

Youngstown-Warren, OH National Compensation Survey June 1998



U.S. Department of Labor
Alexis M. Herman, Secretary

Bureau of Labor Statistics
Katharine G. Abraham, Commissioner

September 1999

Bulletin 3095-62

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.

Material in this bulletin is in the public domain and, with appropriate credit, may be reproduced without permission. This information will be made available to sensory impaired individuals upon request. Voice phone: (202) 606-7828; Federal Relay Service: 1-800-877-8339.

Contents

	<i>Page</i>
Introduction.....	1
Tables:	
A-1. Hourly earnings for selected occupations, all workers, all industries.....	2
A-2. Hourly earnings for selected occupations, all workers, private industry and State and local government.....	4
A-3. Hourly earnings for selected occupations, full-time and part-time workers, all industries.....	6
A-4. Weekly and annual earnings and hours for selected occupations, full-time workers only, all industries.....	8
B-1. Mean hourly earnings by occupational group and levels, all industries, private industry, State and local government, full-time and part-time workers.....	10
B-2. Mean hourly earnings for selected occupations and levels, all industries, private industry, State and local government, full-time and part-time workers.....	13
C-1. Mean hourly earnings by occupational group and selected characteristics, all industries.....	15
C-2. Mean hourly earnings by occupational group and industry division, private industry, all workers.....	16
C-3. Mean hourly earnings by occupational group and establishment employment size, private industry, all workers.....	17
C-4. Number of workers represented by occupational group.....	18
Appendixes:	
A. Technical Note.....	A-1
Table 1. Number of establishments studied and represented.....	A-5
Table 2. Relative standard errors.....	A-6
Table 3. Average work levels.....	A-8
B. Occupational Classifications.....	B-1
C. Generic Leveling Criteria.....	C-1
D. Evaluating Your Firm's Jobs.....	D-1
E. A Guide for Users of Prior BLS Wage Surveys.....	E-1

Introduction

The tables in this bulletin summarize the NCS survey results for the Youngstown-Warren, OH 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, Youngstown-Warren, OH, June 1998

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
All occupations	\$14.68	\$6.00	\$8.65	\$13.42	\$20.00	\$23.57
All occupations excluding sales	14.97	6.15	9.14	13.80	20.11	23.57
White-collar occupations	16.74	6.40	9.56	13.93	22.11	30.70
White-collar occupations excluding sales	18.06	7.63	10.64	15.07	23.32	31.78
Professional specialty and technical occupations	21.32	12.00	15.01	19.96	26.50	32.23
Professional specialty occupations	22.59	13.56	17.51	21.30	28.30	32.48
Engineers, architects, and surveyors	25.60	18.02	21.12	25.00	30.00	32.10
Engineers, N.E.C.	25.16	18.02	21.12	25.00	29.38	32.94
Mathematical and computer scientists	—	—	—	—	—	—
Natural scientists	—	—	—	—	—	—
Health related occupations	18.71	14.81	16.53	18.62	20.06	23.86
Registered nurses	19.36	14.81	17.45	18.62	21.30	23.97
Teachers, college and university	—	—	—	—	—	—
Teachers, except college and university	25.64	16.24	20.12	27.05	31.78	33.77
Elementary school teachers	25.92	17.32	20.92	26.13	31.14	33.77
Secondary school teachers	27.39	19.08	23.30	27.12	31.78	35.86
Teachers, N.E.C.	26.33	16.89	19.82	28.52	32.00	33.56
Librarians, archivists, and curators	—	—	—	—	—	—
Social scientists and urban planners	—	—	—	—	—	—
Social, recreation, and religious workers	12.63	10.24	10.24	11.80	12.39	13.81
Social workers	13.53	10.84	11.80	12.22	13.81	13.81
Lawyers and judges	—	—	—	—	—	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	14.53	6.75	10.88	10.88	18.51	26.19
Technical occupations	16.84	11.25	12.44	13.92	21.25	24.77
Licensed practical nurses	12.88	11.65	12.36	13.03	13.50	14.01
Drafters	23.58	9.00	12.00	18.00	35.53	35.71
Executive, administrative, and managerial occupations ...	27.96	11.13	17.22	24.85	32.79	44.66
Executives, administrators, and managers	32.24	17.22	21.91	28.95	35.75	47.37
Managers and administrators, N.E.C.	38.22	20.40	27.34	34.71	38.22	49.07
Management related occupations	18.99	10.80	11.13	16.69	25.36	30.16
Management related occupations, N.E.C.	27.35	23.12	25.85	27.14	28.86	32.34
Sales occupations	10.28	5.50	5.80	7.60	12.85	20.19
Sales workers, other commodities	7.06	5.50	5.50	5.55	8.12	10.50
Cashiers	7.01	5.35	5.58	6.00	7.00	8.65
Administrative support occupations, including clerical	10.62	6.36	7.88	10.27	12.55	15.00
Secretaries	10.40	7.00	8.30	9.65	12.40	15.34
Receptionists	7.38	6.10	7.25	7.44	7.49	8.35
Records clerks, N.E.C.	10.20	8.53	9.62	10.07	10.90	11.71
Bookkeepers, accounting and auditing clerks	11.03	9.17	9.35	10.50	13.21	14.29
Traffic, shipping and receiving clerks	10.10	5.46	7.57	9.85	12.43	12.97
Stock and inventory clerks	12.11	8.15	10.30	13.36	14.06	14.06
General office clerks	11.18	7.45	9.19	10.62	12.30	16.49
Teachers' aides	8.24	5.15	7.01	7.37	10.90	11.26
Administrative support occupations, N.E.C.	9.83	6.92	8.00	9.41	11.24	14.72
Blue-collar occupations	14.95	7.11	10.42	14.98	20.39	21.34
Precision production, craft, and repair occupations	18.11	11.58	14.80	17.97	22.41	23.66
Industrial machinery repairers	19.30	13.27	17.28	20.49	23.57	23.57
Mechanics and repairers, N.E.C.	16.07	11.90	14.93	15.03	17.92	20.21
Electricians	21.73	15.48	20.75	23.57	23.57	23.57
Supervisors, production occupations	20.54	9.70	16.35	21.08	26.48	28.10
Machinists	14.98	11.59	13.74	16.00	16.00	16.05
Machine operators, assemblers, and inspectors	15.47	8.00	11.01	16.08	20.61	20.61
Punching and stamping press operators	15.46	8.70	11.51	14.64	19.55	20.39
Grinding, abrading, buffing, and polishing machine operators	10.95	8.55	9.10	9.35	11.25	16.70
Fabricating machine operators, N.E.C.	14.97	7.75	10.00	13.81	20.65	20.65
Furnace, kiln, and oven operators, except food ...	14.51	9.10	13.96	15.40	16.60	17.41
Miscellaneous machine operators, N.E.C.	15.14	7.65	9.89	15.79	20.42	20.65
Welders and cutters	14.79	10.14	11.01	12.77	19.82	20.40
Miscellaneous hand working occupations, N.E.C.	9.27	5.50	8.35	8.50	12.48	12.55
Production inspectors, checkers and examiners ..	12.48	6.50	8.59	13.49	15.93	19.24
Transportation and material moving occupations	14.80	9.01	11.65	14.74	17.48	20.68

See footnotes at end of table.

Table A-1. Hourly earnings¹ for selected occupations, all workers², all industries, Youngstown-Warren, OH, June 1998 — Continued

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
Blue-collar occupations (-Continued)						
Transportation and material moving occupations (-Continued)						
Truck drivers	\$13.56	\$11.06	\$11.38	\$14.43	\$15.02	\$15.83
Bus drivers	9.48	6.00	8.00	9.48	11.00	12.70
Crane and tower operators	12.02	6.85	8.65	12.78	13.37	14.74
Industrial truck and tractor equipment operators ..	16.56	9.60	12.34	19.92	20.09	21.14
Handlers, equipment cleaners, helpers, and laborers	10.16	5.46	6.25	8.55	13.44	17.51
Production helpers	8.78	5.50	7.45	7.75	10.86	11.96
Stock handlers and baggers	10.01	5.45	6.00	8.50	11.02	19.72
Machine feeders and offbearers	9.83	7.70	8.25	8.55	10.86	14.56
Freight, stock, and material handlers, N.E.C.	12.94	7.50	8.46	14.90	14.90	16.16
Hand packers and packagers	8.09	5.30	5.51	7.00	8.25	12.69
Laborers except construction, N.E.C.	9.52	5.25	5.82	8.05	12.57	16.34
Service occupations						
Protective service occupations	8.81	5.15	5.50	7.45	11.30	14.73
Food service occupations	14.23	9.69	12.35	14.27	17.33	20.02
Waiters and waitresses	5.74	2.13	3.50	5.50	6.50	9.50
Cooks	2.46	2.13	2.13	2.15	2.30	3.50
Food preparation occupations, N.E.C.	7.55	5.50	6.00	6.50	8.55	9.85
Health service occupations	6.25	5.15	5.30	5.95	6.41	8.25
Nursing aides, orderlies and attendants	8.26	5.92	6.60	7.38	10.66	11.80
Cleaning and building service occupations	7.83	5.75	6.60	7.00	8.75	11.34
Janitors and cleaners	8.40	5.15	5.50	7.05	10.95	12.68
Personal service occupations	8.51	5.15	5.47	7.30	11.16	12.68
	8.61	5.15	5.25	7.94	9.89	14.33

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."

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, Youngstown-Warren, OH, June 1998

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	\$14.14	\$5.75	\$8.02	\$12.98	\$19.72	\$22.50	\$17.58	\$9.69	\$11.88	\$14.73	\$21.91	\$31.15
All occupations excluding sales	14.45	6.00	8.40	13.38	20.00	22.75	17.60	9.69	11.86	14.73	21.91	31.19
White-collar occupations	15.51	6.00	8.42	12.44	19.64	27.28	20.28	9.86	12.39	18.88	28.26	32.97
White-collar occupations excluding sales	17.05	7.33	10.10	14.06	21.00	29.61	20.35	9.86	12.37	18.94	28.27	33.10
Professional specialty and technical occupations	18.99	11.25	13.55	18.62	22.75	28.28	25.43	15.27	19.60	25.53	31.78	34.47
Professional specialty occupations	19.95	11.61	15.83	19.02	23.97	28.53	25.88	15.35	20.19	26.23	31.78	34.55
Engineers, architects, and surveyors	25.60	18.02	21.12	25.00	30.00	32.10	-	-	-	-	-	-
Engineers, N.E.C.	25.16	18.02	21.12	25.00	29.38	32.94	-	-	-	-	-	-
Mathematical and computer scientists	-	-	-	-	-	-	-	-	-	-	-	-
Natural scientists	-	-	-	-	-	-	-	-	-	-	-	-
Health related occupations	18.43	14.81	16.38	18.62	19.58	23.83	-	-	-	-	-	-
Registered nurses	19.04	14.81	17.29	18.62	20.35	23.86	-	-	-	-	-	-
Teachers, college and university	-	-	-	-	-	-	-	-	-	-	-	-
Teachers, except college and university	-	-	-	-	-	-	27.04	17.54	22.17	28.52	32.00	34.23
Elementary school teachers	-	-	-	-	-	-	26.96	18.24	22.63	27.45	31.78	34.65
Secondary school teachers	-	-	-	-	-	-	28.26	19.91	23.64	27.79	32.95	36.08
Librarians, archivists, and curators	-	-	-	-	-	-	-	-	-	-	-	-
Social scientists and urban planners	-	-	-	-	-	-	-	-	-	-	-	-
Social, recreation, and religious workers	-	-	-	-	-	-	13.53	10.84	11.80	12.22	13.81	13.81
Social workers	-	-	-	-	-	-	13.53	10.84	11.80	12.22	13.81	13.81
Lawyers and judges	-	-	-	-	-	-	-	-	-	-	-	-
Writers, authors, entertainers, athletes, and professionals, N.E.C.	14.53	6.75	10.88	10.88	18.51	26.19	-	-	-	-	-	-
Technical occupations	16.96	11.14	12.37	13.50	21.25	24.77	-	-	-	-	-	-
Licensed practical nurses	12.88	11.65	12.36	13.03	13.50	14.01	-	-	-	-	-	-
Drafters	23.58	9.00	12.00	18.00	35.53	35.71	-	-	-	-	-	-
Executive, administrative, and managerial occupations	29.25	11.13	17.06	25.77	35.56	47.37	23.86	16.55	18.94	21.91	28.27	34.36
Executives, administrators, and managers	36.51	20.40	24.05	32.45	37.93	49.07	23.62	16.55	18.94	21.91	25.00	34.36
Managers and administrators, N.E.C.	39.45	21.00	27.92	34.71	39.66	49.07	-	-	-	-	-	-
Management related occupations	18.57	10.80	11.13	15.61	25.36	31.39	-	-	-	-	-	-
Sales occupations	10.17	5.50	5.75	7.54	12.07	20.19	-	-	-	-	-	-
Sales workers, other commodities	7.06	5.50	5.50	5.55	8.12	10.50	-	-	-	-	-	-
Cashiers	6.38	5.30	5.50	6.00	6.75	7.75	-	-	-	-	-	-
Administrative support occupations, including clerical	10.30	6.00	7.49	9.62	11.80	15.00	11.48	7.54	9.75	11.06	13.21	15.15
Secretaries	8.92	6.58	7.07	8.03	9.72	13.94	11.73	9.62	9.65	10.47	13.25	15.81
Receptionists	7.38	6.10	7.25	7.44	7.49	8.35	-	-	-	-	-	-
Records clerks, N.E.C.	9.87	8.50	9.62	10.00	10.90	10.90	-	-	-	-	-	-
Bookkeepers, accounting and auditing clerks	10.48	9.17	9.35	10.50	10.60	13.74	-	-	-	-	-	-
Traffic, shipping and receiving clerks	10.10	5.46	7.57	9.85	12.43	12.97	-	-	-	-	-	-
Stock and inventory clerks	12.11	8.15	10.30	13.36	14.06	14.06	-	-	-	-	-	-
General office clerks	11.31	6.50	8.22	10.50	15.46	16.49	11.01	9.33	9.86	10.62	12.30	13.00
Administrative support occupations, N.E.C.	9.81	6.92	7.99	9.20	11.24	14.72	-	-	-	-	-	-
Blue-collar occupations	14.99	7.00	10.00	15.03	20.40	21.34	13.93	10.45	13.13	14.08	14.93	15.14
Precision production, craft, and repair occupations	18.31	11.50	15.03	18.27	22.65	23.66	14.46	13.07	13.66	14.71	14.93	15.14
Industrial machinery repairers	19.30	13.27	17.28	20.49	23.57	23.57	-	-	-	-	-	-
Mechanics and repairers, N.E.C.	16.24	11.58	14.98	15.46	17.92	20.21	-	-	-	-	-	-
Electricians	21.73	15.48	20.75	23.57	23.57	23.57	-	-	-	-	-	-
Supervisors, production occupations ..	20.54	9.70	16.35	21.08	26.48	28.10	-	-	-	-	-	-
Machinists	14.98	11.59	13.74	16.00	16.00	16.05	-	-	-	-	-	-
Machine operators, assemblers, and inspectors	15.47	8.00	11.01	16.24	20.61	20.61	-	-	-	-	-	-
Punching and stamping press operators	15.46	8.70	11.51	14.64	19.55	20.39	-	-	-	-	-	-
Grinding, abrading, buffing, and polishing machine operators	10.95	8.55	9.10	9.35	11.25	16.70	-	-	-	-	-	-

See footnotes at end of table.

Table A-2. Hourly earnings¹ for selected occupations, all workers², private industry and State and local government, Youngstown-Warren, OH, June 1998 — 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)													
Machine operators, assemblers, and inspectors (-Continued)													
Fabricating machine operators, N.E.C.	\$14.97	\$7.75	\$10.00	\$13.81	\$20.65	\$20.65	—	—	—	—	—	—	—
Furnace, kiln, and oven operators, except food	14.51	9.10	13.96	15.40	16.60	17.41	—	—	—	—	—	—	—
Miscellaneous machine operators, N.E.C.	15.14	7.65	9.89	15.79	20.42	20.65	—	—	—	—	—	—	—
Welders and cutters	14.79	10.14	11.01	12.77	19.82	20.40	—	—	—	—	—	—	—
Miscellaneous hand working occupations, N.E.C.	9.27	5.50	8.35	8.50	12.48	12.55	—	—	—	—	—	—	—
Production inspectors, checkers and examiners	12.48	6.50	8.59	13.49	15.93	19.24	—	—	—	—	—	—	—
Transportation and material moving occupations	14.85	8.91	11.43	15.01	17.63	20.68	\$14.45	\$10.11	\$13.71	\$14.08	\$14.95	\$17.43	—
Truck drivers	13.49	11.06	11.33	14.43	15.02	15.83	—	—	—	—	—	—	—
Bus drivers	—	—	—	—	—	—	10.85	8.80	9.79	10.24	11.88	12.90	—
Crane and tower operators	12.02	6.85	8.65	12.78	13.37	14.74	—	—	—	—	—	—	—
Industrial truck and tractor equipment operators	16.56	9.60	12.34	19.92	20.09	21.14	—	—	—	—	—	—	—
Handlers, equipment cleaners, helpers, and laborers	10.01	5.45	6.25	8.35	12.63	17.65	12.71	9.42	10.45	13.70	14.55	14.55	—
Production helpers	8.78	5.50	7.45	7.75	10.86	11.96	—	—	—	—	—	—	—
Stock handlers and baggers	10.01	5.45	6.00	8.50	11.02	19.72	—	—	—	—	—	—	—
Machine feeders and offbearers	9.83	7.70	8.25	8.55	10.86	14.56	—	—	—	—	—	—	—
Freight, stock, and material handlers, N.E.C.	12.94	7.50	8.46	14.90	14.90	16.16	—	—	—	—	—	—	—
Hand packers and packagers	8.09	5.30	5.51	7.00	8.25	12.69	—	—	—	—	—	—	—
Laborers except construction, N.E.C.	9.33	5.15	5.60	8.00	11.97	19.69	—	—	—	—	—	—	—
Service occupations	7.09	4.15	5.25	6.40	8.25	11.30	13.26	8.72	10.95	13.05	15.33	17.33	—
Protective service occupations	—	—	—	—	—	—	14.53	10.45	12.35	14.27	15.79	18.28	—
Food service occupations	5.46	2.13	2.30	5.45	6.26	8.89	9.00	6.50	7.24	8.03	10.05	12.88	—
Waiters and waitresses	2.46	2.13	2.13	2.15	2.30	3.50	—	—	—	—	—	—	—
Cooks	7.11	5.50	6.00	6.50	8.50	9.60	—	—	—	—	—	—	—
Food preparation occupations, N.E.C.	5.96	5.15	5.30	5.50	6.25	7.85	—	—	—	—	—	—	—
Health service occupations	8.05	5.75	6.60	7.25	10.30	11.34	—	—	—	—	—	—	—
Nursing aides, orderlies and attendants	7.79	5.75	6.40	7.00	8.25	11.34	—	—	—	—	—	—	—
Cleaning and building service occupations	7.47	5.15	5.15	6.00	8.03	11.30	11.23	8.79	10.95	11.06	11.72	13.32	—
Janitors and cleaners	7.49	5.15	5.15	5.95	9.35	11.30	11.23	8.79	10.95	11.06	11.72	13.32	—
Personal service occupations	7.34	5.15	5.15	7.10	9.59	9.89	—	—	—	—	—	—	—

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."

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, Youngstown-Warren, OH, June 1998

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	\$15.56	\$7.00	\$9.85	\$14.43	\$20.40	\$23.66	\$7.56	\$5.15	\$5.15	\$5.75	\$9.44	\$13.50
All occupations excluding sales	15.79	7.25	10.20	14.72	20.42	23.66	7.74	3.25	5.15	5.93	10.33	14.00
White-collar occupations	17.57	7.05	10.24	14.82	22.75	31.51	10.19	5.40	5.75	8.39	13.50	17.45
White-collar occupations excluding sales	18.61	8.17	10.87	15.87	24.05	32.21	12.31	6.10	7.54	12.12	15.01	18.62
Professional specialty and technical occupations	22.10	12.25	16.24	20.95	27.87	32.76	15.07	11.47	12.64	14.00	17.45	20.81
Professional specialty occupations	23.22	13.93	18.19	22.66	29.07	32.94	16.32	11.80	14.00	15.01	18.62	25.14
Engineers, architects, and surveyors	25.60	18.02	21.12	25.00	30.00	32.10	-	-	-	-	-	-
Engineers, N.E.C.	25.16	18.02	21.12	25.00	29.38	32.94	-	-	-	-	-	-
Mathematical and computer scientists	-	-	-	-	-	-	-	-	-	-	-	-
Natural scientists	-	-	-	-	-	-	-	-	-	-	-	-
Health related occupations	19.15	15.40	17.45	18.75	20.29	23.86	17.40	14.00	15.01	17.16	18.62	21.30
Registered nurses	19.75	15.79	17.68	19.08	22.91	23.97	18.20	14.00	16.18	18.14	19.18	21.61
Teachers, college and university	-	-	-	-	-	-	-	-	-	-	-	-
Teachers, except college and university	25.74	16.49	20.34	27.05	31.78	33.77	-	-	-	-	-	-
Elementary school teachers	25.92	17.32	20.92	26.13	31.14	33.77	-	-	-	-	-	-
Secondary school teachers	27.44	19.05	23.30	27.25	31.98	35.86	-	-	-	-	-	-
Teachers, N.E.C.	26.35	16.89	19.95	28.52	32.00	33.56	-	-	-	-	-	-
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.	15.39	10.88	10.88	12.34	23.13	26.19	-	-	-	-	-	-
Technical occupations	17.73	11.25	12.44	14.65	22.75	28.17	12.91	11.33	12.00	13.15	13.50	13.88
Drafters	24.67	9.00	16.30	32.02	35.53	38.14	-	-	-	-	-	-
Executive, administrative, and managerial occupations	28.00	11.13	17.22	24.85	32.86	44.66	-	-	-	-	-	-
Executives, administrators, and managers	32.23	17.22	21.91	28.95	35.75	47.37	-	-	-	-	-	-
Managers and administrators, N.E.C.	38.22	20.40	27.34	34.71	38.22	49.07	-	-	-	-	-	-
Management related occupations	19.00	10.80	11.13	15.61	25.36	30.16	-	-	-	-	-	-
Management related occupations, N.E.C.	27.35	23.12	25.85	27.14	28.86	32.34	-	-	-	-	-	-
Sales occupations	11.49	5.55	6.25	9.66	16.20	22.11	6.39	5.20	5.45	5.65	7.50	8.65
Cashiers	-	-	-	-	-	-	6.59	5.25	5.45	5.75	7.60	8.65
Administrative support occupations, including clerical	10.86	6.71	8.19	10.43	13.00	15.02	8.16	5.50	6.10	7.54	10.90	11.33
Secretaries	10.40	7.00	8.30	9.65	12.40	15.34	-	-	-	-	-	-
Bookkeepers, accounting and auditing clerks	11.03	9.17	9.35	10.50	13.21	14.29	-	-	-	-	-	-
Traffic, shipping and receiving clerks	10.10	5.46	7.57	9.85	12.43	12.97	-	-	-	-	-	-
Stock and inventory clerks	12.71	8.15	11.02	13.36	14.06	14.06	-	-	-	-	-	-
General office clerks	11.22	7.50	9.19	11.06	12.30	16.49	-	-	-	-	-	-
Administrative support occupations, N.E.C.	9.73	6.92	8.00	9.20	10.50	14.72	-	-	-	-	-	-
Blue-collar occupations	15.29	7.55	10.95	15.13	20.40	21.34	7.44	5.15	5.45	5.70	9.48	11.74
Precision production, craft, and repair occupations	18.13	11.58	14.81	17.97	22.41	23.66	-	-	-	-	-	-
Industrial machinery repairers	19.40	13.27	17.28	20.49	23.57	23.57	-	-	-	-	-	-
Mechanics and repairers, N.E.C.	16.07	11.90	14.93	15.03	17.92	20.21	-	-	-	-	-	-
Electricians	21.73	15.48	20.75	23.57	23.57	23.57	-	-	-	-	-	-
Supervisors, production occupations ..	20.54	9.70	16.35	21.08	26.48	28.10	-	-	-	-	-	-
Machinists	14.98	11.59	13.74	16.00	16.00	16.05	-	-	-	-	-	-
Machine operators, assemblers, and inspectors	15.61	8.40	11.24	16.52	20.61	20.61	7.99	5.15	5.50	7.81	9.69	11.20
Punching and stamping press operators	15.46	8.70	11.51	14.64	19.55	20.39	-	-	-	-	-	-
Grinding, abrading, buffing, and polishing machine operators	10.95	8.55	9.10	9.35	11.25	16.70	-	-	-	-	-	-

See footnotes at end of table.

Table A-3. Hourly earnings¹ for selected occupations, full-time and part-time workers², all industries, Youngstown-Warren, OH, June 1998 — 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)												
Machine operators, assemblers, and inspectors (-Continued)												
Fabricating machine operators, N.E.C.	\$14.97	\$7.75	\$10.00	\$13.81	\$20.65	\$20.65	—	—	—	—	—	—
Furnace, kiln, and oven operators, except food	14.51	9.10	13.96	15.40	16.60	17.41	—	—	—	—	—	—
Miscellaneous machine operators, N.E.C.	15.45	9.06	9.89	15.79	20.42	20.65	—	—	—	—	—	—
Welders and cutters	14.79	10.14	11.01	12.77	19.82	20.40	—	—	—	—	—	—
Production inspectors, checkers and examiners	12.48	6.50	8.59	13.49	15.93	19.24	—	—	—	—	—	—
Transportation and material moving occupations	15.12	9.60	12.34	14.95	17.48	20.78	\$10.57	\$5.93	\$8.80	\$11.38	\$11.88	\$15.20
Truck drivers	13.62	11.06	11.29	14.62	15.02	15.83	—	—	—	—	—	—
Crane and tower operators	12.02	6.85	8.65	12.78	13.37	14.74	—	—	—	—	—	—
Industrial truck and tractor equipment operators	16.56	9.60	12.34	19.92	20.09	21.14	—	—	—	—	—	—
Handlers, equipment cleaners, helpers, and laborers	10.75	5.97	7.33	9.75	13.70	17.89	5.95	5.15	5.25	5.50	6.00	6.75
Production helpers	9.32	7.45	7.50	8.75	10.86	11.96	—	—	—	—	—	—
Stock handlers and baggers	11.45	6.25	7.55	10.95	12.50	19.72	5.59	5.15	5.25	5.45	5.70	6.25
Machine feeders and offbearers	9.83	7.70	8.25	8.55	10.86	14.56	—	—	—	—	—	—
Freight, stock, and material handlers, N.E.C.	12.94	7.50	8.46	14.90	14.90	16.16	—	—	—	—	—	—
Hand packers and packagers	8.88	5.35	6.00	7.50	9.00	13.51	—	—	—	—	—	—
Laborers except construction, N.E.C.	9.82	5.40	6.25	8.05	12.63	19.69	—	—	—	—	—	—
Service occupations	10.41	5.92	6.85	9.89	12.81	15.79	5.38	2.13	5.15	5.25	6.00	8.25
Protective service occupations	14.54	9.69	12.35	14.27	17.33	20.02	7.95	5.15	5.15	5.15	10.00	10.45
Food service occupations	8.46	5.30	6.25	7.85	9.85	12.88	4.57	2.13	2.18	5.25	5.75	6.50
Waiters and waitresses	—	—	—	—	—	—	2.47	2.13	2.13	2.15	2.30	3.50
Cooks	8.55	6.25	7.00	8.50	9.49	12.40	6.38	5.50	5.50	6.00	6.50	9.60
Food preparation occupations, N.E.C.	6.90	5.15	5.85	6.25	7.85	8.89	5.83	5.15	5.25	5.50	5.95	6.50
Health service occupations	8.26	5.92	6.60	7.38	10.90	11.80	8.29	5.60	6.75	7.02	10.66	11.96
Nursing aides, orderlies and attendants	7.88	5.75	6.40	7.15	8.81	11.50	—	—	—	—	—	—
Cleaning and building service occupations	9.33	5.50	6.13	8.45	11.29	13.32	6.21	5.15	5.15	5.15	6.45	9.44
Janitors and cleaners	9.65	5.47	5.95	10.95	11.30	13.32	6.21	5.15	5.15	5.15	6.45	9.44
Personal service occupations	10.54	7.02	7.76	9.89	11.69	17.20	5.99	5.15	5.15	5.20	5.68	8.59

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 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."

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, Youngstown-Warren, OH, June 1998

Occupation ³	All industries					
	Mean weekly hours ⁴	Weekly earnings		Mean annual hours	Annual earnings	
		Mean	Median		Mean	Median
All occupations	39.8	\$620	\$582	2,015	\$31,347	\$29,601
All occupations excluding sales	39.8	629	593	2,011	31,752	30,285
White-collar occupations	39.5	693	593	1,917	33,678	29,494
White-collar occupations excluding sales	39.4	732	631	1,892	35,195	31,118
Professional specialty and technical occupations	38.6	854	827	1,728	38,189	38,147
Professional specialty occupations	38.3	889	854	1,656	38,456	39,000
Engineers, architects, and surveyors	40.0	1,024	1,000	2,080	53,253	52,000
Engineers, N.E.C.	40.0	1,006	1,000	2,080	52,333	52,000
Mathematical and computer scientists	-	-	-	-	-	-
Natural scientists	-	-	-	-	-	-
Health related occupations	40.0	766	750	2,080	39,834	39,000
Registered nurses	40.0	790	763	2,080	41,075	39,686
Teachers, college and university	-	-	-	-	-	-
Teachers, except college and university	36.3	935	965	1,342	34,548	35,871
Elementary school teachers	36.5	947	970	1,340	34,728	35,374
Secondary school teachers	36.3	995	970	1,335	36,648	35,798
Teachers, N.E.C.	35.8	944	993	1,331	35,057	36,832
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.	40.0	615	494	2,080	32,001	25,667
Technical occupations	40.0	709	586	2,080	36,876	30,472
Drafters	40.0	987	1,281	2,080	51,314	66,602
Executive, administrative, and managerial occupations ...	40.7	1,140	994	2,117	59,287	51,688
Executives, administrators, and managers	41.1	1,324	1,138	2,135	68,829	59,197
Managers and administrators, N.E.C.	41.9	1,601	1,398	2,178	83,245	72,675
Management related occupations	40.0	760	624	2,080	39,522	32,469
Management related occupations, N.E.C.	40.0	1,094	1,086	2,080	56,895	56,451
Sales occupations	40.0	460	386	2,080	23,901	20,093
Administrative support occupations, including clerical	39.6	430	411	2,012	21,845	20,946
Secretaries	39.7	413	386	1,958	20,367	19,136
Bookkeepers, accounting and auditing clerks	40.0	441	420	2,080	22,943	21,840
Traffic, shipping and receiving clerks	40.0	404	394	2,080	21,013	20,488
Stock and inventory clerks	40.0	508	534	2,080	26,436	27,789
General office clerks	39.3	441	420	2,043	22,914	21,840
Administrative support occupations, N.E.C.	39.9	388	368	2,047	19,925	19,136
Blue-collar occupations	40.0	611	604	2,077	31,750	31,262
Precision production, craft, and repair occupations	40.0	725	719	2,080	37,704	37,378
Industrial machinery repairers	40.0	776	820	2,080	40,359	42,619
Mechanics and repairers, N.E.C.	40.0	643	601	2,080	33,426	31,262
Electricians	40.0	869	943	2,080	45,205	49,026
Supervisors, production occupations	40.0	821	843	2,080	42,714	43,846
Machinists	40.0	599	640	2,080	31,161	33,280
Machine operators, assemblers, and inspectors	40.0	624	661	2,078	32,446	34,362
Punching and stamping press operators	40.0	618	586	2,080	32,162	30,451
Grinding, abrading, buffing, and polishing machine operators	40.0	438	374	2,080	22,773	19,448
Fabricating machine operators, N.E.C.	40.0	599	552	2,080	31,132	28,716
Furnace, kiln, and oven operators, except food ...	40.0	580	616	2,080	30,184	32,032
Miscellaneous machine operators, N.E.C.	40.0	618	632	2,080	32,137	32,843
Welders and cutters	40.0	591	511	2,080	30,755	26,562
Production inspectors, checkers and examiners ..	40.0	499	540	2,080	25,956	28,059
Transportation and material moving occupations	39.9	603	598	2,056	31,085	31,096
Truck drivers	40.0	545	585	2,080	28,332	30,411
Crane and tower operators	40.0	481	511	2,080	25,006	26,582
Industrial truck and tractor equipment operators ..	40.0	662	797	2,080	34,439	41,434
Handlers, equipment cleaners, helpers, and laborers	40.0	430	390	2,080	22,350	20,280
Production helpers	40.0	373	350	2,080	19,385	18,200
Stock handlers and baggers	40.0	458	438	2,080	23,811	22,776
Machine feeders and offbearers	40.0	393	342	2,080	20,450	17,784
Freight, stock, and material handlers, N.E.C.	40.0	517	596	2,080	26,906	30,992
Hand packers and packagers	40.0	355	300	2,080	18,479	15,600

See footnotes at end of table.

Table A-4. Weekly and annual earnings¹ and hours for selected occupations, full-time workers only², all industries, Youngstown-Warren, OH, June 1998 — Continued

Occupation ³	All industries					
	Mean weekly hours ⁴	Weekly earnings		Mean annual hours	Annual earnings	
		Mean	Median		Mean	Median
Blue-collar occupations (-Continued)						
Handlers, equipment cleaners, helpers, and laborers (-Continued)						
Laborers except construction, N.E.C.	40.0	\$393	\$322	2,080	\$20,423	\$16,744
Service occupations	40.6	422	388	2,075	21,602	19,635
Protective service occupations	44.0	639	655	2,288	33,252	34,037
Food service occupations	39.0	330	298	1,916	16,209	15,116
Cooks	36.6	313	298	1,748	14,945	15,496
Food preparation occupations, N.E.C.	39.4	272	250	1,959	13,510	12,480
Health service occupations	39.8	329	286	2,072	17,107	14,871
Nursing aides, orderlies and attendants	39.8	314	282	2,071	16,309	14,664
Cleaning and building service occupations	39.3	367	335	2,030	18,950	17,410
Janitors and cleaners	39.2	378	390	2,023	19,523	20,280
Personal service occupations	38.5	406	396	1,783	18,796	19,947

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."

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, Youngstown-Warren, OH, June 1998

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	\$14.68	\$14.14	\$17.58	\$15.56	\$7.56
All occupations excluding sales	14.97	14.45	17.60	15.79	7.74
White-collar occupations	16.74	15.51	20.28	17.57	10.19
Level 1	6.30	6.24	—	6.73	5.58
Level 2	7.95	6.95	10.12	8.22	7.00
Level 3	9.04	8.34	11.05	9.36	7.88
Level 4	10.30	9.60	13.53	10.28	—
Level 5	13.01	12.53	14.65	12.91	—
Level 6	15.13	13.68	21.23	15.50	—
Level 7	16.71	16.39	17.80	16.86	15.47
Level 8	21.30	18.88	26.20	21.37	—
Level 9	23.55	21.71	25.63	23.76	—
Level 11	28.94	29.52	26.08	28.94	—
Level 12	35.63	36.02	—	35.63	—
Not able to be leveled	11.77	11.77	—	12.55	—
White-collar occupations excluding sales	18.06	17.05	20.35	18.61	12.31
Level 1	7.15	7.15	—	—	—
Level 2	9.43	8.57	10.14	9.78	—
Level 3	9.14	8.63	10.44	9.20	8.70
Level 4	10.48	9.69	13.53	10.46	—
Level 5	12.98	12.45	14.65	12.87	—
Level 6	15.40	13.87	21.23	15.89	—
Level 7	17.52	17.42	17.80	17.83	15.47
Level 8	22.83	19.71	26.20	22.98	—
Level 9	23.55	21.69	25.63	23.76	—
Level 11	28.94	29.52	26.08	28.94	—
Level 12	35.63	36.02	—	35.63	—
Not able to be leveled	11.77	11.77	—	12.55	—
Professional specialty and technical occupations	21.32	18.99	25.43	22.10	15.07
Professional specialty occupations	22.59	19.95	25.88	23.22	16.32
Level 5	16.09	—	—	—	—
Level 6	18.21	13.57	—	20.52	—
Level 7	19.10	19.70	18.26	19.69	—
Level 8	23.10	18.25	—	23.31	—
Level 9	24.00	21.01	26.85	24.32	—
Level 11	27.09	27.89	—	27.09	—
Level 12	31.45	—	—	31.45	—
Not able to be leveled	13.91	13.91	—	14.63	—
Engineers, architects, and surveyors	25.60	25.60	—	25.60	—
Level 9	23.12	23.12	—	23.12	—
Mathematical and computer scientists	—	—	—	—	—
Natural scientists	—	—	—	—	—
Health related occupations	18.71	18.43	—	19.15	17.40
Level 8	17.27	17.27	—	17.13	—
Level 9	19.46	18.77	—	19.66	—
Teachers, college and university	—	—	—	—	—
Teachers, except college and university	25.64	—	27.04	25.74	—
Level 7	22.62	—	—	22.61	—
Level 8	26.55	—	—	26.55	—
Level 9	27.90	—	27.90	27.90	—
Librarians, archivists, and curators	—	—	—	—	—
Social scientists and urban planners	—	—	—	—	—
Social, religious, and recreation workers	12.63	—	13.53	—	—
Lawyers and judges	—	—	—	—	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	14.53	14.53	—	15.39	—
Not able to be leveled	11.02	11.02	—	—	—
Technical occupations	16.84	16.96	—	17.73	12.91
Level 7	16.53	16.53	—	16.98	—
Level 8	19.17	—	—	19.17	—
Executive, administrative, and managerial occupations ...	27.96	29.25	23.86	28.00	—
Level 9	22.11	21.94	22.35	22.14	—
Level 11	31.71	—	—	31.71	—

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, Youngstown-Warren, OH, June 1998 — 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)					
Executive, administrative, and managerial occupations (-Continued)					
Level 12	\$37.36	\$37.36	—	\$37.36	—
Executives, administrators, and managers	32.24	36.51	\$23.62	32.23	—
Level 9	22.84	23.42	22.35	22.81	—
Level 11	32.41	—	—	32.41	—
Level 12	37.98	37.98	—	37.98	—
Management related occupations	18.99	18.57	—	19.00	—
Level 9	19.76	19.76	—	—	—
Sales occupations	10.28	10.17	—	11.49	\$6.39
Level 1	5.96	5.96	—	—	5.55
Level 2	5.97	5.97	—	—	—
Level 3	8.60	7.34	—	—	7.35
Level 8	17.92	17.92	—	17.92	—
Administrative support occupations, including clerical	10.62	10.30	11.48	10.86	8.16
Level 1	7.15	7.15	—	—	—
Level 2	9.43	8.57	10.14	9.78	—
Level 3	9.14	8.63	10.44	9.20	8.70
Level 4	10.23	9.64	13.09	10.20	—
Level 5	13.08	13.34	12.55	13.08	—
Level 6	12.56	12.67	—	12.56	—
Level 7	15.72	—	—	15.72	—
Blue-collar occupations	14.95	14.99	13.93	15.29	7.44
Level 1	7.58	7.37	—	8.05	6.19
Level 2	8.62	8.57	—	8.73	—
Level 4	15.25	15.35	13.21	15.36	—
Level 5	13.47	13.41	13.93	13.47	—
Level 6	16.18	16.32	—	16.18	—
Level 7	19.55	19.73	—	19.59	—
Level 8	20.03	20.03	—	20.03	—
Precision production, craft, and repair occupations	18.11	18.31	14.46	18.13	—
Level 5	13.32	13.13	—	13.32	—
Level 6	13.94	13.90	—	13.94	—
Level 7	19.96	20.09	—	20.01	—
Level 8	20.03	20.03	—	20.03	—
Machine operators, assemblers, and inspectors	15.47	15.47	—	15.61	7.99
Level 1	7.66	7.66	—	7.52	—
Level 2	8.08	8.08	—	8.17	—
Level 4	16.67	16.67	—	16.67	—
Level 5	12.93	12.95	—	12.95	—
Level 6	16.16	16.16	—	16.16	—
Level 7	13.65	13.65	—	13.65	—
Transportation and material moving occupations	14.80	14.85	14.45	15.12	10.57
Level 2	10.94	10.94	—	10.94	—
Level 4	13.38	13.39	13.35	13.63	—
Level 5	13.81	—	—	13.81	—
Handlers, equipment cleaners, helpers, and laborers	10.16	10.01	12.71	10.75	5.95
Level 1	7.29	6.97	—	7.87	5.70
Level 2	8.33	8.23	—	8.44	—
Level 3	14.22	14.32	—	14.22	—
Level 4	10.62	10.55	—	10.62	—
Service occupations	8.81	7.09	13.26	10.41	5.38
Level 1	6.34	6.30	6.99	7.70	5.49
Level 2	6.42	5.85	—	9.35	3.96
Level 3	7.96	7.63	10.71	8.28	5.95
Level 4	10.45	8.09	13.42	10.82	—
Level 5	12.78	—	12.78	—	—
Level 7	15.22	—	—	15.27	—
Protective service occupations	14.23	—	14.53	14.54	7.95
Level 7	15.41	—	14.93	15.47	—
Food service occupations	5.74	5.46	9.00	8.46	4.57

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, Youngstown-Warren, OH, June 1998 — 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
Service occupations (-Continued)					
Food service occupations (-Continued)					
Level 1	\$5.43	\$5.10	—	—	\$5.16
Level 2	4.22	4.08	—	—	3.62
Level 3	5.23	—	—	—	—
Level 4	8.09	—	—	—	—
Health service occupations	8.26	8.05	—	\$8.26	8.29
Level 3	7.97	7.93	—	8.00	—
Cleaning and building service occupations	8.40	7.47	\$11.23	9.33	6.21
Level 1	6.78	6.78	—	7.42	6.07
Level 2	10.85	11.34	—	11.56	—
Personal service occupations	8.61	7.34	—	10.54	5.99
Level 1	5.19	—	—	—	5.19

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.

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.

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, Youngstown-Warren, OH, June 1998

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:					
Engineers, N.E.C.	\$25.16	\$25.16	—	\$25.16	—
Registered nurses	19.36	19.04	—	19.75	\$18.20
Level 8	17.28	17.28	—	—	—
Level 9	19.91	19.27	—	20.26	—
Elementary school teachers	25.92	—	\$26.96	25.92	—
Secondary school teachers	27.39	—	28.26	27.44	—
Teachers, N.E.C.	26.33	—	—	26.35	—
Social workers	13.53	—	13.53	—	—
Technical occupations:					
Licensed practical nurses	12.88	12.88	—	—	—
Drafters	23.58	23.58	—	24.67	—
Executive, administrative, and managerial occupations:					
Managers and administrators, N.E.C.	38.22	39.45	—	38.22	—
Level 9	23.82	25.51	—	23.82	—
Level 12	38.11	38.11	—	38.11	—
Management related occupations, N.E.C.	27.35	—	—	27.35	—
Sales occupations:					
Sales workers, other commodities	7.06	7.06	—	—	—
Cashiers	7.01	6.38	—	—	6.59
Level 1	5.92	5.92	—	—	—
Administrative support occupations, including clerical:					
Secretaries	10.40	8.92	11.73	10.40	—
Level 3	9.62	—	—	9.62	—
Level 4	9.97	—	—	9.97	—
Receptionists	7.38	7.38	—	—	—
Records clerks, N.E.C.	10.20	9.87	—	—	—
Bookkeepers, accounting and auditing clerks	11.03	10.48	—	11.03	—
Traffic, shipping and receiving clerks	10.10	10.10	—	10.10	—
Stock and inventory clerks	12.11	12.11	—	12.71	—
General office clerks	11.18	11.31	11.01	11.22	—
Level 3	10.38	—	—	10.38	—
Level 4	9.31	9.31	—	9.31	—
Teachers' aides	8.24	—	—	—	—
Administrative support occupations, N.E.C.	9.83	9.81	—	9.73	—
Level 3	9.80	9.80	—	—	—
Blue-collar occupations:					
Precision production, craft, and repair occupations:					
Industrial machinery repairers	19.30	19.30	—	19.40	—
Level 7	20.86	20.86	—	21.02	—
Mechanics and repairers, N.E.C.	16.07	16.24	—	16.07	—
Electricians	21.73	21.73	—	21.73	—
Level 7	21.73	21.73	—	21.73	—
Supervisors, production occupations	20.54	20.54	—	20.54	—
Level 8	21.87	21.87	—	21.87	—
Machinists	14.98	14.98	—	14.98	—
Level 7	14.36	14.36	—	14.36	—
Machine operators, assemblers, and inspectors:					
Punching and stamping press operators	15.46	15.46	—	15.46	—
Grinding, abrading, buffing, and polishing machine operators	10.95	10.95	—	10.95	—
Fabricating machine operators, N.E.C.	14.97	14.97	—	14.97	—
Furnace, kiln, and oven operators, except food ...	14.51	14.51	—	14.51	—
Miscellaneous machine operators, N.E.C.	15.14	15.14	—	15.45	—
Level 3	13.68	13.68	—	13.68	—
Welders and cutters	14.79	14.79	—	14.79	—
Level 5	14.04	14.04	—	14.04	—
Miscellaneous hand working occupations, N.E.C.	9.27	9.27	—	—	—
Production inspectors, checkers and examiners ...	12.48	12.48	—	12.48	—
Level 4	12.79	12.79	—	12.79	—
Transportation and material moving occupations:					
Truck drivers	13.56	13.49	—	13.62	—

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, Youngstown-Warren, OH, June 1998 — 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)					
Transportation and material moving occupations: (-Continued)					
Bus drivers	\$9.48	—	\$10.85	—	—
Level 4	9.26	—	—	—	—
Crane and tower operators	12.02	\$12.02	—	\$12.02	—
Industrial truck and tractor equipment operators ..	16.56	16.56	—	16.56	—
Handlers, equipment cleaners, helpers, and laborers:					
Production helpers	8.78	8.78	—	9.32	—
Stock handlers and baggers	10.01	10.01	—	11.45	\$5.59
Level 1	5.81	5.81	—	—	5.59
Machine feeders and offbearers	9.83	9.83	—	9.83	—
Freight, stock, and material handlers, N.E.C.	12.94	12.94	—	12.94	—
Hand packers and packagers	8.09	8.09	—	8.88	—
Laborers except construction, N.E.C.	9.52	9.33	—	9.82	—
Level 1	7.77	7.38	—	7.99	—
Level 2	9.30	9.30	—	9.30	—
Service occupations:					
Food service occupations:					
Waiters and waitresses	2.46	2.46	—	—	2.47
Level 2	2.33	2.33	—	—	2.34
Cooks	7.55	7.11	—	8.55	6.38
Level 2	6.10	—	—	—	—
Level 4	8.09	—	—	—	—
Food preparation occupations, N.E.C.	6.25	5.96	—	6.90	5.83
Level 1	6.03	5.74	—	—	5.68
Health service occupations:					
Nursing aides, orderlies and attendants	7.83	7.79	—	7.88	—
Level 3	7.95	7.91	—	8.00	—
Cleaning and building service occupations:					
Janitors and cleaners	8.51	7.49	11.23	9.65	6.21
Level 1	6.72	6.72	—	7.39	6.07
Level 2	10.85	11.34	—	11.56	—

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.

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.

Table C-1. Mean hourly earnings¹ by occupational group and selected characteristics, all industries, Youngstown-Warren, OH, June 1998

Occupational group ²	Full-time workers ³	Part-time workers ³	Union ⁴	Nonunion ⁴	Time ⁵	Incentive ⁵
All occupations	\$15.56	\$7.56	\$16.67	\$12.67	\$14.62	\$15.57
All occupations excluding sales	15.79	7.74	16.71	12.99	14.91	15.88
White-collar occupations	17.57	10.19	20.07	15.69	16.83	14.48
White-collar excluding sales	18.61	12.31	20.43	17.15	18.09	-
Professional specialty and technical occupations	22.10	15.07	25.00	18.84	21.32	-
Professional specialty occupations	23.22	16.32	26.35	19.63	22.59	-
Technical occupations	17.73	12.91	17.22	16.69	16.84	-
Executive, administrative, and managerial occupations ...	28.00	-	-	27.96	28.42	-
Sales occupations	11.49	6.39	-	10.24	9.71	13.69
Administrative support including clerical occupations	10.86	8.16	11.96	10.18	10.65	-
Blue-collar occupations	15.29	7.44	16.79	10.15	14.81	16.27
Precision production, craft, and repair occupations	18.13	-	18.82	15.88	18.20	-
Machine operators, assemblers, and inspectors	15.61	7.99	-	8.82	15.39	16.95
Transportation and material moving occupations	15.12	10.57	16.14	11.92	13.84	16.62
Handlers, equipment cleaners, helpers, and laborers	10.75	5.95	13.05	6.81	10.00	12.64
Service occupations	10.41	5.38	11.46	6.79	8.82	-

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."

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, Youngstown-Warren, OH, June 1998

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	\$14.14	\$17.11	—	\$18.82	\$17.04	—	—	—	—	—
All occupations excluding sales	14.45	17.16	—	18.79	17.09	—	—	—	—	—
White-collar occupations	15.51	22.43	—	—	22.71	—	—	—	—	—
White-collar excluding sales	17.05	23.92	—	—	24.33	—	—	—	—	—
Professional specialty and technical occupations	18.99	23.60	—	—	23.70	—	—	—	—	—
Professional specialty occupations	19.95	24.71	—	—	24.87	—	—	—	—	—
Technical occupations	16.96	19.39	—	—	19.39	—	—	—	—	—
Executive, administrative, and managerial occupations	29.25	35.87	—	—	37.34	—	—	—	—	—
Sales occupations	10.17	15.52	—	—	15.36	—	—	—	—	—
Administrative support, including clerical occupations	10.30	12.49	—	—	12.70	—	—	—	—	—
Blue-collar occupations	14.99	16.10	—	19.34	15.97	—	—	—	—	—
Precision production, craft, and repair occupations	18.31	18.84	—	19.66	18.73	—	—	—	—	—
Machine operators, assemblers, and inspectors	15.47	16.05	—	—	16.05	—	—	—	—	—
Transportation and material moving occupations	14.85	15.21	—	—	15.21	—	—	—	—	—
Handlers, equipment cleaners, helpers, and laborers	10.01	11.97	—	—	11.69	—	—	—	—	—
Service occupations	7.09	14.66	—	—	14.66	—	—	—	—	—

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."

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, Youngstown-Warren, OH, June 1998

Occupational group ³	All private industry workers	50 - 99 workers	100 workers or more		
			Total	100 - 499 workers	500 workers or more
All occupations	\$14.14	\$10.88	\$15.16	\$11.57	\$19.04
All occupations excluding sales	14.45	11.24	15.43	11.61	19.05
White-collar occupations	15.51	13.76	16.03	12.91	20.91
White-collar excluding sales	17.05	16.51	17.19	13.67	20.97
Professional specialty and technical occupations	18.99	19.72	18.82	16.98	20.03
Professional specialty occupations	19.95	20.34	19.87	16.39	21.68
Technical occupations	16.96	18.78	16.42	17.85	14.82
Executive, administrative, and managerial occupations ...	29.25	23.43	30.89	28.42	32.12
Sales occupations	10.17	7.45	11.38	11.32	—
Administrative support, including clerical occupations	10.30	10.89	10.14	9.07	12.79
Blue-collar occupations	14.99	12.21	15.61	11.51	—
Precision production, craft, and repair occupations	18.31	15.83	19.10	15.16	—
Machine operators, assemblers, and inspectors	15.47	9.54	16.06	10.90	—
Transportation and material moving occupations	14.85	13.27	15.65	14.76	17.97
Handlers, equipment cleaners, helpers, and laborers	10.01	8.43	10.43	8.94	15.26
Service occupations	7.09	5.81	8.48	6.62	11.51

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."

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, Youngstown-Warren, OH, June 1998

Occupational group ²	All workers		
	All industries	Private industry	State and local government
All occupations	124,025	101,540	22,485
All occupations excluding sales	115,677	93,372	22,305
White-collar occupations	47,321	33,287	14,035
White-collar excluding sales	38,973	25,118	13,855
Professional specialty and technical occupations	18,909	10,716	8,193
Professional specialty occupations	15,216	7,264	7,953
Technical occupations	3,693	3,453	—
Executive, administrative, and managerial occupations ...	5,258	3,825	1,433
Sales occupations	8,348	8,168	—
Administrative support including clerical occupations	14,806	10,577	4,229
Blue-collar occupations	54,807	52,129	2,678
Precision production, craft, and repair occupations	14,490	13,679	—
Machine operators, assemblers, and inspectors	21,290	21,273	—
Transportation and material moving occupations	6,472	5,362	1,109
Handlers, equipment cleaners, helpers, and laborers	12,555	11,815	—
Service occupations	21,896	16,124	5,772

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."

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 Youngstown-Warren, OH, Metropolitan Statistical Area includes Columbiana, Mahoning and Trumbull Counties.

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	204
Responding	138
Out of business or not in survey scope	5
Unable or refused to pro- vide data	61

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, Youngstown-Warren, OH, June 1998

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	755	135	46	89	66	23
Private industry	675	112	44	68	51	17
Goods-producing industries	182	62	18	44	33	11
Mining	2	1	1	-	-	-
Construction	18	3	2	1	1	-
Manufacturing	162	58	15	43	32	11
Service-producing industries	493	50	26	24	18	6
Transportation and public utilities	61	4	3	1	1	-
Wholesale and retail trade	232	18	14	4	4	-
Finance, insurance and real estate	22	4	1	3	3	-
Services	179	24	8	16	10	6
State and local government	80	23	2	21	15	6

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, Youngstown-Warren, OH, June 1998

(in percent)

Occupation ³	All industries	Private industry	State and local government
All occupations	2.0	2.3	3.3
All occupations excluding sales	1.9	2.2	3.3
White-collar occupations	3.6	4.7	4.5
White-collar occupations excluding sales	3.6	5.0	4.5
Professional specialty and technical occupations	3.0	4.2	4.0
Professional specialty occupations	2.9	3.9	4.0
Engineers, architects, and surveyors	5.4	5.4	—
Engineers, N.E.C.	6.7	6.7	—
Mathematical and computer scientists	—	—	—
Natural scientists	—	—	—
Health related occupations	3.5	3.7	—
Registered nurses	3.8	4.2	—
Teachers, college and university	—	—	—
Teachers, except college and university	3.7	—	2.6
Elementary school teachers	4.3	—	4.5
Secondary school teachers	3.6	—	4.3
Teachers, N.E.C.	2.1	—	—
Librarians, archivists, and curators	—	—	—
Social scientists and urban planners	—	—	—
Social, recreation, and religious workers	9.7	—	12.4
Social workers	12.4	—	12.4
Lawyers and judges	—	—	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	14.0	14.0	—
Technical occupations	8.6	9.1	—
Licensed practical nurses	2.0	2.0	—
Drafters	21.6	21.6	—
Executive, administrative, and managerial occupations ..	9.0	11.3	6.4
Executives, administrators, and managers	8.3	9.6	6.7
Managers and administrators, N.E.C.	10.6	11.1	—
Management related occupations	15.4	16.0	—
Management related occupations, N.E.C.	4.7	—	—
Sales occupations	8.5	8.7	—
Sales workers, other commodities	10.1	10.1	—
Cashiers	4.8	4.0	—
Administrative support occupations, including clerical	3.6	4.6	4.2
Secretaries	6.3	8.2	5.7
Receptionists	4.0	4.0	—
Records clerks, N.E.C.	4.0	4.0	—
Bookkeepers, accounting and auditing clerks	4.9	3.8	—
Traffic, shipping and receiving clerks	10.9	10.9	—
Stock and inventory clerks	4.2	4.2	—
General office clerks	5.8	9.8	3.5
Teachers' aides	10.3	—	—
Administrative support occupations, N.E.C.	2.9	3.0	—
Blue-collar occupations	1.9	1.9	3.0
Precision production, craft, and repair occupations	2.9	3.0	2.3
Industrial machinery repairers	7.1	7.1	—
Mechanics and repairers, N.E.C.	4.7	5.2	—
Electricians	4.1	4.1	—
Supervisors, production occupations	8.1	8.1	—
Machinists	3.9	3.9	—
Machine operators, assemblers, and inspectors	2.3	2.3	—
Punching and stamping press operators	10.2	10.2	—
Grinding, abrading, buffing, and polishing machine operators	10.1	10.1	—
Fabricating machine operators, N.E.C.	16.9	16.9	—
Furnace, kiln, and oven operators, except food ...	7.5	7.5	—
Miscellaneous machine operators, N.E.C.	7.9	7.9	—
Welders and cutters	7.4	7.4	—
Miscellaneous hand working occupations, N.E.C.	10.9	10.9	—
Production inspectors, checkers and examiners ..	10.8	10.8	—

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, Youngstown-Warren, OH, June 1998 — Continued

(in percent)

Occupation ³	All industries	Private industry	State and local government
Blue-collar occupations (-Continued)			
Transportation and material moving occupations	5.3	6.0	5.5
Truck drivers	2.4	2.6	—
Bus drivers	8.2	—	5.7
Crane and tower operators	8.8	8.8	—
Industrial truck and tractor equipment operators ..	8.8	8.8	—
Handlers, equipment cleaners, helpers, and laborers	6.5	6.9	7.0
Production helpers	6.0	6.0	—
Stock handlers and baggers	15.7	15.7	—
Machine feeders and offbearers	7.9	7.9	—
Freight, stock, and material handlers, N.E.C.	10.4	10.4	—
Hand packers and packagers	11.8	11.8	—
Laborers except construction, N.E.C.	12.8	13.6	—
Service occupations	5.9	5.3	5.9
Protective service occupations	7.1	—	6.5
Food service occupations	7.9	8.9	11.9
Waiters and waitresses	4.8	4.8	—
Cooks	8.0	7.9	—
Food preparation occupations, N.E.C.	4.4	4.2	—
Health service occupations	5.9	6.4	—
Nursing aides, orderlies and attendants	6.1	6.2	—
Cleaning and building service occupations	8.2	10.2	3.6
Janitors and cleaners	8.7	11.5	3.6
Personal service occupations	13.0	8.8	—

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."

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, Youngstown-Warren, OH, June 1998

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	6	7	4
White-collar occupations excluding sales	7	7	5
Professional specialty and technical occupations	8	8	7
Professional specialty occupations	8	9	7
Engineers, architects, and surveyors	10	10	—
Engineers, N.E.C.	10	10	—
Mathematical and computer scientists	—	—	—
Natural scientists	—	—	—
Health related occupations	8	9	7
Registered nurses	8	9	8
Teachers, college and university	—	—	—
Teachers, except college and university	8	8	—
Elementary school teachers	8	8	—
Secondary school teachers	8	8	—
Teachers, N.E.C.	8	8	—
Librarians, archivists, and curators	—	—	—
Social scientists and urban planners	—	—	—
Social, recreation, and religious workers	7	—	—
Social workers	7	—	—
Lawyers and judges	—	—	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	8	8	—
Technical occupations	7	7	6
Licensed practical nurses	6	—	—
Drafters	8	8	—
Executive, administrative, and managerial occupations	10	10	—
Executives, administrators, and managers	10	10	—
Managers and administrators, N.E.C.	11	11	—
Management related occupations	8	8	—
Management related occupations, N.E.C.	10	10	—
Sales occupations	4	5	2
Sales workers, other commodities	3	—	—
Cashiers	2	—	2
Administrative support occupations, including clerical	4	4	3
Secretaries	4	4	—
Receptionists	2	—	—
Records clerks, N.E.C.	4	—	—
Bookkeepers, accounting and auditing clerks	4	4	—
Traffic, shipping and receiving clerks	4	4	—
Stock and inventory clerks	4	4	—
General office clerks	3	3	—
Teachers' aides	2	—	—
Administrative support occupations, N.E.C.	4	4	—
Blue-collar occupations	4	4	2
Precision production, craft, and repair occupations	6	6	—
Industrial machinery repairers	7	7	—
Mechanics and repairers, N.E.C.	6	6	—
Electricians	7	7	—
Supervisors, production occupations	8	8	—
Machinists	6	6	—
Machine operators, assemblers, and inspectors	3	4	2
Punching and stamping press operators	4	4	—
Grinding, abrading, buffing, and polishing machine operators	3	3	—
Fabricating machine operators, N.E.C.	3	3	—
Furnace, kiln, and oven operators, except food	5	5	—
Miscellaneous machine operators, N.E.C.	3	3	—
Welders and cutters	5	5	—
Miscellaneous hand working occupations, N.E.C.	3	—	—
Production inspectors, checkers and examiners	4	4	—
Transportation and material moving occupations	4	5	3
Truck drivers	4	4	—
Bus drivers	3	—	—
Crane and tower operators	4	4	—
Industrial truck and tractor equipment operators	3	3	—

See footnotes at end of table.

Appendix table 3. Average work levels for selected occupations, all workers, full-time and part-time workers, Youngstown-Warren, OH, June 1998 — Continued

Occupation ¹	All workers	Full-time workers	Part-time workers
Blue-collar occupations (-Continued)			
Handlers, equipment cleaners, helpers, and laborers	2	3	1
Production helpers	3	3	—
Stock handlers and baggers	2	2	1
Machine feeders and offbearers	3	3	—
Freight, stock, and material handlers, N.E.C.	4	4	—
Hand packers and packagers	2	2	—
Laborers except construction, N.E.C.	2	2	—
Service occupations			
Protective service occupations	3	4	2
Food service occupations	6	6	4
Food service occupations	2	4	2
Waiters and waitresses	2	—	2
Cooks	3	4	3
Food preparation occupations, N.E.C.	1	2	1
Health service occupations	3	3	3
Nursing aides, orderlies and attendants	3	3	—
Cleaning and building service occupations	2	2	1
Janitors and cleaners	2	2	1
Personal service occupations	3	4	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.