.88	15.90	16.78	-	-	-	-	-	-
Truck drivers	14.17	9.00	11.35	15.90	15.90	17.86	-	-	-	-	-	-
Industrial truck and tractor equipment operators	12.73	9.00	10.53	11.72	14.71	16.78	-	-	-	-	-	-
Handlers, equipment cleaners, helpers, and laborers	11.10	7.18	8.25	11.00	12.77	15.55	\$6.67	\$5.25	\$5.49	\$5.95	\$7.00	\$8.84
Production helpers	11.40	8.20	8.76	12.63	12.77	14.32	-	-	-	-	-	-
Stock handlers and baggers	10.24	6.00	8.00	8.94	12.50	16.03	5.98	5.25	5.40	5.75	6.28	7.00
Hand packers and packagers	9.52	7.18	7.66	8.13	12.69	12.69	-	-	-	-	-	-
Service occupations	10.05	6.29	7.23	8.88	11.94	15.09	6.36	2.65	5.50	6.48	7.75	8.79
Protective service occupations	14.18	6.36	6.62	14.02	17.05	26.52	-	-	-	-	-	-
Food service occupations	7.74	4.05	6.50	7.50	9.51	11.62	5.33	2.65	2.65	5.65	6.80	7.68
Waiters and waitresses	-	-	-	-	-	-	4.08	2.65	2.65	2.78	6.90	6.90
Cooks	8.52	6.70	7.10	8.50	9.82	11.94	-	-	-	-	-	-
Food preparation occupations, N.E.C.	6.48	5.64	5.87	6.50	6.65	7.58	6.56	5.50	5.50	5.95	7.00	8.89
Health service occupations	9.08	7.15	7.87	8.35	9.95	11.79	8.29	6.73	7.60	8.11	8.99	9.48
Nursing aides, orderlies and attendants	9.10	6.92	7.87	8.35	9.95	11.79	8.07	6.69	7.52	7.97	8.31	9.23
Cleaning and building service occupations	11.20	7.51	8.82	11.16	12.93	15.60	6.79	6.25	6.41	6.50	7.25	7.75
Janitors and cleaners	11.34	7.90	8.82	11.16	13.08	15.60	6.54	6.25	6.25	6.41	6.73	7.00
Personal service occupations	10.45	7.46	9.22	10.16	11.70	14.06	7.39	6.00	6.03	7.00	8.00	10.00

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. The 10th, 25th, 50th, 75th and 90th percentiles designate position in the earnings distribution. At the 50th percentile, the median, half of the workers receive the same as or more than the rate shown, and half receive the same as or less than the rate shown. At the 25th percentile, one-fourth of the workers earn the same as or less than the rate shown. At the 75th percentile, one-fourth earn the same as or more than the rate shown. The 10th and 90th percentiles follow the same logic.

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 A classification system including about 480 individual occupations is used to cover

all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

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NOTE: Individual and average wage rates were collected in this update survey. A procedure was put into place to "move" the positional statistics where averages were collected. This procedure compares current locality survey data—at the quote level—with the same quote from the prior survey. Individual rates from the prior survey are moved by the average change in mean wages for the occupation.

Table A-4. Weekly and annual earnings¹ and hours for selected occupations, full-time workers only², all industries, Kalamazoo-Battle Creek, MI, February 1999

Occupation ³	All industries					
	Mean weekly hours ⁴	Weekly earnings		Mean annual hours	Annual earnings	
		Mean	Median		Mean	Median
All occupations	40.0	\$652	\$575	2,018	\$32,883	\$29,723
All occupations excluding sales	40.0	654	577	2,014	32,990	29,973
White-collar occupations	39.7	794	709	1,956	39,087	35,818
White-collar occupations excluding sales	39.7	810	726	1,945	39,734	36,712
Professional specialty and technical occupations	39.3	943	865	1,854	44,506	42,865
Professional specialty occupations	39.1	1,022	923	1,790	46,840	45,230
Engineers, architects, and surveyors	40.5	1,127	980	2,107	58,603	50,945
Mechanical engineers	40.4	1,036	921	2,100	53,885	47,882
Mathematical and computer scientists	40.0	934	928	2,080	48,588	48,245
Computer systems analysts and scientists	40.0	962	935	2,080	50,030	48,610
Natural scientists	-	-	-	-	-	-
Health related occupations	39.9	884	811	2,077	45,982	42,162
Registered nurses	39.9	891	812	2,076	46,343	42,224
Teachers, college and university	46.0	1,575	1,316	1,664	57,034	47,376
Teachers, except college and university	35.9	1,110	1,192	1,372	42,465	45,662
Elementary school teachers	35.9	1,143	1,214	1,359	43,323	45,662
Librarians, archivists, and curators	-	-	-	-	-	-
Social scientists and urban planners	-	-	-	-	-	-
Social, recreation, and religious workers	40.0	725	760	2,080	37,684	39,505
Social workers	40.0	731	760	2,080	38,016	39,505
Lawyers and judges	-	-	-	-	-	-
Writers, authors, entertainers, athletes, and professionals, N.E.C.	40.0	963	1,019	2,080	50,080	53,013
Technical occupations	39.9	699	693	2,077	36,334	36,038
Licensed practical nurses	39.6	519	515	2,059	26,971	26,770
Computer programmers	40.0	639	600	2,080	33,247	31,200
Technical and related occupations, N.E.C.	40.0	819	776	2,080	42,576	40,352
Executive, administrative, and managerial occupations ..	41.1	1,007	853	2,124	52,052	44,366
Executives, administrators, and managers	41.5	1,139	1,000	2,137	58,668	52,000
Financial managers	40.9	932	815	2,126	48,457	42,354
Managers and administrators, N.E.C.	41.7	1,099	1,000	2,166	57,148	52,000
Management related occupations	40.5	810	769	2,104	42,096	39,978
Accountants and auditors	40.4	740	711	2,102	38,462	36,982
Management related occupations, N.E.C.	40.0	858	806	2,082	44,611	41,891
Sales occupations	40.8	567	409	2,123	29,503	21,278
Supervisors, sales occupations	41.2	714	623	2,141	37,135	32,406
Sales workers, other commodities	39.8	634	391	2,067	32,965	20,311
Cashiers	40.0	352	370	2,080	18,284	19,240
Administrative support occupations, including clerical	39.3	492	468	1,980	24,761	23,816
Secretaries	39.6	514	510	2,058	26,736	26,520
Receptionists	39.2	348	340	2,038	18,119	17,680
Order clerks	40.0	489	464	2,080	25,423	24,128
Records clerks, N.E.C.	39.5	510	509	2,053	26,499	26,457
Bookkeepers, accounting and auditing clerks	39.9	468	468	2,076	24,336	24,357
Stock and inventory clerks	39.9	607	581	2,076	31,585	30,202
General office clerks	39.9	423	419	1,969	20,842	20,864
Administrative support occupations, N.E.C.	39.9	561	516	2,076	29,188	26,857
Blue-collar occupations	40.4	557	521	2,094	28,896	27,040
Precision production, craft, and repair occupations	40.1	762	700	2,086	39,596	36,400
Supervisors, mechanics and repairers	42.8	906	938	2,224	47,105	48,768
Industrial machinery repairers	40.0	703	675	2,080	36,558	35,110
Mechanics and repairers, N.E.C.	40.0	704	678	2,078	36,593	35,256
Electricians	40.0	852	963	2,078	44,268	50,066
Supervisors, production occupations	40.0	781	760	2,080	40,617	39,499
Machine operators, assemblers, and inspectors	39.7	482	444	2,060	25,051	22,880
Numerical control machine operators	40.0	523	500	2,080	27,221	26,000
Fabricating machine operators, N.E.C.	40.0	494	451	2,061	25,462	22,560
Molding and casting machine operators	39.5	379	370	2,054	19,724	19,240
Packaging and filling machine operators	40.0	488	494	2,080	25,381	25,688
Miscellaneous machine operators, N.E.C.	40.1	581	613	2,082	30,172	31,866
Welders and cutters	40.0	754	729	2,076	39,146	37,918
Assemblers	39.2	389	392	2,039	20,222	20,364
Production inspectors, checkers and examiners ..	40.0	438	365	2,078	22,731	18,970
Transportation and material moving occupations	43.6	596	575	2,241	30,644	29,910

See footnotes at end of table.

Table A-4. Weekly and annual earnings¹ and hours for selected occupations, full-time workers only², all industries, Kalamazoo-Battle Creek, MI, February 1999 — Continued

Occupation ³	All industries					
	Mean weekly hours ⁴	Weekly earnings		Mean annual hours	Annual earnings	
		Mean	Median		Mean	Median
Blue-collar occupations (-Continued)						
Transportation and material moving occupations (-Continued)						
Truck drivers	46.9	\$664	\$763	2,437	\$34,537	\$39,686
Industrial truck and tractor equipment operators ..	39.4	501	469	2,047	26,054	24,378
Handlers, equipment cleaners, helpers, and laborers	40.0	444	440	2,080	23,087	22,880
Production helpers	40.0	456	505	2,080	23,717	26,270
Stock handlers and baggers	40.0	409	358	2,080	21,290	18,595
Hand packers and packagers	40.0	381	325	2,080	19,807	16,914
Service occupations						
Protective service occupations	40.0	567	561	2,080	29,494	29,162
Food service occupations	39.8	308	296	1,972	15,271	14,337
Cooks	39.8	339	332	1,927	16,416	14,872
Food preparation occupations, N.E.C.	39.7	257	255	2,062	13,358	13,247
Health service occupations	39.6	359	334	2,058	18,684	17,368
Nursing aides, orderlies and attendants	39.6	360	333	2,058	18,729	17,320
Cleaning and building service occupations	39.9	447	446	2,077	23,266	23,213
Janitors and cleaners	39.9	453	446	2,076	23,543	23,213
Personal service occupations	39.2	410	406	1,923	20,090	20,405

¹ Earnings 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, 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. The median designates position—one-half of the workers receive the same as or more, and one-half receive the same as or less than the rate shown.

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 A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

⁴ Mean weekly hours are the hours an employee is scheduled to work in a

week, exclusive of overtime.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means not elsewhere classified. IN THIS SURVEY, THE NONRESPONSE RATE FOR ALL INDUSTRIES AND PRIVATE INDUSTRY EXCEEDED REGULAR SURVEY STANDARDS FOR PUBLICATION. ACCORDINGLY, USERS SHOULD INTERPRET THESE RESULTS WITH THIS LIMITATION IN MIND.

NOTE: Individual and average wage rates were collected in this update survey. A procedure was put into place to "move" the positional statistics where averages were collected. This procedure compares current locality survey data—at the quote level—with the same quote from the prior survey. Individual rates from the prior survey are moved by the average change in mean wages for the occupation.

Table B-1. Mean hourly earnings¹ by occupational group and levels², all industries, private industry, State and local government, full-time and part-time workers, Kalamazoo-Battle Creek, MI, February 1999

Occupational group ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
All occupations	\$15.44	\$14.55	\$20.14	\$16.30	\$8.48
All occupations excluding sales	15.68	14.78	20.14	16.38	8.85
White-collar occupations	19.04	17.93	22.52	19.98	10.86
Level 1	6.59	6.59	—	—	6.41
Level 2	8.54	8.36	—	9.16	7.07
Level 3	8.51	8.41	8.79	8.87	7.91
Level 4	11.59	11.44	12.20	11.73	8.78
Level 5	14.56	14.85	12.61	14.80	11.22
Level 6	15.40	15.32	—	15.34	15.74
Level 7	18.19	18.59	16.92	18.30	16.06
Level 8	21.76	19.35	28.54	21.99	19.70
Level 9	26.43	24.14	29.13	26.43	—
Level 10	29.69	30.39	—	29.69	—
Level 11	31.13	32.60	27.46	31.13	—
Level 12	31.83	32.55	—	31.83	—
Level 13	52.43	59.92	—	52.43	—
White-collar occupations excluding sales	20.01	19.08	22.52	20.43	13.98
Level 1	7.28	7.28	—	—	—
Level 2	8.90	8.71	—	9.04	—
Level 3	9.08	9.28	8.79	9.13	8.87
Level 4	12.00	11.94	12.20	12.06	—
Level 5	14.92	15.31	12.61	15.15	11.56
Level 6	15.40	15.32	—	15.34	15.74
Level 7	17.75	18.02	16.92	17.84	16.06
Level 8	21.74	19.23	28.54	21.98	19.70
Level 9	26.34	23.79	29.13	26.34	—
Level 10	29.69	30.39	—	29.69	—
Level 11	31.13	32.60	27.46	31.13	—
Level 12	31.56	32.25	—	31.56	—
Level 13	52.43	59.92	—	52.43	—
Professional specialty and technical occupations	23.45	21.12	28.46	24.00	17.19
Professional specialty occupations	25.45	23.16	28.86	26.16	18.08
Level 6	16.18	16.11	—	15.91	—
Level 7	19.05	18.98	—	19.84	—
Level 8	22.85	19.27	29.99	23.36	—
Level 9	27.64	22.97	29.91	27.65	—
Level 10	30.92	32.05	—	30.92	—
Level 11	30.48	—	—	30.48	—
Level 12	33.12	—	—	33.12	—
Level 13	47.07	—	—	47.07	—
Engineers, architects, and surveyors	27.81	28.10	—	27.81	—
Level 8	20.88	20.88	—	20.88	—
Level 9	23.55	23.69	—	23.55	—
Mathematical and computer scientists	23.36	23.69	—	23.36	—
Natural scientists	—	—	—	—	—
Health related occupations	21.48	21.61	—	22.14	19.53
Level 7	20.49	20.97	—	—	—
Level 8	19.87	19.84	—	19.88	—
Teachers, college and university	34.27	—	—	34.27	—
Teachers, except college and university	29.96	—	31.22	30.94	10.22
Level 8	30.11	—	32.66	30.11	—
Level 9	31.97	—	31.97	31.97	—
Librarians, archivists, and curators	—	—	—	—	—
Social scientists and urban planners	—	—	—	—	—
Social, religious, and recreation workers	18.12	—	—	18.12	—
Lawyers and judges	—	—	—	—	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	23.97	24.37	—	24.08	—
Technical occupations	17.23	17.10	—	17.49	12.99
Level 4	11.94	11.94	—	11.94	—
Level 5	14.68	14.68	—	14.68	—
Level 6	15.93	15.93	—	16.48	—
Level 7	18.44	18.16	—	18.52	—

See footnotes at end of table.

Table B-1. Mean hourly earnings¹ by occupational group and levels², all industries, private industry, State and local government, full-time and part-time workers, Kalamazoo-Battle Creek, MI, February 1999 — Continued

Occupational group ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
White-collar occupations (-Continued)					
Technical occupations (-Continued)					
Level 8	\$22.59	\$22.59	—	\$22.59	—
Executive, administrative, and managerial occupations ...	24.44	24.61	\$23.53	24.51	—
Level 6	10.85	10.85	—	11.12	—
Level 7	16.41	16.67	—	16.41	—
Level 8	18.41	18.19	—	18.45	—
Level 9	22.75	23.47	—	22.75	—
Level 11	31.92	32.00	—	31.92	—
Level 12	30.81	30.81	—	30.81	—
Executives, administrators, and managers	27.31	27.77	25.44	27.45	—
Level 6	10.50	10.50	—	10.77	—
Level 8	15.68	14.53	—	15.66	—
Level 9	21.91	21.91	—	21.91	—
Level 11	31.92	32.00	—	31.92	—
Level 12	30.81	30.81	—	30.81	—
Management related occupations	20.01	20.26	—	20.01	—
Level 7	16.71	16.71	—	16.71	—
Level 8	21.06	21.68	—	21.06	—
Level 9	23.18	24.43	—	23.18	—
Sales occupations	10.94	10.94	—	13.90	\$6.94
Level 1	6.20	6.20	—	—	6.13
Level 2	7.63	7.63	—	—	6.75
Level 3	7.62	7.62	—	8.00	7.39
Level 4	9.36	9.36	—	9.70	—
Level 5	11.45	11.45	—	11.69	—
Level 8	22.50	22.50	—	22.50	—
Administrative support occupations, including clerical	12.24	12.38	11.86	12.51	8.89
Level 1	7.29	7.29	—	—	—
Level 2	8.90	8.71	—	9.04	—
Level 3	9.04	9.22	8.79	9.08	8.87
Level 4	12.02	11.95	12.20	12.08	—
Level 5	14.93	15.29	—	14.97	—
Level 6	15.58	15.51	—	15.58	—
Level 7	17.71	18.88	—	17.78	—
Blue-collar occupations	13.45	13.42	13.98	13.80	7.10
Level 1	7.76	7.76	—	8.21	6.66
Level 2	10.47	10.44	—	10.52	9.18
Level 3	14.03	14.11	—	14.07	—
Level 4	13.76	13.78	—	13.76	—
Level 5	14.02	13.87	—	14.02	—
Level 6	16.65	16.80	—	16.65	—
Level 7	20.21	20.76	—	20.21	—
Level 8	24.39	24.39	—	24.39	—
Precision production, craft, and repair occupations	18.93	19.23	15.71	18.98	—
Level 4	15.08	15.08	—	15.08	—
Level 5	15.07	14.85	—	15.07	—
Level 6	16.72	16.72	—	16.72	—
Level 7	20.33	21.02	—	20.33	—
Level 8	24.39	24.39	—	24.39	—
Machine operators, assemblers, and inspectors	12.15	12.15	—	12.16	—
Level 1	7.67	7.67	—	—	—
Level 2	10.28	10.28	—	10.28	—
Level 3	13.59	13.59	—	13.59	—
Level 4	13.38	13.38	—	13.38	—
Level 5	14.18	14.18	—	14.18	—
Transportation and material moving occupations	13.51	13.61	—	13.67	—
Level 2	11.08	11.09	—	11.10	—
Level 3	15.49	15.69	—	15.49	—
Level 4	14.58	14.58	—	14.58	—
Handlers, equipment cleaners, helpers, and laborers	10.21	9.98	—	11.10	6.67
Level 1	7.81	7.81	—	8.75	6.57
Level 2	10.31	10.26	—	10.49	—

See footnotes at end of table.

Table B-1. Mean hourly earnings¹ by occupational group and levels², all industries, private industry, State and local government, full-time and part-time workers, Kalamazoo-Battle Creek, MI, February 1999 — Continued

Occupational group ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
Blue-collar occupations (-Continued)					
Handlers, equipment cleaners, helpers, and laborers (-Continued)					
Level 3	\$12.44	\$12.31	—	\$12.65	—
Level 4	13.59	13.70	—	13.59	—
Service occupations	8.98	7.80	\$14.12	10.05	\$6.36
Level 1	6.48	6.43	—	7.09	6.11
Level 2	7.80	7.09	—	8.42	6.16
Level 3	9.41	9.41	—	9.55	—
Level 4	10.34	10.44	—	10.47	—
Protective service occupations	13.70	—	19.65	14.18	—
Food service occupations	6.74	6.55	—	7.74	5.33
Level 1	5.73	5.61	—	5.90	5.62
Level 2	6.11	6.11	—	7.10	—
Level 3	9.55	9.88	—	9.88	—
Health service occupations	8.84	8.45	—	9.08	8.29
Level 2	8.34	8.34	—	—	8.47
Level 3	8.79	8.79	—	—	—
Cleaning and building service occupations	10.36	9.84	—	11.20	6.79
Level 1	8.71	8.71	—	—	6.91
Level 2	10.72	—	—	11.34	—
Level 3	9.47	9.47	—	9.47	—
Personal service occupations	9.83	9.29	11.13	10.45	7.39
Level 1	6.35	—	—	—	6.35
Level 4	8.92	—	—	—	—

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.

² Each occupation for which wage data are collected in an establishment is evaluated based on 10 factors, including knowledge, complexity, work environment, etc. Points are assigned based on the occupation's ranking within each factor. The points are summed to determine the overall level of the occupation. See technical note for more information.

³ A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

⁴ All workers include full-time and part-time workers. 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.

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NOTE: Individual and average wage rates were collected in this update survey. A procedure was put into place to "move" the positional statistics where averages were collected. This procedure compares current locality survey data—at the quote level—with the same quote from the prior survey. Individual rates from the prior survey are moved by the average change in mean wages for the occupation.

Table B-2. Mean hourly earnings¹ for selected occupations and levels², all industries, private industry, State and local government, full-time and part-time workers, Kalamazoo-Battle Creek, MI, February 1999

Occupation ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
White-collar occupations:					
Professional specialty and technical occupations:					
Professional specialty occupations:					
Mechanical engineers	\$25.66	\$25.66	—	\$25.66	—
Computer systems analysts and scientists	24.05	24.67	—	24.05	—
Registered nurses	21.60	21.79	—	22.32	\$19.54
Level 7	18.48	—	—	—	—
Level 8	19.87	19.84	—	19.88	—
Elementary school teachers	31.88	—	\$32.83	31.88	—
Social workers	18.28	—	—	18.28	—
Technical occupations:					
Licensed practical nurses	13.12	13.12	—	13.10	—
Level 5	12.93	12.93	—	—	—
Computer programmers	15.98	15.98	—	15.98	—
Technical and related occupations, N.E.C.	20.47	20.77	—	20.47	—
Executive, administrative, and managerial occupations:					
Financial managers	22.80	22.80	—	22.80	—
Managers and administrators, N.E.C.	26.27	28.11	—	26.39	—
Level 9	23.50	23.50	—	23.50	—
Level 11	34.25	34.25	—	34.25	—
Level 12	28.58	28.58	—	28.58	—
Accountants and auditors	18.30	18.56	—	18.30	—
Management related occupations, N.E.C.	21.43	21.56	—	21.43	—
Level 9	23.84	—	—	23.84	—
Sales occupations:					
Supervisors, sales occupations	17.34	17.34	—	17.34	—
Sales workers, other commodities	12.06	12.06	—	15.95	7.74
Level 4	9.06	9.06	—	—	—
Cashiers	7.70	7.70	—	8.79	6.91
Level 1	6.22	6.22	—	—	6.12
Administrative support occupations, including clerical:					
Secretaries	12.89	12.94	12.84	12.99	—
Level 4	11.84	11.58	—	11.93	—
Level 5	13.40	—	—	13.51	—
Receptionists	8.53	8.53	—	8.89	—
Order clerks	11.75	11.75	—	12.22	—
Records clerks, N.E.C.	12.12	11.82	—	12.91	—
Bookkeepers, accounting and auditing clerks	11.72	10.72	—	11.72	—
Level 4	12.31	—	—	12.31	—
Stock and inventory clerks	14.08	14.08	—	15.22	—
Investigators and adjusters except insurance	9.92	9.92	—	—	—
General office clerks	10.31	10.43	—	10.59	8.40
Level 2	9.46	—	—	—	—
Level 3	9.21	8.27	—	—	—
Bank tellers	8.45	8.45	—	—	—
Teachers' aides	8.50	—	8.55	—	—
Administrative support occupations, N.E.C.	14.06	14.06	—	14.06	—
Blue-collar occupations:					
Precision production, craft, and repair occupations:					
Supervisors, mechanics and repairers	21.18	21.18	—	21.18	—
Industrial machinery repairers	17.58	17.58	—	17.58	—
Level 7	17.72	17.75	—	17.72	—
Mechanics and repairers, N.E.C.	17.61	17.72	—	17.61	—
Level 5	15.17	15.17	—	15.17	—
Electricians	21.30	—	—	21.30	—
Level 7	20.53	—	—	20.53	—
Supervisors, production occupations	19.53	19.53	—	19.53	—
Machine operators, assemblers, and inspectors:					
Numerical control machine operators	13.09	13.09	—	13.09	—
Fabricating machine operators, N.E.C.	12.35	12.35	—	12.35	—
Molding and casting machine operators	9.60	9.60	—	9.60	—
Packaging and filling machine operators	12.20	12.20	—	12.20	—
Miscellaneous machine operators, N.E.C.	14.49	14.49	—	14.49	—
Level 4	15.17	15.17	—	15.17	—

See footnotes at end of table.

Table B-2. Mean hourly earnings¹ for selected occupations and levels², all industries, private industry, State and local government, full-time and part-time workers, Kalamazoo-Battle Creek, MI, February 1999 — Continued

Occupation ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
Blue-collar occupations: (-Continued)					
Machine operators, assemblers, and inspectors: (-Continued)					
Welders and cutters	\$18.86	\$18.86	—	\$18.86	—
Assemblers	9.92	9.92	—	9.92	—
Level 2	10.28	10.28	—	10.28	—
Production inspectors, checkers and examiners ..	10.94	10.94	—	10.94	—
Transportation and material moving occupations:					
Truck drivers	14.05	14.05	—	14.17	—
Level 2	11.43	11.43	—	11.43	—
Industrial truck and tractor equipment operators ..	12.71	12.71	—	12.73	—
Level 2	10.26	10.26	—	—	—
Level 3	12.94	12.94	—	12.94	—
Level 4	15.16	15.16	—	15.16	—
Handlers, equipment cleaners, helpers, and laborers:					
Groundskeepers and gardeners except farm	11.18	—	—	—	—
Production helpers	11.40	11.40	—	11.40	—
Stock handlers and baggers	8.43	8.35	—	10.24	\$5.98
Level 1	6.67	6.67	—	8.12	5.78
Level 2	9.10	9.10	—	—	—
Level 3	12.64	12.42	—	12.85	—
Freight, stock, and material handlers, N.E.C.	10.97	10.97	—	—	—
Hand packers and packagers	9.47	9.47	—	9.52	—
Level 1	8.82	8.82	—	8.82	—
Laborers except construction, N.E.C.	11.91	11.19	—	—	—
Service occupations:					
Food service occupations:					
Waiters and waitresses	3.55	3.55	—	—	4.08
Level 1	3.05	3.05	—	—	—
Cooks	8.46	8.39	—	8.52	—
Level 2	7.73	7.73	—	7.75	—
Level 3	9.91	—	—	9.91	—
Food preparation occupations, N.E.C.	6.52	6.32	—	6.48	6.56
Level 1	6.51	6.29	—	—	6.56
Health service occupations:					
Nursing aides, orderlies and attendants	8.83	8.40	—	9.10	8.07
Level 2	8.36	8.36	—	—	—
Cleaning and building service occupations:					
Janitors and cleaners	10.65	10.17	—	11.34	6.54
Level 1	9.24	9.24	—	—	—
Level 2	10.72	—	—	11.34	—
Level 3	9.47	9.47	—	9.47	—
Personal service occupations:					
Child care workers, N.E.C.	9.63	—	—	—	—
Service occupations, N.E.C.	11.17	—	—	—	—

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.

² Each occupation for which wage data are collected in an establishment is evaluated based on 10 factors, including knowledge, complexity, work environment, etc. Points are assigned based on the occupation's ranking within each factor. The points are summed to determine the overall level of the occupation. See technical note for more information.

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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.

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Table C-1. Mean hourly earnings¹ by occupational group and selected characteristics, all industries, Kalamazoo-Battle Creek, MI, February 1999

Occupational group ²	Full-time workers ³	Part-time workers ³	Union ⁴	Nonunion ⁴	Time ⁵	Incentive ⁵
All occupations	\$16.30	\$8.48	\$16.87	\$14.67	\$15.37	\$17.12
All occupations excluding sales	16.38	8.85	17.04	14.91	15.61	17.91
White-collar occupations	19.98	10.86	21.82	18.22	19.07	18.37
White-collar excluding sales	20.43	13.98	22.79	19.15	19.96	-
Professional specialty and technical occupations	24.00	17.19	26.42	21.80	23.53	-
Professional specialty occupations	26.16	18.08	27.22	24.07	25.51	-
Technical occupations	17.49	12.99	-	17.33	17.15	-
Executive, administrative, and managerial occupations ...	24.51	-	-	24.81	24.43	-
Sales occupations	13.90	6.94	-	11.32	9.86	15.04
Administrative support including clerical occupations	12.51	8.89	12.53	12.18	12.24	-
Blue-collar occupations	13.80	7.10	15.29	11.61	13.31	16.36
Precision production, craft, and repair occupations	18.98	-	20.03	16.92	18.87	-
Machine operators, assemblers, and inspectors	12.16	-	13.93	10.50	11.84	16.47
Transportation and material moving occupations	13.67	-	14.54	12.88	13.56	-
Handlers, equipment cleaners, helpers, and laborers	11.10	6.67	11.53	9.10	10.03	-
Service occupations	10.05	6.36	12.32	7.22	8.98	-

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.

² A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

³ 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.

⁴ Union workers are those whose wages are determined through collective bargaining.

⁵ Time workers' wages are based solely on an 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.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means not elsewhere classified. IN THIS SURVEY, THE NONRESPONSE RATE FOR ALL INDUSTRIES AND PRIVATE INDUSTRY EXCEEDED REGULAR SURVEY STANDARDS FOR PUBLICATION. ACCORDINGLY, USERS SHOULD INTERPRET THESE RESULTS WITH THIS LIMITATION IN MIND.

NOTE: Individual and average wage rates were collected in this update survey. A procedure was put into place to "move" the positional statistics where averages were collected. This procedure compares current locality survey data—at the quote level—with the same quote from the prior survey. Individual rates from the prior survey are moved by the average change in mean wages for the occupation.

Table C-2. Mean hourly earnings¹ by occupational group and industry division, private industry, all workers², Kalamazoo-Battle Creek, MI, February 1999

Occupational group ³	All private industries	Goods-producing industries ⁴				Service-producing industries ⁵				
		Total	Mining	Construction	Manufacturing	Total	Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services
All occupations	\$14.55	-	-	-	-	-	-	-	\$15.67	-
All occupations excluding sales	14.78	-	-	-	-	-	-	-	15.73	-
White-collar occupations	17.93	-	-	-	-	-	-	-	15.99	-
White-collar excluding sales	19.08	-	-	-	-	-	-	-	16.06	-
Professional specialty and technical occupations	21.12	-	-	-	-	-	-	-	-	-
Professional specialty occupations	23.16	-	-	-	-	-	-	-	-	-
Technical occupations	17.10	-	-	-	-	-	-	-	-	-
Executive, administrative, and managerial occupations	24.61	-	-	-	-	-	-	-	19.50	-
Sales occupations	10.94	-	-	-	-	-	-	-	-	-
Administrative support, including clerical occupations	12.38	-	-	-	-	-	-	-	12.98	-
Blue-collar occupations	13.42	-	-	-	-	-	-	-	-	-
Precision production, craft, and repair occupations	19.23	-	-	-	-	-	-	-	-	-
Machine operators, assemblers, and inspectors	12.15	-	-	-	-	-	-	-	-	-
Transportation and material moving occupations	13.61	-	-	-	-	-	-	-	-	-
Handlers, equipment cleaners, helpers, and laborers	9.98	-	-	-	-	-	-	-	-	-
Service occupations	7.80	-	-	-	-	-	-	-	8.94	-

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.

² All workers include full-time and part-time workers. 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 A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

⁴ Goods-producing industries include mining, construction, and manufacturing.

⁵ Service-producing industries include transportation and public utilities; wholesale

and retail trade; finance, insurance, and real estate; and services.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means not elsewhere classified. IN THIS SURVEY, THE NONRESPONSE RATE FOR ALL INDUSTRIES AND PRIVATE INDUSTRY EXCEEDED REGULAR SURVEY STANDARDS FOR PUBLICATION. ACCORDINGLY, USERS SHOULD INTERPRET THESE RESULTS WITH THIS LIMITATION IN MIND.

NOTE: Individual and average wage rates were collected in this update survey. A procedure was put into place to "move" the positional statistics where averages were collected. This procedure compares current locality survey data—at the quote level—with the same quote from the prior survey. Individual rates from the prior survey are moved by the average change in mean wages for the occupation.

Table C-3. Mean hourly earnings¹ by occupational group and establishment employment size, private industry, all workers², Kalamazoo-Battle Creek, MI, February 1999

Occupational group ³	All private industry workers	50 - 99 workers	100 workers or more		
			Total	100 - 499 workers	500 workers or more
All occupations	\$14.55	\$11.81	\$15.17	\$14.33	\$17.26
All occupations excluding sales	14.78	11.95	15.41	14.61	17.30
White-collar occupations	17.93	15.31	18.40	17.21	20.41
White-collar excluding sales	19.08	16.70	19.46	18.68	20.60
Professional specialty and technical occupations	21.12	17.84	21.30	19.04	24.54
Professional specialty occupations	23.16	18.02	23.43	20.90	26.88
Technical occupations	17.10	17.52	17.08	15.56	19.47
Executive, administrative, and managerial occupations ...	24.61	25.60	24.43	26.10	21.40
Sales occupations	10.94	10.05	11.20	10.62	—
Administrative support, including clerical occupations	12.38	12.38	12.37	11.26	13.76
Blue-collar occupations	13.42	12.93	13.51	13.43	13.80
Precision production, craft, and repair occupations	19.23	18.82	19.34	19.10	20.37
Machine operators, assemblers, and inspectors	12.15	9.82	12.38	11.99	13.50
Transportation and material moving occupations	13.61	—	14.71	14.97	—
Handlers, equipment cleaners, helpers, and laborers	9.98	8.47	10.13	10.18	—
Service occupations	7.80	6.41	8.72	8.46	9.74

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.

² All workers include full-time and part-time workers. 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 A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means not elsewhere classified. IN THIS SURVEY, THE NONRESPONSE RATE FOR ALL INDUSTRIES AND PRIVATE INDUSTRY EXCEEDED REGULAR SURVEY STANDARDS FOR PUBLICATION. ACCORDINGLY, USERS SHOULD INTERPRET THESE RESULTS WITH THIS LIMITATION IN MIND.

NOTE: Individual and average wage rates were collected in this update survey. A procedure was put into place to "move" the positional statistics where averages were collected. This procedure compares current locality survey data—at the quote level—with the same quote from the prior survey. Individual rates from the prior survey are moved by the average change in mean wages for the occupation.

Table C-4. Number of workers¹ represented by occupational group, Kalamazoo-Battle Creek, MI, February 1999

Occupational group ²	All workers		
	All industries	Private industry	State and local government
All occupations	121,448	99,629	21,819
All occupations excluding sales	114,195	92,376	21,819
White-collar occupations	58,115	42,336	15,779
White-collar excluding sales	50,862	35,083	15,779
Professional specialty and technical occupations	26,015	16,377	9,638
Professional specialty occupations	20,284	10,933	9,351
Technical occupations	5,731	5,445	—
Executive, administrative, and managerial occupations ...	8,670	7,262	1,409
Sales occupations	7,253	7,253	—
Administrative support including clerical occupations	16,176	11,444	4,732
Blue-collar occupations	43,152	40,900	2,253
Precision production, craft, and repair occupations	9,361	8,569	792
Machine operators, assemblers, and inspectors	17,272	17,272	—
Transportation and material moving occupations	5,794	5,007	—
Handlers, equipment cleaners, helpers, and laborers	10,726	10,052	—
Service occupations	20,181	16,393	3,788

¹ Both full-time and part-time workers were included in the survey. 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 establishment, where a 40-hour week is the minimum full-time schedule.

² A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

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

categories not shown separately. N.E.C. means not elsewhere classified. IN THIS SURVEY, THE NONRESPONSE RATE FOR ALL INDUSTRIES AND PRIVATE INDUSTRY EXCEEDED REGULAR SURVEY STANDARDS FOR PUBLICATION. ACCORDINGLY, USERS SHOULD INTERPRET THESE RESULTS WITH THIS LIMITATION IN MIND.

NOTE: Individual and average wage rates were collected in this update survey. A procedure was put into place to "move" the positional statistics where averages were collected. This procedure compares current locality survey data—at the quote level—with the same quote from the prior survey. Individual rates from the prior survey are moved by the average change in mean wages for the occupation.

Appendix A: Technical Note

This section provides basic information on the procedures and concepts used to produce the data contained in this bulletin. It is divided into three parts: Planning for the survey; data collection; and processing and analyzing the data. Although this section answers some questions commonly asked by data users, it is not a comprehensive description of all the steps required to produce the data.

Planning for the survey

The overall design of the survey includes questions of scope, frame, and sample selection.

Survey scope

This survey covered establishments employing 50 workers or more in goods-producing industries (mining, construction and manufacturing); service-producing industries (transportation, communications, electric, gas, and sanitary services; wholesale trade; retail trade; finance, insurance, and real estate; and services industries); and State and local governments. Agriculture, private households, and the Federal Government were excluded from the scope of the survey. For purposes of this survey an establishment was an economic unit which 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 was usually at a single physical location. For State and local governments, an establishment was defined as all locations of a government entity.

The Kalamazoo-Battle Creek, MI, Metropolitan Statistical Area includes Calhoun, Kalamazoo, and Van Buren Counties, MI.

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. The sampling frame was reviewed prior to the survey and, when necessary, missing establishments were added, out-of-business and out-of-scope establishments were removed, and addresses, employment levels, industry classification, and other information were updated.

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 sample of establishments. The sample of establishments was drawn by first stratifying the sampling frame by industry and ownership. The number of sample establishments allocated to each stratum is approximately proportional to the stratum employment. Each sampled establishment is selected within a stratum with a probability proportional to its employment. Use of this technique means that the larger an establishment's employment, the greater its chance of selection. Weights were applied to each establishment when the data were tabulated so that it represents similar units (by industry and employment size) in the economy which were not selected for collection. See appendix table 1 for a count of establishments in the survey by employment size. The second stage of sample selection, detailed below, was a probability sample of occupations within a sampled establishment.

Data collection

The collection of data from survey respondents required detailed procedures. Collection was the responsibility of the field economists, working out of the Regional Office, who visited each establishment surveyed. Other contact methods, such as mail and telephone, were used to follow-up and update data.

Occupational selection and classification

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

1. Probability-proportional-to-size selection of establishment jobs.
2. Classification of jobs into occupations based on the Census of Population system.
3. Characterization of jobs as full-time v. part-time, union v. nonunion, and time v. incentive.
4. Determination of the level of work of each job.

For each occupation, wage data were collected for those workers who met all the criteria identified in the last three steps. Special procedures were developed for jobs for which a correct classification or level could not be determined.

In step one, the jobs to be sampled were selected at each establishment by the BLS field economist during a personal visit. A complete list of employees was used for sampling,

with each selected worker representing a job within the establishment.

As with the selection of establishments, the selection of a job was based on probability proportional to its size in the establishment. The greater the number of people working in a job in the establishment, the greater its chance of selection.

The number of jobs collected in each establishment was based on an establishment's employment size as shown in the following schedule:

<i>Number of employees</i>	<i>Number of selected jobs</i>
50-99	8
100-249	10
250-999	12
1000-2,499	16
2,500+	20

The second step of the process entailed classifying the selected jobs into occupations based on their duties. The National Compensation Survey occupational classification system is based on the 1990 Census of Population. A selected job may fall into any one of about 480 occupational classifications, from accountant to wood lathe operator. In cases where a job's duties overlapped two or more census classification codes, the duties used to set the wage level were used to classify the job. Classification by primary duties was the fallback.

Each occupational classification is an element of a broader classification known as a major occupational group (MOG). Occupations can fall into any of the following MOGs:

- Professional specialty and technical
- Executive, administrative, and managerial
- Sales
- Administrative support including clerical
- Precision production, craft, and repair
- Machine operators, assemblers, and inspectors
- Transportation and material moving
- Handlers, equipment cleaners, helpers, and laborers
- Service occupations

Appendix B contains a complete list of all individual occupations, classified by the MOG to which they belong. 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, depending on whether any part of pay was directly based on the actual production of the worker, rather than solely on hours worked. Finally, the worker was identified as being in a union job or a nonunion job. See the "Definition of Terms" section on the following page for more detail.

Generic leveling through point factor analysis

In the last step before wage data were collected, the work level of each selected job was determined using a "generic leveling" process. Generic leveling ranks and compares all occupations randomly selected in an establishment using the same criteria. This is a major departure from the method used in the past in the Bureau's Occupational Compensation Surveys which studied specifically defined occupations with leveling definitions unique to each occupation.

For this survey, the level of each occupation in an establishment was determined by an analysis of each of 10 leveling factors. Nine of these factors are drawn from the U.S. Government Office of Personnel Management's Factor Evaluation System, which is the underlying structure for evaluation of General Schedule Federal employees. The tenth factor, supervisory duties, attempts to account for the effect of supervisory duties. It is considered experimental. The 10 factors are:

- Knowledge
- Supervision received
- Guidelines
- Complexity
- Scope and effect
- Personal contacts
- Purpose of contacts
- Physical demands
- Work environment
- Supervisory duties

Each factor contains a number of levels and each level has an associated written description and point value. The number and range of points differ among the factors. For each factor, an occupation was assigned a level based on which written description best matched the job. Within each occupation, the points for 9 factors (supervisory duties was excluded) were recorded and totaled. The total determines the overall level of the occupation. Appendix table 3 presents average work levels for published occupational groups and selected occupations. A description of the levels for each factor is shown in appendix C.

Tabulations of levels of work for occupations in the survey follow the Federal Government's white-collar General Schedule. Point ranges for each of the 15 levels are shown in appendix D. It also includes an example of a leveled job and a guide to help data users evaluate jobs in their firm.

Wage data collected in prior surveys using the new generic leveling method were evaluated by BLS researchers using regression techniques. For each of the major occupational groups, wages were compared to the 10 generic level factors (and levels within those factors). The analysis showed that several of the generic level factors, most notably knowledge and supervision received, had strong explanatory power for wages. That is, as the levels within a given factor increased, the wages also increased. Detailed research continues in the area. The results of this research will be published by BLS in the future.

Collection period

The survey data were collected over several months. 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 (e.g., Christmas bonuses, profit-sharing bonuses)
- Uniform and tool allowances
- Free room and board
- Payments made by third parties (e.g., tips, bonuses given by manufacturers to department store salespeople, referral incentives in real estate)
- On-call pay

In order to calculate earnings for various time periods (hourly, weekly, and annual), data on work schedules were also 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, exempt from overtime provisions, often work beyond the assigned work schedule, their typical number of hours actually worked was collected.

Definition of terms

Full-time worker. Any employee that the employer considers to be full time.

Incentive worker. Any employee whose earnings are tied, at least in part, to commissions, piece rates, production bonuses, or other incentives based on production or sales.

Level. A ranking of an occupation based on the require-

ments of the position. (See the description in the technical note and the example for more details on the leveling process.)

Nonunion worker. An employee in an occupation not meeting the conditions for union coverage (see below).

Part-time worker. Any employee that the employer considers to be part-time.

Straight-time. Time worked at the standard rate of pay for the job.

Time-based worker. Any employee whose earnings are tied to an hourly rate or salary, and not to a specific level of production.

Union worker. Any employee is in a union occupation when all of the following conditions are met:

- A labor organization is recognized as the bargaining agent for all workers in the occupation
- Wage and salary rates are determined through collective bargaining or negotiations
- Settlement terms, which must include earnings provisions and may include benefit provisions, are embodied in a signed mutually binding collective bargaining agreement

Processing and analyzing the data

Data were processed and analyzed at the Bureau's National Office following collection.

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 the individual establishments or occupations into the various data series. Some of the establishments surveyed could not supply or refused to supply information. If data were not provided by a sample member, 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 the nonrespondents equals the mean value of 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 and job level.

Establishments that were determined to be out of business or outside the scope of the survey had their weights changed to zero. If only partial data were given by a sample establishment or occupation, or data were missing, the

response was treated as a refusal.

Survey response

	Establish- ments
Total in sample	226
Responding	147
Out of business or not in survey scope	8
Unable or refused to pro- vide data	71

Some surveys may have a high nonresponse rate for the all industries or private industry iterations. Such instances are noted in the bulletin table footnotes.

Estimation

The wage series in the tables are computed by combining the wages for individual establishment/occupations. Before being combined, individual wage rates are weighted by: number of workers; the sample weight adjusted for nonresponding establishments and other factors; and the occupation work schedule, varying depending on whether hourly, weekly, or annual rates are being calculated.

Not all series that were calculated met the criteria for publication. Before any series was published, it was reviewed to make sure that the number of observations underlying it was sufficient. This review prevented publishing a series that could have revealed information about a specific establishment.

The number of workers estimates represent the total in all establishments within the scope of the study and not the number actually surveyed. Because occupational structures among establishments differ, estimates of the number of workers obtained from the sample of establishments serve only to indicate the relative importance of the occupational groups studied.

Data reliability

The data in this bulletin 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 the 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. Appendix table 2 contains RSE data for selected series in this bulletin. RSE data for all series in this bulletin are available on the Internet web site and by request to the BLS National Office.

The standard error can be used to calculate a “confidence interval” around a sample estimate. As an example, suppose table A-1 shows that mean hourly earnings for all workers was \$12.79 per hour, and appendix table 2 shows a relative standard error of 3.6 percent for this estimate. At the 90-percent level, the confidence interval for this estimate is \$13.55 to \$12.03 (\$12.79 plus and minus 1.645 times 3.6 percent times \$12.79). 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. A Technical Reinterview Program done in all survey areas will be used in the development of a formal quality assessment process to help compute nonsampling error. 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 by personal visit, computer edits of the data, and detailed data review.

Appendix table 1. Number of establishments studied by industry division and establishment employment size, and number of establishments represented, Kalamazoo-Battle Creek, MI, February 1999

Industry	Number of establishments represented	Number of establishments studied				
		Total studied	50 - 99 workers	100 workers or more		
				Total	100 - 499 workers	500 workers or more
All industries	692	145	41	104	81	23
Private industry	652	134	41	93	77	16
Goods-producing industries	205	52	10	42	34	8
Construction	23	2	1	1	1	-
Manufacturing	183	50	9	41	33	8
Service-producing industries	446	82	31	51	43	8
Transportation and public utilities	45	12	4	8	7	1
Wholesale and retail trade	194	26	11	15	12	3
Finance, insurance and real estate	49	12	5	7	5	2
Services	157	32	11	21	19	2
State and local government	41	11	-	11	4	7

NOTE: Dashes indicate that no data were reported. Overall industry and industry groups may include data for categories not shown separately.

Appendix table 2. Relative standard errors of mean hourly earnings¹ for selected occupations, all industries, private industry, and State and local government, all workers², Kalamazoo-Battle Creek, MI, February 1999

(in percent)

Occupation ³	All industries	Private industry	State and local government
All occupations	2.0	2.2	4.0
All occupations excluding sales	2.0	2.2	4.0
White-collar occupations	2.3	2.8	3.7
White-collar occupations excluding sales	2.3	2.8	3.7
Professional specialty and technical occupations	2.7	3.5	3.2
Professional specialty occupations	2.9	4.3	3.5
Engineers, architects, and surveyors	5.8	6.0	—
Mechanical engineers	7.8	7.8	—
Mathematical and computer scientists	3.6	4.4	—
Computer systems analysts and scientists	2.9	3.0	—
Natural scientists	—	—	—
Health related occupations	5.8	6.4	—
Registered nurses	6.3	7.1	—
Teachers, college and university	10.4	—	—
Teachers, except college and university	5.4	—	5.3
Elementary school teachers	4.0	—	3.4
Librarians, archivists, and curators	—	—	—
Social scientists and urban planners	—	—	—
Social, recreation, and religious workers	5.7	—	—
Social workers	5.8	—	—
Lawyers and judges	—	—	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	11.2	11.8	—
Technical occupations	4.8	5.1	—
Licensed practical nurses	1.8	1.8	—
Computer programmers	6.2	6.2	—
Technical and related occupations, N.E.C.	5.8	7.1	—
Executive, administrative, and managerial occupations ...	4.7	4.8	14.6
Executives, administrators, and managers	6.6	6.7	18.8
Financial managers	13.3	13.3	—
Managers and administrators, N.E.C.	8.3	6.7	—
Management related occupations	4.7	5.1	—
Accountants and auditors	4.7	5.5	—
Management related occupations, N.E.C.	6.4	7.0	—
Sales occupations	8.2	8.2	—
Supervisors, sales occupations	18.7	18.7	—
Sales workers, other commodities	26.5	26.5	—
Cashiers	4.0	4.0	—
Administrative support occupations, including clerical	3.0	3.8	3.9
Secretaries	4.7	7.9	4.4
Receptionists	4.8	4.8	—
Order clerks	5.3	5.3	—
Records clerks, N.E.C.	5.4	7.8	—
Bookkeepers, accounting and auditing clerks	5.2	4.1	—
Stock and inventory clerks	12.0	12.0	—
Investigators and adjusters except insurance	2.4	2.4	—
General office clerks	5.6	6.7	—
Bank tellers	0.9	0.9	—
Teachers' aides	3.6	—	3.7
Administrative support occupations, N.E.C.	7.7	7.7	—
Blue-collar occupations	2.7	2.8	3.9
Precision production, craft, and repair occupations	2.1	2.2	4.7
Supervisors, mechanics and repairers	6.2	6.2	—
Industrial machinery repairers	4.4	4.5	—
Mechanics and repairers, N.E.C.	5.7	6.5	—
Electricians	7.6	—	—
Supervisors, production occupations	8.4	8.4	—
Machine operators, assemblers, and inspectors	4.4	4.4	—
Numerical control machine operators	6.8	6.8	—
Fabricating machine operators, N.E.C.	14.6	14.6	—
Molding and casting machine operators	4.6	4.6	—
Packaging and filling machine operators	4.5	4.5	—

See footnotes at end of table.

Appendix table 2. Relative standard errors of mean hourly earnings¹ for selected occupations, all industries, private industry, and State and local government, all workers², Kalamazoo-Battle Creek, MI, February 1999 — Continued

(in percent)

Occupation ³	All industries	Private industry	State and local government
Blue-collar occupations (-Continued)			
Machine operators, assemblers, and inspectors (-Continued)			
Miscellaneous machine operators, N.E.C.	4.3	4.3	—
Welders and cutters	12.0	12.0	—
Assemblers	6.4	6.4	—
Production inspectors, checkers and examiners ..	13.0	13.0	—
Transportation and material moving occupations	5.7	6.1	—
Truck drivers	8.5	8.5	—
Industrial truck and tractor equipment operators ..	5.5	5.5	—
Handlers, equipment cleaners, helpers, and laborers	3.7	3.7	—
Groundskeepers and gardeners except farm	7.5	—	—
Production helpers	6.6	6.6	—
Stock handlers and baggers	6.4	6.4	—
Freight, stock, and material handlers, N.E.C.	6.9	6.9	—
Hand packers and packagers	10.2	10.2	—
Laborers except construction, N.E.C.	5.7	6.4	—
Service occupations	3.3	4.3	6.8
Protective service occupations	19.6	—	16.7
Food service occupations	5.3	5.8	—
Waiters and waitresses	15.9	15.9	—
Cooks	5.7	6.8	—
Food preparation occupations, N.E.C.	3.9	3.1	—
Health service occupations	3.7	3.5	—
Nursing aides, orderlies and attendants	4.0	3.8	—
Cleaning and building service occupations	6.2	8.1	—
Janitors and cleaners	5.9	8.0	—
Personal service occupations	4.5	2.9	10.3
Child care workers, N.E.C.	4.5	—	—
Service occupations, N.E.C.	9.7	—	—

¹ The relative standard error is the standard error expressed as a percent of the estimate. Hourly earnings for these occupations are presented in Tables A-1 and A-2. Reliable relative standard errors could not be determined for all occupations.

² All workers include full-time and part-time workers. 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 A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

NOTE: Dashes indicate that no data were reported or

that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means not elsewhere classified. IN THIS SURVEY, THE NONRESPONSE RATE FOR ALL INDUSTRIES AND PRIVATE INDUSTRY EXCEEDED REGULAR SURVEY STANDARDS FOR PUBLICATION. ACCORDINGLY, USERS SHOULD INTERPRET THESE RESULTS WITH THIS LIMITATION IN MIND.

NOTE: Individual and average wage rates were collected in this update survey. A procedure was put into place to "move" the positional statistics where averages were collected. This procedure compares current locality survey data—at the quote level—with the same quote from the prior survey. Individual rates from the prior survey are moved by the average change in mean wages for the occupation.

Appendix table 3. Average work levels for selected occupations, all workers, full-time and part-time workers, Kalamazoo-Battle Creek, MI, February 1999

Occupation ¹	All workers	Full-time workers	Part-time workers
All occupations	5	5	3
All occupations excluding sales	5	5	3
White-collar occupations	7	7	4
White-collar occupations excluding sales	7	7	5
Professional specialty and technical occupations	8	8	6
Professional specialty occupations	8	9	7
Engineers, architects, and surveyors	10	10	—
Mechanical engineers	9	9	—
Mathematical and computer scientists	8	8	—
Computer systems analysts and scientists	9	9	—
Natural scientists	—	—	—
Health related occupations	8	8	7
Registered nurses	8	8	8
Teachers, college and university	12	12	—
Teachers, except college and university	8	8	6
Elementary school teachers	8	8	—
Librarians, archivists, and curators	—	—	—
Social scientists and urban planners	—	—	—
Social, recreation, and religious workers	9	9	—
Social workers	9	9	—
Lawyers and judges	—	—	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	8	8	—
Technical occupations	6	6	5
Licensed practical nurses	5	5	—
Computer programmers	7	7	—
Technical and related occupations, N.E.C.	7	7	—
Executive, administrative, and managerial occupations	9	9	—
Executives, administrators, and managers	10	10	—
Financial managers	10	10	—
Managers and administrators, N.E.C.	10	10	—
Management related occupations	8	8	—
Accountants and auditors	7	7	—
Management related occupations, N.E.C.	8	8	—
Sales occupations	4	5	2
Supervisors, sales occupations	7	7	—
Sales workers, other commodities	4	5	3
Cashiers	2	3	2
Administrative support occupations, including clerical	4	4	3
Secretaries	5	5	—
Receptionists	2	2	—
Order clerks	4	5	—
Records clerks, N.E.C.	4	4	—
Bookkeepers, accounting and auditing clerks	4	4	—
Stock and inventory clerks	4	4	—
Investigators and adjusters except insurance	4	—	—
General office clerks	3	3	3
Bank tellers	2	—	—
Teachers' aides	3	—	—
Administrative support occupations, N.E.C.	4	4	—
Blue-collar occupations	4	4	2
Precision production, craft, and repair occupations	6	6	—
Supervisors, mechanics and repairers	8	8	—
Industrial machinery repairers	6	6	—
Mechanics and repairers, N.E.C.	6	6	—
Electricians	7	7	—
Supervisors, production occupations	7	7	—
Machine operators, assemblers, and inspectors	3	3	—
Numerical control machine operators	4	4	—
Fabricating machine operators, N.E.C.	3	3	—
Molding and casting machine operators	3	3	—
Packaging and filling machine operators	3	3	—
Miscellaneous machine operators, N.E.C.	4	4	—
Welders and cutters	6	6	—
Assemblers	2	2	—
Production inspectors, checkers and examiners	2	2	—

See footnotes at end of table.

Appendix table 3. Average work levels for selected occupations, all workers, full-time and part-time workers, Kalamazoo-Battle Creek, MI, February 1999 — Continued

Occupation ¹	All workers	Full-time workers	Part-time workers
Blue-collar occupations (-Continued)			
Transportation and material moving occupations	3	3	—
Truck drivers	3	3	—
Industrial truck and tractor equipment operators	3	3	—
Handlers, equipment cleaners, helpers, and laborers	2	3	1
Groundskeepers and gardeners except farm	3	—	—
Production helpers	2	2	—
Stock handlers and baggers	2	2	1
Freight, stock, and material handlers, N.E.C.	2	—	—
Hand packers and packagers	2	2	—
Laborers except construction, N.E.C.	3	—	—
Service occupations	3	3	2
Protective service occupations	5	5	—
Food service occupations	2	2	2
Waiters and waitresses	2	—	2
Cooks	2	2	—
Food preparation occupations, N.E.C.	1	1	1
Health service occupations	3	3	2
Nursing aides, orderlies and attendants	3	3	2
Cleaning and building service occupations	2	2	2
Janitors and cleaners	2	2	2
Personal service occupations	4	5	2
Child care workers, N.E.C.	4	—	—
Service occupations, N.E.C.	2	—	—

¹ A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups. The occupations titled authors, musicians, actors, painters, photographers, dancers, artists, athletes, and legislators cannot be assigned a work level.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may

include data for categories not shown separately. N.E.C. means "not elsewhere classified."

NOTE: Individual and average wage rates were collected in this update survey. A procedure was put into place to "move" the positional statistics where averages were collected. This procedure compares current locality survey data—at the quote level—with the same quote from the prior survey. Individual rates from the prior survey are moved by the average change in mean wages for the occupation.