



Boston-Worcester-Lawrence, MA-NH-ME-CT National Compensation Survey August 1997

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Preface

This bulletin provides results of an August 1997 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.

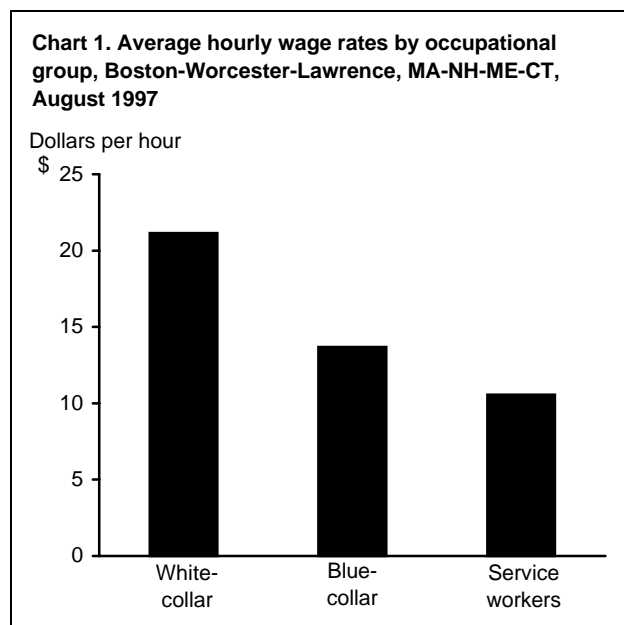
In tables containing work levels within occupational series, the work levels are derived from generic standards that *apply to all* occupational groups. The job levels in the OCS bulletins were based on narrowly-defined descriptions that were not comparable across specific occupations.

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 \$17.99 per hour during August 1997. White-collar workers had an average wage of \$21.14 per hour. Blue-collar workers averaged \$13.68 per hour, while service workers had average earnings of \$10.57 per hour. (All comparisons in this analysis cover hourly rates for both full- and part-time workers, unless otherwise noted.)



Within each of these occupational groups, average hourly wages for individual occupations varied. For example, white-collar occupations included registered nurses at \$22.27 per hour, secretaries at \$14.68, and general office clerks at \$12.21. Among occupations in the blue-collar category, truck drivers averaged \$14.41 per hour while stock handlers and baggers averaged \$8.81. Finally, service occupations included janitors and cleaners at \$10.69 per hour and nursing aides, orderlies and attendants at \$9.77. Table A-1 presents earnings data for 165 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 \$17.57 per hour, while surveyed State and local government workers averaged \$20.25. Table A-2 reports the average hourly rate for white-collar occupations as \$20.84 in private industry and \$22.75 in State and local government. Blue-collar occupations showed an average hourly rate of \$13.37 in private industry and \$17.13 in State and local government. Service occupations within private industry averaged \$8.70 per hour while those found in State and local government averaged \$15.58.

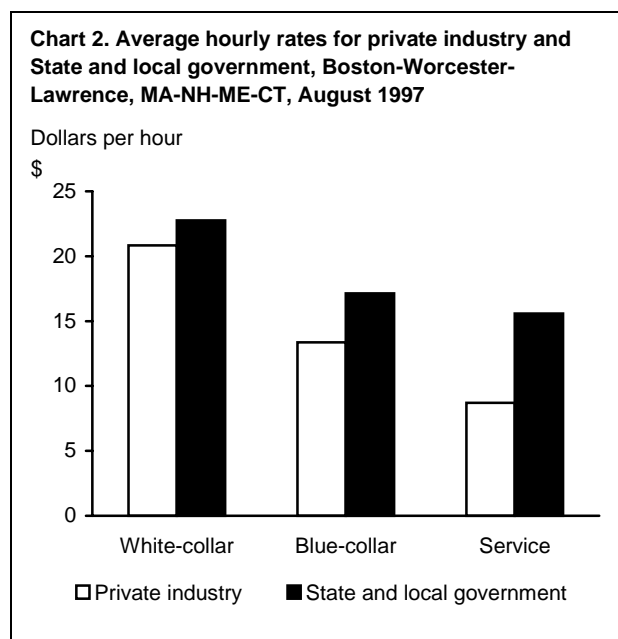
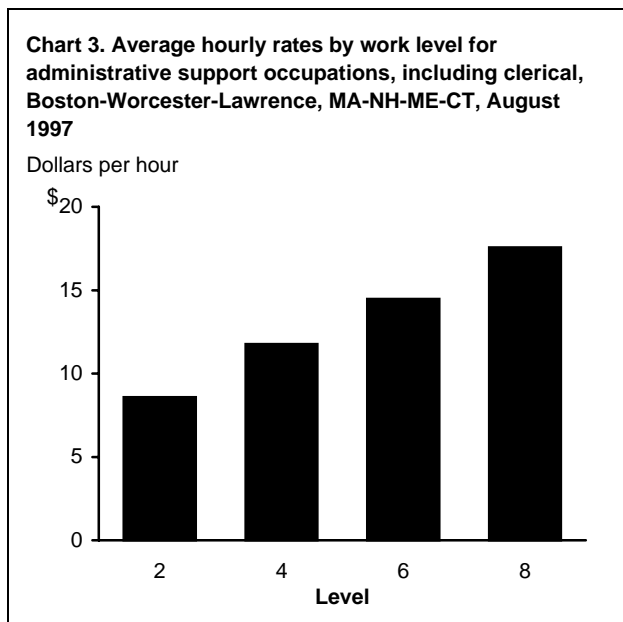


Table A-3 presents data for workers considered by the survey respondents to be either full-time or part-time. Average wages for full-time workers, all occupations, were \$18.94 per hour, compared with an average of \$10.89 per hour for part-time workers.

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 \$8.58 for level 2, \$11.76 for level 4, \$14.48 for level 6, and \$17.56 for level 8.

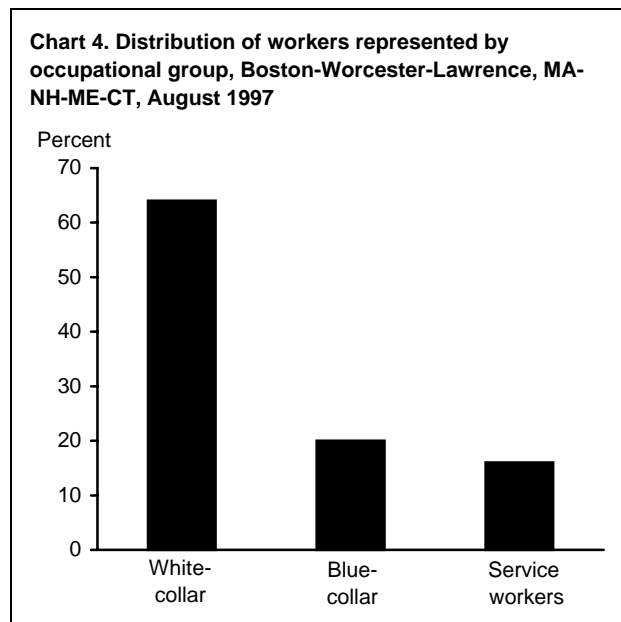


Surveyed union workers had an average hourly rate of \$18.33, as reported in table C-1. Wages for nonunion workers averaged \$17.88. Time workers, whose wages were based solely on an hourly rate or a salary, averaged \$18.00 per hour. Incentive workers, whose wages were at least partially based on productivity payments, averaged \$17.47 per hour.

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

wages averaged \$18.80 in all goods-producing industries, \$17.85 in mining, and \$18.68 in manufacturing. Hourly wages averaged \$17.04 in all service-producing industries, \$18.87 in transportation and public utilities, \$12.74 in wholesale and retail trade, and \$18.00 in services. Data for other industry divisions did not meet publication criteria.

Table C-4 reports that a total of 1,723,639 workers were represented by the Boston-Worcester-Lawrence, MA-NH-ME-CT, survey. White-collar occupations included 1,100,315 workers, or 64 percent; blue-collar occupations included 341,334 workers, or 20 percent; and service occupations included 281,991 workers, or 16 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, August 1997

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
All occupations	\$17.99	\$7.50	\$10.10	\$14.93	\$21.92	\$32.13
All occupations excluding sales	18.21	8.00	10.50	15.18	22.16	32.22
White-collar occupations	21.14	8.83	12.23	17.69	26.37	37.50
White-collar occupations excluding sales	21.86	9.86	13.08	18.50	26.92	37.69
Professional specialty and technical occupations	25.06	13.57	16.97	23.08	30.69	39.34
Professional specialty occupations	27.29	15.15	19.23	25.61	32.92	41.60
Engineers, architects, and surveyors	29.95	19.72	23.32	28.43	34.20	42.19
Aerospace engineers	35.99	30.38	33.22	34.33	39.24	44.29
Civil engineers	27.04	15.17	22.31	30.56	30.56	30.56
Electrical and electronic engineers	31.63	20.57	24.23	30.40	36.27	45.55
Industrial engineers	27.17	18.68	21.10	24.96	30.50	39.44
Mechanical engineers	28.31	20.05	23.00	25.99	31.73	40.10
Engineers, N.E.C.	30.70	19.87	24.52	28.30	36.06	43.56
Mathematical and computer scientists	29.07	18.75	23.10	28.42	33.68	40.25
Computer systems analysts and scientists	29.76	20.18	24.04	29.18	34.19	40.87
Operations and systems researchers and analysts	22.98	16.49	16.95	23.08	26.76	31.20
Natural scientists	31.02	13.49	17.11	33.06	42.98	49.50
Physicists and astronomers	42.36	33.06	35.48	39.13	47.62	58.20
Chemists, except biochemists	24.37	11.37	13.49	17.11	29.48	45.19
Medical scientists	27.08	12.93	14.42	22.10	39.06	48.08
Health related occupations	24.71	15.87	18.09	22.05	26.39	32.74
Physicians	43.61	15.87	16.47	34.86	66.20	96.16
Registered nurses	22.27	15.87	18.08	21.63	25.77	29.69
Pharmacists	23.95	20.00	22.00	23.87	25.46	29.01
Respiratory therapists	19.15	15.00	16.06	19.56	21.20	23.13
Occupational therapists	23.72	18.41	18.41	23.17	30.00	31.24
Physical therapists	29.16	21.00	24.14	27.45	30.36	38.00
Teachers, college and university	37.29	22.14	28.16	35.11	43.67	55.16
Medical science teachers	40.39	26.88	28.38	33.09	55.16	62.01
Art, drama and music teachers	30.55	19.66	22.57	30.68	41.80	42.12
English teachers	36.29	22.58	35.49	38.11	40.21	44.20
Foreign language teachers	33.99	20.69	23.76	34.47	37.88	42.53
Teachers, post secondary N.E.C.	34.00	24.28	29.37	31.90	38.46	44.83
Teachers, except college and university	29.73	15.86	22.35	29.80	37.22	42.46
Prekindergarten and kindergarten	23.60	8.40	11.28	26.44	36.78	39.15
Elementary school teachers	30.54	19.16	24.22	30.50	36.47	41.63
Secondary school teachers	29.83	17.20	23.27	28.96	36.78	41.63
Teachers, special education	29.71	9.98	24.58	30.97	37.93	41.43
Teachers, N.E.C.	34.09	14.01	19.57	37.99	44.95	49.29
Vocational and educational counselors	23.70	17.38	17.69	25.32	29.29	32.47
Librarians, archivists, and curators	24.77	18.56	19.93	23.11	24.48	35.66
Librarians	24.92	18.56	19.93	23.42	24.48	35.66
Social scientists and urban planners	-	-	-	-	-	-
Economists	24.14	18.38	18.46	19.23	22.43	40.39
Social, recreation, and religious workers	15.68	10.10	12.47	15.87	17.77	22.86
Social workers	15.98	10.10	12.50	15.87	18.62	23.83
Recreation workers	12.91	9.00	11.50	13.00	15.88	15.88
Lawyers and judges	32.83	15.79	24.89	28.77	38.48	53.37
Lawyers	31.77	15.79	24.89	28.77	38.46	53.37
Writers, authors, entertainers, athletes, and professionals, N.E.C.	22.25	13.00	15.15	20.50	26.75	34.21
Technical writers	23.58	11.54	20.02	23.08	31.01	34.21
Designers	24.86	13.84	16.50	20.02	33.13	40.14
Editors and reporters	23.63	11.78	14.29	23.40	26.64	43.44
Public relations specialists	20.68	13.71	15.39	20.50	21.81	28.85
Athletes	18.77	6.87	15.03	21.24	24.97	28.85
Professional occupations, N.E.C.	22.01	11.75	16.69	23.32	27.29	35.10
Technical occupations	17.32	10.60	13.45	16.74	20.14	24.44
Clinical laboratory technologists and technicians	15.45	10.38	11.14	14.50	18.61	21.84
Radiological technicians	20.30	15.61	18.92	20.71	22.19	24.33
Licensed practical nurses	16.06	12.98	14.50	16.25	17.41	19.02
Health technologists and technicians, N.E.C.	13.25	8.50	9.57	13.00	15.90	18.00
Electrical and electronic technicians	17.88	13.00	14.84	17.55	20.66	22.66

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, August 1997 — Continued

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
White-collar occupations (-Continued)						
Professional specialty and technical occupations (-Continued)						
Technical occupations (-Continued)						
Engineering technicians, N.E.C.	\$20.53	\$12.00	\$17.17	\$19.42	\$24.80	\$26.69
Drafters	19.61	14.49	16.05	20.25	22.43	26.03
Chemical technicians	17.52	12.80	15.18	16.77	21.15	21.15
Computer programmers	20.90	13.00	16.72	20.28	24.34	26.79
Legal assistants	18.67	11.79	14.84	16.66	19.13	34.68
Technical and related occupations, N.E.C.	18.16	10.34	14.27	17.31	21.86	27.19
Executive, administrative, and managerial occupations ...	29.11	15.28	18.56	23.75	34.28	47.12
Executives, administrators, and managers	35.16	17.32	22.29	29.71	42.51	53.21
Administrators and officials, public administration	24.99	18.63	19.24	22.83	29.39	34.34
Financial managers	30.72	16.58	20.10	24.37	37.88	44.71
Personnel and labor relations managers	36.31	18.53	18.99	39.90	39.90	79.33
Purchasing managers	31.79	22.16	22.16	34.01	40.48	40.48
Managers, marketing, advertising and public relations	37.45	19.29	25.38	37.31	42.51	52.88
Administrators, education and related fields	31.95	19.44	23.75	27.78	44.11	49.55
Managers, medicine and health	29.22	17.30	21.63	25.56	33.33	44.35
Managers, food servicing and lodging establishments	18.30	11.15	12.13	15.47	20.00	26.44
Managers, service organizations, N.E.C.	23.86	12.11	16.83	26.44	28.29	29.21
Managers and administrators, N.E.C.	41.42	19.23	24.32	35.00	49.03	79.33
Management related occupations	21.11	13.85	16.10	19.62	23.73	28.93
Accountants and auditors	19.10	13.43	15.38	18.35	20.68	25.86
Underwriters	23.77	14.50	17.28	20.46	31.97	35.00
Other financial officers	23.38	15.38	19.47	21.49	25.75	30.29
Management analysts	27.56	18.21	20.19	23.13	32.81	48.08
Personnel, training, and labor relations specialists	20.01	13.85	16.10	19.23	24.04	27.18
Buyers, wholesale and retail trade, except farm products	32.77	15.27	19.23	21.63	37.07	67.31
Purchasing agents and buyers, N.E.C.	17.94	12.00	14.78	18.22	20.61	24.74
Construction inspectors	20.54	16.14	18.96	21.63	22.92	22.92
Inspectors and compliance officers, except construction	20.90	17.58	19.66	19.91	22.06	24.04
Management related occupations, N.E.C.	21.24	14.42	16.15	20.07	23.89	28.85
Sales occupations	14.84	5.50	6.64	10.10	17.31	30.29
Supervisors, sales occupations	17.50	8.60	10.14	13.00	16.17	38.65
Sales occupations, other business services	23.40	10.10	10.82	18.27	32.05	47.77
Sales representatives, mining, manufacturing, and wholesale	32.26	14.94	20.05	28.80	43.27	52.83
Sales workers, apparel	6.86	6.00	6.00	6.42	7.78	8.85
Sales workers, other commodities	10.05	5.45	6.20	8.33	11.69	17.37
Cashiers	7.38	5.25	5.60	6.40	8.00	10.73
Sales support occupations, N.E.C.	14.22	6.50	7.60	14.90	17.69	18.75
Administrative support occupations, including clerical	12.55	8.00	9.62	12.05	14.84	17.95
Supervisors, general office	19.97	15.48	16.95	18.00	20.67	26.93
Supervisors, financial records processing	17.13	13.20	15.56	16.83	17.04	23.85
Computer operators	15.97	11.18	12.47	16.41	19.12	20.55
Secretaries	14.68	9.62	12.25	14.43	17.41	19.50
Typists	12.55	10.00	10.51	13.30	14.18	14.18
Interviewers	11.30	8.62	9.91	11.20	12.90	14.50
Hotel clerks	9.34	7.75	8.00	9.50	10.40	10.50
Transportation ticket and reservation agents	12.47	7.50	8.99	11.80	15.03	19.06
Receptionists	10.28	7.00	8.50	9.75	12.10	14.04
Information clerks, N.E.C.	12.74	8.25	9.02	12.91	16.61	17.31
Order clerks	11.49	7.25	8.84	10.25	13.22	16.59
Personnel clerks except payroll and timekeeping	13.37	9.00	11.27	13.00	15.86	17.23
Library clerks	13.05	9.50	11.72	12.43	15.60	16.23
Records clerks, N.E.C.	11.47	8.17	8.78	10.20	13.27	18.06
Bookkeepers, accounting and auditing clerks	12.44	9.13	10.53	12.50	14.80	15.68
Payroll and timekeeping clerks	13.33	11.06	11.49	12.79	16.68	16.68

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, August 1997 — Continued

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
White-collar occupations (-Continued)						
Administrative support occupations, including clerical (-Continued)						
Billing clerks	\$9.80	\$8.17	\$8.17	\$9.50	\$11.00	\$12.10
Duplicating machine operators	10.39	8.22	8.22	10.50	11.90	13.69
Telephone operators	10.45	7.00	7.99	11.00	12.34	12.34
Mail clerks except postal service	8.71	7.27	7.67	8.42	9.20	9.82
Production coordinators	17.91	14.02	16.18	18.63	19.23	20.70
Traffic, shipping and receiving clerks	12.18	8.41	10.00	12.08	14.42	15.18
Stock and inventory clerks	14.19	10.25	12.50	13.55	17.17	18.04
Material recording, scheduling, and distribution clerks, N.E.C.	12.17	8.56	9.92	11.90	13.89	15.50
Insurance adjusters, examiners, and investigators	15.43	10.58	12.77	14.46	18.32	20.86
Investigators and adjusters except insurance	12.33	9.58	10.16	11.51	13.46	17.03
Bill and account collectors	12.86	10.25	12.00	13.00	13.95	15.05
General office clerks	12.21	8.00	10.09	12.44	14.38	15.57
Data entry keyers	11.65	8.00	10.42	12.20	12.95	12.95
Teachers' aides	10.14	6.96	8.07	10.00	11.30	13.37
Administrative support occupations, N.E.C.	12.79	9.59	9.59	10.38	17.34	19.14
Blue-collar occupations						
Precision production, craft, and repair occupations	13.68	7.25	9.49	12.82	16.78	21.65
Automobile mechanics	17.60	11.00	13.33	17.07	21.77	25.09
Bus, truck, and stationary engine mechanics	17.59	11.14	12.22	19.01	20.55	21.89
Industrial machinery repairers	20.30	13.30	13.33	23.09	23.65	24.29
Electronic repairers, communications and industrial equipment	15.69	11.75	13.00	14.20	17.30	20.32
Mechanics and repairers, N.E.C.	14.87	8.71	8.86	10.46	24.14	24.14
Carpenters	17.19	13.09	14.91	17.41	18.89	21.20
Electricians	21.23	14.15	20.37	21.65	24.39	25.67
Electrical power installers and repairers	20.87	14.90	16.30	21.50	23.44	27.30
Plumbers, pipefitters and steamfitters	23.92	21.29	22.05	23.26	26.69	27.01
Construction trades, N.E.C.	17.95	13.00	14.08	19.35	21.67	23.24
Supervisors, production occupations	15.47	9.32	12.58	14.46	20.35	20.55
Machinists	17.59	11.25	12.00	17.07	21.00	24.30
Electrical and electronic equipment assemblers ..	18.08	14.99	15.85	18.08	19.37	21.91
Butchers and meat cutters	12.02	7.91	10.00	12.43	14.11	14.91
Machine operators, assemblers, and inspectors	12.48	6.45	9.00	12.50	16.97	19.48
Fabricating machine operators, N.E.C.	11.42	7.00	8.50	11.54	13.71	15.69
Molding and casting machine operators	11.91	8.75	11.28	12.06	13.46	13.83
Printing press operators	9.70	7.75	7.87	9.05	11.29	14.70
Photoengravers and lithographers	14.72	8.75	11.75	14.75	17.61	19.99
Textile sewing machine operators	13.69	8.50	8.50	13.80	15.86	21.69
Packaging and filling machine operators	9.65	7.00	7.91	9.19	11.59	12.27
Miscellaneous machine operators, N.E.C.	10.25	6.25	7.60	10.45	12.50	14.58
Welders and cutters	11.80	8.00	9.75	11.90	13.42	15.13
Assemblers	15.29	13.09	15.03	15.03	16.48	17.63
Production inspectors, checkers and examiners ..	9.58	5.75	7.00	8.90	12.20	14.09
Production testers	11.02	7.55	8.28	10.94	12.26	15.69
Transportation and material moving occupations	11.50	8.45	10.43	12.01	13.15	13.20
Truck drivers	14.80	9.20	11.61	13.66	18.72	20.18
Bus drivers	14.41	9.90	11.55	13.35	16.78	20.02
Excavating and loading machine operators	14.48	9.20	12.60	13.00	19.98	19.98
Industrial truck and tractor equipment operators ..	24.03	18.45	23.95	25.56	25.56	25.56
Handlers, equipment cleaners, helpers, and laborers	10.91	7.00	9.00	11.46	12.66	13.64
Groundskeepers and gardeners except farm	10.34	6.00	7.25	9.25	12.26	16.83
Construction laborers	11.68	7.75	9.00	12.21	13.55	13.91
Production helpers	14.98	7.00	9.76	17.81	19.90	19.90
Stock handlers and baggers	9.28	6.50	7.10	8.40	12.26	12.26
Machine feeders and offbearers	8.81	5.40	6.60	8.85	10.05	12.10
Freight, stock, and material handlers, N.E.C.	10.45	6.25	8.00	10.74	13.08	14.63
Hand packers and packagers	10.34	7.00	8.00	10.00	11.50	13.95
Laborers except construction, N.E.C.	8.21	5.40	6.45	7.86	9.00	12.14
	10.49	6.00	7.34	9.37	12.21	16.75

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, August 1997 — Continued

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
Service occupations	\$10.57	\$5.75	\$7.50	\$9.40	\$12.85	\$18.27
Protective service occupations	14.54	7.00	8.84	15.26	18.98	20.21
Supervisors, firefighters and fire prevention occupations	21.47	18.54	18.98	21.32	22.99	26.25
Supervisors, police and detectives	24.99	18.18	21.25	23.64	33.19	33.19
Firefighting occupations	16.40	12.82	14.26	16.65	18.27	20.07
Police and detectives, public service	18.00	14.63	16.89	18.56	19.68	20.15
Guards and police except public service	8.55	6.00	6.75	7.50	9.24	11.55
Protective service occupations, N.E.C.	7.50	7.00	7.50	7.50	7.73	7.73
Food service occupations	7.50	2.63	5.25	7.25	9.89	11.90
Supervisors, food preparation and service occupations	12.99	10.25	11.06	12.17	14.50	16.83
Waiters and waitresses	4.71	2.63	2.63	2.63	8.00	9.50
Cooks	9.86	7.00	8.00	9.64	11.25	13.00
Food counter, fountain, and related occupations	7.15	5.50	5.50	6.15	7.98	10.53
Kitchen workers, food preparation	8.94	6.50	7.00	8.00	11.00	12.50
Waiters'/Waitresses' assistants	5.25	4.25	4.25	5.25	6.00	8.00
Food preparation occupations, N.E.C.	7.08	5.25	6.00	6.69	8.00	9.45
Health service occupations	9.81	7.95	8.50	9.45	10.76	12.13
Health aides, except nursing	9.71	7.50	8.25	9.10	10.28	12.61
Nursing aides, orderlies and attendants	9.77	8.00	8.53	9.50	10.76	11.77
Cleaning and building service occupations	10.56	7.00	8.29	9.68	12.94	14.68
Supervisors, cleaning and building service workers	15.14	8.55	9.31	13.75	18.82	24.50
Maids and housemen	8.08	6.25	6.75	7.43	9.38	10.00
Janitors and cleaners	10.69	7.44	8.40	10.23	13.00	14.54
Personal service occupations	10.45	6.00	6.89	8.49	10.73	13.57
Welfare service aides	8.44	6.50	6.87	8.00	9.18	11.71
Child care workers, N.E.C.	7.76	6.08	6.89	7.24	8.62	10.30
Service occupations, N.E.C.	9.09	6.00	7.70	9.13	10.10	12.48

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."

Table A-2. Hourly earnings¹ for selected occupations, all workers², private industry and State and local government, Boston-Worcester-Lawrence, MA-NH-ME-CT, August 1997

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	\$17.57	\$7.25	\$9.68	\$14.33	\$21.28	\$31.54	\$20.25	\$10.75	\$13.38	\$18.23	\$24.75	\$34.24
All occupations excluding sales	17.80	7.58	10.00	14.59	21.53	31.56	20.28	10.75	13.41	18.24	24.79	34.24
White-collar occupations	20.84	8.50	11.88	17.28	25.48	37.31	22.75	11.06	14.13	20.51	29.39	37.99
White-collar occupations excluding sales	21.67	9.62	12.86	18.15	26.11	37.63	22.82	11.17	14.17	20.67	29.42	37.99
Professional specialty and technical occupations	24.30	13.07	16.45	21.72	29.45	38.46	28.07	15.67	21.27	28.30	34.66	41.43
Professional specialty occupations	26.84	15.00	18.51	24.60	32.29	41.73	28.72	16.49	22.41	28.30	35.57	41.43
Engineers, architects, and surveyors	30.10	19.33	22.38	28.52	35.58	43.28	-	-	-	-	-	-
Aerospace engineers	35.99	30.38	33.22	34.33	39.24	44.29	-	-	-	-	-	-
Civil engineers	22.59	13.47	15.17	20.44	26.23	32.00	-	-	-	-	-	-
Electrical and electronic engineers	31.63	20.57	24.23	30.40	36.27	45.55	-	-	-	-	-	-
Industrial engineers	27.17	18.68	21.10	24.96	30.50	39.44	-	-	-	-	-	-
Mechanical engineers	28.31	20.05	23.00	25.99	31.73	40.10	-	-	-	-	-	-
Engineers, N.E.C.	31.47	19.24	23.19	30.98	38.70	44.17	-	-	-	-	-	-
Mathematical and computer scientists	29.55	19.23	24.04	29.15	34.14	40.87	-	-	-	-	-	-
Computer systems analysts and scientists	30.20	20.67	24.77	29.57	34.62	41.08	-	-	-	-	-	-
Operations and systems researchers and analysts	23.74	15.63	18.76	23.24	27.56	31.55	-	-	-	-	-	-
Natural scientists	31.28	13.46	17.11	33.60	42.98	49.71	-	-	-	-	-	-
Physicists and astronomers	42.36	33.06	35.48	39.13	47.62	58.20	-	-	-	-	-	-
Chemists, except biochemists	24.37	11.37	13.49	17.11	29.48	45.19	-	-	-	-	-	-
Medical scientists	27.39	12.88	14.42	19.23	41.00	48.08	-	-	-	-	-	-
Health related occupations	24.84	15.97	18.11	21.63	26.20	32.74	23.63	12.50	17.59	23.96	28.35	33.15
Physicians	47.35	16.30	16.83	51.44	72.12	96.16	-	-	-	-	-	-
Registered nurses	22.18	15.87	18.00	21.27	25.42	29.81	23.09	14.66	19.89	23.96	26.39	28.35
Pharmacists	23.95	20.00	22.00	23.87	25.46	29.01	-	-	-	-	-	-
Respiratory therapists	19.54	15.05	16.81	20.25	21.61	23.77	-	-	-	-	-	-
Physical therapists	29.16	21.00	24.14	27.45	30.36	38.00	-	-	-	-	-	-
Teachers, college and university	38.23	22.14	28.08	34.96	45.37	59.08	34.09	21.75	29.37	35.86	39.93	42.10
Medical science teachers	40.39	26.88	28.38	33.09	55.16	62.01	-	-	-	-	-	-
Art, drama and music teachers	29.17	17.24	19.90	25.41	42.12	42.12	-	-	-	-	-	-
English teachers	33.34	20.43	23.86	36.17	41.19	45.37	-	-	-	-	-	-
Foreign language teachers	32.24	20.52	22.14	31.08	37.71	54.14	-	-	-	-	-	-
Teachers, except college and university	16.99	9.13	11.38	16.45	21.75	25.95	31.49	18.42	25.07	31.71	37.94	43.22
Prekindergarten and kindergarten	10.71	8.00	8.94	11.28	11.38	12.62	-	-	-	-	-	-
Elementary school teachers	-	-	-	-	-	-	30.92	19.93	24.46	30.82	36.47	41.63
Secondary school teachers	20.86	14.36	17.10	20.16	24.86	27.56	31.00	18.21	24.91	31.59	37.67	42.15
Teachers, special education	-	-	-	-	-	-	32.23	23.23	25.92	33.66	37.93	41.43
Teachers, N.E.C.	17.92	10.00	13.70	16.45	23.00	29.03	37.44	19.57	29.56	40.82	46.85	50.42
Vocational and educational counselors	-	-	-	-	-	-	26.16	12.39	25.32	29.29	32.47	32.47
Librarians, archivists, and curators	23.29	18.56	19.93	23.11	24.00	32.84	26.35	18.64	21.91	23.42	35.66	36.78
Librarians	23.32	18.56	19.86	24.00	24.00	35.16	26.35	18.64	21.91	23.42	35.66	36.78
Social scientists and urban planners	-	-	-	-	-	-	-	-	-	-	-	-
Economists	24.14	18.38	18.46	19.23	22.43	40.39	-	-	-	-	-	-
Social, recreation, and religious workers	14.49	9.76	11.39	14.40	16.50	18.30	18.18	12.47	14.23	18.95	20.15	24.49
Social workers	14.69	9.92	11.06	14.40	16.50	19.02	18.41	12.47	15.40	18.96	20.41	24.49
Recreation workers	13.15	9.00	11.50	13.00	15.88	15.88	-	-	-	-	-	-
Lawyers and judges	34.67	13.57	15.79	38.10	50.61	60.73	-	-	-	-	-	-
Lawyers	34.67	13.57	15.79	38.10	50.61	60.73	-	-	-	-	-	-
Writers, authors, entertainers, athletes, and professionals, N.E.C.	22.61	12.74	16.28	20.83	27.41	34.21	-	-	-	-	-	-
Technical writers	23.58	11.54	20.02	23.08	31.01	34.21	-	-	-	-	-	-
Designers	24.96	15.10	16.50	20.02	34.44	40.14	-	-	-	-	-	-
Editors and reporters	23.63	11.78	14.29	23.40	26.64	43.44	-	-	-	-	-	-
Public relations specialists	22.08	15.39	18.00	20.50	28.85	28.85	-	-	-	-	-	-
Athletes	19.04	6.87	15.03	21.24	24.97	28.85	-	-	-	-	-	-
Professional occupations, N.E.C.	22.01	11.75	16.69	23.32	27.29	35.10	-	-	-	-	-	-
Technical occupations	17.22	10.60	13.36	16.66	20.07	24.34	18.88	12.00	15.67	17.65	21.27	33.69
Clinical laboratory technologists and technicians	15.42	10.34	11.06	14.42	18.54	22.21	-	-	-	-	-	-
Radiological technicians	20.30	15.61	18.92	20.71	22.19	24.33	-	-	-	-	-	-
Licensed practical nurses	16.19	13.24	14.50	16.25	17.71	19.27	14.77	10.30	12.33	16.00	17.02	17.02

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, August 1997 — 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)												
Professional specialty and technical occupations (-Continued)												
Technical occupations (-Continued)												
Health technologists and technicians, N.E.C.	\$12.83	\$8.50	\$9.55	\$12.62	\$15.47	\$17.85	—	—	—	—	—	—
Electrical and electronic technicians ...	17.92	13.08	14.84	17.55	20.75	22.66	—	—	—	—	—	—
Engineering technicians, N.E.C.	20.53	12.00	17.17	19.42	24.80	26.69	—	—	—	—	—	—
Drafters	19.61	14.49	16.05	20.25	22.43	26.03	—	—	—	—	—	—
Chemical technicians	17.52	12.80	15.18	16.77	21.15	21.15	—	—	—	—	—	—
Computer programmers	21.05	13.00	16.09	21.16	25.53	26.79	—	—	—	—	—	—
Technical and related occupations, N.E.C.	17.97	10.10	13.45	17.31	21.86	27.19	—	—	—	—	—	—
Executive, administrative, and managerial occupations	29.66	15.05	18.27	23.98	35.34	49.03	\$24.91	\$16.83	\$18.63	\$22.92	\$28.38	\$39.06
Executives, administrators, and managers	36.10	16.83	22.16	31.30	43.51	60.10	28.49	19.22	22.83	25.80	34.18	43.22
Administrators and officials, public administration	—	—	—	—	—	—	24.99	18.63	19.24	22.83	29.39	34.34
Financial managers	30.78	16.58	20.10	25.12	37.88	44.71	—	—	—	—	—	—
Personnel and labor relations managers	36.31	18.53	18.99	39.90	39.90	79.33	—	—	—	—	—	—
Purchasing managers	31.79	22.16	22.16	34.01	40.48	40.48	—	—	—	—	—	—
Managers, marketing, advertising and public relations	37.45	19.29	25.38	37.31	42.51	52.88	—	—	—	—	—	—
Administrators, education and related fields	33.62	19.14	20.19	27.78	49.55	49.68	30.33	23.00	25.80	28.38	33.63	44.11
Managers, medicine and health	28.36	16.83	21.63	25.00	32.59	40.51	—	—	—	—	—	—
Managers, food servicing and lodging establishments	18.30	11.15	12.13	15.47	20.00	26.44	—	—	—	—	—	—
Managers, service organizations, N.E.C.	23.86	12.11	16.83	26.44	28.29	29.21	—	—	—	—	—	—
Managers and administrators, N.E.C.	41.78	19.23	24.77	35.94	49.03	80.29	—	—	—	—	—	—
Management related occupations	21.32	13.78	16.10	19.85	24.04	30.00	19.28	15.38	16.70	18.56	21.47	23.91
Accountants and auditors	19.26	13.22	15.14	18.10	21.15	26.13	18.03	15.30	16.05	18.56	18.56	18.56
Underwriters	23.77	14.50	17.28	20.46	31.97	35.00	—	—	—	—	—	—
Other financial officers	23.68	15.98	20.17	21.63	25.83	30.29	—	—	—	—	—	—
Management analysts	28.06	18.40	20.19	24.04	36.28	48.08	—	—	—	—	—	—
Personnel, training, and labor relations specialists	20.09	14.63	16.10	19.23	24.04	27.18	—	—	—	—	—	—
Buyers, wholesale and retail trade, except farm products	32.77	15.27	19.23	21.63	37.07	67.31	—	—	—	—	—	—
Purchasing agents and buyers, N.E.C.	17.94	12.00	14.78	18.22	20.61	24.74	—	—	—	—	—	—
Construction inspectors	—	—	—	—	—	—	20.54	16.14	18.96	21.63	22.92	22.92
Inspectors and compliance officers, except construction	21.50	18.04	19.66	21.72	22.06	26.36	—	—	—	—	—	—
Management related occupations, N.E.C.	21.34	13.87	15.60	19.71	25.11	30.71	20.80	16.70	18.46	20.07	23.25	25.77
Sales occupations	14.85	5.50	6.60	10.10	17.29	30.75	14.47	7.69	9.54	14.92	19.47	19.47
Supervisors, sales occupations	17.53	8.60	10.14	13.00	16.20	38.65	—	—	—	—	—	—
Sales occupations, other business services	23.40	10.10	10.82	18.27	32.05	47.77	—	—	—	—	—	—
Sales representatives, mining, manufacturing, and wholesale	32.26	14.94	20.05	28.80	43.27	52.83	—	—	—	—	—	—
Sales workers, apparel	6.86	6.00	6.00	6.42	7.78	8.85	—	—	—	—	—	—
Sales workers, other commodities	10.05	5.45	6.20	8.33	11.69	17.37	—	—	—	—	—	—
Cashiers	7.10	5.25	5.50	6.30	7.75	10.00	14.50	7.69	8.46	18.25	19.47	19.47
Sales support occupations, N.E.C.	14.22	6.50	7.60	14.90	17.69	18.75	—	—	—	—	—	—
Administrative support occupations, including clerical	12.45	8.00	9.50	11.78	14.73	18.13	13.06	9.17	10.79	12.95	15.16	17.17
Supervisors, general office	20.58	14.41	17.00	18.27	21.15	34.51	—	—	—	—	—	—
Supervisors, financial records processing	17.13	13.20	15.56	16.83	17.04	23.85	—	—	—	—	—	—

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, August 1997 — 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)												
Computer operators	\$15.98	\$11.18	\$12.47	\$16.41	\$19.12	\$20.55	—	—	—	—	—	—
Secretaries	14.37	9.26	12.00	13.94	16.70	19.50	\$16.00	\$11.65	\$14.55	\$15.99	\$17.94	\$19.59
Interviewers	11.48	8.62	9.79	11.48	13.01	14.50	—	—	—	—	—	—
Hotel clerks	9.34	7.75	8.00	9.50	10.40	10.50	—	—	—	—	—	—
Transportation ticket and reservation agents	12.47	7.50	8.99	11.80	15.03	19.06	—	—	—	—	—	—
Receptionists	10.31	7.00	8.50	9.75	12.10	14.04	10.01	6.75	9.17	9.17	11.30	12.72
Information clerks, N.E.C.	12.57	8.25	9.02	12.75	16.61	17.31	—	—	—	—	—	—
Order clerks	11.49	7.25	8.84	10.25	13.22	16.59	—	—	—	—	—	—
Personnel clerks except payroll and timekeeping	13.37	9.00	11.27	13.00	15.86	17.23	—	—	—	—	—	—
Library clerks	—	—	—	—	—	—	12.85	10.05	11.72	12.30	15.60	16.23
Records clerks, N.E.C.	11.45	8.17	8.78	10.00	13.27	18.06	—	—	—	—	—	—
Bookkeepers, accounting and auditing clerks	12.31	9.13	10.50	12.31	14.56	15.81	13.74	9.23	13.94	15.45	15.68	15.68
Payroll and timekeeping clerks	12.61	10.98	11.06	11.74	13.14	16.92	—	—	—	—	—	—
Billing clerks	9.80	8.17	8.17	9.50	11.00	12.10	—	—	—	—	—	—
Duplicating machine operators	10.09	8.00	8.22	8.89	11.06	13.69	—	—	—	—	—	—
Telephone operators	10.47	7.00	7.99	11.00	12.34	12.34	—	—	—	—	—	—
Mail clerks except postal service	8.62	7.27	7.67	8.42	9.20	9.74	—	—	—	—	—	—
Dispatchers	—	—	—	—	—	—	12.95	10.86	11.96	11.96	14.54	16.39
Production coordinators	17.91	14.02	16.18	18.63	19.23	20.70	—	—	—	—	—	—
Traffic, shipping and receiving clerks	12.18	8.41	10.00	12.08	14.42	15.18	—	—	—	—	—	—
Stock and inventory clerks	13.43	10.25	11.79	12.98	15.60	17.47	—	—	—	—	—	—
Material recording, scheduling, and distribution clerks, N.E.C.	12.01	8.25	9.68	11.87	14.06	15.50	—	—	—	—	—	—
Insurance adjusters, examiners, and investigators	15.43	10.58	12.77	14.46	18.32	20.86	—	—	—	—	—	—
Investigators and adjusters except insurance	12.33	9.58	10.16	11.51	13.46	17.03	—	—	—	—	—	—
Bill and account collectors	12.86	10.25	12.00	13.00	13.95	15.05	—	—	—	—	—	—
General office clerks	11.80	7.75	9.00	11.45	14.38	15.57	12.97	10.18	11.51	13.54	14.10	15.44
Data entry keyers	9.52	7.00	7.15	9.36	12.20	12.67	—	—	—	—	—	—
Teachers' aides	—	—	—	—	—	—	10.15	6.96	8.07	10.00	11.30	13.41
Administrative support occupations, N.E.C.	12.80	9.59	9.59	10.25	17.34	19.14	—	—	—	—	—	—
Blue-collar occupations	13.37	7.09	9.10	12.38	16.35	21.25	17.13	12.21	13.78	16.31	20.18	23.09
Precision production, craft, and repair occupations												
Automobile mechanics	17.43	11.00	13.18	16.79	21.50	25.23	18.91	13.28	15.00	19.01	22.79	24.79
Bus, truck, and stationary engine mechanics	17.19	11.14	11.14	14.77	20.55	25.20	—	—	—	—	—	—
Industrial machinery repairers	19.88	13.30	13.30	23.65	23.65	25.68	—	—	—	—	—	—
Mechanics and repairers, N.E.C.	15.69	11.75	13.00	14.20	17.30	20.32	—	—	—	—	—	—
Electricians	15.98	13.24	14.32	15.70	17.80	18.89	—	—	—	—	—	—
Construction trades, N.E.C.	20.78	14.50	16.30	21.50	23.44	28.30	—	—	—	—	—	—
Supervisors, production occupations ..	17.13	9.18	11.37	18.99	20.55	20.55	12.84	9.54	13.28	13.28	14.46	14.46
Machinists	17.59	11.25	12.00	17.07	21.00	24.30	—	—	—	—	—	—
Electrical and electronic equipment assemblers	18.08	14.99	15.85	18.08	19.37	21.91	—	—	—	—	—	—
Butchers and meat cutters	12.02	7.91	10.00	12.43	14.11	14.91	—	—	—	—	—	—
Machine operators, assemblers, and inspectors	12.48	6.45	9.00	12.50	16.97	19.48	—	—	—	—	—	—
Fabricating machine operators, N.E.C.	11.22	7.00	8.50	11.35	13.35	15.59	15.99	13.71	15.03	15.03	16.31	22.57
Molding and casting machine operators	11.91	8.75	11.28	12.06	13.46	13.83	—	—	—	—	—	—
Printing press operators	9.70	7.75	7.87	9.05	11.29	14.70	—	—	—	—	—	—
Photoengravers and lithographers	14.72	8.75	11.75	14.75	17.61	19.99	—	—	—	—	—	—
Textile sewing machine operators	13.69	8.50	8.50	13.80	15.86	21.69	—	—	—	—	—	—
	9.65	7.00	7.91	9.19	11.59	12.27	—	—	—	—	—	—

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, August 1997 — Continued

Occupation ³	Private industry						State and local government						
	Mean	Percentiles					Mean	Percentiles					
		10	25	Median 50	75	90		10	25	Median 50	75	90	
Blue-collar occupations (-Continued)													
Machine operators, assemblers, and inspectors (-Continued)													
Packaging and filling machine operators	\$10.25	\$6.25	\$7.60	\$10.45	\$12.50	\$14.58	-	-	-	-	-	-	-
Miscellaneous machine operators, N.E.C.	11.47	8.00	9.73	11.81	13.27	14.99	-	-	-	-	-	-	-
Assemblers	9.58	5.75	7.00	8.90	12.20	14.09	-	-	-	-	-	-	-
Production inspectors, checkers and examiners	11.02	7.55	8.28	10.94	12.26	15.69	-	-	-	-	-	-	-
Production testers	11.50	8.45	10.43	12.01	13.15	13.20	-	-	-	-	-	-	-
Transportation and material moving occupations	14.46	9.00	11.46	13.00	16.78	20.67	\$17.02	\$12.99	\$14.30	\$19.71	\$19.98	\$19.98	\$19.98
Truck drivers	14.49	9.90	11.55	13.35	16.78	20.02	-	-	-	-	-	-	-
Bus drivers	12.23	8.11	9.93	13.00	13.00	15.59	-	-	-	-	-	-	-
Excavating and loading machine operators	24.03	18.45	23.95	25.56	25.56	25.56	-	-	-	-	-	-	-
Industrial truck and tractor equipment operators	10.91	7.00	9.00	11.46	12.66	13.64	-	-	-	-	-	-	-
Handlers, equipment cleaners, helpers, and laborers	10.10	6.00	7.10	9.00	11.87	16.50	13.75	10.69	11.67	12.95	14.45	20.18	20.18
Groundskeepers and gardeners except farm	10.94	7.50	7.75	12.53	13.91	14.82	12.49	11.67	11.67	12.21	12.52	13.55	13.55
Construction laborers	15.53	7.00	8.00	19.80	19.90	20.60	13.12	10.56	11.42	13.70	14.21	14.92	14.92
Production helpers	9.28	6.50	7.10	8.40	12.26	12.26	-	-	-	-	-	-	-
Stock handlers and baggers	8.81	5.40	6.60	8.85	10.05	12.10	-	-	-	-	-	-	-
Machine feeders and offbearers	10.45	6.25	8.00	10.74	13.08	14.63	-	-	-	-	-	-	-
Freight, stock, and material handlers, N.E.C.	10.34	7.00	8.00	10.00	11.50	13.95	-	-	-	-	-	-	-
Hand packers and packagers	8.21	5.40	6.45	7.86	9.00	12.14	-	-	-	-	-	-	-
Laborers except construction, N.E.C.	9.42	6.00	7.00	8.60	10.45	15.73	16.25	10.35	12.21	20.18	20.18	21.63	21.63
Service occupations	8.70	5.25	6.99	8.46	10.00	12.75	15.58	10.00	11.69	15.35	18.98	20.21	20.21
Protective service occupations	8.63	6.00	6.75	7.65	9.50	13.46	17.89	13.11	15.68	18.31	19.51	21.70	21.70
Supervisors, firefighters and fire prevention occupations	-	-	-	-	-	-	21.47	18.54	18.98	21.32	22.99	26.25	26.25
Supervisors, police and detectives	-	-	-	-	-	-	24.99	18.18	21.25	23.64	33.19	33.19	33.19
Firefighting occupations	-	-	-	-	-	-	16.40	12.82	14.26	16.65	18.27	20.07	20.07
Police and detectives, public service ..	-	-	-	-	-	-	18.00	14.63	16.89	18.56	19.68	20.15	20.15
Guards and police except public service	8.39	6.00	6.75	7.50	9.17	10.87	-	-	-	-	-	-	-
Food service occupations	7.44	2.63	5.25	7.00	9.89	11.90	9.15	7.50	7.98	8.15	10.05	13.37	13.37
Supervisors, food preparation and service occupations	13.00	10.25	11.06	12.75	14.50	16.83	-	-	-	-	-	-	-
Waiters and waitresses	4.71	2.63	2.63	2.63	8.00	9.50	-	-	-	-	-	-	-
Cooks	9.85	7.00	8.00	9.50	11.25	13.00	-	-	-	-	-	-	-
Food counter, fountain, and related occupations	6.86	5.40	5.50	6.00	7.14	11.06	-	-	-	-	-	-	-
Kitchen workers, food preparation	8.94	6.50	7.00	8.00	11.00	12.50	-	-	-	-	-	-	-
Waiters'/Waitresses' assistants	5.25	4.25	4.25	5.25	6.00	8.00	-	-	-	-	-	-	-
Food preparation occupations, N.E.C.	7.06	5.25	6.00	6.64	8.00	9.45	8.10	6.83	7.07	8.09	8.09	10.29	10.29

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, August 1997 — 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)												
Health service occupations	\$9.48	\$7.75	\$8.44	\$9.11	\$10.09	\$11.61	\$11.23	\$9.44	\$10.26	\$11.69	\$11.69	\$12.78
Health aides, except nursing	9.65	7.50	8.20	9.00	10.10	12.60	-	-	-	-	-	-
Nursing aides, orderlies and attendants	9.36	7.83	8.45	9.11	10.04	11.23	11.27	9.56	10.56	11.69	11.69	12.78
Cleaning and building service occupations	9.59	6.75	7.65	8.55	11.50	13.75	13.33	10.23	11.35	12.94	14.84	16.95
Maids and housemen	8.08	6.25	6.75	7.43	9.38	10.00	-	-	-	-	-	-
Janitors and cleaners	9.73	7.00	8.00	8.65	11.64	13.87	12.96	10.23	11.35	12.77	14.68	15.42
Personal service occupations	10.23	5.75	6.70	8.38	10.35	13.50	12.07	7.15	8.13	10.27	17.98	20.92
Welfare service aides	8.44	6.50	6.87	8.00	9.18	11.71	-	-	-	-	-	-
Service occupations, N.E.C.	9.07	6.00	7.15	9.13	10.00	12.50	-	-	-	-	-	-

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."

Table A-3. Hourly earnings¹ for selected occupations, full-time and part-time workers², all industries, Boston-Worcester-Lawrence, MA-NH-ME-CT, August 1997

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	\$18.94	\$8.45	\$11.14	\$15.81	\$22.99	\$33.48	\$10.89	\$5.30	\$6.35	\$8.40	\$13.00	\$20.27
All occupations excluding sales	18.95	8.50	11.30	15.87	23.01	33.26	11.80	5.35	7.00	9.00	14.58	21.38
White-collar occupations	22.07	9.90	13.00	18.56	27.32	38.47	13.41	5.60	7.00	10.46	17.02	23.74
White-collar occupations excluding sales	22.35	10.10	13.46	18.94	27.54	38.46	16.45	7.60	9.81	14.62	20.08	26.84
Professional specialty and technical occupations	25.61	13.71	17.31	23.75	31.25	40.11	20.24	12.00	14.70	18.44	23.30	30.00
Professional specialty occupations	27.90	15.87	19.87	26.14	33.66	42.15	21.85	14.10	15.30	19.85	25.32	32.05
Engineers, architects, and surveyors	29.95	19.72	23.32	28.43	34.20	42.19	-	-	-	-	-	-
Aerospace engineers	35.99	30.38	33.22	34.33	39.24	44.29	-	-	-	-	-	-
Civil engineers	27.04	15.17	22.31	30.56	30.56	30.56	-	-	-	-	-	-
Electrical and electronic engineers	31.63	20.57	24.23	30.40	36.27	45.55	-	-	-	-	-	-
Industrial engineers	27.17	18.68	21.10	24.96	30.50	39.44	-	-	-	-	-	-
Mechanical engineers	28.31	20.05	23.00	25.99	31.73	40.10	-	-	-	-	-	-
Engineers, N.E.C.	30.70	19.87	24.52	28.30	36.06	43.56	-	-	-	-	-	-
Mathematical and computer scientists	29.07	18.68	23.12	28.41	33.65	40.02	-	-	-	-	-	-
Computer systems analysts and scientists	29.76	20.22	24.04	29.17	34.19	40.87	-	-	-	-	-	-
Operations and systems researchers and analysts	22.98	16.49	16.95	23.08	26.76	31.20	-	-	-	-	-	-
Natural scientists	30.95	13.46	17.11	33.06	42.98	48.08	-	-	-	-	-	-
Physicists and astronomers	42.36	33.06	35.48	39.13	47.62	58.20	-	-	-	-	-	-
Chemists, except biochemists	24.37	11.37	13.49	17.11	29.48	45.19	-	-	-	-	-	-
Medical scientists	26.56	12.79	14.42	19.23	39.06	48.08	-	-	-	-	-	-
Health related occupations	24.96	15.87	17.59	22.44	26.37	32.82	24.01	16.05	18.51	21.48	27.52	32.74
Physicians	42.90	9.76	16.30	34.86	64.90	96.16	-	-	-	-	-	-
Registered nurses	22.17	15.87	17.78	21.69	25.42	28.98	22.49	16.00	18.46	21.25	26.39	31.49
Respiratory therapists	19.09	15.00	15.97	18.93	21.56	23.77	-	-	-	-	-	-
Physical therapists	-	-	-	-	-	-	32.89	21.00	21.00	34.00	38.00	51.00
Teachers, college and university	37.97	23.56	29.37	35.86	44.42	54.98	31.75	19.76	20.51	25.04	40.80	62.51
Art, drama and music teachers	31.84	18.61	25.41	32.87	41.80	42.12	-	-	-	-	-	-
English teachers	36.53	23.73	35.49	38.29	40.21	44.20	-	-	-	-	-	-
Foreign language teachers	33.99	20.69	23.76	34.47	37.88	42.53	-	-	-	-	-	-
Teachers, post secondary N.E.C.	35.59	27.20	30.54	33.87	43.24	44.83	-	-	-	-	-	-
Teachers, except college and university	30.34	16.83	23.60	30.55	37.67	42.46	18.29	6.28	10.00	16.00	25.32	29.30
Prekindergarten and kindergarten	23.70	8.40	11.26	27.52	36.78	39.15	-	-	-	-	-	-
Elementary school teachers	30.56	19.16	24.21	30.54	36.47	41.63	-	-	-	-	-	-
Secondary school teachers	30.02	17.20	23.68	29.42	36.96	42.03	-	-	-	-	-	-
Teachers, special education	29.71	9.98	24.58	30.97	37.93	41.43	-	-	-	-	-	-
Teachers, N.E.C.	35.97	16.45	26.81	40.16	45.18	49.46	22.19	10.00	13.70	16.00	30.00	46.85
Librarians, archivists, and curators	24.79	18.56	19.93	23.42	24.48	35.66	-	-	-	-	-	-
Librarians	24.95	18.56	19.93	24.00	24.48	35.66	-	-	-	-	-	-
Social scientists and urban planners	21.39	16.16	16.16	17.53	23.08	35.15	-	-	-	-	-	-
Economists	24.14	18.38	18.46	19.23	22.43	40.39	-	-	-	-	-	-
Social, recreation, and religious workers	15.69	10.02	12.18	15.87	18.30	23.68	15.62	10.82	14.40	15.60	16.56	19.70
Social workers	16.00	10.09	12.47	16.16	18.96	24.49	15.90	13.19	14.40	15.60	16.20	20.50
Lawyers and judges	32.82	15.79	24.89	28.77	38.48	53.37	-	-	-	-	-	-
Lawyers	31.76	15.79	24.89	28.77	38.46	53.37	-	-	-	-	-	-
Writers, authors, entertainers, athletes, and professionals, N.E.C.	22.64	13.13	15.39	20.83	27.89	34.21	17.08	11.00	12.25	18.00	22.93	22.93
Technical writers	23.65	11.54	19.17	23.08	31.41	34.21	-	-	-	-	-	-
Designers	24.86	13.84	16.50	20.02	33.13	40.14	-	-	-	-	-	-
Editors and reporters	23.63	11.78	14.29	23.40	26.64	43.44	-	-	-	-	-	-
Public relations specialists	20.93	13.71	15.39	20.50	21.81	28.85	-	-	-	-	-	-
Professional occupations, N.E.C.	24.61	16.97	19.18	23.32	27.89	35.91	-	-	-	-	-	-
Technical occupations	17.58	10.92	13.62	17.02	20.25	24.73	15.26	9.25	12.00	15.65	18.30	21.00
Clinical laboratory technologists and technicians	15.48	10.43	11.06	14.28	18.61	23.40	15.12	9.73	12.44	15.65	18.27	19.79
Radiological technicians	20.16	15.61	18.92	19.90	22.21	24.33	20.60	15.01	18.18	21.86	22.05	25.71
Licensed practical nurses	15.98	12.50	14.50	16.25	17.41	19.02	16.20	13.24	14.40	16.22	18.27	19.17
Health technologists and technicians, N.E.C.	13.52	8.50	9.99	13.30	15.90	18.00	12.05	7.50	8.50	10.59	15.25	18.25
Electrical and electronic technicians	17.96	13.08	15.00	17.60	20.75	22.66	-	-	-	-	-	-

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, August 1997 — 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)												
Professional specialty and technical occupations (-Continued)												
Technical occupations (-Continued)												
Engineering technicians, N.E.C.	\$20.77	\$13.03	\$17.31	\$19.77	\$24.80	\$26.69	-	-	-	-	-	-
Drafters	19.67	14.49	17.03	20.25	22.43	26.03	-	-	-	-	-	-
Chemical technicians	17.52	12.80	15.18	16.77	21.15	21.15	-	-	-	-	-	-
Computer programmers	21.00	13.00	16.95	20.69	24.34	26.79	-	-	-	-	-	-
Legal assistants	18.67	11.79	14.84	16.66	19.13	34.68	-	-	-	-	-	-
Technical and related occupations, N.E.C.	18.17	10.20	13.89	17.31	23.21	27.19	-	-	-	-	-	-
Executive, administrative, and managerial occupations	29.19	15.27	18.56	23.77	34.34	47.12	\$24.16	\$15.57	\$16.00	\$21.03	\$27.40	\$39.90
Executives, administrators, and managers	35.28	17.32	22.38	29.81	42.51	53.21	27.44	15.16	20.29	23.00	38.06	48.00
Administrators and officials, public administration	24.90	18.63	19.24	22.83	29.39	34.34	-	-	-	-	-	-
Financial managers	30.91	16.58	20.10	25.12	37.88	44.71	-	-	-	-	-	-
Personnel and labor relations managers	36.31	18.53	18.99	39.90	39.90	79.33	-	-	-	-	-	-
Purchasing managers	31.79	22.16	22.16	34.01	40.48	40.48	-	-	-	-	-	-
Managers, marketing, advertising and public relations	37.45	19.29	25.38	37.31	42.51	52.88	-	-	-	-	-	-
Administrators, education and related fields	32.42	19.24	23.94	28.30	44.11	49.55	-	-	-	-	-	-
Managers, medicine and health	30.06	16.83	22.44	26.30	33.33	44.35	-	-	-	-	-	-
Managers, food servicing and lodging establishments	18.30	11.15	12.13	15.47	20.00	26.44	-	-	-	-	-	-
Managers, service organizations, N.E.C.	23.86	12.11	16.83	26.44	28.29	29.21	-	-	-	-	-	-
Managers and administrators, N.E.C.	41.39	19.23	24.32	34.82	49.03	79.33	-	-	-	-	-	-
Management related occupations	21.13	13.85	16.10	19.66	23.76	28.85	20.03	15.57	16.00	18.04	21.79	29.33
Accountants and auditors	19.08	13.34	15.38	18.32	20.61	25.86	-	-	-	-	-	-
Underwriters	23.77	14.50	17.28	20.46	31.97	35.00	-	-	-	-	-	-
Other financial officers	23.38	15.38	19.47	21.49	25.75	30.29	-	-	-	-	-	-
Management analysts	27.63	18.21	20.19	22.44	33.67	48.08	-	-	-	-	-	-
Personnel, training, and labor relations specialists	20.04	13.85	16.10	19.23	24.04	27.18	-	-	-	-	-	-
Buyers, wholesale and retail trade, except farm products	32.77	15.27	19.23	21.63	37.07	67.31	-	-	-	-	-	-
Purchasing agents and buyers, N.E.C.	17.94	12.00	14.78	18.22	20.61	24.74	-	-	-	-	-	-
Inspectors and compliance officers, except construction	21.70	19.66	19.66	21.72	22.38	26.36	-	-	-	-	-	-
Management related occupations, N.E.C.	21.18	14.42	16.14	20.07	23.77	28.85	-	-	-	-	-	-
Sales occupations	18.77	7.00	9.98	13.81	22.00	38.99	6.79	5.25	5.50	6.16	7.25	8.95
Supervisors, sales occupations	17.50	8.60	10.14	13.00	16.17	38.65	-	-	-	-	-	-
Sales occupations, other business services	23.40	10.10	10.82	18.27	32.05	47.77	-	-	-	-	-	-
Sales representatives, mining, manufacturing, and wholesale	32.26	14.94	20.05	28.80	43.27	52.83	-	-	-	-	-	-
Sales workers, other commodities	11.85	6.00	7.95	10.00	14.08	19.53	7.16	5.40	5.45	6.50	7.90	10.11
Cashiers	10.20	6.50	7.25	9.02	13.81	13.81	6.37	5.25	5.40	6.00	6.80	8.27
Sales support occupations, N.E.C.	14.22	6.50	8.00	14.90	17.69	18.75	-	-	-	-	-	-
Administrative support occupations, including clerical	12.80	8.19	10.00	12.30	15.02	18.06	10.39	7.00	7.75	9.50	12.16	14.10
Supervisors, general office	19.07	14.82	17.00	18.00	20.29	25.96	-	-	-	-	-	-
Supervisors, financial records processing	17.13	13.20	15.56	16.83	17.04	23.85	-	-	-	-	-	-
Computer operators	16.52	11.51	14.24	16.41	19.12	20.55	-	-	-	-	-	-
Secretaries	14.81	10.00	12.36	14.50	17.46	19.50	12.27	8.94	9.62	11.70	14.29	18.75

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, August 1997 — 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)												
Typists	\$12.52	\$10.00	\$10.50	\$13.30	\$14.18	\$14.18	-	-	-	-	-	-
Interviewers	11.49	8.81	9.91	11.17	13.20	14.50	\$10.97	\$8.00	\$9.54	\$11.20	\$12.36	\$13.01
Transportation ticket and reservation agents	-	-	-	-	-	-	12.16	7.50	9.39	11.34	14.61	17.18
Receptionists	10.60	7.00	9.00	10.70	12.37	14.04	9.23	7.29	8.00	9.17	10.00	11.83
Information clerks, N.E.C.	12.80	8.25	9.02	13.56	16.61	17.31	-	-	-	-	-	-
Order clerks	12.44	8.80	9.61	11.25	14.84	19.43	7.65	6.50	6.80	7.40	7.70	9.70
Personnel clerks except payroll and timekeeping	14.67	11.31	13.00	14.38	17.23	17.23	-	-	-	-	-	-
Library clerks	13.36	10.22	11.72	13.19	15.60	16.23	11.63	8.93	10.63	12.30	12.30	12.75
Records clerks, N.E.C.	11.70	8.17	8.78	10.50	13.79	18.06	-	-	-	-	-	-
Bookkeepers, accounting and auditing clerks	12.62	9.50	10.75	12.56	14.82	15.81	10.42	6.00	9.00	10.45	12.80	13.94
Payroll and timekeeping clerks	13.33	11.06	11.49	12.79	16.68	16.68	-	-	-	-	-	-
Billing clerks	9.73	8.17	8.17	9.38	10.92	11.75	-	-	-	-	-	-
Telephone operators	11.73	9.32	11.00	12.02	12.34	12.34	7.61	6.00	7.00	7.50	8.14	9.38
Mail clerks except postal service	9.38	8.17	8.33	8.93	9.74	13.08	-	-	-	-	-	-
Production coordinators	17.91	14.02	16.18	18.63	19.23	20.70	-	-	-	-	-	-
Traffic, shipping and receiving clerks	12.24	9.05	10.00	12.08	14.42	15.18	-	-	-	-	-	-
Stock and inventory clerks	14.60	10.99	12.50	13.68	17.17	18.04	-	-	-	-	-	-
Material recording, scheduling, and distribution clerks, N.E.C.	12.17	8.56	9.92	11.90	13.89	15.50	-	-	-	-	-	-
Insurance adjusters, examiners, and investigators	15.43	10.58	12.77	14.46	18.32	20.86	-	-	-	-	-	-
Investigators and adjusters except insurance	12.40	9.62	10.16	11.51	13.54	17.03	-	-	-	-	-	-
Bill and account collectors	12.85	10.00	11.68	13.00	13.95	15.05	-	-	-	-	-	-
General office clerks	12.42	8.50	10.46	12.58	14.38	15.51	10.45	6.00	7.50	9.00	14.10	16.80
Data entry keyers	11.93	9.36	10.42	12.45	12.95	15.65	7.86	6.25	6.25	8.00	9.00	10.00
Teachers' aides	9.90	6.77	8.00	10.00	11.30	13.11	11.26	7.55	8.20	10.58	12.65	19.03
Administrative support occupations, N.E.C.	12.95	9.59	9.59	10.25	17.34	19.14	10.89	8.01	8.84	11.29	12.00	13.92
Blue-collar occupations												
Precision production, craft, and repair occupations	14.02	7.75	10.00	13.08	17.10	21.82	7.96	5.25	6.00	7.09	9.00	11.00
Automobile mechanics	17.58	11.00	13.33	17.06	21.77	24.90	-	-	-	-	-	-
Bus, truck, and stationary engine mechanics	17.59	11.14	12.22	19.01	20.55	21.89	-	-	-	-	-	-
Industrial machinery repairers	20.30	13.30	13.33	23.09	23.65	24.29	-	-	-	-	-	-
Mechanics and repairers, N.E.C.	15.69	11.75	13.00	14.20	17.30	20.32	-	-	-	-	-	-
Carpenters	17.19	13.09	14.91	17.41	18.89	21.20	-	-	-	-	-	-
Electricians	21.23	14.15	20.37	21.65	24.39	25.67	-	-	-	-	-	-
Electrical power installers and repairers	20.87	14.90	16.30	21.50	23.44	27.30	-	-	-	-	-	-
Plumbers, pipefitters and steamfitters	23.92	21.29	22.05	23.26	26.69	27.01	-	-	-	-	-	-
Construction trades, N.E.C.	17.95	13.00	14.08	19.35	21.67	23.24	-	-	-	-	-	-
Supervisors, production occupations ..	15.47	9.32	12.58	14.46	20.35	20.55	-	-	-	-	-	-
Machinists	17.59	11.25	12.00	17.07	21.00	24.30	-	-	-	-	-	-
Electrical and electronic equipment assemblers	18.08	14.99	15.85	18.08	19.37	21.91	-	-	-	-	-	-
Butchers and meat cutters	12.02	7.91	10.00	12.43	14.11	14.91	-	-	-	-	-	-
Machine operators, assemblers, and inspectors	12.37	6.40	9.00	12.00	15.09	19.48	-	-	-	-	-	-
Fabricating machine operators, N.E.C.	11.52	7.10	8.62	11.68	13.75	15.78	-	-	-	-	-	-
Molding and casting machine operators	11.91	8.75	11.28	12.06	13.46	13.83	-	-	-	-	-	-
Printing press operators	9.70	7.75	7.87	9.05	11.29	14.70	-	-	-	-	-	-
Photoengravers and lithographers	14.72	8.75	11.75	14.75	17.61	19.99	-	-	-	-	-	-
	13.69	8.50	8.50	13.80	15.86	21.69	-	-	-	-	-	-

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, August 1997 — Continued

Occupation ³	All industries											
	Full-time					Part-time						
	Mean	Percentiles					Mean	Percentiles				
10		25	Median 50	75	90	10		25	Median 50	75	90	
Blue-collar occupations (-Continued)												
Machine operators, assemblers, and inspectors (-Continued)												
Textile sewing machine operators	\$9.65	\$7.00	\$7.91	\$9.19	\$11.59	\$12.27	-	-	-	-	-	-
Packaging and filling machine operators	10.25	6.25	7.60	10.45	12.50	14.58	-	-	-	-	-	-
Miscellaneous machine operators, N.E.C.	11.81	8.00	9.75	11.90	13.42	15.13	-	-	-	-	-	-
Welders and cutters	15.29	13.09	15.03	15.03	16.48	17.63	-	-	-	-	-	-
Assemblers	9.99	6.31	7.37	9.19	12.20	14.09	-	-	-	-	-	-
Production inspectors, checkers and examiners	11.02	7.55	8.28	10.94	12.26	15.69	-	-	-	-	-	-
Production testers	11.50	8.45	10.43	12.01	13.15	13.20	-	-	-	-	-	-
Transportation and material moving occupations	15.01	9.30	11.75	14.03	19.53	20.57	\$11.21	\$7.50	\$9.75	\$10.50	\$13.00	\$13.00
Truck drivers	14.56	9.90	11.60	13.40	16.78	20.02	-	-	-	-	-	-
Bus drivers	15.20	8.50	13.00	15.59	19.98	19.98	-	-	-	-	-	-
Excavating and loading machine operators	24.03	18.45	23.95	25.56	25.56	25.56	-	-	-	-	-	-
Industrial truck and tractor equipment operators	10.91	7.00	9.00	11.46	12.66	13.64	-	-	-	-	-	-
Handlers, equipment cleaners, helpers, and laborers	11.10	7.00	8.00	10.00	13.25	18.60	7.20	5.25	5.75	6.70	8.00	10.00
Groundskeepers and gardeners except farm	12.77	11.67	12.21	12.52	13.91	14.82	-	-	-	-	-	-
Construction laborers	14.96	7.00	9.75	17.81	19.90	19.90	-	-	-	-	-	-
Production helpers	9.28	6.50	7.10	8.40	12.26	12.26	-	-	-	-	-	-
Stock handlers and baggers	10.03	7.42	8.78	9.50	11.43	13.69	6.38	5.25	5.35	6.25	7.03	8.15
Machine feeders and offbearers	10.59	6.25	8.52	10.74	13.08	14.63	-	-	-	-	-	-
Freight, stock, and material handlers, N.E.C.	10.56	7.00	8.00	10.00	11.53	15.93	9.57	6.00	8.97	10.00	11.00	11.00
Hand packers and packagers	8.68	6.05	7.00	8.07	9.49	13.64	-	-	-	-	-	-
Laborers except construction, N.E.C.	11.32	6.00	8.25	10.00	14.12	20.18	7.65	6.25	6.80	7.34	8.50	9.39
Service occupations	11.69	6.96	8.36	10.30	14.36	18.95	7.18	2.63	6.00	7.24	8.70	10.00
Protective service occupations	15.29	7.25	10.10	16.71	19.31	20.39	7.79	6.00	6.50	7.21	8.50	10.00
Supervisors, firefighters and fire prevention occupations	21.47	18.54	18.98	21.32	22.99	26.25	-	-	-	-	-	-
Supervisors, police and detectives	24.99	18.18	21.25	23.64	33.19	33.19	-	-	-	-	-	-
Firefighting occupations	16.41	12.87	14.26	16.65	18.27	20.07	-	-	-	-	-	-
Police and detectives, public service ..	18.09	14.63	16.89	18.56	19.69	20.21	-	-	-	-	-	-
Guards and police except public service	8.91	6.30	7.00	8.00	9.71	13.10	7.33	6.00	6.25	7.00	7.75	9.06
Protective service occupations, N.E.C.	-	-	-	-	-	-	7.32	6.95	7.00	7.00	7.25	8.50
Food service occupations	8.74	2.63	6.50	8.50	11.00	13.36	5.48	2.63	2.63	5.60	7.00	9.00
Supervisors, food preparation and service occupations	13.60	10.49	11.30	13.30	16.11	19.69	-	-	-	-	-	-
Waiters and waitresses	6.08	2.63	2.63	5.03	9.50	10.00	3.10	2.63	2.63	2.63	2.63	3.75
Cooks	10.09	7.25	8.15	10.00	11.34	13.37	8.65	6.50	7.00	8.00	10.25	11.50
Food counter, fountain, and related occupations	-	-	-	-	-	-	7.04	5.50	5.50	6.00	8.41	11.10
Kitchen workers, food preparation	9.37	6.50	7.00	8.00	12.00	12.50	7.70	6.50	6.50	7.55	8.95	9.40
Waiters'/Waitresses' assistants	-	-	-	-	-	-	5.38	3.25	4.25	5.25	7.00	8.00
Food preparation occupations, N.E.C.	7.52	5.50	6.00	7.00	8.99	10.15	6.59	5.25	6.00	6.50	7.00	8.00
Health service occupations	9.97	8.00	8.62	9.56	11.23	12.25	9.28	7.34	8.32	9.00	9.99	11.33
Health aides, except nursing	9.98	7.87	8.34	9.25	10.50	13.09	9.13	6.76	7.89	8.85	9.33	10.59
Nursing aides, orderlies and attendants	9.91	8.00	8.65	9.56	11.16	11.99	9.27	7.50	8.45	9.05	10.00	11.33
Cleaning and building service occupations	11.12	7.00	8.45	10.79	13.50	15.35	8.32	6.75	7.44	8.40	8.50	10.00
Supervisors, cleaning and building service workers	17.17	10.04	13.46	16.23	23.80	24.50	-	-	-	-	-	-

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, August 1997 — 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 (-Continued)												
Cleaning and building service occupations (-Continued)												
Maids and housemen	\$7.74	\$6.25	\$6.70	\$7.25	\$8.61	\$10.00	—	—	—	—	—	—
Janitors and cleaners	11.34	7.84	8.65	11.44	13.50	14.87	\$8.10	\$6.75	\$7.44	\$8.40	\$8.40	\$8.55
Personal service occupations	13.47	7.34	8.49	10.10	12.50	23.77	7.68	5.30	6.08	6.90	8.70	10.27
Welfare service aides	—	—	—	—	—	—	7.57	5.25	6.50	7.63	8.63	9.45
Child care workers, N.E.C.	8.98	6.80	8.04	8.84	10.05	10.73	—	—	—	—	—	—
Service occupations, N.E.C.	9.79	8.49	9.13	9.13	10.35	11.72	8.62	5.75	6.50	8.32	10.00	12.50

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."

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, August 1997

Occupation ³	All industries					
	Mean weekly hours ⁴	Weekly earnings		Mean annual hours	Annual earnings	
		Mean	Median		Mean	Median
All occupations	39.2	\$742	\$617	1,985	\$37,599	\$31,782
All occupations excluding sales	39.1	742	620	1,980	37,530	31,990
White-collar occupations	38.9	858	724	1,957	43,179	36,400
White-collar occupations excluding sales	38.8	867	736	1,947	43,515	37,073
Professional specialty and technical occupations	38.3	981	912	1,864	47,739	43,992
Professional specialty occupations	38.0	1,059	1,002	1,817	50,692	47,001
Engineers, architects, and surveyors	39.9	1,196	1,144	2,076	62,179	59,467
Aerospace engineers	41.2	1,481	1,495	2,140	77,017	77,735
Civil engineers	39.3	1,062	1,146	2,042	55,223	59,592
Electrical and electronic engineers	40.0	1,266	1,177	2,081	65,830	61,191
Industrial engineers	41.3	1,121	1,073	2,146	58,307	55,806
Mechanical engineers	40.5	1,148	1,040	2,108	59,676	54,059
Engineers, N.E.C.	39.5	1,211	1,061	2,051	62,969	55,185
Mathematical and computer scientists	39.6	1,152	1,134	2,061	59,897	58,988
Computer systems analysts and scientists	39.7	1,182	1,166	2,066	61,485	60,632
Operations and systems researchers and analysts	38.8	892	847	2,019	46,404	44,034
Natural scientists	39.4	1,219	1,298	2,049	63,399	67,496
Physicists and astronomers	40.0	1,694	1,565	2,080	88,103	81,390
Chemists, except biochemists	38.3	933	684	1,992	48,537	35,589
Medical scientists	39.5	1,048	769	2,053	54,519	39,998
Health related occupations	38.9	970	860	1,993	49,749	43,430
Physicians	45.0	1,932	2,058	2,342	100,486	106,995
Registered nurses	38.3	849	810	1,988	44,080	41,808
Respiratory therapists	39.4	751	756	2,046	39,061	39,333
Teachers, college and university	36.0	1,368	1,264	1,539	58,433	55,505
Art, drama and music teachers	35.2	1,120	1,233	1,402	44,635	45,490
English teachers	35.6	1,300	1,390	1,401	51,159	54,215
Foreign language teachers	37.4	1,270	1,293	1,538	52,267	50,412
Teachers, post secondary N.E.C.	38.1	1,356	1,151	1,600	56,925	44,665
Teachers, except college and university	33.9	1,029	1,030	1,278	38,773	39,170
Prekindergarten and kindergarten	35.7	847	1,027	1,478	35,025	41,443
Elementary school teachers	33.6	1,025	1,025	1,248	38,132	38,896
Secondary school teachers	34.2	1,028	987	1,275	38,288	38,205
Teachers, special education	34.1	1,014	1,061	1,279	37,997	40,476
Teachers, N.E.C.	33.1	1,189	1,330	1,265	45,502	49,085
Librarians, archivists, and curators	36.7	910	840	1,722	42,692	42,060
Librarians	36.9	920	840	1,713	42,747	41,309
Social scientists and urban planners	35.3	755	561	1,835	39,237	29,170
Economists	39.5	954	769	2,056	49,618	39,998
Social, recreation, and religious workers	37.4	587	534	1,943	30,492	27,749
Social workers	37.3	597	539	1,940	31,027	28,022
Lawyers and judges	39.2	1,288	1,079	2,037	66,861	56,102
Lawyers	39.4	1,250	1,079	2,047	65,013	56,102
Writers, authors, entertainers, athletes, and professionals, N.E.C.	38.9	880	820	2,017	45,656	42,640
Technical writers	40.0	946	923	2,080	49,187	48,006
Designers	39.6	983	801	2,057	51,140	41,642
Editors and reporters	36.4	861	866	1,894	44,761	45,009
Public relations specialists	39.6	829	820	2,060	43,113	42,640
Professional occupations, N.E.C.	38.9	957	933	2,023	49,774	48,506
Technical occupations	39.4	693	670	2,049	36,020	34,840
Clinical laboratory technologists and technicians	39.3	609	540	2,045	31,657	28,059
Radiological technicians	40.0	806	796	2,080	41,933	41,392
Licensed practical nurses	38.6	617	640	2,007	32,075	33,280
Health technologists and technicians, N.E.C.	39.8	538	528	2,068	27,967	27,456
Electrical and electronic technicians	39.4	708	702	2,049	36,795	36,504
Engineering technicians, N.E.C.	39.9	830	791	2,077	43,155	41,122
Drafters	40.0	787	810	2,080	40,911	42,120
Chemical technicians	40.0	701	671	2,080	36,435	34,882
Computer programmers	39.1	822	803	2,035	42,737	41,746
Legal assistants	38.6	720	615	2,005	37,445	31,996
Technical and related occupations, N.E.C.	39.6	719	692	2,059	37,407	36,005
Executive, administrative, and managerial occupations	40.3	1,176	958	2,087	60,932	49,442
Executives, administrators, and managers	40.6	1,433	1,188	2,099	74,048	61,243

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, August 1997 — 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)						
Executives, administrators, and managers (-Continued)						
Administrators and officials, public administration	37.7	\$938	\$873	1,959	\$48,779	\$45,391
Financial managers	41.4	1,279	1,060	2,151	66,488	55,141
Personnel and labor relations managers	42.1	1,529	1,496	2,190	79,495	77,805
Purchasing managers	42.1	1,340	1,336	2,191	69,665	69,493
Managers, marketing, advertising and public relations	41.0	1,537	1,492	2,134	79,919	77,605
Administrators, education and related fields	40.0	1,298	1,077	1,948	63,139	56,024
Managers, medicine and health	39.3	1,181	1,019	2,042	61,391	52,995
Managers, food servicing and lodging establishments	41.8	766	619	2,175	39,809	32,178
Managers, service organizations, N.E.C.	39.7	947	1,058	2,064	49,246	54,995
Managers and administrators, N.E.C.	40.9	1,692	1,414	2,121	87,779	72,800
Management related occupations	39.9	842	760	2,072	43,781	39,520
Accountants and auditors	39.2	747	696	2,037	38,866	36,192
Underwriters	38.2	908	767	1,987	47,231	39,897
Other financial officers	39.8	930	908	2,067	48,344	47,195
Management analysts	42.2	1,167	831	2,197	60,692	43,232
Personnel, training, and labor relations specialists	40.2	805	769	2,088	41,849	39,998
Buyers, wholesale and retail trade, except farm products	41.2	1,351	865	2,144	70,247	44,990
Purchasing agents and buyers, N.E.C.	39.9	717	729	2,077	37,263	37,898
Inspectors and compliance officers, except construction	40.2	872	885	2,091	45,367	46,004
Management related occupations, N.E.C.	40.1	850	760	2,086	44,190	39,541
Sales occupations	39.9	749	552	2,075	38,950	28,725
Supervisors, sales occupations	43.9	769	561	2,285	39,984	29,172
Sales occupations, other business services	39.8	930	731	2,068	48,380	38,002
Sales representatives, mining, manufacturing, and wholesale	40.7	1,313	1,152	2,116	68,260	59,904
Sales workers, other commodities	37.2	441	380	1,934	22,920	19,760
Cashiers	38.7	395	360	2,013	20,539	18,720
Sales support occupations, N.E.C.	39.9	567	596	2,075	29,506	30,992
Administrative support occupations, including clerical	38.5	492	472	1,967	25,165	24,206
Supervisors, general office	38.9	742	702	2,023	38,567	36,504
Supervisors, financial records processing	39.8	682	673	2,070	35,448	35,006
Computer operators	37.7	623	669	1,785	29,482	33,925
Secretaries	38.5	570	565	1,984	29,376	29,328
Typists	37.1	464	477	1,903	23,817	24,752
Interviewers	39.4	452	433	2,047	23,525	22,526
Receptionists	37.6	399	387	1,956	20,739	20,134
Information clerks, N.E.C.	37.6	482	509	1,956	25,043	26,442
Order clerks	39.2	488	440	2,040	25,372	22,880
Personnel clerks except payroll and timekeeping	40.0	587	575	2,080	30,510	29,910
Library clerks	35.0	468	466	1,737	23,220	24,239
Records clerks, N.E.C.	39.5	461	412	2,051	23,992	21,445
Bookkeepers, accounting and auditing clerks	39.3	496	492	2,044	25,805	25,605
Payroll and timekeeping clerks	38.0	506	505	1,975	26,335	26,247
Billing clerks	39.5	384	356	2,055	19,994	18,491
Telephone operators	38.0	445	440	1,974	23,163	22,880
Mail clerks except postal service	38.2	358	338	1,986	18,635	17,555
Production coordinators	39.5	706	699	2,052	36,735	36,329
Traffic, shipping and receiving clerks	39.9	488	483	2,048	25,060	25,126
Stock and inventory clerks	39.0	569	550	2,027	29,601	28,621
Material recording, scheduling, and distribution clerks, N.E.C.	39.9	485	476	2,073	25,225	24,752
Insurance adjusters, examiners, and investigators	37.6	580	533	1,954	30,138	27,706
Investigators and adjusters except insurance	39.1	485	454	2,035	25,231	23,587
Bill and account collectors	39.6	509	513	2,061	26,478	26,686
General office clerks	37.4	464	457	1,933	24,018	23,678

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, August 1997 — Continued

Occupation ³	All industries					
	Mean weekly hours ⁴	Weekly earnings		Mean annual hours	Annual earnings	
		Mean	Median		Mean	Median
White-collar occupations (-Continued)						
Administrative support occupations, including clerical (-Continued)						
Data entry keyers	37.5	\$448	\$444	1,952	\$23,293	\$23,096
Teachers' aides	33.1	327	319	1,240	12,274	11,828
Administrative support occupations, N.E.C.	38.9	504	420	2,023	26,203	21,840
Blue-collar occupations						
Precision production, craft, and repair occupations	40.0	703	679	2,074	36,458	35,298
Automobile mechanics	41.7	733	760	2,166	38,112	39,541
Bus, truck, and stationary engine mechanics	40.0	812	924	2,080	42,226	48,027
Industrial machinery repairers	39.9	626	560	2,073	32,534	29,120
Mechanics and repairers, N.E.C.	39.2	674	658	2,040	35,069	34,237
Carpenters	40.0	849	866	2,080	44,148	45,032
Electricians	40.0	835	860	2,080	43,403	44,720
Electrical power installers and repairers	40.0	957	930	2,080	49,763	48,381
Plumbers, pipefitters and steamfitters	40.0	718	774	2,080	37,336	40,248
Construction trades, N.E.C.	40.0	619	578	2,080	32,174	30,077
Supervisors, production occupations	40.6	715	755	2,112	37,159	39,242
Machinists	39.7	718	723	2,065	37,322	37,606
Electrical and electronic equipment assemblers ..	39.9	480	497	2,077	24,966	25,854
Butchers and meat cutters	40.0	495	480	2,080	25,730	24,960
Machine operators, assemblers, and inspectors	40.0	460	467	2,025	23,328	23,920
Fabricating machine operators, N.E.C.	40.0	476	482	2,080	24,774	25,085
Molding and casting machine operators	39.7	385	362	1,760	17,067	17,555
Printing press operators	40.0	589	590	2,080	30,608	30,680
Photoengravers and lithographers	39.7	544	552	2,066	28,294	28,704
Textile sewing machine operators	40.0	386	368	2,080	20,070	19,115
Packaging and filling machine operators	39.8	407	399	2,067	21,181	20,758
Miscellaneous machine operators, N.E.C.	39.9	472	476	2,077	24,526	24,752
Welders and cutters	40.0	612	601	2,080	31,802	31,262
Assemblers	40.0	400	368	2,080	20,780	19,115
Production inspectors, checkers and examiners ..	39.8	438	436	1,873	20,633	21,538
Production testers	40.0	460	480	2,080	23,916	24,981
Transportation and material moving occupations	40.1	601	560	2,039	30,611	27,560
Truck drivers	39.7	578	534	2,065	30,072	27,768
Bus drivers	40.0	608	624	1,920	29,181	27,040
Excavating and loading machine operators	40.0	961	1,022	2,073	49,806	53,165
Industrial truck and tractor equipment operators ..	40.0	436	458	2,080	22,691	23,837
Handlers, equipment cleaners, helpers, and laborers	39.7	440	400	2,022	22,444	20,426
Groundskeepers and gardeners except farm	40.0	511	501	2,016	25,742	26,042
Construction laborers	40.0	599	712	2,080	31,125	37,045
Production helpers	38.6	358	336	2,005	18,612	17,472
Stock handlers and baggers	39.4	395	374	2,033	20,394	19,448
Machine feeders and offbearers	40.0	423	430	2,080	22,018	22,339
Freight, stock, and material handlers, N.E.C.	39.8	420	400	2,070	21,866	20,800
Hand packers and packagers	39.4	342	320	1,855	16,103	16,494
Laborers except construction, N.E.C.	40.0	452	400	2,078	23,515	20,800
Service occupations						
Protective service occupations	40.6	620	693	2,109	32,260	36,026
Supervisors, firefighters and fire prevention occupations	41.5	891	895	2,158	46,315	46,563
Supervisors, police and detectives	39.6	991	946	2,062	51,528	49,171
Firefighting occupations	44.1	724	703	2,295	37,656	36,545
Police and detectives, public service	39.8	719	742	2,068	37,401	38,605
Guards and police except public service	39.7	353	320	2,063	18,380	16,640
Food service occupations	39.0	341	334	2,004	17,510	16,640
Supervisors, food preparation and service occupations	43.9	597	577	2,284	31,063	30,001
Waiters and waitresses	39.0	237	201	2,027	12,325	10,462
Cooks	38.4	387	380	1,935	19,528	19,552
Kitchen workers, food preparation	39.0	365	320	2,028	18,999	16,640
Food preparation occupations, N.E.C.	38.2	287	280	1,943	14,610	14,477
Health service occupations	38.9	387	375	2,011	20,056	19,469
Health aides, except nursing	39.2	391	367	1,977	19,730	19,094

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, August 1997 — Continued

Occupation ³	All industries					
	Mean weekly hours ⁴	Weekly earnings		Mean annual hours	Annual earnings	
		Mean	Median		Mean	Median
Service occupations (-Continued)						
Health service occupations (-Continued)						
Nursing aides, orderlies and attendants	38.8	\$384	\$376	2,016	\$19,981	\$19,539
Cleaning and building service occupations	39.1	434	421	2,031	22,573	21,902
Supervisors, cleaning and building service workers	39.4	676	649	2,046	35,139	33,758
Maids and housemen	38.3	297	280	1,991	15,420	14,560
Janitors and cleaners	39.2	444	452	2,036	23,089	23,483
Personal service occupations	34.4	464	410	1,758	23,677	21,312
Child care workers, N.E.C.	40.0	359	354	2,017	18,110	17,722
Service occupations, N.E.C.	38.9	381	365	1,937	18,972	18,990

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."

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, August 1997

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	\$17.99	\$17.57	\$20.25	\$18.94	\$10.89
All occupations excluding sales	18.21	17.80	20.28	18.95	11.80
White-collar occupations	21.14	20.84	22.75	22.07	13.41
Level 1	6.64	6.61	—	7.38	6.44
Level 2	7.63	7.38	9.40	8.49	6.78
Level 3	10.12	9.56	11.87	10.47	8.59
Level 4	11.59	11.36	13.11	11.74	10.39
Level 5	13.11	12.88	15.46	13.11	13.19
Level 6	14.46	14.30	15.88	14.40	15.38
Level 7	18.24	17.84	20.42	18.22	18.52
Level 8	19.01	19.12	18.03	18.62	22.14
Level 9	24.88	22.09	31.42	25.36	19.56
Level 10	24.19	24.43	21.83	24.29	22.48
Level 11	29.26	29.49	28.22	29.21	31.00
Level 12	37.68	37.65	38.24	37.54	43.42
Level 13	45.90	45.96	—	45.88	—
Level 14	61.64	62.58	—	61.57	—
Level 15	55.94	55.94	—	55.94	—
Not able to be leveled	27.96	29.48	21.26	28.36	17.77
White-collar occupations excluding sales	21.86	21.67	22.82	22.35	16.45
Level 1	7.41	7.37	—	7.81	7.04
Level 2	8.59	8.33	9.45	8.70	8.20
Level 3	10.29	9.80	11.63	10.61	8.83
Level 4	11.67	11.41	13.14	11.73	11.05
Level 5	13.30	13.06	15.46	13.30	13.29
Level 6	14.57	14.41	15.88	14.51	15.38
Level 7	18.26	17.84	20.47	18.24	18.52
Level 8	19.02	19.13	18.03	18.60	22.14
Level 9	24.89	21.84	31.42	25.40	19.56
Level 10	23.82	24.05	21.83	23.91	22.48
Level 11	28.46	28.52	28.22	28.39	31.00
Level 12	37.11	37.04	38.24	36.94	43.42
Level 13	45.80	45.85	—	45.77	—
Level 14	61.64	62.58	—	61.57	—
Level 15	55.94	55.94	—	55.94	—
Not able to be leveled	28.04	29.63	21.26	28.45	17.17
Professional specialty and technical occupations	25.06	24.30	28.07	25.61	20.24
Professional specialty occupations	27.29	26.84	28.72	27.90	21.85
Level 5	12.27	12.00	—	12.42	—
Level 6	13.97	13.47	16.42	13.87	14.47
Level 7	19.29	18.14	21.79	19.37	18.84
Level 8	20.93	21.13	18.51	20.19	23.53
Level 9	26.48	21.71	32.78	27.50	19.27
Level 10	22.12	22.53	18.47	22.04	22.94
Level 11	28.91	28.99	28.63	28.87	30.07
Level 12	36.17	36.04	—	35.91	44.94
Level 13	45.77	45.70	—	45.70	—
Level 14	52.28	52.28	—	52.02	—
Not able to be leveled	27.80	30.13	18.26	28.06	18.64
Engineers, architects, and surveyors	29.95	30.10	—	29.95	—
Level 7	19.52	19.52	—	19.52	—
Level 9	23.66	23.66	—	23.66	—
Level 10	24.02	24.02	—	24.02	—
Level 11	29.55	29.94	—	29.55	—
Level 12	36.81	36.81	—	36.81	—
Level 13	44.03	44.03	—	44.03	—
Not able to be leveled	38.29	38.29	—	38.29	—
Mathematical and computer scientists	29.07	29.55	—	29.07	—
Level 7	18.63	18.63	—	18.63	—
Level 8	19.15	19.15	—	19.15	—
Level 9	23.36	24.14	—	23.40	—
Level 10	23.26	23.26	—	23.26	—
Level 11	28.85	28.92	—	28.85	—

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, August 1997 — 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)					
Mathematical and computer scientists (-Continued)					
Level 12	\$33.00	\$33.00	—	\$32.90	—
Level 13	41.33	41.33	—	41.33	—
Natural scientists	31.02	31.28	—	30.95	—
Level 13	44.40	44.40	—	44.18	—
Health related occupations	24.71	24.84	\$23.63	24.96	\$24.01
Level 6	16.38	17.03	—	15.51	—
Level 7	18.90	18.95	—	18.71	19.11
Level 8	22.38	22.51	—	21.63	24.15
Level 9	24.32	23.66	26.82	24.29	24.44
Level 10	19.14	20.10	—	18.00	—
Level 11	26.50	26.31	27.39	24.91	34.78
Teachers, college and university	37.29	38.23	34.09	37.97	31.75
Level 9	23.13	24.11	—	—	—
Level 10	26.55	26.91	—	28.10	—
Level 11	29.65	29.89	—	30.36	—
Level 12	43.07	47.49	—	41.92	—
Teachers, except college and university	29.73	16.99	31.49	30.34	18.29
Level 5	11.40	10.83	—	11.58	—
Level 6	15.98	—	—	—	—
Level 7	22.53	18.85	22.93	22.66	—
Level 8	19.68	18.72	—	18.67	—
Level 9	34.49	21.04	35.13	34.48	35.95
Level 11	30.24	—	—	—	—
Librarians, archivists, and curators	24.77	23.29	26.35	24.79	—
Level 9	25.86	—	28.30	25.92	—
Social scientists and urban planners	—	—	—	21.39	—
Social, religious, and recreation workers	15.68	14.49	18.18	15.69	15.62
Level 7	15.22	12.29	—	15.28	—
Level 8	15.54	15.13	—	15.67	—
Lawyers and judges	32.83	34.67	—	32.82	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	22.25	22.61	—	22.64	17.08
Level 7	18.82	19.38	—	18.82	—
Level 8	18.55	18.55	—	18.55	—
Level 9	21.06	21.06	—	21.24	—
Level 11	30.56	30.56	—	30.56	—
Level 12	33.59	33.59	—	33.59	—
Not able to be leveled	17.05	17.11	—	16.94	—
Technical occupations	17.32	17.22	18.88	17.58	15.26
Level 4	11.19	11.00	14.92	11.40	10.10
Level 5	14.42	14.33	—	14.28	15.25
Level 6	15.47	15.54	—	15.28	16.36
Level 7	18.77	18.79	—	18.74	19.11
Level 8	17.77	17.76	—	17.92	15.43
Level 9	23.39	23.48	—	23.33	—
Level 11	35.67	36.02	—	35.67	—
Not able to be leveled	22.35	—	—	—	—
Executive, administrative, and managerial occupations ...	29.11	29.66	24.91	29.19	24.16
Level 5	14.92	13.60	—	14.93	—
Level 6	14.32	14.32	—	14.32	—
Level 7	16.72	16.52	18.40	16.76	—
Level 8	17.32	17.19	18.10	17.32	—
Level 9	21.90	21.82	22.38	21.91	—
Level 10	25.69	25.66	—	25.84	—
Level 11	27.12	27.17	26.88	27.11	—
Level 12	38.26	38.22	38.95	38.19	—
Level 13	45.82	45.97	—	45.82	—
Level 14	67.74	69.90	—	67.74	—
Not able to be leveled	31.25	32.01	25.81	31.24	—
Executives, administrators, and managers	35.16	36.10	28.49	35.28	27.44
Level 6	13.72	13.72	—	13.72	—
Level 7	16.03	15.87	—	16.08	—

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, August 1997 — 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 8	\$17.30	\$17.17	—	\$17.30	—
Level 9	22.17	22.14	\$22.35	22.21	—
Level 10	25.56	25.48	—	25.79	—
Level 11	28.05	28.40	26.92	28.05	—
Level 12	40.66	40.76	38.95	40.60	—
Level 13	45.67	45.82	—	45.67	—
Level 14	68.54	70.97	—	68.54	—
Not able to be leveled	34.86	35.62	29.40	34.87	—
Management related occupations	21.11	21.32	19.28	21.13	\$20.03
Level 5	15.04	13.71	—	15.04	—
Level 6	14.73	14.73	—	14.73	—
Level 7	16.91	16.70	18.71	16.94	—
Level 8	17.32	17.19	18.12	17.32	—
Level 9	21.64	21.55	22.42	21.63	—
Level 10	25.94	25.94	—	25.94	—
Level 11	24.52	24.48	—	24.41	—
Level 12	30.96	30.96	—	30.97	—
Not able to be leveled	22.93	23.67	—	22.93	—
Sales occupations	14.84	14.85	14.47	18.77	6.79
Level 2	6.56	6.55	—	—	6.36
Level 3	9.00	8.31	17.62	9.49	7.49
Level 4	11.12	11.13	—	11.76	8.87
Level 5	11.64	11.64	—	11.64	—
Level 6	12.78	12.78	—	12.78	—
Level 7	17.53	17.67	—	17.53	—
Level 8	18.91	18.91	—	18.91	—
Level 9	24.73	24.73	—	24.73	—
Level 10	28.59	28.59	—	28.59	—
Level 11	38.26	38.26	—	38.26	—
Level 12	54.94	54.94	—	54.94	—
Administrative support occupations, including clerical	12.55	12.45	13.06	12.80	10.39
Level 1	7.41	7.37	—	7.81	7.04
Level 2	8.58	8.33	9.43	8.69	8.17
Level 3	10.29	9.78	11.68	10.60	8.78
Level 4	11.76	11.48	13.23	11.78	11.58
Level 5	12.91	12.75	14.65	12.92	12.73
Level 6	14.48	14.26	15.90	14.48	14.52
Level 7	17.47	17.54	17.00	17.50	—
Level 8	17.56	17.80	—	17.56	—
Level 9	21.25	21.27	—	21.25	—
Not able to be leveled	16.50	15.07	—	16.85	—
Blue-collar occupations	13.68	13.37	17.13	14.02	7.96
Level 1	7.88	7.78	12.60	8.52	6.24
Level 2	9.96	9.91	11.48	10.21	8.44
Level 3	10.79	10.70	12.34	10.90	8.37
Level 4	12.02	11.83	16.25	12.02	—
Level 5	15.59	15.28	18.05	15.59	—
Level 6	15.56	15.67	14.67	15.56	—
Level 7	18.25	18.00	19.30	18.24	—
Level 8	18.37	18.06	—	18.23	—
Level 9	23.15	23.17	—	23.15	—
Precision production, craft, and repair occupations	17.60	17.43	18.91	17.58	—
Level 2	10.19	10.19	—	10.19	—
Level 3	9.87	—	—	9.87	—
Level 4	12.34	12.34	—	12.34	—
Level 5	17.00	16.91	17.87	17.01	—
Level 6	16.08	16.14	—	16.09	—
Level 7	18.87	18.54	20.29	18.86	—
Level 8	18.66	18.31	—	18.50	—
Level 9	23.12	23.13	—	23.12	—

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, August 1997 — 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)					
Machine operators, assemblers, and inspectors	\$11.42	\$11.22	\$15.99	\$11.52	—
Level 1	7.14	7.14	—	7.40	—
Level 2	9.35	9.26	—	9.38	—
Level 3	9.92	9.92	—	9.95	—
Level 4	11.17	11.17	—	11.17	—
Level 5	12.80	12.80	—	12.80	—
Level 6	13.53	13.34	—	13.53	—
Level 7	16.29	16.13	—	16.29	—
Transportation and material moving occupations	14.80	14.46	17.02	15.01	\$11.21
Level 3	11.32	11.30	—	11.36	—
Level 4	13.46	13.22	—	13.49	—
Level 5	18.29	18.13	—	18.36	—
Level 6	17.15	—	—	17.15	—
Level 7	17.44	17.44	—	17.44	—
Handlers, equipment cleaners, helpers, and laborers	10.34	10.10	13.75	11.10	7.20
Level 1	7.40	7.19	—	8.19	6.39
Level 2	10.17	10.14	—	10.72	8.10
Level 3	11.85	11.71	13.39	12.18	8.06
Level 4	11.80	11.17	16.25	11.86	—
Level 5	12.81	12.52	—	12.81	—
Service occupations					
Level 1	10.57	8.70	15.58	11.69	7.18
Level 2	7.50	7.14	10.80	7.87	6.94
Level 3	8.27	7.35	10.91	9.26	6.40
Level 4	8.73	8.36	12.05	9.57	6.96
Level 5	10.15	9.50	13.34	10.33	9.22
Level 6	15.16	12.05	17.50	16.22	9.00
Level 7	14.73	12.08	17.08	14.73	—
Level 8	17.76	16.37	18.10	17.72	—
Level 9	16.70	—	—	16.70	—
Level 9	22.03	—	22.03	22.03	—
Protective service occupations	14.54	8.63	17.89	15.29	7.79
Level 1	7.41	—	—	—	8.96
Level 2	10.16	—	—	10.29	—
Level 3	8.11	7.80	11.74	8.86	7.00
Level 4	13.17	—	13.81	13.42	—
Level 5	17.26	12.37	17.91	17.27	—
Level 6	17.10	—	17.11	17.10	—
Level 7	18.04	—	18.04	18.04	—
Level 9	21.64	—	21.64	21.64	—
Food service occupations	7.50	7.44	9.15	8.74	5.48
Level 1	5.89	5.86	—	5.98	5.81
Level 2	5.93	5.72	8.45	6.45	5.51
Level 3	6.15	6.03	—	7.49	4.52
Level 4	9.10	9.10	—	9.41	—
Level 5	10.83	10.82	—	12.03	—
Health service occupations	9.81	9.48	11.23	9.97	9.28
Level 1	7.51	7.49	—	—	—
Level 2	10.14	8.72	11.03	10.37	8.77
Level 3	9.60	9.35	11.65	9.66	9.43
Level 4	9.67	9.59	10.77	9.63	9.85
Level 5	10.02	9.60	—	10.70	—
Level 6	10.66	—	—	—	—
Cleaning and building service occupations	10.56	9.59	13.33	11.12	8.32
Level 1	8.75	8.25	11.42	9.24	7.87
Level 2	10.08	9.32	12.42	10.25	8.52
Level 3	11.76	11.29	13.40	11.88	—
Level 4	13.49	—	13.94	13.65	—
Personal service occupations	10.45	10.23	12.07	13.47	7.68
Level 1	7.04	—	—	—	7.04
Level 2	6.92	6.79	—	—	6.52
Level 3	8.76	8.68	—	9.52	8.10
Level 4	9.91	8.85	—	10.43	—

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, August 1997 — 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)					
Personal service occupations (-Continued)					
Level 5	\$19.82	\$19.82	—	—	—

¹ Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, holidays, nonproduction bonuses, and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours.

² 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."

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, August 1997

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:					
Aerospace engineers	\$35.99	\$35.99	—	\$35.99	—
Civil engineers	27.04	22.59	—	27.04	—
Electrical and electronic engineers	31.63	31.63	—	31.63	—
Level 9	23.57	23.57	—	23.57	—
Level 11	29.61	29.61	—	29.61	—
Industrial engineers	27.17	27.17	—	27.17	—
Level 9	23.04	23.04	—	23.04	—
Mechanical engineers	28.31	28.31	—	28.31	—
Level 12	35.28	35.28	—	35.28	—
Engineers, N.E.C.	30.70	31.47	—	30.70	—
Level 9	23.60	23.60	—	23.60	—
Level 11	29.10	30.86	—	29.10	—
Level 12	37.05	37.05	—	37.05	—
Computer systems analysts and scientists	29.76	30.20	—	29.76	—
Level 7	19.21	19.21	—	19.21	—
Level 9	24.32	25.24	—	24.38	—
Level 10	23.26	23.26	—	23.26	—
Level 11	28.77	28.84	—	28.77	—
Level 12	33.12	33.12	—	33.02	—
Level 13	41.33	41.33	—	41.33	—
Operations and systems researchers and analysts	22.98	23.74	—	22.98	—
Level 9	20.83	21.84	—	20.83	—
Physicists and astronomers	42.36	42.36	—	42.36	—
Chemists, except biochemists	24.37	24.37	—	24.37	—
Medical scientists	27.08	27.39	—	26.56	—
Physicians	43.61	47.35	—	42.90	—
Registered nurses	22.27	22.18	\$23.09	22.17	\$22.49
Level 6	16.46	17.26	—	15.42	—
Level 7	18.94	19.01	—	18.63	19.20
Level 8	22.57	22.59	—	21.78	24.45
Level 9	23.52	23.44	23.88	23.46	23.70
Level 11	26.45	—	—	26.48	—
Pharmacists	23.95	23.95	—	—	—
Respiratory therapists	19.15	19.54	—	19.09	—
Occupational therapists	23.72	—	—	—	—
Physical therapists	29.16	29.16	—	—	32.89
Medical science teachers	40.39	40.39	—	—	—
Art, drama and music teachers	30.55	29.17	—	31.84	—
English teachers	36.29	33.34	—	36.53	—
Foreign language teachers	33.99	32.24	—	33.99	—
Teachers, post secondary N.E.C.	34.00	—	—	35.59	—
Prekindergarten and kindergarten	23.60	10.71	—	23.70	—
Elementary school teachers	30.54	—	30.92	30.56	—
Level 7	23.53	—	23.75	23.49	—
Level 9	33.42	—	33.66	33.43	—
Secondary school teachers	29.83	20.86	31.00	30.02	—
Level 7	22.73	—	22.79	22.73	—
Level 9	33.06	—	34.24	33.06	—
Teachers, special education	29.71	—	32.23	29.71	—
Level 9	33.59	—	33.78	33.59	—
Teachers, N.E.C.	34.09	17.92	37.44	35.97	22.19
Level 9	41.13	—	41.51	—	37.22
Vocational and educational counselors	23.70	—	26.16	—	—
Librarians	24.92	23.32	26.35	24.95	—
Level 9	25.86	—	28.30	25.92	—
Economists	24.14	24.14	—	24.14	—
Social workers	15.98	14.69	18.41	16.00	15.90
Level 7	15.42	12.18	—	15.42	—
Level 8	15.45	14.89	—	15.62	—
Recreation workers	12.91	13.15	—	—	—
Lawyers	31.77	34.67	—	31.76	—

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, August 1997 — 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)					
Professional specialty and technical occupations: (-Continued)					
Professional specialty occupations: (-Continued)					
Technical writers	\$23.58	\$23.58	—	\$23.65	—
Designers	24.86	24.96	—	24.86	—
Editors and reporters	23.63	23.63	—	23.63	—
Public relations specialists	20.68	22.08	—	20.93	—
Athletes	18.77	19.04	—	—	—
Not able to be leveled	18.77	19.04	—	—	—
Technical occupations:					
Clinical laboratory technologists and technicians	15.45	15.42	—	15.48	\$15.12
Level 4	11.44	11.38	—	—	—
Level 5	11.26	—	—	—	—
Level 6	15.82	15.82	—	15.76	—
Level 7	17.33	17.33	—	17.35	—
Level 8	16.72	16.72	—	16.54	—
Radiological technicians	20.30	20.30	—	20.16	20.60
Level 6	18.71	18.71	—	—	—
Licensed practical nurses	16.06	16.19	\$14.77	15.98	16.20
Level 4	14.79	—	—	—	—
Level 5	16.61	16.59	—	16.95	15.79
Health technologists and technicians, N.E.C.	13.25	12.83	—	13.52	12.05
Level 4	10.47	10.46	—	10.96	—
Level 6	13.92	13.92	—	—	—
Level 7	17.01	17.01	—	—	—
Level 8	15.69	15.90	—	15.93	—
Electrical and electronic technicians	17.88	17.92	—	17.96	—
Level 6	14.61	14.78	—	14.78	—
Level 7	18.13	18.13	—	18.13	—
Level 8	18.95	19.18	—	18.95	—
Engineering technicians, N.E.C.	20.53	20.53	—	20.77	—
Level 7	21.21	21.21	—	21.21	—
Drafters	19.61	19.61	—	19.67	—
Chemical technicians	17.52	17.52	—	17.52	—
Computer programmers	20.90	21.05	—	21.00	—
Level 9	22.85	22.82	—	22.85	—
Legal assistants	18.67	—	—	18.67	—
Technical and related occupations, N.E.C.	18.16	17.97	—	18.17	—
Level 7	19.01	19.01	—	19.01	—
Executive, administrative, and managerial occupations:					
Administrators and officials, public administration	24.99	—	24.99	24.90	—
Level 9	21.31	—	21.31	21.31	—
Financial managers	30.72	30.78	—	30.91	—
Level 9	20.68	20.68	—	20.68	—
Level 11	28.07	28.07	—	28.07	—
Level 12	38.85	38.85	—	38.85	—
Level 13	43.80	43.83	—	43.80	—
Personnel and labor relations managers	36.31	36.31	—	36.31	—
Purchasing managers	31.79	31.79	—	31.79	—
Managers, marketing, advertising and public relations	37.45	37.45	—	37.45	—
Level 9	23.22	23.22	—	23.22	—
Level 12	37.35	37.35	—	37.35	—
Level 13	44.21	44.21	—	44.21	—
Not able to be leveled	40.27	40.27	—	40.27	—
Administrators, education and related fields	31.95	33.62	30.33	32.42	—
Level 9	23.34	—	—	—	—
Level 11	26.40	—	26.74	26.40	—
Level 12	41.40	—	—	41.73	—
Managers, medicine and health	29.22	28.36	—	30.06	—
Level 9	20.42	—	—	—	—
Level 12	32.85	30.72	—	32.85	—
Managers, food servicing and lodging establishments	18.30	18.30	—	18.30	—

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, August 1997 — 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)					
Executive, administrative, and managerial occupations: (-Continued)					
Managers, service organizations, N.E.C.	\$23.86	\$23.86	—	\$23.86	—
Managers and administrators, N.E.C.	41.42	41.78	—	41.39	—
Level 9	22.56	22.68	—	22.56	—
Level 10	27.59	27.59	—	27.59	—
Level 11	29.28	29.39	—	29.28	—
Level 12	44.47	44.47	—	44.45	—
Level 13	45.97	46.33	—	45.97	—
Level 14	75.89	75.89	—	75.89	—
Not able to be leveled	42.70	42.70	—	42.70	—
Accountants and auditors	19.10	19.26	\$18.03	19.08	—
Level 5	15.69	—	—	15.69	—
Level 7	16.63	16.58	—	16.63	—
Level 8	17.95	18.24	—	17.95	—
Level 9	20.23	20.23	—	20.18	—
Underwriters	23.77	23.77	—	23.77	—
Other financial officers	23.38	23.68	—	23.38	—
Level 7	16.35	—	—	16.35	—
Management analysts	27.56	28.06	—	27.63	—
Personnel, training, and labor relations specialists	20.01	20.09	—	20.04	—
Level 7	16.58	16.58	—	16.65	—
Level 9	22.16	22.17	—	22.16	—
Level 11	25.07	25.07	—	25.07	—
Buyers, wholesale and retail trade, except farm products	32.77	32.77	—	32.77	—
Purchasing agents and buyers, N.E.C.	17.94	17.94	—	17.94	—
Level 9	20.53	20.53	—	20.53	—
Construction inspectors	20.54	—	20.54	—	—
Inspectors and compliance officers, except construction	20.90	21.50	—	21.70	—
Management related occupations, N.E.C.	21.24	21.34	20.80	21.18	—
Level 7	16.90	16.52	—	16.90	—
Level 8	17.62	16.55	—	17.62	—
Level 9	22.60	22.47	—	22.60	—
Level 11	24.85	24.85	—	24.56	—
Sales occupations:					
Supervisors, sales occupations	17.50	17.53	—	17.50	—
Level 5	11.05	11.05	—	11.05	—
Level 8	17.34	17.34	—	17.34	—
Sales occupations, other business services	23.40	23.40	—	23.40	—
Sales representatives, mining, manufacturing, and wholesale	32.26	32.26	—	32.26	—
Sales workers, apparel	6.86	6.86	—	—	—
Sales workers, other commodities	10.05	10.05	—	11.85	\$7.16
Level 4	9.67	9.67	—	10.09	—
Cashiers	7.38	7.10	14.50	10.20	6.37
Level 2	6.15	6.12	—	—	6.12
Level 3	9.50	8.47	17.70	10.39	7.65
Level 4	12.05	12.14	—	—	—
Sales support occupations, N.E.C.	14.22	14.22	—	14.22	—
Administrative support occupations, including clerical:					
Supervisors, general office	19.97	20.58	—	19.07	—
Supervisors, financial records processing	17.13	17.13	—	17.13	—
Computer operators	15.97	15.98	—	16.52	—
Secretaries	14.68	14.37	16.00	14.81	12.27
Level 3	9.43	9.43	—	9.40	—
Level 4	12.53	12.45	12.80	12.47	—
Level 5	13.37	13.43	—	13.42	—
Level 6	15.12	14.77	16.05	15.14	—
Level 7	17.99	18.10	—	18.01	—
Typists	12.55	—	—	12.52	—
Interviewers	11.30	11.48	—	11.49	10.97

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, August 1997 — 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)					
Interviewers (-Continued)					
Level 3	\$10.10	\$10.03	—	—	—
Hotel clerks	9.34	9.34	—	—	—
Transportation ticket and reservation agents	12.47	12.47	—	—	\$12.16
Receptionists	10.28	10.31	\$10.01	\$10.60	9.23
Level 2	8.58	7.97	—	—	8.56
Level 3	10.07	10.06	—	—	9.83
Level 4	11.37	11.37	—	11.37	—
Information clerks, N.E.C.	12.74	12.57	—	12.80	—
Order clerks	11.49	11.49	—	12.44	7.65
Level 3	8.45	8.45	—	—	—
Personnel clerks except payroll and timekeeping	13.37	13.37	—	14.67	—
Level 4	11.09	11.09	—	—	—
Library clerks	13.05	—	12.85	13.36	11.63
Records clerks, N.E.C.	11.47	11.45	—	11.70	—
Level 3	8.62	8.51	—	—	—
Level 4	12.71	12.71	—	12.71	—
Level 5	12.03	—	—	12.03	—
Bookkeepers, accounting and auditing clerks	12.44	12.31	13.74	12.62	10.42
Level 3	10.49	10.84	—	10.63	—
Level 4	12.09	11.79	—	12.14	—
Level 5	13.17	12.85	—	13.17	—
Level 6	13.95	13.95	—	13.95	—
Payroll and timekeeping clerks	13.33	12.61	—	13.33	—
Billing clerks	9.80	9.80	—	9.73	—
Level 4	9.17	9.17	—	—	—
Duplicating machine operators	10.39	10.09	—	—	—
Telephone operators	10.45	10.47	—	11.73	7.61
Level 2	10.44	—	—	—	—
Level 3	10.75	—	—	—	—
Mail clerks except postal service	8.71	8.62	—	9.38	—
Dispatchers	—	—	12.95	—	—
Production coordinators	17.91	17.91	—	17.91	—
Traffic, shipping and receiving clerks	12.18	12.18	—	12.24	—
Level 3	11.27	11.27	—	11.37	—
Level 5	12.97	12.97	—	12.97	—
Stock and inventory clerks	14.19	13.43	—	14.60	—
Material recording, scheduling, and distribution clerks, N.E.C.	12.17	12.01	—	12.17	—
Insurance adjusters, examiners, and investigators	15.43	15.43	—	15.43	—
Level 6	14.11	14.11	—	14.11	—
Level 9	21.13	21.13	—	21.13	—
Investigators and adjusters except insurance	12.33	12.33	—	12.40	—
Level 4	12.46	12.46	—	12.46	—
Level 5	12.39	12.39	—	12.46	—
Level 6	12.28	12.28	—	12.23	—
Bill and account collectors	12.86	12.86	—	12.85	—
General office clerks	12.21	11.80	12.97	12.42	10.45
Level 2	9.17	7.91	—	9.49	7.80
Level 3	11.25	10.47	12.23	11.39	9.13
Level 4	12.70	12.22	13.68	12.73	12.51
Level 5	14.19	13.73	—	13.98	—
Data entry keyers	11.65	9.52	—	11.93	7.86
Level 2	7.73	7.73	—	—	—
Level 3	11.99	—	—	—	—
Teachers' aides	10.14	—	10.15	9.90	11.26
Level 2	8.09	—	8.09	8.08	—
Level 3	10.27	—	10.32	10.22	—
Administrative support occupations, N.E.C.	12.79	12.80	—	12.95	10.89
Level 4	12.30	12.30	—	—	—
Professional occupations, N.E.C.	22.01	22.01	—	24.61	—

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, August 1997 — 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:					
Precision production, craft, and repair occupations:					
Automobile mechanics	\$17.59	\$17.19	—	\$17.59	—
Level 7	18.67	—	—	18.67	—
Bus, truck, and stationary engine mechanics	20.30	19.88	—	20.30	—
Level 7	22.80	—	—	22.80	—
Industrial machinery repairers	15.69	15.69	—	15.69	—
Level 7	15.57	15.57	—	15.57	—
Electronic repairers, communications and industrial equipment	14.87	—	—	—	—
Heating, air conditioning, and refrigeration mechanics					
Level 7	19.10	19.10	—	19.10	—
Mechanics and repairers, N.E.C.	17.19	15.98	—	17.19	—
Level 7	18.09	—	—	18.09	—
Carpenters	21.23	—	—	21.23	—
Level 7	21.23	—	—	21.23	—
Electricians	20.87	20.78	—	20.87	—
Level 7	17.92	15.94	—	17.92	—
Electrical power installers and repairers	23.92	—	—	23.92	—
Level 7	24.03	24.58	—	24.03	—
Plumbers, pipefitters and steamfitters	17.95	—	—	17.95	—
Construction trades, N.E.C.	15.47	17.13	\$12.84	15.47	—
Supervisors, production occupations	17.59	17.59	—	17.59	—
Level 7	17.27	17.27	—	17.27	—
Machinists	18.08	18.08	—	18.08	—
Electrical and electronic equipment assemblers ..	12.02	12.02	—	12.02	—
Butchers and meat cutters	12.48	12.48	—	12.37	—
Machine operators, assemblers, and inspectors:					
Fabricating machine operators, N.E.C.	11.91	11.91	—	11.91	—
Molding and casting machine operators	9.70	9.70	—	9.70	—
Printing press operators	14.72	14.72	—	14.72	—
Level 7	17.89	17.89	—	17.89	—
Photoengravers and lithographers	13.69	13.69	—	13.69	—
Textile sewing machine operators	9.65	9.65	—	9.65	—
Packaging and filling machine operators	10.25	10.25	—	10.25	—
Miscellaneous machine operators, N.E.C.	11.80	11.47	—	11.81	—
Level 3	10.67	10.67	—	10.67	—
Level 4	11.72	11.72	—	11.72	—
Level 5	12.16	12.16	—	12.16	—
Welders and cutters	15.29	—	—	15.29	—
Assemblers	9.58	9.58	—	9.99	—
Level 2	8.95	8.95	—	8.95	—
Level 3	10.39	10.39	—	10.39	—
Production inspectors, checkers and examiners ..	11.02	11.02	—	11.02	—
Level 3	8.94	8.94	—	8.94	—
Level 5	12.41	12.41	—	12.41	—
Production testers	11.50	11.50	—	11.50	—
Transportation and material moving occupations:					
Truck drivers	14.41	14.49	—	14.56	—
Level 3	12.33	12.42	—	12.42	—
Level 4	13.64	13.63	—	13.64	—
Level 5	16.16	16.16	—	16.16	—
Bus drivers	14.48	12.23	—	15.20	—
Excavating and loading machine operators	24.03	24.03	—	24.03	—
Level 5	24.07	24.07	—	24.07	—
Industrial truck and tractor equipment operators ..	10.91	10.91	—	10.91	—
Level 4	12.22	12.22	—	12.22	—
Handlers, equipment cleaners, helpers, and laborers:					
Groundskeepers and gardeners except farm	11.68	10.94	12.49	12.77	—
Level 3	10.46	—	—	—	—
Construction laborers	14.98	15.53	13.12	14.96	—
Production helpers	9.28	9.28	—	9.28	—
Stock handlers and baggers	8.81	8.81	—	10.03	\$6.38

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, August 1997 — 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	\$6.96	\$6.96	—	\$8.37	\$6.00
Level 2	6.80	6.80	—	—	6.57
Level 3	9.95	9.95	—	10.65	7.38
Level 4	10.42	10.42	—	10.46	—
Machine feeders and offbearers	10.45	10.45	—	10.59	—
Freight, stock, and material handlers, N.E.C.	10.34	10.34	—	10.56	9.57
Level 2	9.45	9.45	—	9.04	—
Level 3	11.07	11.07	—	11.02	—
Hand packers and packagers	8.21	8.21	—	8.68	—
Level 1	—	—	—	7.93	—
Level 2	8.50	8.50	—	8.50	—
Laborers except construction, N.E.C.	10.49	9.42	\$16.25	11.32	7.65
Level 1	7.14	7.04	—	—	7.63
Level 2	8.39	8.39	—	—	—
Level 3	11.92	—	—	11.92	—
Level 4	15.10	13.19	—	15.11	—
Service occupations:					
Protective service occupations:					
Supervisors, firefighters and fire prevention occupations					
Supervisors, police and detectives	21.47	—	21.47	21.47	—
Supervisors, police and detectives	24.99	—	24.99	24.99	—
Firefighting occupations	16.40	—	16.40	16.41	—
Level 5	16.67	—	16.67	16.68	—
Police and detectives, public service	18.00	—	18.00	18.09	—
Level 5	18.27	—	18.27	18.29	—
Level 7	18.49	—	18.49	18.49	—
Guards and police except public service	8.55	8.39	—	8.91	7.33
Level 2	10.29	—	—	10.29	—
Level 3	8.09	7.75	—	8.90	6.95
Level 5	11.50	—	—	11.50	—
Protective service occupations, N.E.C.	7.50	—	—	—	7.32
Level 3	7.50	—	—	—	7.32
Food service occupations:					
Supervisors, food preparation and service occupations					
Waiters and waitresses	12.99	13.00	—	13.60	—
Level 2	4.71	4.71	—	6.08	3.10
Level 3	3.20	3.20	—	—	—
Level 3	3.59	3.59	—	—	3.32
Cooks	9.86	9.85	—	10.09	8.65
Level 2	7.66	—	—	—	—
Level 3	8.80	8.72	—	—	—
Level 4	9.95	9.95	—	10.19	—
Food counter, fountain, and related occupations	7.15	6.86	—	—	7.04
Level 1	6.18	—	—	—	—
Kitchen workers, food preparation	8.94	8.94	—	9.37	7.70
Level 2	7.59	7.59	—	—	—
Waiters/Waitresses' assistants	5.25	5.25	—	—	5.38
Food preparation occupations, N.E.C.	7.08	7.06	8.10	7.52	6.59
Level 1	6.78	6.75	—	7.07	6.43
Level 2	7.18	7.15	—	7.73	6.58
Level 3	7.61	7.59	—	—	—
Health service occupations:					
Health aides, except nursing					
Level 2	9.71	9.65	—	9.98	9.13
Level 3	8.75	8.75	—	—	—
Level 4	8.98	8.94	—	—	8.95
Level 5	9.66	9.34	—	9.65	—
Level 5	9.61	9.61	—	—	—
Nursing aides, orderlies and attendants	9.77	9.36	11.27	9.91	9.27
Level 2	10.28	8.71	11.04	10.41	9.20

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, August 1997 — 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)					
Health service occupations: (-Continued)					
Nursing aides, orderlies and attendants (-Continued)					
Level 3	\$9.67	\$9.40	—	\$9.69	\$9.60
Level 4	9.47	9.41	\$10.50	9.38	9.87
Cleaning and building service occupations:					
Supervisors, cleaning and building service workers					
	15.14	—	—	17.17	—
Maids and housemen					
	8.08	8.08	—	7.74	—
Level 1	7.02	7.02	—	6.97	—
Janitors and cleaners					
	10.69	9.73	12.96	11.34	8.10
Level 1	9.12	8.57	11.42	9.97	7.89
Level 2	10.27	9.41	12.42	10.46	—
Level 3	12.07	11.58	—	12.07	—
Level 4	13.65	—	—	13.87	—
Personal service occupations:					
Welfare service aides					
	8.44	8.44	—	—	7.57
Level 3	7.81	7.81	—	—	—
Child care workers, N.E.C.					
	7.76	—	—	8.98	—
Service occupations, N.E.C.					
	9.09	9.07	—	9.79	8.62
Level 2	7.66	7.60	—	—	6.77

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."

Table C-1. Mean hourly earnings¹ by occupational group and selected characteristics, all industries, Boston-Worcester-Lawrence, MA-NH-ME-CT, August 1997

Occupational group ²	Full-time workers ³	Part-time workers ³	Union ⁴	Nonunion ⁴	Time ⁵	Incentive ⁵
All occupations	\$18.94	\$10.89	\$18.33	\$17.88	\$18.00	\$17.47
All occupations excluding sales	18.95	11.80	18.94	17.98	18.23	16.43
White-collar occupations	22.07	13.41	20.96	21.17	21.10	23.36
White-collar excluding sales	22.35	16.45	22.71	21.69	21.79	47.47
Professional specialty and technical occupations	25.61	20.24	28.23	24.16	25.06	—
Professional specialty occupations	27.90	21.85	29.24	26.65	27.30	—
Technical occupations	17.58	15.26	21.40	16.72	17.32	—
Executive, administrative, and managerial occupations ...	29.19	24.16	23.31	29.44	28.87	49.07
Sales occupations	18.77	6.79	8.27	16.55	14.26	18.77
Administrative support including clerical occupations	12.80	10.39	13.71	12.29	12.55	—
Blue-collar occupations	14.02	7.96	17.08	11.77	13.80	11.01
Precision production, craft, and repair occupations	17.58	—	20.03	15.30	17.53	—
Machine operators, assemblers, and inspectors	11.52	—	13.42	10.86	11.59	9.24
Transportation and material moving occupations	15.01	11.21	17.51	12.63	14.53	—
Handlers, equipment cleaners, helpers, and laborers	11.10	7.20	13.60	8.82	10.53	—
Service occupations	11.69	7.18	14.38	8.60	10.57	—

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."

Table C-2. Mean hourly earnings¹ by occupational group and industry division, private industry, all workers², Boston-Worcester-Lawrence, MA-NH-ME-CT, August 1997

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	\$17.57	\$18.80	\$17.85	—	\$18.68	\$17.04	\$18.87	\$12.74	—	\$18.00
All occupations excluding sales	17.80	18.69	17.85	—	18.55	17.38	18.13	13.33	—	17.92
White-collar occupations	20.84	24.46	—	—	24.57	19.79	19.85	15.43	—	21.49
White-collar excluding sales	21.67	24.53	—	—	24.64	20.74	18.71	20.17	—	21.46
Professional specialty and technical occupations	24.30	26.88	—	—	27.11	23.31	19.80	25.66	—	23.31
Professional specialty occupations	26.84	29.95	—	—	30.24	25.64	30.04	28.65	—	25.21
Technical occupations	17.22	18.27	—	—	18.37	16.82	16.79	16.17	—	16.84
Executive, administrative, and managerial occupations	29.66	31.42	—	—	32.01	29.03	26.44	28.84	—	28.24
Sales occupations	14.85	23.22	—	—	23.22	13.96	27.45	11.45	—	22.68
Administrative support, including clerical occupations	12.45	13.10	—	—	13.05	12.31	14.03	11.17	—	12.55
Blue-collar occupations	13.37	13.57	16.49	—	12.50	12.93	16.98	11.42	—	10.66
Precision production, craft, and repair occupations	17.43	16.38	—	—	14.64	20.32	21.37	20.53	—	18.18
Machine operators, assemblers, and inspectors	11.22	11.64	—	—	11.64	7.93	—	—	—	7.04
Transportation and material moving occupations	14.46	15.14	—	—	13.65	13.92	14.99	13.18	—	9.98
Handlers, equipment cleaners, helpers, and laborers	10.10	11.60	—	—	10.07	9.07	9.81	8.98	—	8.79
Service occupations	8.70	11.62	—	—	11.32	8.62	—	7.10	—	9.12

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."

Table C-3. Mean hourly earnings¹ by occupational group and establishment employment size, private industry, all workers², Boston-Worcester-Lawrence, MA-NH-ME-CT, August 1997

Occupational group ³	All private industry workers	50 - 99 workers	100 workers or more		
			Total	100 - 499 workers	500 workers or more
All occupations	\$17.57	\$14.73	\$18.17	\$16.41	\$20.09
All occupations excluding sales	17.80	14.37	18.48	16.80	20.16
White-collar occupations	20.84	19.02	21.13	19.58	22.50
White-collar excluding sales	21.67	19.57	21.95	20.97	22.67
Professional specialty and technical occupations	24.30	21.44	24.55	22.69	25.85
Professional specialty occupations	26.84	23.12	27.16	25.69	28.12
Technical occupations	17.22	16.37	17.29	15.70	18.68
Executive, administrative, and managerial occupations ...	29.66	28.16	29.90	28.49	31.07
Sales occupations	14.85	17.32	13.91	13.21	17.33
Administrative support, including clerical occupations	12.45	12.65	12.42	12.78	12.15
Blue-collar occupations	13.37	12.39	13.67	13.23	14.42
Precision production, craft, and repair occupations	17.43	16.30	17.70	17.79	17.57
Machine operators, assemblers, and inspectors	11.22	11.20	11.22	10.92	11.67
Transportation and material moving occupations	14.46	13.24	15.06	14.34	16.61
Handlers, equipment cleaners, helpers, and laborers	10.10	9.38	10.36	9.93	11.62
Service occupations	8.70	7.24	9.21	8.68	10.12

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.

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Table C-4. Number of workers¹ represented by occupational group, Boston-Worcester-Lawrence, MA-NH-ME-CT, August 1997

Occupational group ²	All workers		
	All industries	Private industry	State and local government
All occupations	1,723,639	1,431,692	291,947
All occupations excluding sales	1,598,659	1,308,084	290,575
White-collar occupations	1,100,315	901,136	199,179
White-collar excluding sales	975,335	777,528	197,807
Professional specialty and technical occupations	459,947	346,239	113,708
Professional specialty occupations	365,329	257,862	107,467
Technical occupations	94,619	88,377	6,242
Executive, administrative, and managerial occupations ...	193,470	168,519	24,951
Sales occupations	124,980	123,608	1,372
Administrative support including clerical occupations	321,917	262,769	59,148
Blue-collar occupations	341,334	315,249	26,084
Precision production, craft, and repair occupations	102,576	90,759	11,817
Machine operators, assemblers, and inspectors	109,255	104,893	4,362
Transportation and material moving occupations	42,588	37,287	5,301
Handlers, equipment cleaners, helpers, and laborers	86,915	82,311	4,604
Service occupations	281,991	215,307	66,683

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."

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, which was based on the type of data to be produced, had to be developed before data collection could begin.

Survey scope

This survey of the Boston-Worcester-Lawrence, MA-NH-ME-CT, Consolidated Metropolitan Statistical Area (CMSA) 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, Consolidated Metropolitan Statistical Area (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, CMSA. 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 by industry and ownership. The number of sample establishments allocated to each stratum is approximately proportional to the stratum employment. Each sampled establishment is selected within a stratum with a probability proportional to its employment. Use of this technique means that the larger an establishment's employment, the greater its chance of selection. Weights were applied to each establishment when the data were tabulated so that it represents similar units (by industry and employment size) in the economy which were not selected for collection. See appendix table 1 for a count of establishments in the survey by employment size. The second stage of sample selection, detailed below, was a probability sample of occupations within a sampled establishment.

Data collection

The collection of data from survey respondents required detailed procedures. Collection was the responsibility of the field economists, working out of the Regional Office, who visited each establishment surveyed.

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 May 1997 through December 1997. The average payroll reference month was August 1997. 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, 23.3 percent (representing 374,829 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 (3.9 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.

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

The number of workers estimates represent the total in all establishments within the scope of the study and not the number actually surveyed. Because occupational structures

among establishments differ, estimates of the number of workers obtained from the sample of establishments serve only to indicate the relative importance of the occupational groups studied.

Data reliability

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

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

A measure of the variation among these differing estimates is called the standard error or sampling error. It indicates the precision with which an estimate from a particular sample approximates the average result of all possible samples. The relative standard error (RSE) is the standard error divided by the estimate. Appendix table 2 contains RSE data for selected series in this bulletin. RSE data for all series in this bulletin are available on the Internet web site and by request to the BLS National Office.

The standard error can be used to calculate a "confidence interval" around a sample estimate. As an example, suppose table A-1 shows that mean hourly earnings for all workers was \$12.79 per hour, and appendix table 2 shows a relative standard error of 3.6 percent for this estimate. At the 90-percent level, the confidence interval for this estimate is \$13.55 to \$12.03 (\$12.79 plus and minus 1.645 times 3.6 percent times \$12.79). If all possible samples were selected to estimate the population value, the interval from each sample would include the true population value approximately 90 percent of the time.

Nonsampling errors also affect survey results. They can stem from many sources, such as inability to obtain information for some establishments, difficulties with survey definitions, inability of the respondents to provide correct information, or mistakes in recording or coding the data obtained. A Technical Reinterview Program done in all survey areas will be used in the development of a formal quality assessment process to help compute nonsampling error. Although they were not specifically measured, the nonsampling errors were expected to be minimal due to the extensive training of the field economists who gathered the survey data by personal visit, computer edits of the data, and detailed data review.

Appendix table 1. Number of establishments studied by industry division and establishment employment size, and number of establishments represented, Boston-Worcester-Lawrence, MA-NH-ME-CT, August 1997

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	8,592	481	112	369	212	157
Private industry	7,959	423	105	318	184	134
Goods-producing industries	2,075	116	28	88	42	46
Mining	5	3	2	1	1	-
Construction	241	10	4	6	5	1
Manufacturing	1,830	103	22	81	36	45
Service-producing industries	5,883	307	77	230	142	88
Transportation and public utilities	460	24	4	20	12	8
Wholesale and retail trade	2,451	85	32	53	45	8
Finance, insurance and real estate	434	28	5	23	9	14
Services	2,538	170	36	134	76	58
State and local government	633	58	7	51	28	23

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, August 1997

(in percent)

Occupation ³	All industries	Private industry	State and local government
All occupations	1.7	2.0	2.1
All occupations excluding sales	1.7	2.1	2.1
White-collar occupations	2.0	2.4	2.9
White-collar occupations excluding sales	2.0	2.3	2.9
Professional specialty and technical occupations	2.0	2.3	3.6
Professional specialty occupations	2.3	2.8	3.8
Engineers, architects, and surveyors	2.4	2.7	—
Aerospace engineers	4.8	4.8	—
Civil engineers	8.8	16.3	—
Electrical and electronic engineers	3.1	3.1	—
Industrial engineers	6.9	6.9	—
Mechanical engineers	9.0	9.0	—
Engineers, N.E.C.	3.6	4.1	—
Mathematical and computer scientists	3.0	2.9	—
Computer systems analysts and scientists	3.0	2.9	—
Operations and systems researchers and analysts	4.2	3.0	—
Natural scientists	9.8	9.9	—
Physicists and astronomers	5.6	5.6	—
Chemists, except biochemists	22.5	22.5	—
Medical scientists	15.6	16.2	—
Health related occupations	4.8	5.3	8.1
Physicians	18.2	16.9	—
Registered nurses	2.4	2.6	5.4
Pharmacists	3.3	3.3	—
Respiratory therapists	3.6	3.5	—
Occupational therapists	10.7	—	—
Physical therapists	6.5	6.5	—
Teachers, college and university	4.4	5.4	4.5
Medical science teachers	13.9	13.9	—
Art, drama and music teachers	12.0	18.5	—
English teachers	6.9	13.2	—
Foreign language teachers	11.2	14.8	—
Teachers, post secondary N.E.C.	8.8	—	—
Teachers, except college and university	5.0	6.7	5.2
Prekindergarten and kindergarten	20.2	7.1	—
Elementary school teachers	5.4	—	5.5
Secondary school teachers	5.7	4.1	6.1
Teachers, special education	10.9	—	7.1
Teachers, N.E.C.	13.6	10.9	11.0
Vocational and educational counselors	8.8	—	10.8
Librarians, archivists, and curators	7.0	6.8	10.5
Librarians	7.5	8.1	10.5
Social scientists and urban planners	—	—	—
Economists	14.1	14.1	—
Social, recreation, and religious workers	5.4	6.2	7.0
Social workers	5.9	7.0	7.2
Recreation workers	7.9	8.3	—
Lawyers and judges	8.0	8.7	—
Lawyers	7.0	8.7	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	5.9	6.0	—
Technical writers	12.7	12.7	—
Designers	11.2	11.3	—
Editors and reporters	18.1	18.1	—
Public relations specialists	7.7	8.0	—
Athletes	18.1	18.1	—
Professional occupations, N.E.C.	12.0	12.0	—
Technical occupations	2.9	3.0	8.0
Clinical laboratory technologists and technicians	5.3	5.4	—
Radiological technicians	3.4	3.4	—
Licensed practical nurses	2.7	2.8	7.4
Health technologists and technicians, N.E.C.	6.5	5.7	—

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, August 1997 — Continued

(in percent)

Occupation ³	All industries	Private industry	State and local government
White-collar occupations (-Continued)			
Professional specialty and technical occupations (-Continued)			
Technical occupations (-Continued)			
Electrical and electronic technicians	3.3	3.5	—
Engineering technicians, N.E.C.	7.1	7.1	—
Drafters	4.7	4.7	—
Chemical technicians	8.9	8.9	—
Computer programmers	6.1	7.0	—
Legal assistants	15.1	—	—
Technical and related occupations, N.E.C.	7.6	8.1	—
Executive, administrative, and managerial occupations ...	3.8	4.2	5.8
Executives, administrators, and managers	5.0	5.4	5.8
Administrators and officials, public administration	6.4	—	6.4
Financial managers	10.4	10.6	—
Personnel and labor relations managers	19.0	19.0	—
Purchasing managers	12.9	12.9	—
Managers, marketing, advertising and public relations	7.1	7.1	—
Administrators, education and related fields	7.6	12.5	8.8
Managers, medicine and health	10.4	10.9	—
Managers, food servicing and lodging establishments	17.4	17.4	—
Managers, service organizations, N.E.C.	12.2	12.2	—
Managers and administrators, N.E.C.	9.1	9.4	—
Management related occupations	2.8	3.0	3.7
Accountants and auditors	3.6	4.0	3.3
Underwriters	14.9	14.9	—
Other financial officers	6.2	6.1	—
Management analysts	14.1	14.7	—
Personnel, training, and labor relations specialists	6.3	6.5	—
Buyers, wholesale and retail trade, except farm products	26.3	26.3	—
Purchasing agents and buyers, N.E.C.	8.3	8.3	—
Construction inspectors	6.0	—	6.0
Inspectors and compliance officers, except construction	4.4	4.8	—
Management related occupations, N.E.C.	4.8	5.8	4.1
Sales occupations	8.5	8.6	13.1
Supervisors, sales occupations	18.2	18.4	—
Sales occupations, other business services	22.4	22.4	—
Sales representatives, mining, manufacturing, and wholesale	9.7	9.7	—
Sales workers, apparel	3.1	3.1	—
Sales workers, other commodities	8.6	8.6	—
Cashiers	7.1	6.8	14.9
Sales support occupations, N.E.C.	15.1	15.1	—
Administrative support occupations, including clerical	2.1	2.5	2.4
Supervisors, general office	6.9	7.7	—
Supervisors, financial records processing	4.6	4.6	—
Computer operators	5.8	5.9	—
Secretaries	2.4	2.7	3.8
Typists	4.7	—	—
Interviewers	3.8	4.9	—
Hotel clerks	4.6	4.6	—
Transportation ticket and reservation agents	2.6	2.6	—
Receptionists	4.6	5.0	9.9
Information clerks, N.E.C.	10.0	10.7	—
Order clerks	8.5	8.5	—
Personnel clerks except payroll and timekeeping	9.1	9.1	—
Library clerks	5.9	—	8.0
Records clerks, N.E.C.	7.2	7.4	—

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, August 1997 — Continued

(in percent)

Occupation ³	All industries	Private industry	State and local government
White-collar occupations (-Continued)			
Administrative support occupations, including clerical (-Continued)			
Bookkeepers, accounting and auditing clerks	2.5	2.5	9.6
Payroll and timekeeping clerks	5.7	4.7	—
Billing clerks	6.5	6.5	—
Duplicating machine operators	8.4	9.2	—
Telephone operators	6.4	6.5	—
Mail clerks except postal service	3.6	3.4	—
Dispatchers	—	—	8.2
Production coordinators	4.9	4.9	—
Traffic, shipping and receiving clerks	4.9	4.9	—
Stock and inventory clerks	6.0	5.3	—
Material recording, scheduling, and distribution clerks, N.E.C.	7.3	9.4	—
Insurance adjusters, examiners, and investigators	5.1	5.1	—
Investigators and adjusters except insurance	4.3	4.3	—
Bill and account collectors	4.3	4.3	—
General office clerks	2.6	3.8	2.6
Data entry keyers	4.3	6.8	—
Teachers' aides	6.0	—	6.0
Administrative support occupations, N.E.C.	9.1	9.4	—
Blue-collar occupations			
Precision production, craft, and repair occupations	2.2	2.4	2.8
Automobile mechanics	2.7	3.0	4.3
Bus, truck, and stationary engine mechanics	11.0	13.9	—
Industrial machinery repairers	8.7	11.2	—
Electronic repairers, communications and industrial equipment	7.2	7.2	—
Mechanics and repairers, N.E.C.	20.1	—	—
Carpenters	5.0	3.7	—
Electricians	6.2	—	—
Electrical power installers and repairers	6.7	7.6	—
Plumbers, pipefitters and steamfitters	2.2	—	—
Construction trades, N.E.C.	9.5	—	—
Supervisors, production occupations	9.1	10.6	7.8
Machinists	7.1	7.1	—
Electrical and electronic equipment assemblers ..	3.3	3.3	—
Butchers and meat cutters	5.8	5.8	—
Machine operators, assemblers, and inspectors	11.9	11.9	—
Fabricating machine operators, N.E.C.	3.2	3.2	6.8
Molding and casting machine operators	7.9	7.9	—
Printing press operators	7.6	7.6	—
Photoengravers and lithographers	8.5	8.5	—
Textile sewing machine operators	16.5	16.5	—
Packaging and filling machine operators	5.9	5.9	—
Miscellaneous machine operators, N.E.C.	13.2	13.2	—
Welders and cutters	5.1	4.4	—
Assemblers	4.1	—	—
Production inspectors, checkers and examiners ..	8.6	8.6	—
Production testers	6.4	6.4	—
Transportation and material moving occupations	4.6	4.6	—
Truck drivers	4.1	4.7	4.6
Bus drivers	5.6	5.8	—
Excavating and loading machine operators	5.8	7.4	—
Industrial truck and tractor equipment operators ..	3.6	3.6	—
Handlers, equipment cleaners, helpers, and laborers	9.6	9.6	—
Groundskeepers and gardeners except farm	4.8	5.2	6.3
Construction laborers	7.2	12.7	1.9
Production helpers	17.0	20.8	6.4
Stock handlers and baggers	12.1	12.1	—
Machine feeders and offbearers	3.6	3.6	—
	10.2	10.2	—

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, August 1997 — Continued

(in percent)

Occupation ³	All industries	Private industry	State and local government
Blue-collar occupations (-Continued)			
Handlers, equipment cleaners, helpers, and laborers (-Continued)			
Freight, stock, and material handlers, N.E.C.	5.8	5.8	—
Hand packers and packagers	6.7	6.7	—
Laborers except construction, N.E.C.	8.7	8.0	14.0
Service occupations			
Protective service occupations	5.9	5.9	2.6
Supervisors, firefighters and fire prevention occupations	4.5	—	4.5
Supervisors, police and detectives	10.7	—	10.7
Firefighting occupations	3.9	—	3.9
Police and detectives, public service	2.8	—	2.8
Guards and police except public service	5.8	5.7	—
Protective service occupations, N.E.C.	1.4	—	—
Food service occupations	5.2	5.5	6.4
Supervisors, food preparation and service occupations	6.8	6.9	—
Waiters and waitresses	23.5	23.5	—
Cooks	3.8	4.1	—
Food counter, fountain, and related occupations	8.8	9.9	—
Kitchen workers, food preparation	7.3	7.3	—
Waiters/Waitresses' assistants	7.6	7.6	—
Food preparation occupations, N.E.C.	3.8	3.8	4.5
Health service occupations	1.3	1.4	1.3
Health aides, except nursing	4.5	4.7	—
Nursing aides, orderlies and attendants	1.3	1.2	1.3
Cleaning and building service occupations	3.0	3.7	4.0
Supervisors, cleaning and building service workers	15.6	—	—
Maids and housemen	6.6	6.6	—
Janitors and cleaners	3.2	4.2	3.6
Personal service occupations	11.9	13.5	14.2
Welfare service aides	5.3	5.3	—
Child care workers, N.E.C.	8.5	—	—
Service occupations, N.E.C.	5.0	5.7	—

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

² All workers include full-time and part-time workers. Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Therefore, a worker with a 35-hour-per-week schedule might be considered a full-time employee in one establishment, but classified as part-time in another firm, where a 40-hour week is

the minimum full-time schedule.

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

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means "not elsewhere classified."

Appendix table 3. Average work levels for selected occupations, all workers, full-time and part-time workers, Boston-Worcester-Lawrence, MA-NH-ME-CT, August 1997

Occupation ¹	All workers	Full-time workers	Part-time workers
All occupations	6	7	4
All occupations excluding sales	6	7	4
White-collar occupations	7	8	5
White-collar occupations excluding sales	8	8	6
Professional specialty and technical occupations	9	9	8
Professional specialty occupations	9	10	9
Engineers, architects, and surveyors	11	11	—
Aerospace engineers	12	12	—
Civil engineers	10	10	—
Electrical and electronic engineers	11	11	—
Industrial engineers	10	10	—
Mechanical engineers	11	11	—
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	—
Physicists and astronomers	12	12	—
Chemists, except biochemists	11	11	—
Medical scientists	12	12	—
Health related occupations	9	9	8
Physicians	12	12	—
Registered nurses	8	8	8
Pharmacists	9	—	—
Respiratory therapists	7	8	—
Occupational therapists	8	—	—
Physical therapists	10	—	10
Teachers, college and university	11	12	10
Medical science teachers	12	—	—
Art, drama and music teachers	11	11	—
English teachers	12	12	—
Foreign language teachers	12	12	—
Teachers, post secondary N.E.C.	10	11	—
Teachers, except college and university	8	8	7
Prekindergarten and kindergarten	7	7	—
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	—	9	—
Economists	9	9	—
Social, recreation, and religious workers	8	8	9
Social workers	8	8	9
Recreation workers	7	—	—
Lawyers and judges	11	11	—
Lawyers	11	11	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	9	9	7
Technical writers	9	9	—
Designers	10	10	—
Editors and reporters	9	9	—
Public relations specialists	9	9	—
Athletes	—	—	—
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	7	—
Chemical technicians	7	7	—
Computer programmers	8	8	—

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, August 1997 — Continued

Occupation ¹	All workers	Full-time workers	Part-time workers
White-collar occupations (-Continued)			
Professional specialty and technical occupations (-Continued)			
Technical occupations (-Continued)			
Legal assistants	7	7	—
Technical and related occupations, N.E.C.	7	7	—
Executive, administrative, and managerial occupations	10	10	9
Executives, administrators, and managers	11	11	10
Administrators and officials, public administration	10	10	—
Financial managers	11	11	—
Personnel and labor relations managers	11	11	—
Purchasing managers	11	11	—
Managers, marketing, advertising and public relations ..	12	12	—
Administrators, education and related fields	11	11	—
Managers, medicine and health	11	11	—
Managers, food servicing and lodging establishments ...	8	8	—
Managers, service organizations, N.E.C.	10	10	—
Managers and administrators, N.E.C.	12	12	—
Management related occupations	8	8	9
Accountants and auditors	8	8	—
Underwriters	8	8	—
Other financial officers	10	10	—
Management analysts	10	10	—
Personnel, training, and labor relations specialists	9	9	—
Buyers, wholesale and retail trade, except farm products	10	10	—
Purchasing agents and buyers, N.E.C.	8	8	—
Construction inspectors	8	—	—
Inspectors and compliance officers, except construction	9	9	—
Management related occupations, N.E.C.	9	9	—
Sales occupations	5	6	2
Supervisors, sales occupations	7	7	—
Sales occupations, other business services	7	7	—
Sales representatives, mining, manufacturing, and wholesale	9	9	—
Sales workers, apparel	2	—	—
Sales workers, other commodities	4	5	3
Cashiers	2	3	2
Sales support occupations, N.E.C.	6	6	—
Administrative support occupations, including clerical	4	5	3
Supervisors, general office	8	8	—
Supervisors, financial records processing	7	7	—
Computer operators	5	6	—
Secretaries	5	5	4
Typists	4	4	—
Interviewers	4	4	3
Hotel clerks	4	—	—
Transportation ticket and reservation agents	4	—	5
Receptionists	3	4	2
Information clerks, N.E.C.	4	4	—
Order clerks	4	5	3
Personnel clerks except payroll and timekeeping	5	5	—
Library clerks	4	4	4
Records clerks, N.E.C.	4	4	—
Bookkeepers, accounting and auditing clerks	4	5	3
Payroll and timekeeping clerks	4	4	—
Billing clerks	4	4	—
Duplicating machine operators	2	—	—
Telephone operators	2	2	2
Mail clerks except postal service	3	2	—
Production coordinators	6	6	—
Traffic, shipping and receiving clerks	4	4	—
Stock and inventory clerks	5	5	—
Material recording, scheduling, and distribution clerks, N.E.C.	4	4	—
Insurance adjusters, examiners, and investigators	6	6	—
Investigators and adjusters except insurance	5	5	—
Bill and account collectors	6	6	—

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, August 1997 — Continued

Occupation ¹	All workers	Full-time workers	Part-time workers
White-collar occupations (-Continued)			
Administrative support occupations, including clerical (-Continued)			
General office clerks	4	4	3
Data entry keyers	3	3	2
Teachers' aides	3	3	3
Administrative support occupations, N.E.C.	5	5	4
Blue-collar occupations			
Precision production, craft, and repair occupations	4	5	2
Automobile mechanics	6	6	—
Bus, truck, and stationary engine mechanics	7	7	—
Industrial machinery repairers	6	6	—
Electronic repairers, communications and industrial equipment	6	6	—
Mechanics and repairers, N.E.C.	7	7	—
Carpenters	8	8	—
Electricians	6	6	—
Electrical power installers and repairers	6	6	—
Plumbers, pipefitters and steamfitters	5	5	—
Construction trades, N.E.C.	7	7	—
Supervisors, production occupations	7	7	—
Machinists	4	4	—
Electrical and electronic equipment assemblers	4	4	—
Butchers and meat cutters	4	4	—
Machine operators, assemblers, and inspectors	4	4	—
Fabricating machine operators, N.E.C.	5	5	—
Molding and casting machine operators	3	3	—
Printing press operators	6	6	—
Photoengravers and lithographers	3	3	—
Textile sewing machine operators	3	3	—
Packaging and filling machine operators	4	4	—
Miscellaneous machine operators, N.E.C.	7	7	—
Welders and cutters	2	3	—
Assemblers	4	4	—
Production inspectors, checkers and examiners	5	5	—
Production testers	4	4	3
Transportation and material moving occupations	4	4	—
Truck drivers	4	4	—
Bus drivers	5	5	—
Excavating and loading machine operators	3	3	—
Industrial truck and tractor equipment operators	2	3	2
Handlers, equipment cleaners, helpers, and laborers	3	3	—
Groundskeepers and gardeners except farm	2	2	—
Construction laborers	2	2	—
Production helpers	2	3	2
Stock handlers and baggers	2	2	—
Machine feeders and offbearers	3	3	2
Freight, stock, and material handlers, N.E.C.	2	2	—
Hand packers and packagers	2	3	2
Laborers except construction, N.E.C.	3	4	2
Service occupations			
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	—
Waiters and waitresses	3	3	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

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, August 1997 — Continued

Occupation ¹	All workers	Full-time workers	Part-time workers
Service occupations (-Continued)			
Health service occupations	3	3	3
Health aides, except nursing	4	4	3
Nursing aides, orderlies and attendants	3	3	3
Cleaning and building service occupations	2	2	2
Supervisors, cleaning and building service workers	5	6	—
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	—
Service occupations, N.E.C.	3	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."