

Boston-Worcester-Lawrence, MA-NH-ME-CT National Compensation Survey October 1998



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Preface

This bulletin provides results of an October 1998 survey of occupational pay in the Boston-Worcester-Lawrence, MA-NH-ME-CT, Consolidated Metropolitan Statistical Area (CMSA). Data shown in this bulletin were collected as part of the Bureau of Labor Statistics' (BLS) new program known as the 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.

Survey data were collected and reviewed by Bureau of Labor Statistics field economists under the direction of John Barry, Assistant Regional Commissioner for Operations of the Boston Regional Office. 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 analyzed the survey results.

For additional information regarding this survey, please contact the BLS Boston Regional Office at (617) 565-2327. 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) 606-6220, or send e-mail to ocltinfo@bls.gov.

The data contained in this bulletin are also available at the BLS Internet site (<http://stats.bls.gov/comhome.htm>). 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.

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Introduction

This survey of occupational pay was conducted in the Boston-Worcester-Lawrence, MA-NH-ME-CT, Consolidated Metropolitan Statistical Area (CMSA). The CMSA includes Essex County, Middlesex County, Norfolk County, Plymouth County, Suffolk County, twelve communities in Bristol County, one in Hampden County, and fifty-two in Worcester County, MA; eighteen in Hillsborough County, two in Merrimack County, thirty-four in Rockingham County, and ten in Strafford County, NH; five in York County, ME; and one in Windham County, CT.

This bulletin consists primarily of tables whose data are analyzed in the initial textual section. 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 is 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 design and products

The Bureau of Labor Statistics' (BLS) new National Compensation Survey (NCS) is designed to provide data on the levels and rates of change of occupational wages and employee benefits for localities, broad geographic regions, and the nation as a whole. One output of the NCS will be the Employment Cost Index, a quarterly measure of the change in employer costs for wages and benefits. This bulletin is limited to data on wages and salaries. These data are similar to those released under the Occupational Compensation Survey (OCS), which has been discontinued.

NCS more extensive than OCS

The wage data in this bulletin differ from those in previous Occupational Compensation Surveys by providing broader coverage of occupations and establishments within the survey area.

Occupations surveyed for this bulletin were selected using probability techniques from a list of all those present in each establishment. Previous OCS bulletins were limited to a preselected list of occupations, which represented a small subset of all occupations in the economy. Information in the new bulletin is published for a variety of occupation-based data. This new approach includes data on broad occupational classifications such as white-collar workers, major occupational groups such as sales workers, and individual occupations such as cashiers.

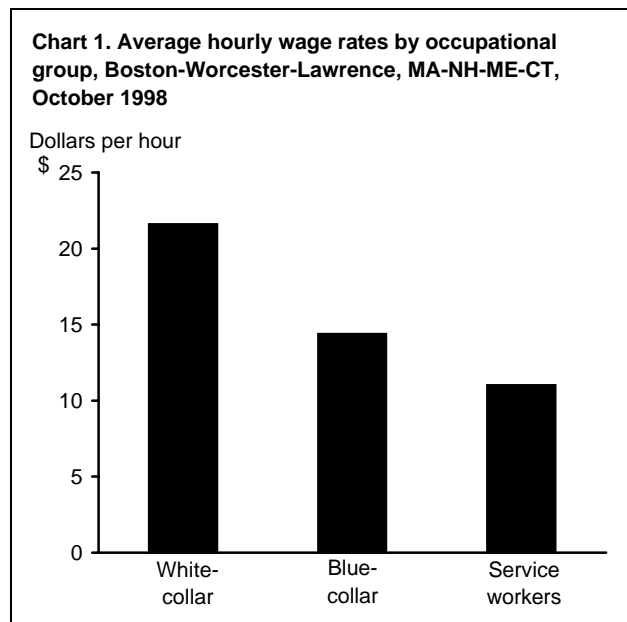
In tables containing work levels within occupational series, the work levels are derived from generic standards that *apply to all* occupational groups. The job levels in the OCS bulletins were based on narrowly-defined descriptions that were not comparable across specific occupations.

Occupational data in this bulletin are also tabulated for other classifications such as industry group, full-time versus part-time workers, union versus nonunion status, time versus incentive status, and establishment employment size. Not all of these series were generated by the OCS program.

The establishments surveyed for this bulletin were limited to those with 50 or more employees. Eventually, NCS will be expanded to cover those now-excluded establishments. Then, virtually all workers in the civilian economy will be surveyed, excluding only agriculture, private households, and employees of the Federal Government.

Wages in the Boston-Worcester-Lawrence, MA-NH-ME-CT Consolidated Metropolitan Statistical Area

Straight-time wages in the Boston-Worcester-Lawrence, MA-NH-ME-CT, Consolidated Metropolitan Statistical Area averaged \$18.20 per hour during October 1998. White-collar workers had an average wage of \$21.60 per hour. Blue-collar workers averaged \$14.38 per hour, while service workers had average earnings of \$11.00 per hour. (All hourly rates in this summary cover both full- and part-time workers, unless otherwise noted.)



Within each of these occupational groups, average hourly wages for individual occupations were estimated. For example, white-collar occupations included registered nurses at \$22.71 per hour, secretaries at \$15.18, and general office clerks at \$12.91. Among occupations in the blue-collar category, truck drivers averaged \$15.31 per hour while stock handlers and baggers averaged \$8.79. Finally, service occupations included janitors and cleaners at \$10.80 per hour and kitchen workers, food preparation at \$8.28. Table A-1 presents earnings data for 144 detailed occupations; data for other detailed occupations surveyed could not be reported separately due to concerns about the confidentiality of survey respondents and the reliability of the data.

Survey results show that private industry workers in

Boston-Worcester-Lawrence, MA-NH-ME-CT earned \$17.65 per hour, while surveyed State and local government workers averaged \$21.01. Table A-2 reports the average hourly rate for white-collar occupations as \$21.21 in private industry and \$23.57 in State and local government. Blue-collar occupations showed an average hourly rate of \$14.04 in private industry and \$18.00 in State and local government. Service occupations within private industry averaged \$9.17 per hour while those found in State and local government averaged \$16.37.

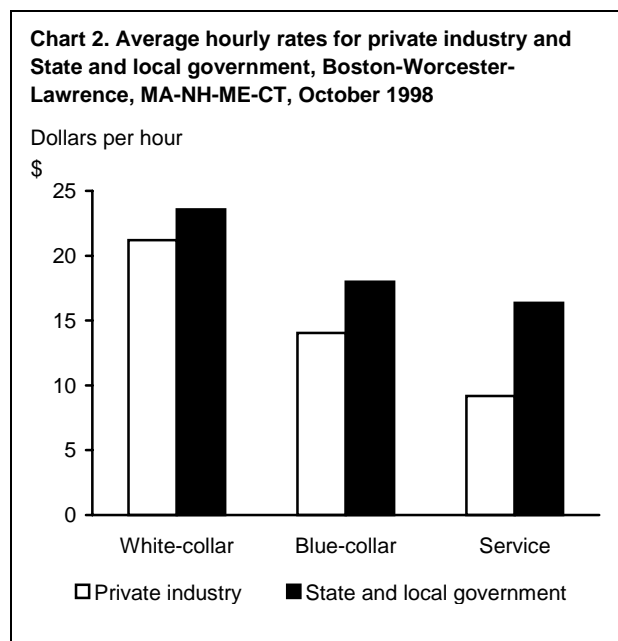
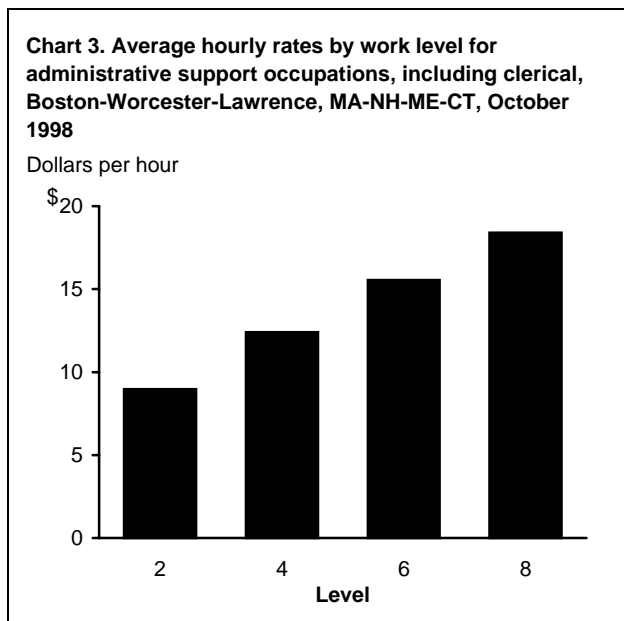


Table A-3 presents data for workers considered by the survey respondents to be either full-time or part-time. Average wages for full-time workers, all occupations, were \$19.26 per hour, compared with an average of \$10.82 per hour for part-time workers.

Data for specific work levels within major occupational groups are reported in table B-1. Occasionally, wage estimates for lower levels of work within major occupational groups are greater than estimates for higher levels. This can occur due to the mix of specific occupations (and industries) represented by the broad group as well as by the variability of the estimate. Some levels within a group may not be published because no workers were identified at that

level or because there were not enough data to guarantee confidentiality and reliability.

Work levels for all major groups span several levels, with professional specialty occupations and executive, administrative, and managerial occupations typically starting and ending at higher work levels than the other groups. Published data for administrative support occupations, including clerical, ranged from level 1 to level 9. As illustrated in Chart 3, the average hourly rate was \$8.96 for level 2, \$12.41 for level 4, \$15.55 for level 6, and \$18.40 for level 8.

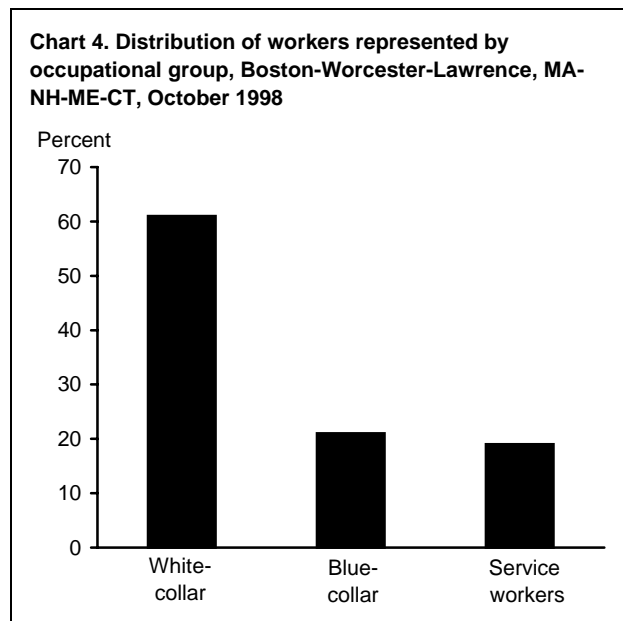


Surveyed union workers had an average hourly rate of \$18.92, as reported in table C-1. Wages for nonunion workers averaged \$17.96. Time workers, whose wages were based solely on an hourly rate or a salary, averaged \$18.13 per hour. Incentive workers, whose wages were at least partially based on productivity payments, averaged \$22.43 per hour.

Table C-2 shows wage data for specific industry divisions within private industry. In the private sector, hourly

wages averaged \$18.54 in mining. Hourly wages averaged \$17.05 in all service-producing industries, \$19.56 in transportation, and public utilities, \$12.37 in wholesale and retail trade, and \$18.14 in services. Data for other industry divisions did not meet publication criteria.

Table C-4 reports that a total of 1,523,887 workers were represented by the Boston-Worcester-Lawrence, MA-NH-ME-CT survey. White-collar occupations included 925,728 workers, or 61 percent; blue-collar occupations included 315,007 workers, or 21 percent; and service occupations included 283,152 workers, or 19 percent.



Data are also presented in appendix table 1 on the number of establishments studied by industry group and employment size. The relative standard errors of published mean hourly earnings for all industries, private industry, and State and local government are available in appendix table 2. The average work levels for published occupational groups and selected occupations are presented in appendix table 3.

Table A-1. Hourly earnings¹ for selected occupations, all workers², all industries, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
All occupations	\$18.20	\$7.75	\$10.41	\$15.06	\$22.62	\$31.88
All occupations excluding sales	18.40	8.00	10.71	15.41	22.88	32.15
White-collar occupations	21.60	9.00	12.57	18.50	27.33	37.74
White-collar occupations excluding sales	22.32	10.01	13.43	19.49	28.02	38.06
Professional specialty and technical occupations	26.24	14.10	18.35	24.41	31.63	40.08
Professional specialty occupations	28.52	15.90	20.67	26.78	33.79	42.00
Engineers, architects, and surveyors	31.22	20.69	24.67	29.65	36.26	43.28
Civil engineers	28.34	17.44	24.74	31.48	31.48	31.48
Industrial engineers	26.99	19.89	22.01	25.51	29.15	38.61
Mechanical engineers	28.62	26.00	27.76	28.00	30.31	30.31
Engineers, N.E.C.	30.95	20.62	24.28	29.15	36.95	42.95
Mathematical and computer scientists	30.48	20.87	24.86	29.33	34.74	41.06
Computer systems analysts and scientists	31.26	22.36	25.89	30.07	35.45	42.35
Operations and systems researchers and analysts	23.20	16.83	17.67	23.11	27.59	32.12
Natural scientists	32.38	13.01	17.55	30.77	46.27	53.96
Chemists, except biochemists	28.81	11.40	14.33	24.97	48.73	51.92
Medical scientists	29.68	12.81	15.45	22.95	41.00	53.41
Health related occupations	24.66	16.00	18.90	22.70	26.84	32.42
Physicians	48.53	10.56	17.54	51.44	74.42	102.59
Registered nurses	22.71	15.79	19.05	22.61	26.27	29.87
Pharmacists	24.56	20.45	23.01	24.62	26.10	27.57
Respiratory therapists	19.10	15.44	15.91	18.12	21.15	24.02
Physical therapists	26.32	18.90	19.50	26.52	30.71	38.00
Teachers, college and university	42.93	25.65	30.56	37.99	52.57	65.59
Medical science teachers	37.18	26.36	30.65	38.46	41.79	45.82
Business, commerce and marketing teachers	69.78	51.39	59.54	73.88	87.69	87.69
Art, drama and music teachers	30.08	21.17	26.38	27.89	33.05	40.86
English teachers	35.89	27.08	29.45	36.61	40.21	45.15
Foreign language teachers	36.34	24.78	28.20	37.88	41.22	49.76
Teachers, post secondary, subject not specified ..	35.42	25.07	25.33	29.17	38.98	64.72
Teachers, post secondary N.E.C.	50.42	29.48	32.26	47.92	56.00	82.00
Teachers, except college and university	30.32	17.37	24.03	31.21	37.28	42.31
Prekindergarten and kindergarten	25.58	10.38	11.00	30.90	37.91	43.45
Elementary school teachers	31.06	21.23	24.91	30.78	36.71	41.15
Secondary school teachers	31.75	18.79	25.63	33.41	37.28	41.45
Teachers, special education	28.17	16.75	22.39	28.54	35.30	38.07
Teachers, N.E.C.	33.73	18.53	20.76	39.25	44.73	44.73
Vocational and educational counselors	24.29	13.36	18.59	24.13	26.08	33.76
Librarians, archivists, and curators	25.01	19.70	20.47	24.15	26.40	32.89
Librarians	25.09	19.20	20.47	23.12	31.54	32.89
Social scientists and urban planners	-	-	-	-	-	-
Social, recreation, and religious workers	16.81	10.21	12.67	16.16	20.76	24.49
Social workers	16.94	10.37	12.74	16.16	20.76	24.49
Lawyers and judges	35.54	25.53	29.92	29.92	40.24	53.99
Writers, authors, entertainers, athletes, and professionals, N.E.C.	22.68	13.98	15.68	22.03	26.77	35.00
Designers	24.29	14.43	16.93	20.03	29.99	39.76
Editors and reporters	24.15	10.81	17.83	23.06	25.71	42.34
Public relations specialists	20.41	14.26	15.10	17.43	23.08	32.97
Professional occupations, N.E.C.	23.49	12.31	18.09	23.69	31.27	32.24
Technical occupations	18.24	11.00	13.59	17.55	20.95	25.52
Clinical laboratory technologists and technicians	15.23	10.74	11.48	13.75	18.79	20.28
Radiological technicians	22.82	17.20	19.88	21.56	25.31	33.74
Licensed practical nurses	16.59	13.45	15.64	16.50	17.74	20.00
Health technologists and technicians, N.E.C.	14.07	10.00	10.66	12.84	15.34	19.04
Electrical and electronic technicians	19.07	13.44	16.67	18.70	21.78	24.13
Engineering technicians, N.E.C.	22.57	16.50	18.85	23.93	27.49	29.16
Drafters	21.31	15.02	19.99	20.85	22.99	26.75
Computer programmers	22.84	17.01	19.08	23.29	24.62	31.10
Technical and related occupations, N.E.C.	19.74	10.40	17.41	20.43	23.92	27.20
Executive, administrative, and managerial occupations ...	28.89	15.67	19.30	25.11	34.13	45.78
Executives, administrators, and managers	34.57	18.99	23.80	30.19	43.27	49.49
Administrators and officials, public administration	24.05	17.00	20.39	24.23	25.77	29.39

See footnotes at end of table.

Table A-1. Hourly earnings¹ for selected occupations, all workers², all industries, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998 — Continued

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
White-collar occupations (-Continued)						
Executive, administrative, and managerial occupations (-Continued)						
Executives, administrators, and managers (-Continued)						
Financial managers	\$34.57	\$20.24	\$22.77	\$31.30	\$45.00	\$45.81
Personnel and labor relations managers	38.77	17.34	22.36	29.00	29.00	82.69
Managers, marketing, advertising and public relations	41.59	22.93	31.71	39.51	45.31	56.77
Administrators, education and related fields	33.43	19.19	24.67	29.77	45.15	46.59
Managers, medicine and health	27.64	15.34	21.10	26.44	30.69	37.63
Managers and administrators, N.E.C.	38.17	21.15	26.69	34.13	44.95	57.69
Management related occupations	21.35	14.33	16.75	20.50	24.04	28.30
Accountants and auditors	20.03	14.34	15.81	18.31	21.15	27.01
Other financial officers	22.52	15.87	20.36	21.96	25.63	28.08
Management analysts	24.54	17.79	18.06	21.63	28.02	36.06
Personnel, training, and labor relations specialists	20.59	13.43	15.87	20.62	25.29	28.56
Buyers, wholesale and retail trade, except farm products	23.37	14.65	18.45	22.50	27.12	30.00
Purchasing agents and buyers, N.E.C.	19.90	13.84	16.44	18.95	22.31	26.93
Management related occupations, N.E.C.	22.23	14.42	17.55	20.53	25.11	28.30
Sales occupations	15.31	6.00	7.15	10.33	16.33	28.79
Supervisors, sales occupations	17.85	10.30	11.76	14.71	17.37	21.15
Sales occupations, other business services	28.07	8.71	11.10	18.49	32.93	54.60
Sales representatives, mining, manufacturing, and wholesale	35.73	12.46	19.62	30.29	41.93	67.38
Sales workers, apparel	7.19	6.00	6.21	6.76	8.21	8.85
Sales workers, other commodities	9.95	5.70	6.35	8.00	11.65	15.13
Cashiers	8.47	5.60	6.25	7.16	9.10	14.21
Sales support occupations, N.E.C.	14.15	7.03	14.42	14.42	16.11	17.68
Administrative support occupations, including clerical	12.91	8.12	9.76	12.39	15.33	18.45
Supervisors, general office	17.78	13.34	14.46	18.17	18.99	24.04
Supervisors, financial records processing	18.68	14.66	17.22	17.67	18.27	25.00
Computer operators	16.50	11.29	12.46	17.44	19.49	22.03
Secretaries	15.18	10.24	12.46	14.94	18.13	19.98
Typists	13.15	10.00	11.74	14.32	14.75	14.75
Interviewers	11.40	9.13	10.02	11.15	12.55	14.56
Hotel clerks	9.54	7.49	8.25	8.97	10.86	11.80
Transportation ticket and reservation agents	13.54	8.86	9.60	13.73	16.67	19.28
Receptionists	10.00	7.00	8.00	9.50	11.01	14.73
Information clerks, N.E.C.	14.11	9.73	10.27	14.39	17.10	21.15
Order clerks	11.99	7.99	9.00	11.57	15.13	16.80
Library clerks	13.25	9.11	11.02	12.51	16.36	17.74
Records clerks, N.E.C.	11.41	8.47	9.19	10.45	12.02	17.49
Bookkeepers, accounting and auditing clerks	12.69	9.48	10.75	12.36	14.23	17.07
Payroll and timekeeping clerks	12.50	8.71	10.07	12.63	14.00	18.46
Billing clerks	10.59	8.53	9.45	10.00	11.05	14.50
Telephone operators	11.42	7.50	9.46	12.00	12.84	12.84
Mail clerks except postal service	8.75	7.50	7.73	8.02	9.23	10.04
Traffic, shipping and receiving clerks	12.63	8.40	11.00	13.25	14.93	15.64
Stock and inventory clerks	15.92	12.07	13.93	16.28	18.04	19.13
Insurance adjusters, examiners, and investigators	16.04	12.11	13.19	15.00	18.58	21.17
Investigators and adjusters except insurance	13.02	9.81	10.84	12.04	14.46	19.62
Bill and account collectors	12.35	10.00	10.00	12.00	14.34	15.29
General office clerks	12.91	8.60	10.80	13.12	14.78	16.70
Data entry keyers	11.48	8.50	10.00	11.51	13.47	13.47
Teachers' aides	11.03	8.08	9.12	10.30	11.43	13.84
Administrative support occupations, N.E.C.	13.46	7.73	10.05	12.10	18.68	19.80
Blue-collar occupations						
Precision production, craft, and repair occupations	14.38	7.75	10.01	13.50	17.53	22.96
Automobile mechanics	18.37	11.54	13.80	17.71	22.27	26.32
Bus, truck, and stationary engine mechanics	18.13	14.00	14.00	19.58	20.37	20.94
	20.36	13.80	13.80	23.09	24.60	24.60

See footnotes at end of table.

Table A-1. Hourly earnings¹ for selected occupations, all workers², all industries, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998 — Continued

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
Blue-collar occupations (-Continued)						
Precision production, craft, and repair occupations (-Continued)						
Industrial machinery repairers	\$15.37	\$12.70	\$13.64	\$14.45	\$17.05	\$19.90
Mechanics and repairers, N.E.C.	19.04	13.50	16.35	18.47	21.77	24.68
Carpenters	21.69	15.59	17.47	22.00	24.82	25.98
Electricians	22.44	13.71	16.30	24.86	27.10	29.53
Electrical power installers and repairers	24.45	21.93	22.75	24.81	25.57	27.82
Plumbers, pipefitters and steamfitters	19.76	13.31	15.91	21.19	21.81	26.08
Construction trades, N.E.C.	17.39	9.60	13.65	16.09	20.75	30.66
Supervisors, production occupations	19.03	11.84	15.15	19.35	22.53	25.81
Machinists	18.96	15.56	17.19	19.51	20.71	21.91
Electrical and electronic equipment assemblers ..	11.98	8.28	10.40	11.54	14.13	15.52
Butchers and meat cutters	14.20	9.73	10.84	14.31	17.57	19.85
Machine operators, assemblers, and inspectors	11.95	7.86	9.19	11.81	14.15	15.97
Molding and casting machine operators	9.99	8.09	8.21	8.96	11.26	14.70
Printing press operators	14.15	9.00	11.04	14.91	15.82	19.20
Textile sewing machine operators	9.83	7.00	7.66	9.30	11.76	13.20
Laundering and dry cleaning machine operators ..	7.84	6.00	6.25	7.10	10.00	10.71
Miscellaneous machine operators, N.E.C.	12.15	8.13	9.98	12.35	13.68	15.56
Welders and cutters	15.39	12.58	14.21	15.63	16.30	18.16
Assemblers	9.17	6.75	8.08	9.08	10.18	12.36
Production inspectors, checkers and examiners ..	11.04	7.42	8.52	9.82	12.91	15.97
Production testers	11.09	8.62	9.00	11.59	12.47	13.43
Transportation and material moving occupations	15.64	10.00	12.02	15.02	19.70	22.12
Truck drivers	15.31	10.50	11.62	15.50	17.53	21.12
Bus drivers	15.06	9.00	12.60	13.50	21.40	21.40
Excavating and loading machine operators	24.03	18.65	21.26	25.56	26.42	26.42
Industrial truck and tractor equipment operators ..	11.62	7.13	9.30	12.40	13.20	13.62
Handlers, equipment cleaners, helpers, and laborers	11.41	6.50	7.35	10.05	13.95	20.15
Groundskeepers and gardeners except farm	12.44	8.13	12.02	12.58	13.95	15.44
Construction laborers	19.51	11.76	15.29	20.15	21.74	25.80
Stock handlers and baggers	8.79	5.60	6.55	8.50	10.12	12.22
Machine feeders and offbearers	11.18	6.65	7.76	12.36	13.54	15.45
Freight, stock, and material handlers, N.E.C.	10.76	7.18	7.27	10.50	11.75	16.02
Hand packers and packagers	8.95	6.00	7.00	8.00	9.97	14.88
Laborers except construction, N.E.C.	11.45	6.67	8.99	10.67	13.41	17.17
Service occupations	11.00	6.10	7.74	9.81	13.02	18.68
Protective service occupations	14.80	7.50	8.50	15.16	19.43	22.45
Supervisors, firefighters and fire prevention occupations	23.42	19.10	19.10	24.40	26.53	27.30
Supervisors, police and detectives	26.69	20.43	23.01	26.06	33.19	33.19
Firefighting occupations	17.42	13.13	14.95	17.13	20.46	22.70
Police and detectives, public service	18.83	13.78	17.15	19.25	20.37	21.94
Guards and police except public service	8.94	7.00	7.50	8.00	9.52	11.66
Protective service occupations, N.E.C.	8.23	7.50	7.59	8.00	8.00	8.50
Food service occupations	7.54	2.63	4.62	7.00	9.96	12.21
Supervisors, food preparation and service occupations	14.53	11.00	12.50	12.58	17.79	21.00
Bartenders	6.62	3.00	3.80	7.16	10.12	10.12
Waiters and waitresses	3.55	2.63	2.63	2.63	2.65	6.82
Cooks	10.37	7.00	8.45	10.24	12.00	13.19
Food counter, fountain, and related occupations ..	7.31	5.82	6.00	6.48	7.56	11.54
Kitchen workers, food preparation	8.28	6.00	6.50	7.50	9.40	11.90
Waiters/Waitresses' assistants	5.22	4.25	4.25	5.25	5.50	8.80
Food preparation occupations, N.E.C.	7.46	5.75	6.50	7.00	8.21	9.75
Health service occupations	10.44	8.42	9.04	10.10	11.88	12.57
Health aides, except nursing	10.35	8.27	8.81	9.66	10.90	13.79
Nursing aides, orderlies and attendants	10.41	8.42	9.08	10.20	11.93	12.09
Cleaning and building service occupations	10.81	7.03	8.45	9.31	13.05	15.36
Supervisors, cleaning and building service workers	16.12	8.80	9.00	14.65	24.76	27.04
Maids and housemen	8.51	6.67	7.35	7.75	9.49	11.00
Janitors and cleaners	10.80	7.18	8.65	9.58	13.05	15.17

See footnotes at end of table.

Table A-1. Hourly earnings¹ for selected occupations, all workers², all industries, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998 — Continued

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
Service occupations (-Continued)						
Personal service occupations	\$11.22	\$6.12	\$7.52	\$10.07	\$12.00	\$14.19
Welfare service aides	10.11	6.70	8.28	10.50	11.69	13.00
Child care workers, N.E.C.	8.59	6.38	7.09	7.75	10.10	11.40
Service occupations, N.E.C.	10.19	6.74	8.70	10.37	11.54	13.35

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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	\$17.65	\$7.50	\$9.82	\$14.35	\$21.73	\$31.13	\$21.01	\$11.12	\$13.75	\$19.13	\$25.77	\$34.78
All occupations excluding sales	17.84	7.74	10.07	14.66	22.00	31.30	21.05	11.16	13.74	19.10	25.93	34.94
White-collar occupations	21.21	8.70	12.07	17.97	26.37	37.38	23.57	11.22	14.75	22.31	30.90	38.48
White-collar occupations excluding sales	22.02	9.81	13.21	19.00	27.15	38.03	23.68	11.27	14.75	22.62	31.05	38.49
Professional specialty and technical occupations	25.55	13.24	17.55	23.08	30.52	40.03	28.81	17.08	22.57	29.15	35.02	40.19
Professional specialty occupations	28.24	15.60	19.98	26.10	32.97	42.34	29.34	18.31	23.04	29.15	35.30	40.74
Engineers, architects, and surveyors	31.39	20.37	24.04	29.84	37.48	44.36	-	-	-	-	-	-
Civil engineers	24.81	15.82	18.30	21.71	29.25	32.22	-	-	-	-	-	-
Industrial engineers	26.99	19.89	22.01	25.51	29.15	38.61	-	-	-	-	-	-
Mechanical engineers	28.62	26.00	27.76	28.00	30.31	30.31	-	-	-	-	-	-
Engineers, N.E.C.	31.45	20.19	23.06	30.28	39.42	44.58	-	-	-	-	-	-
Mathematical and computer scientists	31.05	22.13	25.96	30.07	35.02	41.58	-	-	-	-	-	-
Computer systems analysts and scientists	31.76	23.17	26.47	30.44	36.02	43.25	-	-	-	-	-	-
Operations and systems researchers and analysts	23.91	16.45	19.23	24.13	27.59	32.46	-	-	-	-	-	-
Natural scientists	32.72	13.01	17.55	31.61	48.05	53.96	-	-	-	-	-	-
Chemists, except biochemists	28.81	11.40	14.33	24.97	48.73	51.92	-	-	-	-	-	-
Medical scientists	30.27	12.58	15.45	28.77	42.01	53.41	-	-	-	-	-	-
Health related occupations	24.98	16.45	19.05	22.70	26.94	32.93	21.29	10.56	15.91	22.99	23.96	28.72
Physicians	54.88	17.13	18.58	52.25	74.42	103.78	-	-	-	-	-	-
Registered nurses	22.70	15.82	19.05	22.50	26.23	30.00	22.87	15.71	19.45	23.11	26.49	28.72
Pharmacists	24.56	20.45	23.01	24.62	26.10	27.57	-	-	-	-	-	-
Respiratory therapists	19.63	15.54	17.23	19.99	22.45	25.02	-	-	-	-	-	-
Physical therapists	26.32	18.90	19.50	26.52	30.71	38.00	-	-	-	-	-	-
Teachers, college and university	45.52	26.67	30.89	40.28	56.00	74.50	33.68	22.61	27.08	34.47	40.21	42.94
Medical science teachers	37.18	26.36	30.65	38.46	41.79	45.82	-	-	-	-	-	-
Business, commerce and marketing teachers	70.31	51.74	59.54	73.88	87.69	87.69	-	-	-	-	-	-
English teachers	33.42	24.75	27.32	32.45	40.28	45.80	-	-	-	-	-	-
Teachers, post secondary N.E.C.	55.68	32.59	37.07	56.00	82.00	82.00	-	-	-	-	-	-
Teachers, except college and university	18.59	9.86	11.38	18.37	23.77	30.20	31.96	20.29	26.08	33.41	38.07	42.48
Elementary school teachers	-	-	-	-	-	-	31.17	21.37	24.99	30.98	36.71	41.15
Secondary school teachers	22.22	13.72	18.51	22.91	27.19	28.57	32.67	19.91	28.23	34.29	37.91	41.45
Teachers, N.E.C.	20.16	14.07	14.07	18.53	23.69	30.00	38.36	20.76	33.24	41.56	44.73	44.73
Librarians, archivists, and curators	24.61	18.56	19.93	24.15	26.40	31.54	25.47	20.47	21.93	23.04	32.89	32.89
Librarians	24.70	18.56	19.93	26.40	26.40	31.54	25.47	20.47	21.93	23.04	32.89	32.89
Social scientists and urban planners	-	-	-	-	-	-	-	-	-	-	-	-
Social, recreation, and religious workers	14.23	9.88	10.77	14.50	16.50	17.95	20.95	15.84	18.31	20.76	24.49	26.19
Social workers	14.24	10.02	10.79	14.44	16.40	18.30	20.95	15.84	18.31	20.76	24.49	26.19
Lawyers and judges	-	-	-	-	-	-	-	-	-	-	-	-
Writers, authors, entertainers, athletes, and professionals, N.E.C.	23.03	13.98	15.76	22.83	27.74	35.36	-	-	-	-	-	-
Designers	24.39	13.98	16.93	20.03	29.99	39.76	-	-	-	-	-	-
Editors and reporters	24.15	10.81	17.83	23.06	25.71	42.34	-	-	-	-	-	-
Professional occupations, N.E.C.	23.49	12.31	18.09	23.69	31.27	32.24	-	-	-	-	-	-
Technical occupations	18.13	11.01	13.52	17.55	20.85	25.46	20.04	10.67	16.14	17.45	24.49	34.94
Clinical laboratory technologists and technicians	15.20	10.74	11.42	13.65	18.79	20.28	-	-	-	-	-	-
Radiological technicians	22.82	17.20	19.88	21.56	25.31	33.74	-	-	-	-	-	-
Licensed practical nurses	16.78	13.78	15.66	16.59	18.00	20.00	15.35	10.67	12.94	16.48	17.53	17.53
Health technologists and technicians, N.E.C.	13.52	10.00	10.66	12.84	15.34	18.59	-	-	-	-	-	-
Electrical and electronic technicians	19.15	13.44	16.67	18.96	21.78	24.30	-	-	-	-	-	-
Engineering technicians, N.E.C.	22.45	16.20	18.81	22.75	27.49	29.16	-	-	-	-	-	-
Drafters	21.31	15.02	19.99	20.85	22.99	26.75	-	-	-	-	-	-
Computer programmers	23.11	17.01	19.23	23.48	25.41	31.25	-	-	-	-	-	-
Technical and related occupations, N.E.C.	19.85	10.10	19.23	20.43	23.92	27.20	-	-	-	-	-	-
Executive, administrative, and managerial occupations	29.09	15.38	18.85	25.11	34.76	45.67	27.59	18.94	20.93	25.20	30.61	46.59
Executives, administrators, and managers	35.16	18.19	23.80	30.58	43.27	53.45	31.22	20.97	24.52	28.67	37.72	46.59

See footnotes at end of table.

Table A-2. Hourly earnings¹ for selected occupations, all workers², private industry and State and local government, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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	
White-collar occupations (-Continued)													
Executive, administrative, and managerial occupations (-Continued)													
Executives, administrators, and managers (-Continued)													
Administrators and officials, public administration	—	—	—	—	—	—	\$25.31	\$19.80	\$22.40	\$25.49	\$25.77	\$29.39	—
Financial managers	\$34.65	\$20.15	\$22.77	\$31.30	\$45.00	\$45.81	—	—	—	—	—	—	—
Personnel and labor relations managers	38.77	17.34	22.36	29.00	29.00	82.69	—	—	—	—	—	—	—
Managers, marketing, advertising and public relations	41.59	22.93	31.71	39.51	45.31	56.77	—	—	—	—	—	—	—
Administrators, education and related fields	30.38	18.85	20.25	24.67	30.90	51.60	35.74	24.99	28.67	33.36	46.59	46.59	—
Managers, medicine and health	26.30	15.34	19.60	26.44	30.58	37.63	—	—	—	—	—	—	—
Managers and administrators, N.E.C.	38.37	21.15	26.69	34.13	44.95	57.69	—	—	—	—	—	—	—
Management related occupations	21.43	13.91	16.44	20.54	24.38	29.02	20.71	16.69	18.69	20.07	23.57	25.09	—
Accountants and auditors	20.14	14.04	15.46	18.13	21.15	27.84	—	—	—	—	—	—	—
Other financial officers	22.64	15.87	20.72	22.62	25.76	28.08	—	—	—	—	—	—	—
Management analysts	24.69	17.79	18.06	21.63	28.02	37.06	—	—	—	—	—	—	—
Personnel, training, and labor relations specialists	20.70	13.43	15.87	20.74	25.29	28.72	—	—	—	—	—	—	—
Buyers, wholesale and retail trade, except farm products	23.37	14.65	18.45	22.50	27.12	30.00	—	—	—	—	—	—	—
Purchasing agents and buyers, N.E.C.	19.90	13.84	16.44	18.95	22.31	26.93	—	—	—	—	—	—	—
Management related occupations, N.E.C.	22.27	14.29	17.25	20.39	25.11	30.85	22.05	17.95	20.07	21.03	23.57	28.30	—
Sales occupations	15.25	6.00	7.05	10.17	16.11	28.85	17.39	8.56	15.67	19.35	19.80	20.85	—
Supervisors, sales occupations	17.76	10.30	11.76	14.56	17.37	21.15	—	—	—	—	—	—	—
Sales occupations, other business services	28.07	8.71	11.10	18.49	32.93	54.60	—	—	—	—	—	—	—
Sales representatives, mining, manufacturing, and wholesale	35.73	12.46	19.62	30.29	41.93	67.38	—	—	—	—	—	—	—
Sales workers, apparel	7.19	6.00	6.21	6.76	8.21	8.85	—	—	—	—	—	—	—
Sales workers, other commodities	9.95	5.70	6.35	8.00	11.65	15.13	—	—	—	—	—	—	—
Cashiers	7.76	5.60	6.16	7.05	8.52	11.50	16.99	8.32	16.66	19.35	19.35	20.85	—
Sales support occupations, N.E.C.	14.15	7.03	14.42	14.42	16.11	17.68	—	—	—	—	—	—	—
Administrative support occupations, including clerical	12.77	8.00	9.50	12.10	15.11	18.58	13.61	9.12	11.03	13.35	15.72	18.14	—
Supervisors, general office	17.55	13.34	14.41	17.76	18.99	24.28	—	—	—	—	—	—	—
Supervisors, financial records processing	18.68	14.66	17.22	17.67	18.27	25.00	—	—	—	—	—	—	—
Computer operators	16.51	11.29	12.46	17.44	19.49	22.32	—	—	—	—	—	—	—
Secretaries	14.65	10.00	11.75	14.42	17.28	19.98	17.08	12.27	14.60	18.13	18.16	20.47	—
Interviewers	11.51	8.90	9.98	11.16	12.55	14.64	—	—	—	—	—	—	—
Hotel clerks	9.54	7.49	8.25	8.97	10.86	11.80	—	—	—	—	—	—	—
Transportation ticket and reservation agents	13.54	8.86	9.60	13.73	16.67	19.28	—	—	—	—	—	—	—
Receptionists	9.96	7.00	8.00	9.50	11.01	14.73	—	—	—	—	—	—	—
Information clerks, N.E.C.	13.80	9.50	10.00	13.24	18.58	21.15	—	—	—	—	—	—	—
Order clerks	11.99	7.99	9.00	11.57	15.13	16.80	—	—	—	—	—	—	—
Library clerks	—	—	—	—	—	—	13.37	10.48	11.02	12.51	17.05	17.74	—
Records clerks, N.E.C.	11.38	8.47	9.19	10.45	12.02	17.49	—	—	—	—	—	—	—
Bookkeepers, accounting and auditing clerks	12.43	9.39	10.71	12.00	13.31	16.58	14.75	10.57	12.37	16.47	17.07	17.35	—
Payroll and timekeeping clerks	12.41	8.71	10.07	12.63	13.83	18.46	—	—	—	—	—	—	—
Billing clerks	10.59	8.53	9.45	10.00	11.05	14.50	—	—	—	—	—	—	—
Telephone operators	11.57	7.75	10.00	12.00	12.84	12.84	—	—	—	—	—	—	—
Mail clerks except postal service	8.67	7.36	7.65	8.02	9.23	10.04	—	—	—	—	—	—	—
Traffic, shipping and receiving clerks	12.63	8.40	11.00	13.25	14.93	15.64	—	—	—	—	—	—	—
Stock and inventory clerks	15.33	11.47	13.93	15.44	17.47	18.04	—	—	—	—	—	—	—
Insurance adjusters, examiners, and investigators	16.04	12.11	13.19	15.00	18.58	21.17	—	—	—	—	—	—	—

See footnotes at end of table.

Table A-2. Hourly earnings¹ for selected occupations, all workers², private industry and State and local government, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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	
White-collar occupations (-Continued)													
Administrative support occupations, including clerical (-Continued)													
Investigators and adjusters except insurance	\$13.02	\$9.81	\$10.84	\$12.04	\$14.46	\$19.62	—	—	—	—	—	—	—
Bill and account collectors	12.35	10.00	10.00	12.00	14.34	15.29	—	—	—	—	—	—	—
General office clerks	12.41	8.00	9.40	12.64	14.68	18.07	\$13.64	\$11.28	\$12.33	\$14.10	\$15.40	\$15.59	—
Data entry keyers	10.26	8.23	8.50	9.50	11.51	13.04	—	—	—	—	—	—	—
Teachers' aides	—	—	—	—	—	—	11.05	8.08	9.12	10.30	11.43	13.84	—
Administrative support occupations, N.E.C.	13.48	7.73	10.00	12.10	18.68	19.80	—	—	—	—	—	—	—
Blue-collar occupations	14.04	7.54	9.67	12.97	17.15	22.00	18.00	12.17	13.95	16.47	21.77	24.66	—
Precision production, craft, and repair occupations	18.07	11.25	13.64	17.48	21.97	26.58	20.62	15.08	16.47	21.77	24.36	25.57	—
Bus, truck, and stationary engine mechanics	20.00	13.80	13.80	23.03	24.60	25.68	—	—	—	—	—	—	—
Industrial machinery repairers	15.37	12.70	13.64	14.45	17.05	19.90	—	—	—	—	—	—	—
Mechanics and repairers, N.E.C.	18.23	13.60	17.12	18.15	19.66	23.43	—	—	—	—	—	—	—
Electricians	22.37	13.44	16.30	24.86	27.10	32.72	22.91	16.47	16.47	25.91	28.40	29.53	—
Electrical power installers and repairers	24.56	21.92	21.93	24.81	27.12	27.82	—	—	—	—	—	—	—
Construction trades, N.E.C.	19.57	9.60	18.65	20.75	21.17	30.66	13.64	10.02	12.60	13.65	16.09	16.09	—
Supervisors, production occupations ..	19.03	11.84	15.15	19.35	22.53	25.81	—	—	—	—	—	—	—
Machinists	18.96	15.56	17.19	19.51	20.71	21.91	—	—	—	—	—	—	—
Electrical and electronic equipment assemblers	11.98	8.28	10.40	11.54	14.13	15.52	—	—	—	—	—	—	—
Butchers and meat cutters	14.20	9.73	10.84	14.31	17.57	19.85	—	—	—	—	—	—	—
Machine operators, assemblers, and inspectors	11.77	7.75	9.10	11.63	13.73	15.87	16.96	14.55	15.63	15.63	17.19	24.66	—
Molding and casting machine operators	9.99	8.09	8.21	8.96	11.26	14.70	—	—	—	—	—	—	—
Printing press operators	14.15	9.00	11.04	14.91	15.82	19.20	—	—	—	—	—	—	—
Textile sewing machine operators	9.83	7.00	7.66	9.30	11.76	13.20	—	—	—	—	—	—	—
Laundering and dry cleaning machine operators	7.45	5.50	6.25	7.00	8.12	10.00	—	—	—	—	—	—	—
Miscellaneous machine operators, N.E.C.	11.83	8.10	9.93	12.08	13.64	15.44	—	—	—	—	—	—	—
Assemblers	9.17	6.75	8.08	9.08	10.18	12.36	—	—	—	—	—	—	—
Production inspectors, checkers and examiners	11.04	7.42	8.52	9.82	12.91	15.97	—	—	—	—	—	—	—
Production testers	11.09	8.62	9.00	11.59	12.47	13.43	—	—	—	—	—	—	—
Transportation and material moving occupations	15.35	9.45	11.83	14.14	17.53	23.09	17.28	13.01	14.53	15.37	21.40	21.40	—
Truck drivers	15.47	10.50	11.62	15.50	17.53	21.12	—	—	—	—	—	—	—
Bus drivers	12.78	8.24	12.00	13.50	13.50	15.59	—	—	—	—	—	—	—
Excavating and loading machine operators	24.25	18.45	23.09	25.56	26.42	26.42	—	—	—	—	—	—	—
Industrial truck and tractor equipment operators	11.62	7.13	9.30	12.40	13.20	13.62	—	—	—	—	—	—	—
Handlers, equipment cleaners, helpers, and laborers	11.17	6.40	7.23	9.63	13.78	20.15	14.08	11.74	12.02	13.41	14.44	19.15	—
Groundskeepers and gardeners except farm	12.14	7.87	8.15	13.36	15.44	15.44	—	—	—	—	—	—	—
Construction laborers	—	—	—	—	—	—	13.96	10.87	11.76	13.94	15.29	17.81	—
Stock handlers and baggers	8.79	5.60	6.55	8.50	10.12	12.22	—	—	—	—	—	—	—
Machine feeders and offbearers	11.18	6.65	7.76	12.36	13.54	15.45	—	—	—	—	—	—	—
Freight, stock, and material handlers, N.E.C.	10.75	7.18	7.27	10.50	11.75	16.02	—	—	—	—	—	—	—
Hand packers and packagers	8.95	6.00	7.00	8.00	9.97	14.88	—	—	—	—	—	—	—
Laborers except construction, N.E.C.	10.57	6.35	8.96	9.67	11.73	16.95	16.84	11.00	13.41	13.41	21.62	22.50	—
Service occupations	9.17	5.55	7.29	8.80	10.76	13.01	16.37	10.44	12.38	15.99	19.52	22.61	—
Protective service occupations	9.03	7.00	7.50	8.00	9.53	12.50	18.68	13.36	16.36	18.75	20.92	23.04	—

See footnotes at end of table.

Table A-2. Hourly earnings¹ for selected occupations, all workers², private industry and State and local government, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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
Service occupations (-Continued)												
Protective service occupations (-Continued)												
Supervisors, firefighters and fire prevention occupations	-	-	-	-	-	-	\$23.42	\$19.10	\$19.10	\$24.40	\$26.53	\$27.30
Supervisors, police and detectives	-	-	-	-	-	-	26.69	20.43	23.01	26.06	33.19	33.19
Firefighting occupations	-	-	-	-	-	-	17.42	13.13	14.95	17.13	20.46	22.70
Police and detectives, public service ..	-	-	-	-	-	-	18.83	13.78	17.15	19.25	20.37	21.94
Guards and police except public service	\$8.83	\$7.00	\$7.50	\$8.00	\$9.41	\$11.41	-	-	-	-	-	-
Food service occupations	7.50	2.63	4.25	7.00	9.83	12.21	9.99	7.98	8.45	8.45	13.06	13.77
Supervisors, food preparation and service occupations	14.53	11.00	12.50	12.58	17.79	21.00	-	-	-	-	-	-
Bartenders	6.62	3.00	3.80	7.16	10.12	10.12	-	-	-	-	-	-
Waiters and waitresses	3.55	2.63	2.63	2.63	2.65	6.82	-	-	-	-	-	-
Cooks	10.36	7.00	8.46	10.25	12.00	13.02	-	-	-	-	-	-
Food counter, fountain, and related occupations	7.24	5.82	5.94	6.48	7.56	11.54	-	-	-	-	-	-
Kitchen workers, food preparation	8.28	6.00	6.50	7.50	9.40	11.90	-	-	-	-	-	-
Waiters'/Waitresses' assistants	5.22	4.25	4.25	5.25	5.50	8.80	-	-	-	-	-	-
Food preparation occupations, N.E.C.	7.43	5.75	6.50	7.00	8.15	9.75	-	-	-	-	-	-
Health service occupations	10.18	8.28	8.95	9.77	11.06	12.10	11.57	9.91	10.60	12.04	12.04	13.16
Health aides, except nursing	10.35	8.16	8.81	9.66	10.90	13.79	-	-	-	-	-	-
Nursing aides, orderlies and attendants	10.08	8.28	8.96	9.78	11.00	12.00	11.65	9.91	10.89	12.04	12.04	13.16
Cleaning and building service occupations	9.95	7.00	7.91	8.82	11.28	14.50	13.78	10.12	11.97	13.02	14.65	19.52
Maids and housemen	8.51	6.67	7.35	7.75	9.49	11.00	-	-	-	-	-	-
Janitors and cleaners	10.06	7.00	8.12	8.90	12.00	14.85	13.11	10.06	11.81	12.95	13.85	15.47
Personal service occupations	11.08	6.00	7.25	10.03	12.00	13.30	12.75	7.77	9.05	11.10	13.47	22.72
Welfare service aides	10.11	6.70	8.28	10.50	11.69	13.00	-	-	-	-	-	-
Child care workers, N.E.C.	8.39	6.38	7.09	7.53	9.50	11.04	-	-	-	-	-	-
Service occupations, N.E.C.	10.27	6.74	8.75	10.59	12.00	13.41	-	-	-	-	-	-

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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	\$19.26	\$8.76	\$11.42	\$16.11	\$23.80	\$33.19	\$10.82	\$5.60	\$6.93	\$8.57	\$12.15	\$20.29
All occupations excluding sales	19.25	8.90	11.50	16.25	23.85	33.05	11.54	5.75	7.25	9.00	13.83	21.28
White-collar occupations	22.57	10.07	13.43	19.47	28.30	38.61	13.53	6.00	7.25	10.33	18.00	24.56
White-collar occupations excluding sales	22.83	10.45	13.70	19.80	28.61	38.62	16.56	7.58	9.58	14.80	21.00	27.50
Professional specialty and technical occupations	26.82	14.37	18.92	24.99	32.39	40.74	21.06	11.93	15.35	19.73	25.08	30.23
Professional specialty occupations	29.16	16.53	21.54	27.64	34.63	42.34	22.71	14.10	16.23	20.88	27.09	32.42
Engineers, architects, and surveyors	31.22	20.69	24.67	29.65	36.26	43.28	-	-	-	-	-	-
Civil engineers	28.34	17.44	24.74	31.48	31.48	31.48	-	-	-	-	-	-
Industrial engineers	26.99	19.89	22.01	25.51	29.15	38.61	-	-	-	-	-	-
Mechanical engineers	28.62	26.00	27.76	28.00	30.31	30.31	-	-	-	-	-	-
Engineers, N.E.C.	30.95	20.62	24.28	29.15	36.95	42.95	-	-	-	-	-	-
Mathematical and computer scientists	30.48	20.87	24.86	29.33	34.74	41.06	-	-	-	-	-	-
Computer systems analysts and scientists	31.26	22.36	25.89	30.07	35.45	42.35	-	-	-	-	-	-
Operations and systems researchers and analysts	23.20	16.83	17.67	23.11	27.59	32.12	-	-	-	-	-	-
Natural scientists	32.34	13.01	16.80	30.77	47.65	53.96	-	-	-	-	-	-
Chemists, except biochemists	28.81	11.40	14.33	24.97	48.73	51.92	-	-	-	-	-	-
Medical scientists	29.26	12.58	15.02	22.95	41.00	53.41	-	-	-	-	-	-
Health related occupations	25.10	15.91	18.80	22.99	26.49	32.37	23.51	16.29	18.90	21.95	27.50	32.42
Physicians	49.89	10.56	17.13	51.44	74.42	103.78	-	-	-	-	-	-
Registered nurses	22.74	15.73	19.23	22.99	26.13	29.63	22.64	16.09	18.64	21.80	26.94	30.23
Respiratory therapists	18.90	15.44	15.91	17.23	21.31	25.02	-	-	-	-	-	-
Physical therapists	24.27	19.50	20.50	24.68	28.85	30.71	30.66	18.90	18.90	34.50	38.00	42.00
Teachers, college and university	43.54	26.64	30.72	38.66	52.75	67.77	36.58	20.51	22.96	29.63	51.47	64.73
English teachers	36.28	27.32	29.49	36.61	40.21	45.15	-	-	-	-	-	-
Foreign language teachers	36.34	24.78	28.20	37.88	41.22	49.76	-	-	-	-	-	-
Teachers, post secondary N.E.C.	50.89	30.41	32.59	49.22	56.00	82.00	-	-	-	-	-	-
Teachers, except college and university	30.75	18.17	24.67	32.06	37.52	42.34	20.87	6.97	13.15	20.00	26.08	35.84
Prekindergarten and kindergarten	25.71	10.33	11.00	30.90	37.91	43.45	-	-	-	-	-	-
Elementary school teachers	31.06	21.23	24.91	30.78	36.71	41.15	-	-	-	-	-	-
Secondary school teachers	31.86	18.94	25.96	33.42	37.28	41.45	-	-	-	-	-	-
Teachers, special education	28.17	16.75	22.39	28.54	35.30	38.07	-	-	-	-	-	-
Teachers, N.E.C.	35.72	19.66	27.31	39.81	44.73	44.73	26.06	14.07	14.07	20.19	34.01	48.49
Librarians, archivists, and curators	25.04	19.70	20.47	24.15	26.40	32.89	-	-	-	-	-	-
Librarians	25.13	18.56	20.47	23.12	31.54	32.89	-	-	-	-	-	-
Social scientists and urban planners	-	-	-	-	-	-	-	-	-	-	-	-
Social, recreation, and religious workers	16.82	10.21	12.42	16.16	20.76	24.49	16.76	11.36	15.60	15.90	17.70	22.00
Social workers	16.97	10.34	12.67	16.16	20.76	25.36	16.65	10.50	15.60	15.90	16.38	22.00
Lawyers and judges	-	-	-	-	-	-	-	-	-	-	-	-
Writers, authors, entertainers, athletes, and professionals, N.E.C.	23.14	14.26	15.76	22.18	28.62	35.92	17.87	11.85	12.90	17.43	23.61	23.61
Designers	24.29	14.43	16.93	20.03	29.99	39.76	-	-	-	-	-	-
Editors and reporters	24.15	10.81	17.83	23.06	25.71	42.34	-	-	-	-	-	-
Public relations specialists	20.78	14.26	15.10	23.08	23.08	32.97	-	-	-	-	-	-
Professional occupations, N.E.C.	26.45	18.45	22.59	25.76	31.73	32.24	-	-	-	-	-	-
Technical occupations	18.52	11.06	14.00	17.76	21.29	26.04	15.94	10.50	11.93	15.96	19.23	22.00
Clinical laboratory technologists and technicians	15.27	10.74	11.48	13.55	18.80	20.62	14.92	10.00	11.25	14.13	18.47	20.28
Radiological technicians	23.88	18.27	19.88	21.29	30.25	33.74	21.10	14.78	18.79	22.12	22.19	26.48
Licensed practical nurses	16.72	13.64	15.90	16.62	17.71	20.00	16.34	13.24	15.15	16.50	17.90	18.18
Health technologists and technicians, N.E.C.	14.30	10.00	10.66	13.54	15.34	18.77	13.10	9.50	10.50	11.93	14.56	19.73
Electrical and electronic technicians	19.07	13.44	16.67	18.70	21.78	24.13	-	-	-	-	-	-
Engineering technicians, N.E.C.	22.57	16.50	18.85	23.93	27.49	29.16	-	-	-	-	-	-
Drafters	21.31	15.02	19.99	20.85	22.99	26.75	-	-	-	-	-	-
Computer programmers	22.84	17.01	19.08	23.29	24.62	31.10	-	-	-	-	-	-
Technical and related occupations, N.E.C.	19.85	10.10	19.23	20.43	23.92	27.20	-	-	-	-	-	-
Executive, administrative, and managerial occupations	28.98	15.63	19.35	25.24	34.59	45.81	19.66	16.30	16.93	18.68	21.10	24.04

See footnotes at end of table.

Table A-3. Hourly earnings¹ for selected occupations, full-time and part-time workers², all industries, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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	
White-collar occupations (-Continued)												
Executive, administrative, and managerial occupations (-Continued)												
Executives, administrators, and managers	\$34.71	\$19.13	\$24.52	\$30.19	\$43.27	\$49.49	\$19.77	\$16.30	\$18.15	\$21.03	\$21.10	\$21.10
Administrators and officials, public administration	23.96	17.00	20.39	24.23	25.77	29.39	-	-	-	-	-	-
Financial managers	34.85	20.30	22.77	31.30	45.00	45.81	-	-	-	-	-	-
Personnel and labor relations managers	38.77	17.34	22.36	29.00	29.00	82.69	-	-	-	-	-	-
Managers, marketing, advertising and public relations	41.59	22.93	31.71	39.51	45.31	56.77	-	-	-	-	-	-
Administrators, education and related fields	33.70	19.19	24.67	29.77	45.15	46.59	-	-	-	-	-	-
Managers, medicine and health	28.52	15.34	23.55	27.00	33.75	46.13	-	-	-	-	-	-
Managers and administrators, N.E.C.	38.17	21.15	26.69	34.13	44.95	57.69	-	-	-	-	-	-
Management related occupations	21.37	14.32	16.73	20.53	24.04	28.30	19.51	16.93	16.93	18.68	24.04	24.04
Accountants and auditors	20.00	14.33	15.78	18.31	21.15	27.01	-	-	-	-	-	-
Other financial officers	22.52	15.87	20.36	21.96	25.63	28.08	-	-	-	-	-	-
Management analysts	24.47	17.79	18.06	21.63	28.02	36.06	-	-	-	-	-	-
Personnel, training, and labor relations specialists	20.60	13.43	15.87	20.62	25.29	28.64	-	-	-	-	-	-
Buyers, wholesale and retail trade, except farm products	23.37	14.65	18.45	22.50	27.12	30.00	-	-	-	-	-	-
Purchasing agents and buyers, N.E.C.	19.90	13.84	16.44	18.95	22.31	26.93	-	-	-	-	-	-
Management related occupations, N.E.C.	22.24	14.42	17.55	20.53	25.11	28.30	-	-	-	-	-	-
Sales occupations	19.45	7.70	9.98	14.21	21.59	37.82	7.33	5.50	6.00	6.80	7.95	9.67
Supervisors, sales occupations	17.85	10.30	11.76	14.71	17.37	21.15	-	-	-	-	-	-
Sales occupations, other business services	28.07	8.71	11.10	18.49	32.93	54.60	-	-	-	-	-	-
Sales representatives, mining, manufacturing, and wholesale	35.73	12.46	19.62	30.29	41.93	67.38	-	-	-	-	-	-
Sales workers, other commodities	12.11	6.35	7.97	10.48	13.71	18.70	7.49	5.45	5.85	7.00	8.00	10.29
Cashiers	11.25	6.70	7.85	9.94	14.21	19.35	7.01	5.50	6.00	6.60	7.50	8.90
Administrative support occupations, including clerical	13.20	8.49	10.25	12.66	15.60	18.58	10.28	7.08	7.75	9.23	12.14	14.42
Supervisors, general office	17.81	13.34	14.41	18.27	18.99	24.28	-	-	-	-	-	-
Supervisors, financial records processing	18.68	14.66	17.22	17.67	18.27	25.00	-	-	-	-	-	-
Computer operators	16.70	11.29	12.46	17.44	19.49	22.32	-	-	-	-	-	-
Secretaries	15.33	10.35	12.59	14.97	18.13	20.04	12.60	9.58	9.95	11.45	14.00	19.13
Typists	13.49	11.05	12.63	14.54	14.75	14.75	-	-	-	-	-	-
Interviewers	11.55	9.13	9.98	11.15	12.80	14.56	10.97	9.01	10.33	11.11	11.90	12.32
Transportation ticket and reservation agents	-	-	-	-	-	-	13.08	9.38	10.23	11.34	15.73	17.59
Receptionists	10.15	7.00	7.91	9.50	11.33	14.95	9.34	8.11	8.75	9.25	9.50	12.08
Information clerks, N.E.C.	14.34	9.73	10.27	14.60	18.58	21.15	-	-	-	-	-	-
Order clerks	12.64	8.85	9.70	12.20	16.27	16.80	8.38	6.82	7.14	7.70	8.31	12.14
Library clerks	14.00	10.50	12.02	12.95	17.05	17.74	-	-	-	-	-	-
Records clerks, N.E.C.	11.81	8.47	9.35	10.80	13.00	18.51	-	-	-	-	-	-
Bookkeepers, accounting and auditing clerks	12.82	9.60	10.91	12.36	14.23	17.07	11.17	6.25	8.48	11.11	14.42	14.42
Payroll and timekeeping clerks	12.50	8.71	10.07	12.63	14.00	18.46	-	-	-	-	-	-
Billing clerks	10.52	8.53	9.45	9.62	10.94	14.50	-	-	-	-	-	-
Telephone operators	12.22	9.46	11.58	12.84	12.84	12.84	8.14	7.25	7.25	7.75	8.51	9.99
Mail clerks except postal service	9.50	8.00	8.00	9.14	10.04	12.91	-	-	-	-	-	-
Traffic, shipping and receiving clerks	12.66	8.40	11.00	13.25	14.93	15.64	-	-	-	-	-	-
Stock and inventory clerks	15.92	12.07	13.93	16.28	18.04	19.13	-	-	-	-	-	-
Insurance adjusters, examiners, and investigators	16.04	12.11	13.19	15.00	18.58	21.17	-	-	-	-	-	-

See footnotes at end of table.

Table A-3. Hourly earnings¹ for selected occupations, full-time and part-time workers², all industries, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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	
White-collar occupations (-Continued)												
Administrative support occupations, including clerical (-Continued)												
Investigators and adjusters except insurance	\$12.99	\$10.00	\$10.84	\$12.02	\$14.46	\$19.62	\$13.25	\$9.62	\$10.09	\$13.10	\$14.82	\$20.96
Bill and account collectors	12.35	10.00	10.00	12.00	14.34	15.29	-	-	-	-	-	-
General office clerks	13.25	8.97	11.28	13.46	15.09	17.00	8.48	6.90	7.00	8.20	9.18	10.99
Data entry keyers	11.71	8.50	10.27	12.15	13.47	13.47	-	-	-	-	-	-
Teachers' aides	10.67	8.37	9.12	10.30	11.43	13.25	-	-	-	-	-	-
Administrative support occupations, N.E.C.	14.25	9.52	10.96	12.10	19.09	19.80	10.18	6.50	7.25	9.19	12.91	14.28
Blue-collar occupations												
Precision production, craft, and repair occupations	14.79	8.25	10.50	13.65	18.05	23.26	8.20	5.50	6.15	7.34	9.25	11.75
Automobile mechanics	18.36	11.54	13.80	17.71	22.53	26.32	-	-	-	-	-	-
Bus, truck, and stationary engine mechanics	18.13	14.00	14.00	19.58	20.37	20.94	-	-	-	-	-	-
Industrial machinery repairers	20.36	13.80	13.80	23.09	24.60	24.60	-	-	-	-	-	-
Mechanics and repairers, N.E.C.	15.37	12.70	13.64	14.45	17.05	19.90	-	-	-	-	-	-
Carpenters	19.04	13.50	16.35	18.47	21.77	24.68	-	-	-	-	-	-
Electricians	21.69	15.59	17.47	22.00	24.82	25.98	-	-	-	-	-	-
Electrical power installers and repairers	22.44	13.71	16.30	24.86	27.10	29.53	-	-	-	-	-	-
Plumbers, pipefitters and steamfitters	24.45	21.93	22.75	24.81	25.57	27.82	-	-	-	-	-	-
Construction trades, N.E.C.	19.76	13.31	15.91	21.19	21.81	26.08	-	-	-	-	-	-
Supervisors, production occupations ..	17.39	9.60	13.65	16.09	20.75	30.66	-	-	-	-	-	-
Machinists	19.03	11.84	15.15	19.35	22.53	25.81	-	-	-	-	-	-
Electrical and electronic equipment assemblers	18.96	15.56	17.19	19.51	20.71	21.91	-	-	-	-	-	-
Machine operators, assemblers, and inspectors	11.98	8.28	10.40	11.54	14.13	15.52	-	-	-	-	-	-
Molding and casting machine operators	12.03	8.00	9.26	11.98	14.20	16.09	-	-	-	-	-	-
Printing press operators	9.99	8.09	8.21	8.96	11.26	14.70	-	-	-	-	-	-
Textile sewing machine operators	14.44	9.00	11.49	15.00	16.07	19.20	-	-	-	-	-	-
Miscellaneous machine operators, N.E.C.	9.83	7.00	7.66	9.30	11.76	13.20	-	-	-	-	-	-
Welders and cutters	12.15	8.13	9.98	12.38	13.67	15.56	-	-	-	-	-	-
Assemblers	15.39	12.58	14.21	15.63	16.30	18.16	-	-	-	-	-	-
Production inspectors, checkers and examiners	9.41	7.02	8.25	9.15	10.28	12.36	-	-	-	-	-	-
Production testers	11.04	7.42	8.52	9.82	12.91	15.97	-	-	-	-	-	-
Transportation and material moving occupations	11.09	8.62	9.00	11.59	12.47	13.43	-	-	-	-	-	-
Truck drivers	15.85	10.00	12.40	15.18	21.03	22.12	11.51	6.82	8.00	12.50	13.50	13.91
Bus drivers	15.45	10.51	11.62	15.50	17.53	21.12	-	-	-	-	-	-
Excavating and loading machine operators	15.44	8.24	13.50	13.50	21.40	21.40	-	-	-	-	-	-
Industrial truck and tractor equipment operators	24.03	18.65	21.26	25.56	26.42	26.42	-	-	-	-	-	-
Handlers, equipment cleaners, helpers, and laborers	11.62	7.13	9.30	12.40	13.20	13.62	-	-	-	-	-	-
Groundskeepers and gardeners except farm	12.48	7.00	8.79	11.13	14.88	20.15	7.57	5.50	6.00	7.15	8.25	10.75
Construction laborers	13.37	12.02	12.02	12.91	14.82	15.44	-	-	-	-	-	-
Stock handlers and baggers	19.51	11.76	15.29	20.15	21.74	25.80	-	-	-	-	-	-
Machine feeders and offbearers	10.36	7.30	8.82	10.02	11.63	14.10	6.69	5.39	5.66	6.50	7.50	8.16
Freight, stock, and material handlers, N.E.C.	11.38	6.65	8.00	12.82	13.91	15.45	-	-	-	-	-	-
Hand packers and packagers	10.74	6.93	7.21	9.63	13.62	17.09	-	-	-	-	-	-
Laborers except construction, N.E.C.	9.28	6.50	7.00	8.27	10.37	14.88	-	-	-	-	-	-
	12.09	7.11	9.50	10.92	14.55	17.20	7.76	6.50	6.94	7.55	8.84	9.00

See footnotes at end of table.

Table A-3. Hourly earnings¹ for selected occupations, full-time and part-time workers², all industries, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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	
Service occupations	\$12.20	\$7.00	\$8.72	\$10.94	\$14.84	\$19.52	\$7.75	\$2.63	\$6.50	\$7.72	\$9.13	\$11.54
Protective service occupations	15.69	7.50	10.00	16.65	19.65	22.61	8.13	7.43	7.72	7.72	7.72	9.74
Supervisors, firefighters and fire prevention occupations	23.42	19.10	19.10	24.40	26.53	27.30	—	—	—	—	—	—
Supervisors, police and detectives	26.69	20.43	23.01	26.06	33.19	33.19	—	—	—	—	—	—
Firefighting occupations	17.43	13.13	14.95	17.13	20.73	22.70	—	—	—	—	—	—
Police and detectives, public service ..	18.91	13.78	17.35	19.31	20.37	21.94	—	—	—	—	—	—
Guards and police except public service	9.25	7.00	7.50	8.50	10.00	12.50	7.99	7.35	7.72	7.72	7.72	8.48
Protective service occupations, N.E.C.	—	—	—	—	—	—	8.23	7.50	7.59	8.00	8.00	8.50
Food service occupations	8.77	2.63	6.08	8.46	11.08	13.49	5.76	2.63	2.63	6.00	7.50	9.47
Supervisors, food preparation and service occupations	14.94	11.75	12.50	13.68	17.79	21.00	—	—	—	—	—	—
Waiters and waitresses	4.11	2.63	2.63	2.63	5.39	9.83	3.13	2.38	2.63	2.63	2.63	3.38
Cooks	10.65	7.00	8.50	10.48	12.08	13.76	8.94	7.00	7.55	8.75	9.85	11.52
Food counter, fountain, and related occupations	—	—	—	—	—	—	7.42	5.94	5.94	6.48	7.75	11.54
Kitchen workers, food preparation	8.58	6.00	6.50	7.00	9.75	11.90	7.71	6.41	6.50	7.50	8.50	9.40
Waiters/Waitresses' assistants	—	—	—	—	—	—	5.46	3.25	4.25	5.25	5.50	8.80
Food preparation occupations, N.E.C.	7.69	5.80	6.35	7.29	8.50	10.75	7.17	5.34	6.50	7.00	7.50	8.90
Health service occupations	10.56	8.50	9.12	10.25	11.81	13.16	10.08	7.97	8.91	9.79	12.00	12.00
Health aides, except nursing	10.97	8.78	9.30	10.13	11.88	15.63	9.04	7.72	8.16	8.81	9.49	10.87
Nursing aides, orderlies and attendants	10.43	8.45	9.08	10.22	11.60	12.49	10.36	8.25	9.14	10.11	12.00	12.00
Cleaning and building service occupations	11.62	7.50	8.90	11.00	13.66	15.59	8.50	7.00	7.50	8.65	8.79	10.00
Supervisors, cleaning and building service workers	20.46	14.65	14.65	19.78	27.04	27.04	—	—	—	—	—	—
Maids and housemen	8.03	6.60	7.25	7.70	8.72	10.73	—	—	—	—	—	—
Janitors and cleaners	11.68	7.97	8.90	11.65	13.73	15.59	8.30	7.00	7.25	8.65	8.65	8.90
Personal service occupations	13.44	8.59	10.03	11.39	12.50	20.11	8.32	6.00	6.38	7.47	9.06	11.77
Welfare service aides	—	—	—	—	—	—	9.19	6.70	7.63	8.75	10.95	12.16
Child care workers, N.E.C.	9.77	7.58	8.59	9.60	10.91	11.85	7.47	6.38	6.38	7.09	7.53	9.07
Service occupations, N.E.C.	10.98	9.13	10.07	11.06	12.00	12.50	8.93	6.12	6.74	8.00	11.10	15.32

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998

Occupation ³	All industries					
	Mean weekly hours ⁴	Weekly earnings		Mean annual hours	Annual earnings	
		Mean	Median		Mean	Median
All occupations	39.2	\$754	\$634	1,981	\$38,154	\$32,531
All occupations excluding sales	39.1	753	637	1,976	38,047	32,798
White-collar occupations	38.9	877	753	1,946	43,929	38,084
White-collar occupations excluding sales	38.8	885	769	1,936	44,199	38,641
Professional specialty and technical occupations	38.3	1,026	957	1,853	49,694	45,921
Professional specialty occupations	37.9	1,105	1,057	1,802	52,548	48,065
Engineers, architects, and surveyors	39.9	1,246	1,181	2,076	64,806	61,386
Civil engineers	39.4	1,117	1,181	2,050	58,094	61,386
Industrial engineers	41.3	1,114	1,056	2,146	57,916	54,912
Mechanical engineers	40.7	1,166	1,120	2,118	60,620	58,237
Engineers, N.E.C.	39.5	1,223	1,093	2,055	63,606	56,843
Mathematical and computer scientists	39.8	1,214	1,176	2,071	63,132	61,150
Computer systems analysts and scientists	39.9	1,249	1,206	2,077	64,927	62,691
Operations and systems researchers and analysts	38.8	899	900	2,016	46,766	46,792
Natural scientists	39.3	1,271	1,231	2,043	66,072	64,002
Chemists, except biochemists	38.5	1,108	999	2,000	57,613	51,938
Medical scientists	39.4	1,153	918	2,049	59,957	47,736
Health related occupations	38.8	974	885	2,017	50,620	46,002
Physicians	43.3	2,161	2,101	2,253	112,396	109,241
Registered nurses	38.2	868	869	1,983	45,091	45,126
Respiratory therapists	39.3	743	658	2,043	38,612	34,227
Physical therapists	40.0	971	987	2,080	50,482	51,331
Teachers, college and university	36.2	1,577	1,395	1,507	65,626	58,022
English teachers	35.3	1,281	1,373	1,350	48,976	53,542
Foreign language teachers	38.0	1,380	1,421	1,522	55,308	55,400
Teachers, post secondary N.E.C.	38.0	1,935	1,281	1,624	82,634	46,451
Teachers, except college and university	33.8	1,040	1,091	1,280	39,370	40,577
Prekindergarten and kindergarten	35.6	915	1,033	1,449	37,247	39,471
Elementary school teachers	33.3	1,034	1,064	1,249	38,782	39,376
Secondary school teachers	34.1	1,085	1,156	1,273	40,565	42,719
Teachers, special education	32.1	904	945	1,200	33,804	34,493
Teachers, N.E.C.	35.7	1,276	1,413	1,383	49,400	52,947
Librarians, archivists, and curators	36.9	923	845	1,791	44,840	41,933
Librarians	37.0	931	902	1,788	44,922	41,933
Social scientists and urban planners	-	-	-	-	-	-
Social, recreation, and religious workers	37.4	630	586	1,946	32,728	30,476
Social workers	37.6	638	586	1,954	33,161	30,476
Lawyers and judges	-	-	-	-	-	-
Writers, authors, entertainers, athletes, and professionals, N.E.C.	39.0	902	892	2,016	46,648	46,358
Designers	39.8	966	801	2,068	50,245	41,664
Editors and reporters	39.4	951	892	2,047	49,427	46,358
Public relations specialists	37.6	781	923	1,954	40,600	48,006
Professional occupations, N.E.C.	38.7	1,022	1,030	2,010	53,169	53,573
Technical occupations	39.6	733	702	2,058	38,122	36,504
Clinical laboratory technologists and technicians	39.8	607	537	2,068	31,569	27,903
Radiological technicians	40.0	955	852	2,080	49,662	44,283
Licensed practical nurses	39.3	658	660	2,045	34,191	34,320
Health technologists and technicians, N.E.C.	39.9	570	541	2,073	29,628	28,122
Electrical and electronic technicians	39.4	752	748	2,051	39,109	38,893
Engineering technicians, N.E.C.	39.9	901	957	2,077	46,876	49,774
Drafters	40.0	853	834	2,080	44,332	43,368
Computer programmers	39.1	893	889	2,032	46,419	46,235
Technical and related occupations, N.E.C.	40.2	797	817	2,088	41,459	42,494
Executive, administrative, and managerial occupations ...	40.2	1,164	1,000	2,073	60,080	51,898
Executives, administrators, and managers	40.4	1,404	1,181	2,076	72,070	60,461
Administrators and officials, public administration	37.9	909	924	1,972	47,258	48,069
Financial managers	41.6	1,448	1,322	2,161	75,319	68,729
Personnel and labor relations managers	42.6	1,651	1,160	2,214	85,844	60,320
Managers, marketing, advertising and public relations	41.1	1,711	1,550	2,135	88,815	80,605
Administrators, education and related fields	39.2	1,322	1,124	1,834	61,813	50,996
Managers, medicine and health	39.0	1,114	1,058	2,030	57,903	54,995
Managers and administrators, N.E.C.	40.5	1,545	1,359	2,099	80,124	70,652

See footnotes at end of table.

Table A-4. Weekly and annual earnings¹ and hours for selected occupations, full-time workers only², all industries, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998 — Continued

Occupation ³	All industries					
	Mean weekly hours ⁴	Weekly earnings		Mean annual hours	Annual earnings	
		Mean	Median		Mean	Median
White-collar occupations (-Continued)						
Executive, administrative, and managerial occupations (-Continued)						
Management related occupations	39.8	\$850	\$796	2,069	\$44,219	\$41,395
Accountants and auditors	39.0	781	724	2,029	40,587	37,635
Other financial officers	40.2	905	936	2,090	47,068	48,652
Management analysts	39.0	954	865	2,027	49,594	44,990
Personnel, training, and labor relations specialists	40.0	825	829	2,082	42,887	43,098
Buyers, wholesale and retail trade, except farm products	41.5	969	900	2,156	50,392	46,800
Purchasing agents and buyers, N.E.C.	40.0	796	758	2,080	41,399	39,416
Management related occupations, N.E.C.	40.3	895	821	2,093	46,553	42,699
Sales occupations	40.0	777	568	2,078	40,415	29,557
Supervisors, sales occupations	42.6	761	622	2,216	39,559	32,344
Sales occupations, other business services	39.8	1,116	740	2,068	58,030	38,459
Sales representatives, mining, manufacturing, and wholesale	41.2	1,472	1,298	2,143	76,549	67,509
Sales workers, other commodities	38.4	465	380	1,998	24,190	19,760
Cashiers	38.8	437	395	2,018	22,700	20,550
Administrative support occupations, including clerical	38.5	509	488	1,961	25,886	25,058
Supervisors, general office	39.5	703	731	2,053	36,580	38,002
Supervisors, financial records processing	39.9	745	707	2,073	38,728	36,754
Computer operators	38.6	645	680	2,008	33,532	35,363
Secretaries	38.7	593	593	1,995	30,577	30,732
Typists	36.4	490	509	1,848	24,932	26,463
Interviewers	39.4	455	445	2,050	23,683	23,136
Receptionists	38.4	390	360	1,997	20,259	18,720
Information clerks, N.E.C.	37.5	538	542	1,950	27,977	28,198
Order clerks	39.2	496	473	2,039	25,787	24,597
Library clerks	34.5	483	481	1,661	23,254	25,002
Records clerks, N.E.C.	39.6	468	432	2,060	24,330	22,464
Bookkeepers, accounting and auditing clerks	39.0	500	491	2,030	26,012	25,506
Payroll and timekeeping clerks	39.1	488	505	2,031	25,389	26,270
Billing clerks	39.4	415	385	2,051	21,580	20,010
Telephone operators	38.5	471	514	2,003	24,487	26,707
Mail clerks except postal service	38.3	364	344	1,993	18,931	17,880
Traffic, shipping and receiving clerks	40.0	506	530	2,052	25,969	27,559
Stock and inventory clerks	38.8	617	635	2,015	32,084	33,015
Insurance adjusters, examiners, and investigators	37.6	602	562	1,953	31,315	29,207
Investigators and adjusters except insurance	39.3	510	475	2,041	26,513	24,669
Bill and account collectors	39.3	485	466	2,043	25,240	24,240
General office clerks	37.9	502	519	1,970	26,088	26,978
Data entry keyers	38.2	447	456	1,984	23,229	23,693
Teachers' aides	33.9	362	369	1,280	13,656	13,905
Administrative support occupations, N.E.C.	38.2	545	492	1,989	28,347	25,572
Blue-collar occupations						
Precision production, craft, and repair occupations	40.0	735	710	2,081	38,206	36,904
Automobile mechanics	40.0	725	783	2,080	37,707	40,726
Bus, truck, and stationary engine mechanics	40.0	814	924	2,080	42,346	48,027
Industrial machinery repairers	39.8	612	567	2,069	31,800	29,494
Mechanics and repairers, N.E.C.	39.9	759	731	2,073	39,480	38,002
Carpenters	40.0	868	880	2,080	45,123	45,760
Electricians	40.0	898	994	2,080	46,676	51,699
Electrical power installers and repairers	40.0	978	992	2,080	50,852	51,605
Plumbers, pipefitters and steamfitters	40.0	790	848	2,080	41,098	44,075
Construction trades, N.E.C.	40.0	696	644	2,080	36,177	33,467
Supervisors, production occupations	40.5	770	795	2,104	40,035	41,319
Machinists	40.0	759	780	2,080	39,445	40,581
Electrical and electronic equipment assemblers ..	40.0	479	461	2,080	24,916	23,996
Machine operators, assemblers, and inspectors	39.9	480	479	2,028	24,402	24,461
Molding and casting machine operators	39.6	396	362	1,731	17,288	18,081
Printing press operators	39.9	576	600	2,073	29,943	31,200
Textile sewing machine operators	40.0	393	372	2,080	20,446	19,347

See footnotes at end of table.

Table A-4. Weekly and annual earnings¹ and hours for selected occupations, full-time workers only², all industries, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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)						
Machine operators, assemblers, and inspectors (-Continued)						
Miscellaneous machine operators, N.E.C.	39.9	\$485	\$495	2,075	\$25,213	\$25,764
Welders and cutters	40.0	616	625	2,080	32,011	32,510
Assemblers	40.0	376	366	2,080	19,575	19,032
Production inspectors, checkers and examiners ..	39.8	440	393	1,890	20,861	19,240
Production testers	40.0	443	464	2,080	23,059	24,107
Transportation and material moving occupations	39.9	633	601	2,029	32,166	30,227
Truck drivers	39.7	613	620	2,062	31,861	32,240
Bus drivers	40.0	618	540	1,909	29,477	28,080
Excavating and loading machine operators	40.0	961	1,022	2,073	49,819	53,165
Industrial truck and tractor equipment operators ..	40.0	465	496	2,080	24,171	25,792
Handlers, equipment cleaners, helpers, and laborers	39.7	496	445	2,027	25,297	22,791
Groundskeepers and gardeners except farm	40.0	535	516	2,080	27,806	26,853
Construction laborers	40.0	780	806	2,080	40,585	41,912
Stock handlers and baggers	39.4	408	399	2,031	21,036	20,728
Machine feeders and offbearers	40.0	455	513	2,080	23,668	26,666
Freight, stock, and material handlers, N.E.C.	39.7	427	380	2,065	22,183	19,760
Hand packers and packagers	40.0	371	331	1,877	17,418	16,640
Laborers except construction, N.E.C.	39.9	483	437	2,077	25,113	22,703
Service occupations	39.2	478	421	2,033	24,814	21,893
Protective service occupations	40.7	638	682	2,116	33,198	35,443
Supervisors, firefighters and fire prevention occupations	41.5	973	982	2,159	50,577	51,073
Supervisors, police and detectives	39.6	1,057	1,042	2,059	54,958	54,205
Firefighting occupations	44.2	771	728	2,300	40,091	37,868
Police and detectives, public service	39.8	752	770	2,069	39,128	40,049
Guards and police except public service	39.8	369	340	2,072	19,172	17,680
Food service occupations	38.7	339	324	2,005	17,589	16,834
Supervisors, food preparation and service occupations	43.6	652	625	2,269	33,887	32,500
Waiters and waitresses	38.5	158	105	2,000	8,226	5,470
Cooks	39.1	416	408	2,013	21,432	21,107
Kitchen workers, food preparation	38.9	334	280	2,025	17,381	14,560
Food preparation occupations, N.E.C.	37.8	291	285	1,967	15,134	14,828
Health service occupations	38.8	410	396	2,016	21,298	20,613
Health aides, except nursing	39.0	427	393	2,026	22,214	20,426
Nursing aides, orderlies and attendants	38.7	404	396	2,014	21,000	20,613
Cleaning and building service occupations	38.8	451	436	2,020	23,463	22,651
Supervisors, cleaning and building service workers	39.2	803	692	2,040	41,741	36,000
Maids and housemen	38.1	306	300	1,983	15,935	15,600
Janitors and cleaners	38.9	455	452	2,024	23,635	23,499
Personal service occupations	35.5	477	456	1,809	24,308	23,435
Child care workers, N.E.C.	39.7	388	380	1,927	18,828	19,052
Service occupations, N.E.C.	39.0	429	442	1,984	21,784	23,005

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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	\$18.20	\$17.65	\$21.01	\$19.26	\$10.82
All occupations excluding sales	18.40	17.84	21.05	19.25	11.54
White-collar occupations	21.60	21.21	23.57	22.57	13.53
Level 1	6.89	6.87	—	7.93	6.63
Level 2	8.41	8.10	9.93	9.00	7.49
Level 3	10.73	10.05	13.00	11.08	9.14
Level 4	12.14	11.87	13.70	12.35	10.31
Level 5	13.98	13.73	16.25	13.97	14.07
Level 6	15.58	15.40	17.24	15.37	18.36
Level 7	19.93	18.96	24.11	19.90	20.27
Level 8	19.54	19.56	19.40	19.14	22.52
Level 9	25.86	23.41	31.64	26.28	20.29
Level 10	25.83	26.20	22.57	25.89	24.84
Level 11	30.70	30.90	29.91	30.70	30.93
Level 12	39.36	39.40	38.60	39.24	—
Level 13	49.81	49.86	—	50.17	—
Level 14	55.99	57.16	—	55.87	—
Not able to be leveled	27.16	28.28	24.44	27.39	19.77
White-collar occupations excluding sales	22.32	22.02	23.68	22.83	16.56
Level 1	7.68	7.66	—	—	7.16
Level 2	8.97	8.64	9.98	9.18	8.21
Level 3	10.77	10.27	12.32	11.04	9.27
Level 4	12.32	12.03	13.73	12.41	11.28
Level 5	14.09	13.85	16.08	14.07	14.25
Level 6	15.89	15.72	17.24	15.68	18.36
Level 7	19.98	19.00	24.18	19.96	20.27
Level 8	19.90	19.96	19.40	19.51	22.52
Level 9	25.61	22.82	31.64	26.05	20.29
Level 10	25.65	26.04	22.57	25.71	24.84
Level 11	30.02	30.06	29.91	30.00	30.93
Level 12	38.52	38.51	38.60	38.38	—
Level 13	49.66	49.72	—	50.03	—
Level 14	55.99	57.16	—	55.87	—
Not able to be leveled	27.03	28.11	24.44	27.23	20.28
Professional specialty and technical occupations	26.24	25.55	28.81	26.82	21.06
Professional specialty occupations	28.52	28.24	29.34	29.16	22.71
Level 5	12.38	12.25	—	12.18	—
Level 6	16.56	16.39	—	15.95	—
Level 7	21.93	19.87	25.43	22.12	20.67
Level 8	21.84	22.09	19.15	21.31	23.67
Level 9	27.06	22.56	32.71	27.93	20.07
Level 10	24.84	25.64	20.32	24.74	25.71
Level 11	30.29	30.50	29.53	30.27	30.93
Level 12	38.32	38.35	—	38.06	—
Level 13	49.78	49.70	—	50.59	—
Level 14	54.69	54.69	—	54.36	—
Not able to be leveled	27.28	28.29	24.49	27.34	—
Engineers, architects, and surveyors	31.22	31.39	—	31.22	—
Level 7	21.13	21.13	—	21.13	—
Level 9	24.71	24.71	—	24.71	—
Level 11	31.02	31.63	—	31.02	—
Level 12	38.19	38.19	—	38.19	—
Level 13	45.40	45.40	—	45.40	—
Mathematical and computer scientists	30.48	31.05	—	30.48	—
Level 7	20.58	20.58	—	20.58	—
Level 9	24.12	24.90	—	24.12	—
Level 11	30.23	30.23	—	30.23	—
Level 12	34.09	34.09	—	34.09	—
Level 13	44.73	44.73	—	44.73	—
Natural scientists	32.38	32.72	—	32.34	—
Level 13	46.30	46.30	—	—	—
Health related occupations	24.66	24.98	21.29	25.10	23.51
Level 7	20.33	20.38	—	20.05	20.73

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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)					
Health related occupations (-Continued)					
Level 8	\$23.17	\$23.40	—	\$22.89	\$23.82
Level 9	22.67	22.73	\$22.23	22.71	22.55
Level 10	22.13	24.07	—	20.82	—
Level 11	27.00	26.98	27.11	25.62	34.76
Teachers, college and university	42.93	45.52	33.68	43.54	36.58
Level 9	25.91	27.60	—	—	23.55
Level 10	30.41	31.71	—	31.19	—
Level 11	33.15	34.16	28.83	33.72	25.69
Level 12	44.48	47.95	—	43.16	—
Level 13	64.07	64.07	—	64.07	—
Teachers, except college and university	30.32	18.59	31.96	30.75	20.87
Level 5	11.54	11.71	—	—	—
Level 7	26.74	—	26.72	26.74	—
Level 8	21.25	21.65	—	19.96	—
Level 9	34.40	22.34	35.10	34.36	37.12
Level 11	31.21	—	—	—	—
Librarians, archivists, and curators	25.01	24.61	25.47	25.04	—
Level 9	24.93	—	—	24.99	—
Social scientists and urban planners	—	—	—	—	—
Social, religious, and recreation workers	16.81	14.23	20.95	16.82	16.76
Level 7	16.06	12.51	—	16.05	—
Level 8	16.25	15.74	—	16.25	—
Level 9	16.99	—	—	—	17.30
Lawyers and judges	35.54	—	—	—	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	22.68	23.03	—	23.14	17.87
Level 7	18.12	18.43	—	18.12	—
Level 9	20.88	20.88	—	21.01	—
Level 11	31.30	31.30	—	—	—
Level 12	36.94	36.94	—	36.94	—
Not able to be leveled	17.80	17.79	—	17.61	—
Technical occupations	18.24	18.13	20.04	18.52	15.94
Level 3	11.01	11.34	—	—	—
Level 4	11.93	11.75	15.24	11.89	12.14
Level 5	15.43	15.36	—	15.40	15.59
Level 6	16.51	16.52	—	16.08	17.92
Level 7	20.18	20.15	—	20.17	20.25
Level 8	18.06	17.98	—	18.21	—
Level 9	23.21	23.20	—	23.08	—
Level 11	37.20	39.37	—	37.20	—
Not able to be leveled	21.04	—	—	—	—
Executive, administrative, and managerial occupations ...	28.89	29.09	27.59	28.98	19.66
Level 5	15.43	13.67	—	15.43	—
Level 6	16.11	16.11	—	16.11	—
Level 7	17.35	16.93	21.32	17.36	—
Level 8	18.08	17.75	19.82	18.09	—
Level 9	23.38	23.22	24.44	23.42	—
Level 10	26.21	26.20	—	26.34	—
Level 11	28.98	28.59	30.45	28.98	—
Level 12	38.83	38.80	39.79	38.83	—
Level 13	49.55	49.73	—	49.54	—
Level 14	56.85	59.16	—	56.85	—
Not able to be leveled	30.16	31.67	26.16	30.15	—
Executives, administrators, and managers	34.57	35.16	31.22	34.71	19.77
Level 6	15.88	15.88	—	15.88	—
Level 7	17.32	17.05	—	17.37	—
Level 8	19.18	18.99	—	19.18	—
Level 9	24.07	23.89	24.97	24.18	—
Level 10	26.75	26.81	—	26.95	—
Level 11	30.41	30.35	30.56	30.41	—
Level 12	41.61	41.70	39.79	41.61	—
Level 13	49.30	49.48	—	49.30	—

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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)					
Executives, administrators, and managers (-Continued)					
Level 14	\$56.91	\$59.26	—	\$56.91	—
Not able to be leveled	36.52	40.82	\$29.14	36.54	—
Management related occupations	21.35	21.43	20.71	21.37	\$19.51
Level 5	15.48	13.73	—	15.48	—
Level 6	16.31	16.31	—	16.31	—
Level 7	17.35	16.88	21.90	17.36	—
Level 8	17.85	17.50	19.80	17.85	—
Level 9	22.65	22.57	—	22.64	—
Level 11	25.15	25.07	—	25.15	—
Level 12	29.62	29.62	—	29.62	—
Not able to be leveled	22.35	23.24	—	22.35	—
Sales occupations	15.31	15.25	17.39	19.45	7.33
Level 1	6.69	6.68	—	—	6.55
Level 2	7.31	7.29	—	—	7.06
Level 3	10.53	8.99	18.82	11.32	8.81
Level 4	11.09	11.08	—	11.97	8.69
Level 5	13.02	12.79	—	13.08	—
Level 6	12.12	12.12	—	12.12	—
Level 8	15.62	15.62	—	15.62	—
Level 9	29.76	29.76	—	29.76	—
Level 10	27.67	27.67	—	27.67	—
Level 11	39.81	39.81	—	39.81	—
Administrative support occupations, including clerical	12.91	12.77	13.61	13.20	10.28
Level 1	7.68	7.66	—	—	7.16
Level 2	8.96	8.63	9.96	9.18	8.19
Level 3	10.76	10.23	12.38	11.03	9.17
Level 4	12.41	12.08	13.83	12.48	11.28
Level 5	13.71	13.54	15.29	13.69	13.92
Level 6	15.55	15.27	17.18	15.47	17.60
Level 7	18.33	18.28	18.69	18.34	—
Level 8	18.40	18.47	—	18.40	—
Level 9	21.43	21.43	—	21.43	—
Not able to be leveled	18.97	—	—	—	—
Blue-collar occupations					
Level 1	14.38	14.04	18.00	14.79	8.20
Level 2	9.64	9.57	12.88	10.90	6.65
Level 3	10.56	10.54	—	10.87	8.92
Level 4	11.60	11.52	13.19	11.73	8.75
Level 5	12.40	12.16	15.84	12.40	—
Level 6	15.72	15.29	18.61	15.72	—
Level 7	16.73	16.86	—	16.73	—
Level 8	19.41	19.08	20.65	19.40	—
Level 9	19.71	19.43	—	19.71	—
Level 9	25.16	25.19	—	25.16	—
Precision production, craft, and repair occupations	18.37	18.07	20.62	18.36	—
Level 3	9.37	—	—	9.37	—
Level 4	12.38	12.38	—	12.38	—
Level 5	16.05	15.71	18.58	16.05	—
Level 6	17.48	17.48	—	17.49	—
Level 7	20.11	19.79	21.24	20.11	—
Level 8	19.99	19.67	—	19.99	—
Level 9	25.12	25.16	—	25.12	—
Machine operators, assemblers, and inspectors	11.95	11.77	16.96	12.03	—
Level 1	8.24	8.24	—	8.47	—
Level 2	9.60	9.56	—	9.68	—
Level 3	11.09	11.09	—	11.11	—
Level 4	11.44	11.44	—	11.44	—
Level 5	13.23	13.23	—	13.23	—
Level 6	14.19	13.94	—	14.19	—
Level 7	16.62	16.19	—	16.62	—
Transportation and material moving occupations	15.64	15.35	17.28	15.85	11.51

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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
Blue-collar occupations (-Continued)					
Transportation and material moving occupations (-Continued)					
Level 2	\$11.02	\$11.04	—	—	—
Level 3	12.42	12.49	—	\$12.45	—
Level 4	14.22	13.97	—	14.25	—
Level 5	18.84	18.68	\$19.29	18.91	—
Level 6	18.53	—	—	18.53	—
Level 7	19.91	19.91	—	19.91	—
Handlers, equipment cleaners, helpers, and laborers	11.41	11.17	14.08	12.48	\$7.57
Level 1	9.93	9.82	—	12.65	6.66
Level 2	10.89	10.87	—	11.52	8.86
Level 3	12.38	12.20	13.86	12.81	8.13
Level 4	12.46	11.64	15.69	12.55	—
Level 5	13.45	13.21	—	13.45	—
Service occupations					
Level 1	11.00	9.17	16.37	12.20	7.75
Level 2	8.16	7.84	11.23	8.64	7.43
Level 3	8.72	7.91	11.35	9.60	7.51
Level 4	9.06	8.77	12.82	9.86	7.38
Level 5	10.73	9.94	13.78	11.03	9.33
Level 6	15.65	12.64	18.57	16.98	9.51
Level 7	14.76	11.84	17.27	14.79	—
Level 8	18.69	18.15	18.83	18.63	—
Level 9	17.60	—	—	17.60	—
Level 9	23.16	—	23.16	23.16	—
Protective service occupations	14.80	9.03	18.68	15.69	8.13
Level 2	11.21	—	—	—	—
Level 3	8.47	8.28	—	9.01	7.81
Level 4	13.41	—	14.26	13.70	—
Level 5	18.20	13.26	18.87	18.22	—
Level 6	17.27	—	17.27	17.27	—
Level 7	18.74	—	18.75	18.74	—
Level 9	22.51	—	22.51	22.51	—
Food service occupations	7.54	7.50	9.99	8.77	5.76
Level 1	6.41	6.37	—	6.51	6.30
Level 2	5.85	5.73	—	5.96	5.77
Level 3	6.35	6.33	—	7.51	4.70
Level 4	9.06	9.06	—	9.79	—
Level 5	11.00	11.00	—	11.96	—

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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)					
Health service occupations	\$10.44	\$10.18	\$11.57	\$10.56	\$10.08
Level 2	10.87	10.47	11.32	10.73	—
Level 3	10.08	9.82	—	10.24	9.47
Level 4	10.11	10.02	11.27	10.17	9.89
Level 5	10.55	10.25	—	11.71	—
Cleaning and building service occupations	10.81	9.95	13.78	11.62	8.50
Level 1	9.21	8.79	11.83	10.00	8.09
Level 2	10.40	9.48	12.73	10.62	8.27
Level 3	12.12	11.75	—	12.36	—
Level 4	13.80	—	—	13.94	—
Personal service occupations	11.22	11.08	12.75	13.44	8.32
Level 2	7.28	7.24	—	—	6.81
Level 3	10.05	10.05	—	11.03	9.35
Level 4	10.75	10.26	—	11.01	—
Level 5	19.63	19.63	—	—	—
Level 6	11.90	11.90	—	—	—

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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:					
Civil engineers	\$28.34	\$24.81	—	\$28.34	—
Electrical and electronic engineers					
Level 9	24.44	24.44	—	24.44	—
Level 11	31.84	31.84	—	31.84	—
Industrial engineers	26.99	26.99	—	26.99	—
Level 9	24.60	24.60	—	24.60	—
Mechanical engineers	28.62	28.62	—	28.62	—
Engineers, N.E.C.	30.95	31.45	—	30.95	—
Level 9	23.78	23.78	—	23.78	—
Level 11	30.31	32.32	—	30.31	—
Level 12	38.13	38.13	—	38.13	—
Computer systems analysts and scientists	31.26	31.76	—	31.26	—
Level 7	20.66	20.66	—	20.66	—
Level 9	24.93	25.76	—	24.93	—
Level 11	30.11	30.11	—	30.11	—
Level 12	34.40	34.40	—	34.40	—
Level 13	44.73	44.73	—	44.73	—
Operations and systems researchers and analysts	23.20	23.91	—	23.20	—
Level 9	21.45	22.31	—	21.45	—
Chemists, except biochemists	28.81	28.81	—	28.81	—
Medical scientists	29.68	30.27	—	29.26	—
Physicians	48.53	54.88	—	49.89	—
Registered nurses	22.71	22.70	\$22.87	22.74	\$22.64
Level 7	20.78	20.87	—	20.60	20.96
Level 8	23.49	23.53	—	23.25	24.04
Level 9	22.26	22.26	22.23	22.39	21.89
Level 10	26.87	—	—	—	—
Level 11	25.78	25.86	—	25.79	—
Pharmacists	24.56	24.56	—	—	—
Respiratory therapists	19.10	19.63	—	18.90	—
Physical therapists	26.32	26.32	—	24.27	30.66
Medical science teachers	37.18	37.18	—	—	—
Business, commerce and marketing teachers	69.78	70.31	—	—	—
Art, drama and music teachers	30.08	—	—	—	—
English teachers	35.89	33.42	—	36.28	—
Foreign language teachers	36.34	—	—	36.34	—
Teachers, post secondary, subject not specified ..	35.42	—	—	—	—
Teachers, post secondary N.E.C.	50.42	55.68	—	50.89	—
Prekindergarten and kindergarten	25.58	—	—	25.71	—
Elementary school teachers	31.06	—	31.17	31.06	—
Level 7	27.59	—	27.31	27.59	—
Level 9	33.92	—	34.22	33.92	—
Secondary school teachers	31.75	22.22	32.67	31.86	—
Level 7	26.97	—	27.08	26.97	—
Level 9	34.21	—	35.24	34.21	—
Teachers, special education	28.17	—	—	28.17	—
Level 9	31.10	—	—	31.10	—
Teachers, N.E.C.	33.73	20.16	38.36	35.72	26.06
Level 9	39.66	—	—	—	37.91
Vocational and educational counselors	24.29	—	—	—	—
Librarians	25.09	24.70	25.47	25.13	—
Level 9	24.93	—	—	24.99	—
Social workers	16.94	14.24	20.95	16.97	16.65
Level 7	16.05	12.47	—	16.05	—
Level 8	16.18	15.59	—	16.18	—
Designers	24.29	24.39	—	24.29	—
Editors and reporters	24.15	24.15	—	24.15	—
Public relations specialists	20.41	—	—	20.78	—
Technical occupations:					
Clinical laboratory technologists and technicians	15.23	15.20	—	15.27	14.92
Level 4	11.95	11.92	—	—	—

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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
White-collar occupations: (-Continued)					
Technical occupations: (-Continued)					
Clinical laboratory technologists and technicians (-Continued)					
Level 7	\$16.80	\$16.80	—	\$16.64	—
Level 8	16.58	16.58	—	—	—
Radiological technicians	22.82	22.82	—	23.88	\$21.10
Level 6	19.21	19.21	—	—	—
Licensed practical nurses	16.59	16.78	\$15.35	16.72	16.34
Level 4	15.87	—	—	—	—
Level 5	17.07	17.04	—	17.39	16.18
Health technologists and technicians, N.E.C.	14.07	13.52	—	14.30	13.10
Level 3	10.29	—	—	—	—
Level 4	11.88	11.89	—	11.89	—
Level 6	14.99	14.99	—	—	—
Level 7	18.42	18.42	—	—	—
Electrical and electronic technicians	19.07	19.15	—	19.07	—
Level 7	19.06	19.06	—	19.06	—
Level 8	19.29	19.67	—	19.29	—
Engineering technicians, N.E.C.	22.57	22.45	—	22.57	—
Level 7	24.34	—	—	24.34	—
Drafters	21.31	21.31	—	21.31	—
Computer programmers	22.84	23.11	—	22.84	—
Level 9	22.74	—	—	22.74	—
Technical and related occupations, N.E.C.	19.74	19.85	—	19.85	—
Executive, administrative, and managerial occupations:					
Administrators and officials, public administration	24.05	—	25.31	23.96	—
Level 9	24.31	—	24.31	24.31	—
Financial managers	34.57	34.65	—	34.85	—
Level 11	32.13	32.13	—	32.13	—
Level 13	46.88	—	—	46.88	—
Personnel and labor relations managers	38.77	38.77	—	38.77	—
Managers, marketing, advertising and public relations	41.59	41.59	—	41.59	—
Level 13	47.13	47.13	—	47.13	—
Administrators, education and related fields	33.43	30.38	35.74	33.70	—
Level 9	24.75	22.99	—	25.18	—
Level 11	30.75	—	33.76	30.75	—
Level 12	33.44	—	—	33.44	—
Managers, medicine and health	27.64	26.30	—	28.52	—
Level 9	21.97	—	—	—	—
Level 12	34.69	—	—	34.69	—
Managers and administrators, N.E.C.	38.17	38.37	—	38.17	—
Level 9	25.69	25.91	—	25.69	—
Level 10	29.30	29.30	—	29.30	—
Level 11	31.68	32.57	—	31.68	—
Level 12	46.25	46.25	—	46.25	—
Level 13	48.72	49.05	—	48.72	—
Level 14	55.11	55.11	—	55.11	—
Accountants and auditors	20.03	20.14	—	20.00	—
Level 7	17.21	17.16	—	17.20	—
Level 8	17.62	17.53	—	17.62	—
Level 9	21.51	21.51	—	21.36	—
Other financial officers	22.52	22.64	—	22.52	—
Management analysts	24.54	24.69	—	24.47	—
Personnel, training, and labor relations specialists	20.59	20.70	—	20.60	—
Buyers, wholesale and retail trade, except farm products	23.37	23.37	—	23.37	—
Purchasing agents and buyers, N.E.C.	19.90	19.90	—	19.90	—
Management related occupations, N.E.C.	22.23	22.27	22.05	22.24	—
Level 8	19.00	17.91	—	19.00	—
Level 9	23.15	23.00	—	23.15	—
Level 11	23.72	23.72	—	23.72	—

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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
White-collar occupations: (-Continued)					
Sales occupations:					
Supervisors, sales occupations	\$17.85	\$17.76	—	\$17.85	—
Level 5	14.58	13.87	—	14.58	—
Level 8	12.70	12.70	—	12.70	—
Sales occupations, other business services	28.07	28.07	—	28.07	—
Sales representatives, mining, manufacturing, and wholesale	35.73	35.73	—	35.73	—
Sales workers, apparel	7.19	7.19	—	—	—
Sales workers, other commodities	9.95	9.95	—	12.11	\$7.49
Level 4	9.64	9.64	—	10.43	—
Cashiers	8.47	7.76	\$16.99	11.25	7.01
Level 2	6.87	6.82	—	—	6.83
Level 3	10.76	8.69	18.86	11.92	8.83
Sales support occupations, N.E.C.	14.15	14.15	—	—	—
Administrative support occupations, including clerical:					
Supervisors, general office	17.78	17.55	—	17.81	—
Level 7	18.99	—	—	18.99	—
Supervisors, financial records processing	18.68	18.68	—	18.68	—
Computer operators	16.50	16.51	—	16.70	—
Secretaries	15.18	14.65	17.08	15.33	12.60
Level 3	9.90	9.90	—	9.85	—
Level 4	13.60	12.74	15.86	13.73	—
Level 5	13.61	13.64	—	13.53	—
Level 6	15.81	15.49	16.67	15.82	—
Level 7	18.41	18.41	—	18.44	—
Typists	13.15	—	—	13.49	—
Interviewers	11.40	11.51	—	11.55	10.97
Hotel clerks	9.54	9.54	—	—	—
Transportation ticket and reservation agents	13.54	13.54	—	—	13.08
Receptionists	10.00	9.96	—	10.15	9.34
Level 2	8.14	—	—	—	—
Level 3	9.44	9.40	—	—	9.50
Level 4	11.84	11.84	—	11.84	—
Information clerks, N.E.C.	14.11	13.80	—	14.34	—
Order clerks	11.99	11.99	—	12.64	8.38
Level 3	8.88	8.88	—	—	—
Library clerks	13.25	—	13.37	14.00	—
Records clerks, N.E.C.	11.41	11.38	—	11.81	—
Level 4	13.05	13.05	—	13.05	—
Bookkeepers, accounting and auditing clerks	12.69	12.43	14.75	12.82	11.17
Level 3	10.84	10.81	—	10.84	—
Level 4	12.67	12.29	—	12.78	—
Level 5	13.91	13.42	—	13.90	—
Payroll and timekeeping clerks	12.50	12.41	—	12.50	—
Billing clerks	10.59	10.59	—	10.52	—
Level 4	9.66	9.66	—	—	—
Telephone operators	11.42	11.57	—	12.22	8.14
Level 2	11.71	—	—	—	—
Mail clerks except postal service	8.75	8.67	—	9.50	—
Traffic, shipping and receiving clerks	12.63	12.63	—	12.66	—
Level 3	11.12	11.12	—	11.16	—
Stock and inventory clerks	15.92	15.33	—	15.92	—
Insurance adjusters, examiners, and investigators	16.04	16.04	—	16.04	—
Investigators and adjusters except insurance	13.02	13.02	—	12.99	13.25
Level 3	9.15	9.15	—	—	—
Level 4	13.39	13.39	—	13.39	—
Level 5	13.14	13.14	—	13.04	—
Bill and account collectors	12.35	12.35	—	12.35	—
General office clerks	12.91	12.41	13.64	13.25	8.48
Level 2	10.42	8.12	—	11.04	7.84
Level 3	12.02	11.08	13.08	12.26	9.44
Level 4	12.86	12.03	14.08	13.13	—
Level 5	14.25	13.71	—	14.25	—

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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
White-collar occupations: (-Continued)					
Administrative support occupations, including clerical: (-Continued)					
Data entry keyers	\$11.48	\$10.26	—	\$11.71	—
Teachers' aides	11.03	—	\$11.05	10.67	—
Level 2	9.05	—	9.05	9.15	—
Level 3	11.21	—	11.28	11.41	—
Administrative support occupations, N.E.C.	13.46	13.48	—	14.25	\$10.18
Level 3	10.01	10.01	—	—	—
Professional occupations, N.E.C.	23.49	23.49	—	26.45	—
Blue-collar occupations:					
Precision production, craft, and repair occupations:					
Automobile mechanics	18.13	—	—	18.13	—
Bus, truck, and stationary engine mechanics	20.36	20.00	—	20.36	—
Level 7	23.07	—	—	23.07	—
Industrial machinery repairers	15.37	15.37	—	15.37	—
Level 7	16.40	16.40	—	16.40	—
Heating, air conditioning, and refrigeration mechanics					
Level 7	20.38	20.38	—	20.38	—
Mechanics and repairers, N.E.C.	19.04	18.23	—	19.04	—
Carpenters	21.69	—	—	21.69	—
Level 7	21.69	—	—	21.69	—
Electricians	22.44	22.37	22.91	22.44	—
Level 7	18.42	—	22.91	18.42	—
Electrical power installers and repairers	24.45	24.56	—	24.45	—
Level 7	24.46	24.74	—	24.46	—
Plumbers, pipefitters and steamfitters	19.76	—	—	19.76	—
Construction trades, N.E.C.	17.39	19.57	13.64	17.39	—
Supervisors, production occupations	19.03	19.03	—	19.03	—
Level 7	19.47	19.47	—	19.47	—
Level 9	24.25	24.25	—	24.25	—
Machinists	18.96	18.96	—	18.96	—
Electrical and electronic equipment assemblers ..	11.98	11.98	—	11.98	—
Butchers and meat cutters	14.20	14.20	—	—	—
Machine operators, assemblers, and inspectors:					
Molding and casting machine operators	9.99	9.99	—	9.99	—
Printing press operators	14.15	14.15	—	14.44	—
Textile sewing machine operators	9.83	9.83	—	9.83	—
Laundering and dry cleaning machine operators	7.84	7.45	—	—	—
Miscellaneous machine operators, N.E.C.	12.15	11.83	—	12.15	—
Level 2	10.54	10.54	—	10.54	—
Level 3	11.38	11.38	—	11.36	—
Level 4	13.23	13.23	—	13.23	—
Level 5	12.69	12.69	—	12.69	—
Welders and cutters	15.39	—	—	15.39	—
Assemblers	9.17	9.17	—	9.41	—
Production inspectors, checkers and examiners ..	11.04	11.04	—	11.04	—
Level 3	9.39	9.39	—	9.39	—
Production testers	11.09	11.09	—	11.09	—
Transportation and material moving occupations:					
Truck drivers	15.31	15.47	—	15.45	—
Level 3	13.39	13.62	—	13.44	—
Level 4	14.52	14.65	—	14.52	—
Level 5	16.92	16.92	—	16.92	—
Bus drivers	15.06	12.78	—	15.44	—
Excavating and loading machine operators	24.03	24.25	—	24.03	—
Level 5	24.19	24.19	—	24.19	—
Industrial truck and tractor equipment operators ..	11.62	11.62	—	11.62	—
Handlers, equipment cleaners, helpers, and laborers:					
Groundskeepers and gardeners except farm	12.44	12.14	—	13.37	—
Level 3	11.04	—	—	—	—
Construction laborers	19.51	—	13.96	19.51	—
Stock handlers and baggers	8.79	8.79	—	10.36	6.69

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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)					
Handlers, equipment cleaners, helpers, and laborers: (-Continued)					
Stock handlers and baggers (-Continued)					
Level 1	\$7.18	\$7.18	—	\$8.88	\$6.52
Level 2	7.49	7.49	—	—	7.14
Level 3	9.81	9.81	—	10.67	6.56
Level 4	10.81	10.81	—	10.89	—
Machine feeders and offbearers					
Freight, stock, and material handlers, N.E.C.	11.18	11.18	—	11.38	—
Level 2	10.76	10.75	—	10.74	—
Level 3	9.90	9.90	—	—	—
Level 3	11.97	11.97	—	11.86	—
Hand packers and packagers					
Level 1	8.95	8.95	—	9.28	—
Level 2	7.93	7.93	—	8.65	—
Level 2	9.45	9.45	—	9.45	—
Laborers except construction, N.E.C.					
Level 1	11.45	10.57	\$16.84	12.09	7.76
Level 1	7.61	7.40	—	—	7.57
Level 4	15.28	13.60	—	15.29	—
Service occupations:					
Protective service occupations:					
Supervisors, firefighters and fire prevention occupations					
Supervisors, police and detectives	23.42	—	23.42	23.42	—
Firefighting occupations	26.69	—	26.69	26.69	—
Level 5	17.42	—	17.42	17.43	—
Level 5	18.47	—	18.47	—	—
Police and detectives, public service	18.83	—	18.83	18.91	—
Level 5	18.84	—	18.84	18.86	—
Level 7	19.39	—	19.39	19.39	—
Guards and police except public service	8.94	8.83	—	9.25	7.99
Level 3	8.47	8.27	—	9.01	7.79
Level 5	12.12	—	—	12.12	—
Protective service occupations, N.E.C.	8.23	—	—	—	8.23
Level 3	8.48	—	—	—	8.48
Food service occupations:					
Supervisors, food preparation and service occupations					
Bartenders	14.53	14.53	—	14.94	—
Level 3	6.62	6.62	—	—	—
Level 3	7.33	7.33	—	—	—
Waiters and waitresses	3.55	3.55	—	4.11	3.13
Level 2	3.24	3.24	—	—	—
Level 3	3.71	3.71	—	—	3.40
Cooks	10.37	10.36	—	10.65	8.94
Level 3	9.28	9.28	—	—	—
Level 4	10.08	10.08	—	10.47	—
Food counter, fountain, and related occupations					
Kitchen workers, food preparation	7.31	7.24	—	—	7.42
Level 2	8.28	8.28	—	8.58	7.71
Level 2	7.52	7.52	—	—	7.42
Waiters'/Waitresses' assistants	5.22	5.22	—	—	5.46
Food preparation occupations, N.E.C.	7.46	7.43	—	7.69	7.17
Level 1	7.46	7.43	—	7.93	6.73
Level 2	7.21	7.18	—	7.35	7.09
Level 3	7.88	7.88	—	—	—
Health service occupations:					
Health aides, except nursing					
Level 2	10.35	10.35	—	10.97	9.04
Level 3	9.47	9.47	—	—	—
Level 3	8.73	8.71	—	—	8.59
Level 4	10.43	10.31	—	—	—
Level 5	11.07	11.07	—	—	—
Nursing aides, orderlies and attendants					
Level 2	10.41	10.08	11.65	10.43	10.36
Level 2	11.01	—	11.32	10.76	—
Level 3	10.25	9.95	—	10.30	9.93
Level 4	9.86	9.76	11.38	9.83	9.97

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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
Service occupations: (-Continued)					
Cleaning and building service occupations:					
Supervisors, cleaning and building service workers	\$16.12	—	—	\$20.46	—
Maids and housemen	8.51	\$8.51	—	8.03	—
Level 1	7.67	7.67	—	7.44	—
Janitors and cleaners	10.80	10.06	\$13.11	11.68	\$8.30
Level 1	9.43	8.99	11.83	10.57	8.06
Level 2	10.54	9.54	12.73	10.74	—
Level 3	12.58	12.21	—	12.58	—
Level 4	13.78	—	—	13.93	—
Personal service occupations:					
Welfare service aides	10.11	10.11	—	—	9.19
Level 3	10.06	10.06	—	—	—
Child care workers, N.E.C.	8.59	8.39	—	9.77	7.47
Service occupations, N.E.C.	10.19	10.27	—	10.98	8.93
Level 2	7.75	7.70	—	—	—
Level 4	10.77	—	—	—	—

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998

Occupational group ²	Full-time workers ³	Part-time workers ³	Union ⁴	Nonunion ⁴	Time ⁵	Incentive ⁵
All occupations	\$19.26	\$10.82	\$18.92	\$17.96	\$18.13	\$22.43
All occupations excluding sales	19.25	11.54	19.56	18.00	18.42	15.93
White-collar occupations	22.57	13.53	21.55	21.61	21.47	29.97
White-collar excluding sales	22.83	16.56	23.48	22.06	22.29	-
Professional specialty and technical occupations	26.82	21.06	28.79	25.42	26.24	-
Professional specialty occupations	29.16	22.71	29.72	28.08	28.53	-
Technical occupations	18.52	15.94	23.04	17.39	18.24	-
Executive, administrative, and managerial occupations ...	28.98	19.66	25.88	29.07	28.77	-
Sales occupations	19.45	7.33	9.01	17.39	13.21	28.54
Administrative support including clerical occupations	13.20	10.28	14.16	12.62	12.91	-
Blue-collar occupations	14.79	8.20	17.94	12.27	14.44	12.73
Precision production, craft, and repair occupations	18.36	-	20.93	15.65	18.32	-
Machine operators, assemblers, and inspectors	12.03	-	14.77	11.26	12.05	10.00
Transportation and material moving occupations	15.85	11.51	17.95	13.22	15.43	-
Handlers, equipment cleaners, helpers, and laborers	12.48	7.57	14.04	10.06	11.49	-
Service occupations	12.20	7.75	14.87	9.08	11.01	-

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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	\$17.65	-	\$18.54	-	-	\$17.05	\$19.56	\$12.37	-	\$18.14
All occupations excluding sales	17.84	-	18.54	-	-	17.33	18.95	13.07	-	17.99
White-collar occupations	21.21	-	-	-	-	20.14	20.49	15.22	-	22.27
White-collar excluding sales	22.02	-	-	-	-	21.09	19.55	20.79	-	22.16
Professional specialty and technical occupations	25.55	-	-	-	-	24.44	21.16	27.85	-	24.44
Professional specialty occupations	28.24	-	-	-	-	26.99	31.25	29.12	-	26.54
Technical occupations	18.13	-	-	-	-	17.72	18.36	-	-	17.64
Executive, administrative, and managerial occupations	29.09	-	-	-	-	28.00	28.14	29.08	-	28.49
Sales occupations	15.25	-	-	-	-	14.45	26.69	10.82	-	25.83
Administrative support, including clerical occupations	12.77	-	-	-	-	12.68	14.59	11.09	-	12.73
Blue-collar occupations	14.04	-	17.21	-	-	13.51	17.59	11.34	-	11.46
Precision production, craft, and repair occupations	18.07	-	-	-	-	21.32	21.94	20.45	-	19.82
Machine operators, assemblers, and inspectors	11.77	-	-	-	-	8.14	-	-	-	8.06
Transportation and material moving occupations	15.35	-	-	-	-	14.83	15.89	14.26	-	10.00
Handlers, equipment cleaners, helpers, and laborers	11.17	-	-	-	-	9.49	10.52	9.08	-	10.12
Service occupations	9.17	-	-	-	-	9.06	-	6.95	-	9.66

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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	\$17.65	\$14.96	\$18.23	\$16.68	\$20.00
All occupations excluding sales	17.84	14.23	18.56	17.12	20.09
White-collar occupations	21.21	19.72	21.47	19.94	22.86
White-collar excluding sales	22.02	19.68	22.36	21.43	23.09
Professional specialty and technical occupations	25.55	22.79	25.77	23.73	27.10
Professional specialty occupations	28.24	25.91	28.41	26.80	29.37
Technical occupations	18.13	16.35	18.31	16.78	19.63
Executive, administrative, and managerial occupations ...	29.09	30.37	28.88	29.28	28.49
Sales occupations	15.25	19.85	13.16	12.48	16.21
Administrative support, including clerical occupations	12.77	12.29	12.87	12.88	12.86
Blue-collar occupations	14.04	12.18	14.46	14.19	14.95
Precision production, craft, and repair occupations	18.07	15.12	18.40	18.33	18.51
Machine operators, assemblers, and inspectors	11.77	11.73	11.78	11.60	12.07
Transportation and material moving occupations	15.35	13.22	15.93	15.36	17.51
Handlers, equipment cleaners, helpers, and laborers	11.17	10.81	11.32	10.92	12.25
Service occupations	9.17	7.77	9.72	9.16	10.53

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998

Occupational group ²	All workers		
	All industries	Private industry	State and local government
All occupations	1,523,887	1,257,829	266,058
All occupations excluding sales	1,415,396	1,151,822	263,574
White-collar occupations	925,728	745,991	179,737
White-collar excluding sales	817,237	639,984	177,253
Professional specialty and technical occupations	385,646	286,473	99,173
Professional specialty occupations	307,420	212,964	94,456
Technical occupations	78,225	73,508	4,717
Executive, administrative, and managerial occupations ...	156,378	133,533	22,845
Sales occupations	108,491	106,007	2,484
Administrative support including clerical occupations	275,214	219,979	55,235
Blue-collar occupations	315,007	289,638	25,369
Precision production, craft, and repair occupations	93,282	82,478	10,804
Machine operators, assemblers, and inspectors	101,291	98,072	-
Transportation and material moving occupations	39,745	34,086	5,658
Handlers, equipment cleaners, helpers, and laborers	80,690	75,002	5,688
Service occupations	283,152	222,201	60,951

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. While 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 is based on the type of data to be produced. Establishments that participate in the NCS are studied for several collection cycles. This allows changes in wages within these establishments to be observed over time. Individual wage data are collected for selected jobs during each establishment's initial cycle and updated during subsequent cycles. When data are not available during a collection cycle, efforts are made to collect the data during subsequent cycles and include it in later tabulations. Beginning in the year 2000, the current NCS sample will be replenished on a rotating basis.

Survey scope

This survey of the Boston-Worcester-Lawrence, MA-NH-ME-CT, Consolidated Metropolitan Statistical Area 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 Boston-Worcester-Lawrence, MA-NH-ME-CT, CMSA includes Essex County, Middlesex County, Norfolk County, Plymouth County, Suffolk County, twelve communities in Bristol County, one in Hampden County, and fifty-two in Worcester County, MA; eighteen in Hillsborough County, two in Merrimack County, thirty-four in Rockingham County, and ten in Strafford County, NH; five in York County, ME; and one in Windham County, CT.

Sampling frame

The list of establishments from which the survey sample was selected (sampling frame) was developed from the State unemployment insurance reports for the Boston-Worcester-Lawrence, MA-NH-ME-CT, Consolidated Metropolitan Statistical Area. The reference month for the public sector is June 1994. 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 reference month for the private sector is December 1995. 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 where the strata are determined by industry and whether the establishment is Private, State government or local government. 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 the sample units within each stratum represent all the units within the stratum, both sampled and nonsampled. 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

Detailed procedures are followed when collecting data from survey respondents. For the initial data collection, field economists, working out of the Regional Office, visited each establishment surveyed. The field economists - through mail, phone, or personal visit - completed update collection, which involved obtaining current pay data.

The following procedures are used for schedules initiated for the first time or reinitiated during an update.

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 MOG’s:

- 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

A complete list of all individual occupations, classified by the MOG to which they belong, is contained in appendix B.

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 was collected from September 1998 through January 1998. The average payroll reference month was October 1998. For each establishment in the survey, the data reflect the establishment's practices on the day of collection.

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 requirements 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/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 establishment/occupations into the various data series. Of the establishments surveyed, 26.0 percent (representing 454,337 employees) 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 which were additionally defined by major occupation group and job level.

Establishments which were determined to be out of business or outside the scope of the survey (6.1 percent of the total sample) 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.

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. The respondent has the option of giving mean data instead of individual wages in the years following the initiation.

In 1998, the publication criteria were changed to allow more data to publish. 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.

As a result of the use of sampling weights, the number of workers estimates represent the total in all establishments within the scope of the study not the actual number of workers surveyed.

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 also were not specifically measured, efforts were made to minimize nonsampling errors by the extensive training of field economists who gathered survey data, computer editing 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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 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	8,457	448	104	344	206	138
Private industry	7,919	397	98	299	180	119
Goods-producing industries	2,027	95	20	75	43	32
Mining	5	3	2	1	1	-
Construction	230	9	1	8	7	1
Manufacturing	1,792	83	17	66	35	31
Service-producing industries	5,892	302	78	224	137	87
Transportation and public utilities	468	24	6	18	10	8
Wholesale and retail trade	2,305	85	33	52	42	10
Finance, insurance and real estate	503	30	6	24	12	12
Services	2,615	163	33	130	73	57
State and local government	539	51	6	45	26	19

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998

(in percent)

Occupation ³	All industries	Private industry	State and local government
All occupations	1.9	2.2	2.3
All occupations excluding sales	1.8	2.2	2.4
White-collar occupations	2.2	2.5	2.8
White-collar occupations excluding sales	2.1	2.5	2.9
Professional specialty and technical occupations	2.0	2.4	3.3
Professional specialty occupations	2.1	2.6	3.3
Engineers, architects, and surveyors	2.3	2.6	—
Civil engineers	7.9	13.9	—
Industrial engineers	6.6	6.6	—
Mechanical engineers	3.1	3.1	—
Engineers, N.E.C.	4.0	4.7	—
Mathematical and computer scientists	3.0	2.8	—
Computer systems analysts and scientists	2.9	2.7	—
Operations and systems researchers and analysts	4.3	3.5	—
Natural scientists	11.0	11.3	—
Chemists, except biochemists	23.2	23.2	—
Medical scientists	16.5	17.4	—
Health related occupations	4.9	5.2	7.9
Physicians	20.3	16.3	—
Registered nurses	2.1	2.2	5.3
Pharmacists	3.0	3.0	—
Respiratory therapists	4.2	4.8	—
Physical therapists	10.6	10.6	—
Teachers, college and university	6.3	7.5	4.7
Medical science teachers	9.8	9.8	—
Business, commerce and marketing teachers	8.6	8.6	—
Art, drama and music teachers	8.2	—	—
English teachers	6.1	10.5	—
Foreign language teachers	10.2	—	—
Teachers, post secondary, subject not specified ..	16.7	—	—
Teachers, post secondary N.E.C.	17.6	14.7	—
Teachers, except college and university	4.2	9.2	4.3
Prekindergarten and kindergarten	20.4	—	—
Elementary school teachers	4.9	—	5.0
Secondary school teachers	4.7	4.4	4.8
Teachers, special education	9.5	—	—
Teachers, N.E.C.	15.0	9.5	7.5
Vocational and educational counselors	10.8	—	—
Librarians, archivists, and curators	6.1	6.9	10.3
Librarians	6.7	8.1	10.3
Social scientists and urban planners	—	—	—
Social, recreation, and religious workers	7.3	7.4	7.2
Social workers	7.6	7.9	7.2
Lawyers and judges	13.1	—	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	6.9	7.1	—
Designers	12.3	12.4	—
Editors and reporters	21.2	21.2	—
Public relations specialists	10.3	—	—
Professional occupations, N.E.C.	12.3	12.3	—
Technical occupations	3.5	3.6	10.2
Clinical laboratory technologists and technicians	5.7	5.8	—
Radiological technicians	7.6	7.6	—
Licensed practical nurses	2.3	2.3	7.0
Health technologists and technicians, N.E.C.	6.3	4.7	—
Electrical and electronic technicians	3.8	3.9	—
Engineering technicians, N.E.C.	8.0	8.3	—
Drafters	5.2	5.2	—
Computer programmers	5.3	5.8	—
Technical and related occupations, N.E.C.	8.4	8.6	—
Executive, administrative, and managerial occupations ...	3.1	3.4	8.0

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998 — Continued

(in percent)

Occupation ³	All industries	Private industry	State and local government
White-collar occupations (-Continued)			
Executive, administrative, and managerial occupations (-Continued)			
Executives, administrators, and managers	3.7	4.2	8.3
Administrators and officials, public administration	6.0	—	4.1
Financial managers	7.1	7.2	—
Personnel and labor relations managers	28.1	28.1	—
Managers, marketing, advertising and public relations	9.1	9.1	—
Administrators, education and related fields	10.5	12.9	12.8
Managers, medicine and health	8.8	8.3	—
Managers and administrators, N.E.C.	5.1	5.3	—
Management related occupations	2.5	2.7	4.3
Accountants and auditors	4.3	4.8	—
Other financial officers	4.7	4.7	—
Management analysts	9.0	9.8	—
Personnel, training, and labor relations specialists	7.3	7.4	—
Buyers, wholesale and retail trade, except farm products	8.4	8.4	—
Purchasing agents and buyers, N.E.C.	7.2	7.2	—
Management related occupations, N.E.C.	5.9	7.0	4.9
Sales occupations	9.9	10.2	5.7
Supervisors, sales occupations	18.3	19.0	—
Sales occupations, other business services	24.8	24.8	—
Sales representatives, mining, manufacturing, and wholesale	22.7	22.7	—
Sales workers, apparel	3.2	3.2	—
Sales workers, other commodities	8.3	8.3	—
Cashiers	5.6	6.1	6.2
Sales support occupations, N.E.C.	8.3	8.3	—
Administrative support occupations, including clerical	2.4	2.8	2.5
Supervisors, general office	6.8	7.1	—
Supervisors, financial records processing	5.2	5.2	—
Computer operators	7.7	7.8	—
Secretaries	2.7	2.9	3.6
Typists	4.5	—	—
Interviewers	3.8	5.1	—
Hotel clerks	7.0	7.0	—
Transportation ticket and reservation agents	5.3	5.3	—
Receptionists	6.6	7.0	—
Information clerks, N.E.C.	10.1	11.4	—
Order clerks	7.3	7.3	—
Library clerks	8.8	—	12.2
Records clerks, N.E.C.	6.4	6.5	—
Bookkeepers, accounting and auditing clerks	3.2	3.3	7.3
Payroll and timekeeping clerks	9.1	9.5	—
Billing clerks	5.9	5.9	—
Telephone operators	6.1	6.0	—
Mail clerks except postal service	4.8	4.7	—
Traffic, shipping and receiving clerks	5.8	5.8	—
Stock and inventory clerks	5.3	4.7	—
Insurance adjusters, examiners, and investigators	3.4	3.4	—
Investigators and adjusters except insurance	4.5	4.5	—
Bill and account collectors	6.5	6.5	—
General office clerks	3.1	5.1	2.5
Data entry keyers	4.7	6.2	—
Teachers' aides	6.2	—	6.3
Administrative support occupations, N.E.C.	9.4	9.9	—
Blue-collar occupations	2.3	2.5	3.6
Precision production, craft, and repair occupations	3.5	3.9	4.2

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998 — Continued

(in percent)

Occupation ³	All industries	Private industry	State and local government
Blue-collar occupations (-Continued)			
Precision production, craft, and repair occupations (-Continued)			
Automobile mechanics	6.4	—	—
Bus, truck, and stationary engine mechanics	8.9	11.2	—
Industrial machinery repairers	3.4	3.4	—
Mechanics and repairers, N.E.C.	6.0	7.9	—
Carpenters	5.8	—	—
Electricians	10.3	11.9	12.6
Electrical power installers and repairers	1.9	2.4	—
Plumbers, pipefitters and steamfitters	9.3	—	—
Construction trades, N.E.C.	11.1	12.7	8.5
Supervisors, production occupations	7.5	7.5	—
Machinists	4.2	4.2	—
Electrical and electronic equipment assemblers ..	5.4	5.4	—
Butchers and meat cutters	11.3	11.3	—
Machine operators, assemblers, and inspectors	3.1	3.1	10.1
Molding and casting machine operators	9.9	9.9	—
Printing press operators	7.3	7.3	—
Textile sewing machine operators	5.8	5.8	—
Laundry and dry cleaning machine operators	6.0	1.0	—
Miscellaneous machine operators, N.E.C.	5.7	5.2	—
Welders and cutters	4.5	—	—
Assemblers	4.7	4.7	—
Production inspectors, checkers and examiners ..	7.7	7.7	—
Production testers	6.9	6.9	—
Transportation and material moving occupations	3.8	4.5	5.1
Truck drivers	5.3	5.6	—
Bus drivers	6.1	7.0	—
Excavating and loading machine operators	4.4	4.4	—
Industrial truck and tractor equipment operators ..	9.6	9.6	—
Handlers, equipment cleaners, helpers, and laborers	5.2	5.8	5.3
Groundskeepers and gardeners except farm	6.8	13.9	—
Construction laborers	8.4	—	6.0
Stock handlers and baggers	3.6	3.6	—
Machine feeders and offbearers	12.7	12.7	—
Freight, stock, and material handlers, N.E.C.	7.7	7.7	—
Hand packers and packagers	9.1	9.1	—
Laborers except construction, N.E.C.	7.8	7.8	13.9
Service occupations	2.7	2.4	2.7
Protective service occupations	7.2	5.1	2.7
Supervisors, firefighters and fire prevention occupations	1.2	—	1.2
Supervisors, police and detectives	9.4	—	9.4
Firefighting occupations	4.7	—	4.7
Police and detectives, public service	2.7	—	2.7
Guards and police except public service	4.6	4.4	—
Protective service occupations, N.E.C.	3.8	—	—
Food service occupations	4.9	5.0	11.0
Supervisors, food preparation and service occupations	8.3	8.3	—
Bartenders	20.1	20.1	—
Waiters and waitresses	11.1	11.1	—
Cooks	4.5	4.7	—
Food counter, fountain, and related occupations	9.4	9.5	—
Kitchen workers, food preparation	6.7	6.7	—
Waiters/Waitresses' assistants	9.2	9.2	—
Food preparation occupations, N.E.C.	3.7	3.7	—
Health service occupations	1.5	1.8	1.4
Health aides, except nursing	3.9	4.1	—
Nursing aides, orderlies and attendants	1.5	2.0	1.3
Cleaning and building service occupations	3.7	4.2	5.6

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998 — Continued

(in percent)

Occupation ³	All industries	Private industry	State and local government
Service occupations (-Continued)			
Cleaning and building service occupations (-Continued)			
Supervisors, cleaning and building service workers			
	23.4	—	—
Maids and housemen			
	5.9	5.9	—
Janitors and cleaners			
	3.8	4.7	3.7
Personal service occupations			
	10.1	11.0	14.9
Welfare service aides			
	6.4	6.4	—
Child care workers, N.E.C.			
	9.1	9.4	—
Service occupations, N.E.C.			
	5.9	6.3	—

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, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998

Occupation ¹	All workers	Full-time workers	Part-time workers
All occupations	6	6	4
All occupations excluding sales	6	6	4
White-collar occupations	7	8	5
White-collar occupations excluding sales	7	8	6
Professional specialty and technical occupations	9	9	8
Professional specialty occupations	9	10	8
Engineers, architects, and surveyors	11	11	—
Civil engineers	10	10	—
Industrial engineers	10	10	—
Mechanical engineers	10	10	—
Engineers, N.E.C.	11	11	—
Mathematical and computer scientists	11	11	—
Computer systems analysts and scientists	11	11	—
Operations and systems researchers and analysts	9	9	—
Natural scientists	12	12	—
Chemists, except biochemists	11	11	—
Medical scientists	12	12	—
Health related occupations	8	9	8
Physicians	12	12	—
Registered nurses	8	8	8
Pharmacists	9	—	—
Respiratory therapists	7	8	—
Physical therapists	9	9	9
Teachers, college and university	11	12	10
Medical science teachers	11	—	—
Business, commerce and marketing teachers	11	—	—
Art, drama and music teachers	11	—	—
English teachers	11	12	—
Foreign language teachers	12	12	—
Teachers, post secondary, subject not specified	11	—	—
Teachers, post secondary N.E.C.	11	11	—
Teachers, except college and university	8	8	7
Prekindergarten and kindergarten	7	8	—
Elementary school teachers	8	8	—
Secondary school teachers	8	8	—
Teachers, special education	8	8	—
Teachers, N.E.C.	8	8	8
Vocational and educational counselors	9	—	—
Librarians, archivists, and curators	9	9	—
Librarians	9	9	—
Social scientists and urban planners	—	—	—
Social, recreation, and religious workers	8	7	9
Social workers	8	7	9
Lawyers and judges	11	—	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	9	9	7
Designers	9	9	—
Editors and reporters	9	9	—
Public relations specialists	9	8	—
Professional occupations, N.E.C.	9	11	—
Technical occupations	7	7	6
Clinical laboratory technologists and technicians	6	6	6
Radiological technicians	7	7	7
Licensed practical nurses	5	5	6
Health technologists and technicians, N.E.C.	6	6	5
Electrical and electronic technicians	7	7	—
Engineering technicians, N.E.C.	7	7	—
Drafters	6	6	—
Computer programmers	9	9	—
Technical and related occupations, N.E.C.	7	7	—
Executive, administrative, and managerial occupations	10	10	9
Executives, administrators, and managers	11	11	9
Administrators and officials, public administration	9	9	—
Financial managers	11	11	—
Personnel and labor relations managers	10	10	—
Managers, marketing, advertising and public relations ..	12	12	—
Administrators, education and related fields	11	11	—

See footnotes at end of table.

Appendix table 3. Average work levels for selected occupations, all workers, full-time and part-time workers, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998 — Continued

Occupation ¹	All workers	Full-time workers	Part-time workers
White-collar occupations (-Continued)			
Executive, administrative, and managerial occupations (-Continued)			
Executives, administrators, and managers (-Continued)			
Managers, medicine and health	11	11	—
Managers and administrators, N.E.C.	11	11	—
Management related occupations	8	8	8
Accountants and auditors	8	8	—
Other financial officers	9	9	—
Management analysts	9	9	—
Personnel, training, and labor relations specialists	9	9	—
Buyers, wholesale and retail trade, except farm products	9	9	—
Purchasing agents and buyers, N.E.C.	8	8	—
Management related occupations, N.E.C.	9	9	—
Sales occupations	4	6	2
Supervisors, sales occupations	7	7	—
Sales occupations, other business services	8	8	—
Sales representatives, mining, manufacturing, and wholesale	10	10	—
Sales workers, apparel	2	—	—
Sales workers, other commodities	3	4	3
Cashiers	2	3	2
Sales support occupations, N.E.C.	6	—	—
Administrative support occupations, including clerical	4	4	3
Supervisors, general office	7	7	—
Supervisors, financial records processing	7	7	—
Computer operators	5	5	—
Secretaries	5	5	4
Typists	4	4	—
Interviewers	4	5	4
Hotel clerks	4	—	—
Transportation ticket and reservation agents	5	—	5
Receptionists	3	3	2
Information clerks, N.E.C.	4	4	—
Order clerks	4	5	3
Library clerks	4	4	—
Records clerks, N.E.C.	3	4	—
Bookkeepers, accounting and auditing clerks	4	4	3
Payroll and timekeeping clerks	4	4	—
Billing clerks	4	4	—
Telephone operators	2	2	3
Mail clerks except postal service	2	2	—
Traffic, shipping and receiving clerks	4	4	—
Stock and inventory clerks	5	5	—
Insurance adjusters, examiners, and investigators	6	6	—
Investigators and adjusters except insurance	5	5	5
Bill and account collectors	5	5	—
General office clerks	4	4	3
Data entry keyers	3	3	—
Teachers' aides	3	3	—
Administrative support occupations, N.E.C.	4	4	3
Blue-collar occupations	4	5	2
Precision production, craft, and repair occupations	6	6	—
Automobile mechanics	7	7	—
Bus, truck, and stationary engine mechanics	6	6	—
Industrial machinery repairers	6	6	—
Mechanics and repairers, N.E.C.	7	7	—
Carpenters	7	7	—
Electricians	8	8	—
Electrical power installers and repairers	7	7	—
Plumbers, pipefitters and steamfitters	7	7	—
Construction trades, N.E.C.	5	5	—
Supervisors, production occupations	8	8	—
Machinists	7	7	—
Electrical and electronic equipment assemblers	4	4	—
Butchers and meat cutters	5	—	—

See footnotes at end of table.

Appendix table 3. Average work levels for selected occupations, all workers, full-time and part-time workers, Boston-Worcester-Lawrence, MA-NH-ME-CT, October 1998 — Continued

Occupation ¹	All workers	Full-time workers	Part-time workers
Blue-collar occupations (-Continued)			
Machine operators, assemblers, and inspectors	4	4	—
Molding and casting machine operators	3	3	—
Printing press operators	6	6	—
Textile sewing machine operators	3	3	—
Laundering and dry cleaning machine operators	2	—	—
Miscellaneous machine operators, N.E.C.	3	3	—
Welders and cutters	7	7	—
Assemblers	2	3	—
Production inspectors, checkers and examiners	4	4	—
Production testers	5	5	—
Transportation and material moving occupations	4	4	3
Truck drivers	4	4	—
Bus drivers	4	4	—
Excavating and loading machine operators	5	5	—
Industrial truck and tractor equipment operators	3	3	—
Handlers, equipment cleaners, helpers, and laborers	2	3	2
Groundskeepers and gardeners except farm	3	4	—
Construction laborers	2	2	—
Stock handlers and baggers	2	3	2
Machine feeders and offbearers	2	2	—
Freight, stock, and material handlers, N.E.C.	3	3	—
Hand packers and packagers	2	2	—
Laborers except construction, N.E.C.	3	3	1
Service occupations	3	4	2
Protective service occupations	5	5	3
Supervisors, firefighters and fire prevention occupations	8	8	—
Supervisors, police and detectives	9	9	—
Firefighting occupations	6	6	—
Police and detectives, public service	6	6	—
Guards and police except public service	3	3	3
Protective service occupations, N.E.C.	3	—	3
Food service occupations	3	3	2
Supervisors, food preparation and service occupations	6	6	—
Bartenders	4	—	—
Waiters and waitresses	3	2	3
Cooks	4	4	3
Food counter, fountain, and related occupations	2	—	2
Kitchen workers, food preparation	3	3	2
Waiters/Waitresses' assistants	2	—	2
Food preparation occupations, N.E.C.	2	2	2
Health service occupations	3	4	3
Health aides, except nursing	4	5	3
Nursing aides, orderlies and attendants	3	3	3
Cleaning and building service occupations	2	2	2
Supervisors, cleaning and building service workers	5	7	—
Maids and housemen	2	2	—
Janitors and cleaners	2	2	2
Personal service occupations	3	5	3
Welfare service aides	3	—	3
Child care workers, N.E.C.	2	4	2
Service occupations, N.E.C.	4	4	3

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.