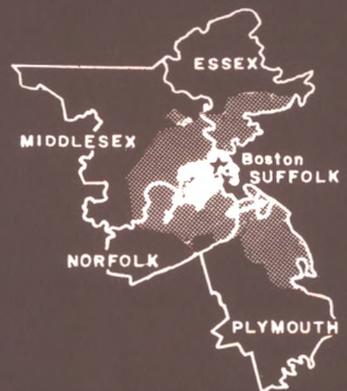


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Area Wage Survey

The Boston, Massachusetts, Metropolitan Area

August 1969

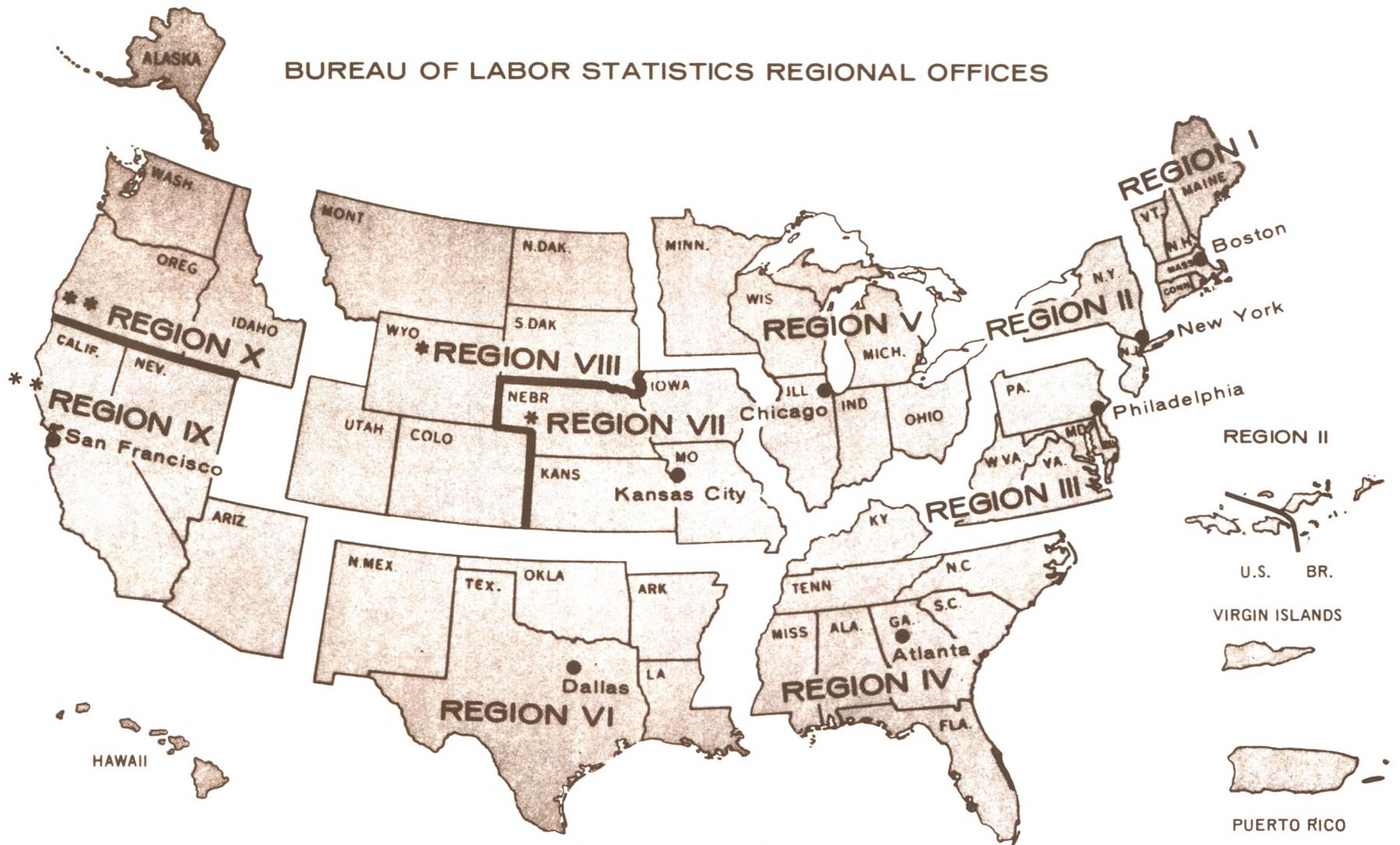


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Area Wage Survey

The Boston, Massachusetts, Metropolitan Area

August 1969

Bulletin 1660-16

January 1970

U.S. DEPARTMENT OF LABOR
George P. Shultz, Secretary

BUREAU OF LABOR STATISTICS
Geoffrey H. Moore, Commissioner



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Preface

The Bureau of Labor Statistics program of annual occupational wage surveys in metropolitan areas is designed to provide data on occupational earnings, and establishment practices and supplementary wage provisions. It yields detailed data by selected industry division for each of the areas studied, for geographic regions, and for the United States. A major consideration in the program is the need for greater insight into (1) the movement of wages by occupational category and skill level, and (2) the structure and level of wages among areas and industry divisions.

At the end of each survey, an individual area bulletin presents survey results for each area studied. After completion of all of the individual area bulletins for a round of surveys, two summary bulletins are issued. The first brings data for each of the metro-

politan areas studied into one bulletin. The second presents information which has been projected from individual metropolitan area data to relate to geographic regions and the United States.

Ninety areas currently are included in the program. In each area, information on occupational earnings is collected annually and on establishment practices and supplementary wage provisions biennially.

This bulletin presents results of the survey in Boston, Mass., in August 1969. The Standard Metropolitan Statistical Area, as defined by the Bureau of the Budget through January 1968, consists of Suffolk County, 15 communities in Essex County, 30 in Middlesex County, 20 in Norfolk County, and 9 in Plymouth County. This study was conducted by the Bureau's regional office in Boston, Mass., under the general direction of Paul V. Mulkern, Assistant Regional Director for Operations.

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NOTE: Similar tabulations are available for other areas. (See inside back cover.)

Current reports on occupational earnings and supplementary wage provisions in the Boston area are also available for contract cleaning services (July 1968), the machinery industries (October 1968); and women's and misses' dresses (August 1968); and on earnings only for selected laundry and dry cleaning occupations (August 1969). Union scales, indicative of prevailing pay levels, are available for building construction; printing; local-transit operating employees; and motortruck drivers, helpers, and allied occupations.

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Area Wage Survey—

The Boston, Mass., Metropolitan Area

Introduction

This area is 1 of 90 in which the U.S. Department of Labor's Bureau of Labor Statistics conducts surveys of occupational earnings and related benefits on an areawide basis.¹

This bulletin presents current occupational employment and earnings information obtained largely by mail from the establishments visited by Bureau field economists in the last previous survey for occupations reported in that earlier study. Personal visits were made to nonrespondents and to those respondents reporting unusual changes since the previous survey.

In each area, data are obtained from representative establishments within six broad industry divisions: Manufacturing; transportation, communication, and other public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services. Major industry groups excluded from these studies are government operations and the construction and extractive industries. Establishments having fewer than a prescribed number of workers are omitted because they tend to furnish insufficient employment in the occupations studied to warrant inclusion. Separate tabulations are provided for each of the broad industry divisions which meet publication criteria.

These surveys are conducted on a sample basis because of the unnecessary cost involved in surveying all establishments. To obtain optimum accuracy at minimum cost, a greater proportion of large than of small establishments is studied. In combining the data, however, all establishments are given their appropriate weight. Estimates based on the establishments studied are presented, therefore, as relating to all establishments in the industry grouping and area, except for those below the minimum size studied.

Occupations and Earnings

The occupations selected for study are common to a variety of manufacturing and nonmanufacturing industries, and are of the following types: (1) Office clerical; (2) professional and technical; (3) maintenance and powerplant; and (4) custodial and material movement. Occupational classification is based on a uniform set of job descriptions designed to take account of interestablishment variation in duties within the same job. The occupations selected for study are listed and described in the appendix. The earnings data following the job titles are for all industries combined. Earnings data for some of the occupations listed and described, or for some industry divisions within occupations, are not presented in the A-series tables because either (1) employment in the occupation is too small to provide enough data

to merit presentation, or (2) there is possibility of disclosure of individual establishment data.

Occupational employment and earnings data are shown for full-time workers, i.e., those hired to work a regular weekly schedule in the given occupational classification. Earnings data exclude premium pay for overtime and for work on weekends, holidays, and late shifts. Nonproduction bonuses are excluded, but cost-of-living allowances and incentive earnings are included. Where weekly hours are reported, as for office clerical occupations, reference is to the standard workweek (rounded to the nearest half hour) for which employees receive their regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates). Average weekly earnings for these occupations have been rounded to the nearest half dollar.

The averages presented reflect composite, areawide estimates. Industries and establishments differ in pay level and job staffing and, thus, contribute differently to the estimates for each job. The pay relationship obtainable from the averages may fail to reflect accurately the wage spread or differential maintained among jobs in individual establishments. Similarly, differences in average pay levels for men and women in any of the selected occupations should not be assumed to reflect differences in pay treatment of the sexes within individual establishments. Other possible factors which may contribute to differences in pay for men and women include: Differences in progression within established rate ranges, since only the actual rates paid incumbents are collected; and differences in specific duties performed, although the workers are classified appropriately within the same survey job description. Job descriptions used in classifying employees in these surveys are usually more generalized than those used in individual establishments and allow for minor differences among establishments in the specific duties performed.

Occupational employment estimates represent the total in all establishments within the scope of the study and not the number actually surveyed. Because of differences in occupational structure among establishments, the estimates of occupational employment obtained from the sample of establishments studied serve only to indicate the relative importance of the jobs studied. These differences in occupational structure do not affect materially the accuracy of the earnings data.

Establishment Practices and Supplementary Wage Provisions

Tabulations on selected establishment practices and supplementary wage provisions (B-series tables) are not presented in this bulletin. Information for these tabulations is collected biennially. These tabulations on minimum entrance salaries for inexperienced women office workers; shift differentials; scheduled weekly hours; paid holidays; paid vacations; and health, insurance, and pension plans are presented (in the B-series tables) in previous bulletins for this area.

¹ Included in the 90 areas are four studies conducted under contract with the New York State Department of Labor. These areas are Binghamton (New York portion only); Rochester (office occupations only); Syracuse; and Utica—Rome. In addition, the Bureau conducts more limited area studies in 78 areas at the request of the Wage and Hour and Public Contracts Divisions of the U.S. Department of Labor.

Table 1. Establishments and Workers Within Scope of Survey and Number Studied in Boston, Mass.,¹
by Major Industry Division,² August 1969

Industry division	Minimum employment in establishments in scope of study	Number of establishments		Workers in establishments		
		Within scope of study ³	Studied	Within scope of study ⁴		Studied
				Number	Percent	
<u>All establishments</u>						
All divisions	-	1,517	321	508,906	100	296,500
Manufacturing	100	468	94	233,176	46	128,675
Nonmanufacturing	-	1,049	227	275,730	54	167,825
Transportation, communication, and other public utilities ⁵	100	64	27	39,846	8	33,633
Wholesale trade	50	270	49	34,260	7	11,185
Retail trade	100	177	45	82,937	16	54,105
Finance, insurance, and real estate	50	202	42	60,776	12	41,484
Services ⁶	50	336	64	57,911	11	27,418
<u>Large establishments</u>						
All divisions	-	179	117	299,612	100	255,445
Manufacturing	500	104	50	155,937	52	117,911
Nonmanufacturing	-	75	67	143,675	48	137,534
Transportation, communication, and other public utilities ⁵	500	12	11	30,496	10	29,967
Wholesale trade	500	5	4	4,009	1	3,459
Retail trade	500	24	19	52,242	18	47,858
Finance, insurance, and real estate	500	18	18	37,016	12	37,016
Services ⁶	500	16	15	19,912	7	19,234

¹ The Boston Standard Metropolitan Statistical Area, as defined by the Bureau of the Budget through January 1968, consists of Suffolk County, 15 communities in Essex County, 30 in Middlesex County, 20 in Norfolk County, and 9 in Plymouth County. The "workers within scope of study" estimates shown in this table provide a reasonably accurate description of the size and composition of the labor force included in the survey. The estimates are not intended, however, to serve as a basis of comparison with other employment indexes for the area to measure employment trends or levels since (1) planning of wage surveys requires the use of establishment data compiled considerably in advance of the payroll period studied, and (2) small establishments are excluded from the scope of the survey.

² The 1967 edition of the Standard Industrial Classification Manual was used in classifying establishments by industry division.

³ Includes all establishments with total employment at or above the minimum limitation. All outlets (within the area) of companies in such industries as trade, finance, auto repair service, and motion picture theaters are considered as 1 establishment.

⁴ Includes all workers in all establishments with total employment (within the area) at or above the minimum limitation.

⁵ Taxicabs and services incidental to water transportation were excluded. Boston's transit system is municipally operated and is excluded by definition from the scope of the study.

⁶ Hotels and motels; laundries and other personal services; business services; automobile repair, rental, and parking; motion pictures; nonprofit membership organizations (excluding religious and charitable organizations); and engineering and architectural services.

Over two-fifths of the workers within scope of the survey in the Boston area were employed in manufacturing firms. The following presents the major industry groups and specific industries as a percent of all manufacturing:

<u>Industry groups</u>	<u>Specific industries</u>		
Electrical equipment and supplies	24	Communication equipment	9
Transportation equipment	13	Aircraft and parts	7
Machinery, except electrical	10	Electronic components and accessories	7
Food and kindred products	8	Ship and boatbuilding and repairing	5
Instruments and related products	8	Footwear, except rubber	4
Printing and publishing	7		
Rubber and plastics products	6		
Leather and leather products	5		

This information is based on estimates of total employment derived from universe materials compiled prior to actual survey. Proportions in various industry divisions may differ from proportions based on the results of the survey as shown in table 1 above.

Wage Trends for Selected Occupational Groups

Presented in table 2 are indexes and percentages of change in average salaries of office clerical workers and industrial nurses, and in average earnings of selected plant worker groups. The indexes are a measure of wages at a given time, expressed as a percent of wages during the base period (date of the area survey conducted between July 1960 and June 1961). Subtracting 100 from the index yields the percentage change in wages from the base period to the date of the index. The percentages of change or increase relate to wage changes between the indicated dates. These estimates are measures of change in averages for the area; they are not intended to measure average pay changes in the establishments in the area.

Method of Computing

Each of the selected key occupations within an occupational group was assigned a weight based on its proportionate employment in the occupational group. These constant weights reflect base year employments wherever possible. The average (mean) earnings for each occupation were multiplied by the occupational weight, and the products for all occupations in the group were totaled. The aggregates for 2 consecutive years were related by dividing the aggregate for the later year by the aggregate for the earlier year. The resultant relative, less 100 percent, shows the percentage change. The index is the product of multiplying the base year relative (100) by the relative for the next succeeding year and continuing to multiply (compound) each year's relative by the previous year's index. Average earnings for the following occupations were used in computing the wage trends:

Office clerical (men and women):	Office clerical (men and women)—	Skilled maintenance (men):
Bookkeeping-machine operators, class B	Continued	Carpenters
Clerks, accounting, classes A and B	Secretaries	Electricians
Clerks, file, classes A, B, and C	Stenographers, general	Machinists
Clerks, order	Stenographers, senior	Mechanics
Clerks, payroll	Switchboard operators, classes A and B	Mechanics (automotive)
Comptometer operators	Tabulating-machine operators, class B	Painters
Keypunch operators, classes A and B	Typists, classes A and B	Pipefitters
Office boys and girls		Tool and die makers
	Industrial nurses (men and women):	Unskilled plant (men):
	Nurses, industrial (registered)	Janitors, porters, and cleaners
		Laborers, material handling

For office clerical workers and industrial nurses, the wage trends relate to regular weekly salaries for the normal workweek, exclusive of earnings for overtime. For plant worker groups, they measure changes in average straight-time hourly earnings, excluding premium pay for overtime and for work on weekends, holidays, and late shifts. The percentages are based on data for selected key occupations and include most of the numerically important jobs within each group.

Limitations of Data

The indexes and percentages of change, as measures of change in area averages, are influenced by: (1) general salary and wage changes, (2) merit or other increases in pay received by individual workers while in the same job, and (3) changes in average wages due to changes in the labor force resulting from labor turnover, force expansions, force reductions, and changes in the proportions of workers employed by establishments with different pay levels. Changes in the labor force can cause increases or decreases in the occupational averages without actual wage changes. It is conceivable that even though all establishments in an area gave wage increases, average wages may have declined because lower-paying establishments entered the area or expanded their work forces. Similarly, wages may have remained relatively constant, yet the averages for an area may have risen considerably because higher-paying establishments entered the area.

The use of constant employment weights eliminates the effect of changes in the proportion of workers represented in each job included in the data. The percentages of change reflect only changes in average pay for straight-time hours. They are not influenced by changes in standard work schedules, as such, or by premium pay for overtime. Where necessary, data were adjusted to remove from the indexes and percentages of change any significant effect caused by changes in the scope of the survey.

Table 2. Indexes of Standard Weekly Salaries and Straight-Time Hourly Earnings for Selected Occupational Groups in Boston, Mass., August 1969 and September 1968, and Percents of Increase for Selected Periods

Period	All industries				Manufacturing			
	Office clerical (men and women)	Industrial nurses (men and women)	Skilled maintenance trades (men)	Unskilled plant workers (men)	Office clerical (men and women)	Industrial nurses (men and women)	Skilled maintenance trades (men)	Unskilled plant workers (men)
	Indexes (October 1960=100)							
August 1969.....	146.8	160.8	142.2	136.9	143.0	159.6	139.5	135.0
September 1968.....	137.1	150.6	135.6	129.3	134.2	150.0	133.3	127.4
	Percents of increase							
September 1968 to August 1969.....	7.1	6.8	4.8	5.9	6.6	6.4	4.7	5.9
September 1967 to September 1968.....	6.1	6.4	7.0	6.5	6.0	7.8	6.8	4.8
October 1966 to September 1967.....	5.5	12.7	4.3	4.7	4.1	9.9	4.5	4.5
October 1965 to October 1966.....	3.8	3.3	4.5	4.6	3.6	3.7	4.6	6.0
October 1964 to October 1965.....	4.8	4.9	4.1	.3	3.2	4.4	3.7	1.6
October 1963 to October 1964.....	2.8	4.1	2.4	1.2	3.8	5.6	2.2	2.6
October 1962 to October 1963.....	2.9	2.6	3.1	2.8	2.9	2.1	3.1	2.4
October 1961 to October 1962.....	2.5	3.8	3.5	3.4	3.1	4.4	3.5	2.2
October 1960 to October 1961.....	3.9	4.5	2.2	2.8	3.3	4.0	1.1	.7
October 1959 to October 1960.....	4.9	4.1	4.7	4.6	4.0	4.1	4.8	4.6

A. Occupational Earnings

Table A-1. Office Occupations—Men and Women

(Average straight-time weekly hours and earnings for selected occupations studied on an area basis by industry division, Boston, Mass., August 1969)

Sex, occupation, and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Number of workers receiving straight-time weekly earnings of—																								
			Mean ²	Median ²	Middle range ²	\$ 55	\$ 60	\$ 65	\$ 70	\$ 75	\$ 80	\$ 85	\$ 90	\$ 95	\$ 100	\$ 110	\$ 120	\$ 130	\$ 140	\$ 150	\$ 160	\$ 170	\$ 180	\$ 190	\$ 200	\$ 210				
						and under	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MEN																														
CLERKS, ACCOUNTING, CLASS A -----	573	38.5	\$ 136.00	\$ 135.50	\$ 121.00-148.00	-	-	-	-	-	-	4	12	16	31	74	94	104	118	56	20	8	14	-	11	11				
MANUFACTURING -----	170	38.5	143.00	131.00	119.50-167.00	-	-	-	-	-	-	-	-	4	9	33	36	26	3	10	9	6	12	-	11	11				
NONMANUFACTURING -----	403	38.5	133.00	137.50	122.00-146.50	-	-	-	-	-	-	4	12	12	22	41	58	78	115	46	11	2	2	-	-	-				
WHOLESALE TRADE -----	62	39.0	131.50	136.00	123.50-144.00	-	-	-	-	-	-	-	-	-	2	11	15	16	6	12	-	-	-	-	-	-				
RETAIL TRADE -----	58	38.0	121.00	121.50	109.50-129.00	-	-	-	-	-	-	4	1	4	6	12	19	-	3	2	5	1	1	-	-	-				
FINANCE ³ -----	124	37.5	127.00	131.00	115.00-143.00	-	-	-	-	-	-	-	-	11	4	12	17	16	26	37	-	-	1	-	-	-				
CLERKS, ACCOUNTING, CLASS B -----	291	37.5	100.50	98.00	90.00-111.50	-	-	-	-	5	8	59	44	49	41	45	32	6	1	1	-	-	-	-	-	-				
NONMANUFACTURING -----	254	37.5	101.00	98.00	90.50-111.50	-	-	-	-	2	2	56	39	45	37	38	29	4	1	1	-	-	-	-	-	-				
WHOLESALE TRADE -----	131	37.0	102.50	105.50	92.00-114.00	-	-	-	-	-	-	28	12	24	19	21	26	1	-	-	-	-	-	-	-	-				
FINANCE ³ -----	87	38.0	97.00	93.50	89.00-106.00	-	-	-	-	1	27	23	12	-	-	12	12	-	-	-	-	-	-	-	-	-				
CLERKS, ORDER -----	507	39.0	137.50	137.50	118.00-153.50	-	-	-	-	-	-	6	16	8	23	90	65	71	52	69	61	21	1	6	10	8				
MANUFACTURING -----	142	38.0	133.00	130.00	116.00-149.50	-	-	-	-	-	-	-	3	4	7	24	34	13	23	21	7	1	1	2	2	-				
NONMANUFACTURING -----	365	39.5	139.50	138.50	118.00-160.50	-	-	-	-	-	-	6	13	4	16	66	31	58	29	48	54	20	-	4	8	8				
WHOLESALE TRADE -----	362	39.5	139.50	139.00	118.00-160.50	-	-	-	-	-	-	5	12	4	16	66	31	57	29	48	54	20	-	4	8	8				
CLERKS, PAYROLL -----	70	38.5	127.00	129.50	108.50-152.00	-	-	-	-	-	-	3	3	2	13	4	11	13	2	19	-	-	-	-	-	-				
OFFICE BOYS -----	758	38.0	82.50	81.00	76.00- 88.50	-	35	24	100	191	141	114	53	42	42	5	11	-	-	-	-	-	-	-	-	-				
MANUFACTURING -----	195	39.0	86.50	84.50	77.50- 93.50	-	-	5	32	25	40	28	26	4	21	3	11	-	-	-	-	-	-	-	-	-				
NONMANUFACTURING -----	563	37.5	81.00	80.00	75.50- 87.00	-	35	19	68	166	101	86	27	38	21	2	-	-	-	-	-	-	-	-	-	-				
PUBLIC UTILITIES ⁴ -----	41	38.5	81.00	79.00	76.50- 84.00	-	-	-	5	19	9	2	5	-	1	-	-	-	-	-	-	-	-	-	-	-				
WHOLESALE TRADE -----	56	38.5	81.50	80.00	74.50- 89.00	-	-	-	16	13	7	8	6	-	4	2	-	-	-	-	-	-	-	-	-	-				
RETAIL TRADE -----	63	37.0	80.00	80.50	77.00- 84.50	-	1	4	-	26	19	10	-	1	2	-	-	-	-	-	-	-	-	-	-	-				
FINANCE ³ -----	298	37.5	79.00	79.00	74.50- 85.00	-	34	10	35	87	58	44	10	18	2	-	-	-	-	-	-	-	-	-	-	-				
SERVICES -----	105	38.0	86.00	86.50	77.50- 96.50	-	-	5	12	21	8	22	6	19	12	-	-	-	-	-	-	-	-	-	-	-				
TABULATING-MACHINE OPERATORS, CLASS A -----	135	38.0	126.50	123.50	117.00-136.50	-	-	-	-	-	-	-	-	1	13	42	32	24	13	7	-	-	2	-	1					
MANUFACTURING -----	62	39.0	130.00	132.50	118.50-142.00	-	-	-	-	-	-	-	-	1	7	11	12	14	9	7	-	-	-	-	1					
NONMANUFACTURING -----	73	37.0	124.00	120.00	116.00-129.50	-	-	-	-	-	-	-	-	-	6	31	20	10	4	-	-	-	2	-	-					
FINANCE ³ -----	62	36.5	120.50	119.00	115.50-127.00	-	-	-	-	-	-	-	-	-	6	30	18	7	1	-	-	-	-	-	-					
TABULATING-MACHINE OPERATORS, CLASS B -----	126	38.5	113.00	110.00	101.50-120.50	-	-	-	-	-	-	7	3	15	38	31	15	4	5	2	4	2	-	-	-					
MANUFACTURING -----	57	39.5	112.50	112.00	103.00-118.50	-	-	-	-	-	-	3	2	2	19	22	4	-	2	-	1	2	-	-	-					
NONMANUFACTURING -----	69	38.0	113.50	109.00	100.00-125.50	-	-	-	-	-	-	4	1	13	19	9	11	4	3	2	3	-	-	-	-					
TABULATING-MACHINE OPERATORS, CLASS C -----	67	37.5	94.00	92.50	86.50-101.50	-	-	-	1	3	8	18	8	10	12	5	-	-	1	1	-	-	-	-	-					
NONMANUFACTURING -----	57	37.5	91.00	89.50	85.50- 98.00	-	-	-	1	3	8	18	8	9	9	-	-	-	1	-	-	-	-	-	-					
WOMEN																														
BILLERS, MACHINE (BILLING MACHINE) -----	283	39.0	92.00	92.50	83.50-101.00	-	8	-	8	25	43	29	59	35	53	21	2	-	-	-	-	-	-	-	-	-				
NONMANUFACTURING -----	254	39.0	91.00	91.50	83.50- 98.50	-	8	-	8	19	43	29	59	35	36	17	-	-	-	-	-	-	-	-	-	-				
WHOLESALE TRADE -----	169	39.0	94.00	94.00	86.00-100.50	-	-	-	-	11	28	16	40	30	28	16	-	-	-	-	-	-	-	-	-	-				
RETAIL TRADE -----	69	38.0	81.50	85.00	76.00- 91.50	-	8	-	8	8	11	11	19	4	-	-	-	-	-	-	-	-	-	-	-	-				
BILLERS, MACHINE (BOOKKEEPING MACHINE) -----	183	37.5	93.50	92.50	76.50-107.00	-	3	11	27	17	14	6	30	8	29	13	10	5	10	-	-	-	-	-	-	-				
NONMANUFACTURING -----	155	37.5	91.00	91.00	74.50-105.50	-	3	11	27	17	8	6	30	2	23	13	5	-	10	-	-	-	-	-	-	-				
RETAIL TRADE -----	90	38.0	80.00	76.50	71.50- 90.50	-	3	11	27	15	6	4	18	1	1	3	1	-	-	-	-	-	-	-	-	-				

See footnotes at end of table.

Table A-1. Office Occupations—Men and Women—Continued

(Average straight-time weekly hours and earnings for selected occupations studied on an area basis by industry division, Boston, Mass., August 1969)

Sex, occupation, and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Number of workers receiving straight-time weekly earnings of—																						
			Mean ²	Median ²	Middle range ²	\$ 55	\$ 60	\$ 65	\$ 70	\$ 75	\$ 80	\$ 85	\$ 90	\$ 95	\$ 100	\$ 110	\$ 120	\$ 130	\$ 140	\$ 150	\$ 160	\$ 170	\$ 180	\$ 190	\$ 200	\$ 210		
						and under	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WOMEN - CONTINUED																												
TABULATING-MACHINE OPERATORS, CLASS B -----	75	38.0	\$ 113.00	\$ 112.00	\$ 101.00-125.50	-	-	-	-	2	-	2	3	10	16	18	16	4	2	-	-	2	-	-	-	-	-	-
NONMANUFACTURING -----	55	37.5	113.00	112.50	102.00-126.00	-	-	-	-	2	-	2	1	7	10	13	16	2	1	-	-	1	-	-	-	-	-	-
TRANSCRIBING-MACHINE OPERATORS, GENERAL -----	413	38.0	98.00	98.50	89.50-107.00	-	-	6	6	7	32	56	67	49	134	23	4	-	-	-	-	-	-	-	-	-	-	
MANUFACTURING -----	156	39.5	101.00	104.00	92.50-108.50	-	-	6	-	9	14	21	15	68	-	1	-	-	-	-	-	-	-	-	-	-	-	
NONMANUFACTURING -----	257	37.5	96.50	95.50	88.50-104.50	-	-	-	6	7	23	42	46	34	66	23	3	-	-	-	-	-	-	-	-	-	-	
FINANCE ³ -----	168	37.0	95.00	94.50	89.00-102.00	-	-	-	4	4	6	34	42	30	26	21	1	-	-	-	-	-	-	-	-	-	-	
TYPISTS, CLASS A -----	1,599	38.0	96.50	96.00	87.50-103.00	-	-	-	12	68	176	263	231	320	319	92	72	34	12	-	-	-	-	-	-	-	-	
MANUFACTURING -----	473	39.5	93.50	95.50	87.50-100.00	-	-	-	4	9	67	78	71	132	91	13	8	-	-	-	-	-	-	-	-	-	-	
NONMANUFACTURING -----	1,126	37.5	97.50	96.00	88.00-104.50	-	-	-	8	59	109	185	160	188	228	79	64	34	12	-	-	-	-	-	-	-	-	
PUBLIC UTILITIES ⁴ -----	119	38.5	97.50	98.00	81.00-107.50	-	-	-	-	28	9	10	-	22	22	12	7	9	-	-	-	-	-	-	-	-	-	
WHOLESALE TRADE -----	92	39.0	104.00	102.50	95.50-117.50	-	-	-	-	2	7	11	1	18	30	-	19	4	-	-	-	-	-	-	-	-	-	
FINANCE ³ -----	472	37.0	92.00	91.00	86.00-98.00	-	-	-	5	21	68	118	98	75	52	25	10	-	-	-	-	-	-	-	-	-	-	
SERVICES -----	390	38.0	103.00	101.00	93.00-111.00	-	-	-	-	4	20	43	50	67	105	40	28	21	12	-	-	-	-	-	-	-	-	
TYPISTS, CLASS B -----	2,777	37.5	86.00	86.00	79.50-92.50	-	12	47	156	544	522	585	412	203	237	39	19	1	-	-	-	-	-	-	-	-	-	
MANUFACTURING -----	602	39.0	90.00	90.00	84.00-98.00	-	-	-	8	59	111	129	100	82	86	25	1	1	-	-	-	-	-	-	-	-	-	
NONMANUFACTURING -----	2,175	37.5	85.00	85.00	78.50-91.00	-	12	47	148	485	411	456	312	121	151	14	18	-	-	-	-	-	-	-	-	-	-	
PUBLIC UTILITIES ⁴ -----	71	38.5	102.00	105.50	86.00-110.00	-	-	-	3	9	5	4	1	4	28	1	16	-	-	-	-	-	-	-	-	-	-	
WHOLESALE TRADE -----	271	38.5	87.50	88.50	84.50-92.50	-	-	-	12	3	59	93	70	21	10	3	-	-	-	-	-	-	-	-	-	-	-	
RETAIL TRADE -----	143	39.0	84.50	87.00	79.50-93.00	-	-	3	8	27	19	42	16	19	9	-	-	-	-	-	-	-	-	-	-	-	-	
FINANCE ³ -----	1,508	36.5	83.50	82.50	77.50-89.00	-	12	44	125	430	270	295	163	59	98	10	2	-	-	-	-	-	-	-	-	-	-	
SERVICES -----	182	39.0	87.50	89.00	82.50-93.50	-	-	-	-	16	58	22	62	18	6	-	-	-	-	-	-	-	-	-	-	-	-	

¹ Standard hours reflect the workweek for which employees receive their regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates), and the earnings correspond to these weekly hours.

² The mean is computed for each job by totaling the earnings of all workers and dividing by the number of workers. The median designates position—half of the employees surveyed receive more than the rate shown; half receive less than the rate shown. The middle range is defined by 2 rates of pay; a fourth of the workers earn less than the lower of these rates and a fourth earn more than the higher rate.

³ Finance, insurance, and real estate.

⁴ Transportation, communication, and other public utilities.

⁵ May include workers other than those presented separately.

Table A-1a. Office Occupations—Large Establishments—Men and Women—Continued

(Average straight-time weekly hours and earnings for selected occupations studied in establishments employing 500 workers or more by industry division, Boston, Mass., August 1969)

Sex, occupation, and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Number of workers receiving straight-time weekly earnings of—																					
			Mean ²	Median ²	Middle range ²	\$ 60	\$ 65	\$ 70	\$ 75	\$ 80	\$ 85	\$ 90	\$ 95	\$ 100	\$ 105	\$ 110	\$ 115	\$ 120	\$ 125	\$ 130	\$ 140	\$ 150	\$ 160	\$ 170	\$ 180	\$ 190	
						and under	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WOMEN - CONTINUED																											
SECRETARIES ⁵ - CONTINUED																											
SECRETARIES, CLASS B -----	1,209	38.5	\$ 140.00	\$ 142.00	\$ 128.00-152.00	2	-	-	2	4	1	2	22	16	14	40	46	88	106	204	317	171	111	32	17	14	
MANUFACTURING -----	678	39.5	136.00	138.00	126.50-148.00	-	-	-	-	-	-	12	8	8	23	31	63	83	129	198	98	17	6	1	1		
NONMANUFACTURING -----	531	38.0	144.50	146.00	133.50-161.00	2	-	-	2	4	1	2	10	8	6	17	15	25	23	75	119	73	94	26	16	13	
RETAIL TRADE -----	71	36.5	112.50	113.50	99.00-130.00	2	-	-	2	4	1	2	9	5	3	11	7	6	2	4	10	3	-	-	-	-	
FINANCE ⁴ -----	167	37.0	142.00	144.00	132.50-154.00	-	-	-	-	-	-	1	3	2	4	3	14	9	27	52	31	16	4	1	-		
SERVICES -----	109	40.0	147.50	145.50	137.00-154.00	-	-	-	-	-	-	-	-	-	-	1	3	5	29	31	17	13	7	-	3		
SECRETARIES, CLASS C -----	1,937	38.5	123.50	124.00	114.50-132.50	-	-	1	1	4	6	31	41	77	141	201	234	301	235	452	139	45	15	7	5	1	
MANUFACTURING -----	1,154	39.5	122.50	123.50	115.00-131.50	-	-	-	-	-	4	20	13	34	85	126	159	192	162	272	64	12	3	3	4	1	
NONMANUFACTURING -----	783	38.0	124.00	124.50	113.50-136.00	-	-	1	1	4	2	11	28	43	56	75	75	109	73	180	75	33	12	4	1	-	
PUBLIC UTILITIES ³ -----	127	38.5	129.50	129.00	120.50-134.00	-	-	-	-	-	-	5	1	2	4	6	10	30	8	37	6	8	7	3	-	-	
RETAIL TRADE -----	52	38.5	111.00	113.00	102.00-122.50	-	-	1	1	2	1	2	4	5	7	6	8	6	1	7	-	-	-	-	1	-	
FINANCE ⁴ -----	417	36.5	123.00	123.50	112.00-135.50	-	-	-	2	1	4	18	24	35	48	43	48	46	89	40	13	5	1	-	-		
SERVICES -----	161	40.0	126.50	127.50	117.00-138.00	-	-	-	-	-	-	3	10	9	13	14	24	16	44	18	10	-	-	-	-		
SECRETARIES, CLASS D -----	2,178	38.5	110.50	109.50	102.50-119.50	-	1	-	9	20	52	92	221	278	468	310	215	284	97	96	21	9	2	3	-	-	
MANUFACTURING -----	1,180	39.5	111.50	109.50	105.00-119.50	-	-	-	1	19	30	100	134	344	162	108	192	29	38	14	6	1	2	-	-		
NONMANUFACTURING -----	998	37.5	109.00	109.50	100.00-119.00	-	1	-	9	19	33	62	121	144	124	148	107	92	68	58	7	3	1	1	-	-	
PUBLIC UTILITIES ³ -----	27	40.0	131.50	128.50	116.50-149.00	-	-	-	-	-	-	-	-	-	3	2	7	-	3	2	5	3	1	1	-	-	
RETAIL TRADE -----	101	37.5	105.50	104.00	97.50-115.00	-	-	-	1	3	14	14	25	7	13	4	8	9	3	-	-	-	-	-	-		
FINANCE ⁴ -----	502	36.5	106.00	105.00	97.00-116.50	-	1	-	9	17	26	40	76	83	57	59	33	44	33	22	2	-	-	-	-	-	
SERVICES -----	294	40.0	113.00	113.00	104.50-122.00	-	-	-	1	4	8	29	36	37	54	39	34	23	29	-	-	-	-	-	-		
STENOGRAPHERS, GENERAL -----	1,059	38.5	99.00	97.50	91.50-104.00	-	-	6	29	87	99	144	338	116	69	59	32	16	33	19	12	-	-	-	-	-	
MANUFACTURING -----	621	39.5	100.00	98.00	95.50-103.00	-	-	1	6	19	40	63	293	78	39	35	21	7	9	9	1	-	-	-	-	-	
NONMANUFACTURING -----	438	38.0	97.50	94.00	86.00-106.50	-	-	5	23	68	59	81	45	38	30	24	11	9	24	10	11	-	-	-	-	-	
PUBLIC UTILITIES ³ -----	115	38.5	105.00	102.00	84.00-127.00	-	-	-	10	24	9	8	5	5	6	11	1	1	17	7	11	-	-	-	-	-	
FINANCE ⁴ -----	135	36.5	94.50	92.00	87.50-101.00	-	-	-	6	14	30	41	10	6	9	6	6	4	1	2	-	-	-	-	-	-	
SERVICES -----	119	39.5	97.00	97.50	90.00-104.50	-	-	-	1	13	15	22	18	23	13	6	3	3	2	-	-	-	-	-	-	-	
STENOGRAPHERS, SENIOR -----	701	38.0	103.00	100.50	95.00-109.50	-	-	-	1	13	60	106	154	129	67	56	34	29	25	15	9	1	1	1	-	-	
MANUFACTURING -----	325	39.0	104.00	102.50	96.00-112.50	-	-	-	1	4	16	45	69	60	33	34	22	13	15	6	6	1	-	-	-	-	
NONMANUFACTURING -----	376	37.0	101.50	99.50	93.50-107.00	-	-	-	9	44	61	85	69	34	22	12	16	10	9	3	-	1	1	-	-		
FINANCE ⁴ -----	202	36.5	99.50	99.00	94.50-104.50	-	-	-	2	15	39	58	42	22	10	5	4	2	2	2	1	-	-	-	-	-	
SERVICES -----	64	39.5	106.00	104.00	99.00-115.00	-	-	-	-	1	7	10	18	8	5	5	6	2	2	2	-	-	-	-	-	-	
SWITCHBOARD OPERATORS, CLASS A -----	377	38.5	104.50	104.00	95.00-113.50	-	2	1	5	15	37	34	43	65	60	31	26	27	5	17	8	1	-	-	-	-	
MANUFACTURING -----	201	39.0	105.00	103.00	95.50-112.00	-	-	-	2	6	14	24	31	38	30	16	8	10	3	11	8	-	-	-	-	-	
NONMANUFACTURING -----	176	38.5	103.50	105.00	93.00-115.00	-	2	1	3	9	23	10	12	27	30	15	18	17	2	6	-	1	-	-	-	-	
PUBLIC UTILITIES ³ -----	40	40.0	113.00	114.50	103.50-122.50	-	-	-	-	-	-	-	14	2	5	6	7	1	5	-	-	-	-	-	-		
RETAIL TRADE -----	57	38.5	99.50	105.50	87.50-110.00	-	2	-	2	5	11	2	2	4	16	5	3	3	1	1	-	-	-	-	-	-	
SWITCHBOARD OPERATORS, CLASS B -----	109	38.5	91.00	93.00	81.00-102.00	2	-	17	8	3	12	20	14	15	15	2	1	-	-	-	-	-	-	-	-	-	
NONMANUFACTURING -----	73	38.0	89.00	91.00	75.00-103.00	2	-	17	7	3	6	8	8	7	12	2	1	-	-	-	-	-	-	-	-	-	
SWITCHBOARD OPERATOR-RECEPTIONISTS- MANUFACTURING -----	105	38.5	95.00	97.00	89.00-103.50	-	-	2	6	11	9	16	22	20	12	1	5	1	-	-	-	-	-	-	-	-	
MANUFACTURING -----	63	39.0	99.00	99.50	95.50-104.50	-	-	-	-	-	3	11	20	16	7	1	5	-	-	-	-	-	-	-	-	-	
TABULATING-MACHINE OPERATORS, CLASS B -----	63	38.5	113.50	110.50	100.50-126.50	-	-	-	-	2	3	10	9	7	9	3	2	11	4	1	-	-	2	-	-		
TRANSCRIBING-MACHINE OPERATORS, GENERAL -----	163	38.0	96.50	94.50	89.00-104.50	-	-	4	4	15	24	37	19	22	15	5	7	4	3	4	-	-	-	-	-	-	
MANUFACTURING -----	56	39.5	93.50	92.50	88.50-100.50	-	-	-	-	9	8	21	4	7	6	-	-	-	-	1	-	-	-	-	-	-	
NONMANUFACTURING -----	107	37.5	98.50	97.50	89.00-108.00	-	-	4	4	6	16	15	15	15	9	5	7	4	3	3	-	-	-	-	-	-	
FINANCE ⁴ -----	98	37.0	96.00	96.00	88.50-104.50	-	-	4	4	6	16	16	15	15	9	5	7	1	-	-	-	-	-	-	-	-	

See footnotes at end of table.

Table A-2. Professional and Technical Occupations—Men and Women

(Average straight-time weekly hours and earnings for selected occupations studied on an area basis by industry division, Boston, Mass., August 1969)

Sex, occupation, and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Number of workers receiving straight-time weekly earnings of—																							
			Mean ²	Median ²	Middle range ²	\$ 80	\$ 90	\$ 100	\$ 110	\$ 120	\$ 130	\$ 140	\$ 150	\$ 160	\$ 170	\$ 180	\$ 190	\$ 200	\$ 210	\$ 220	\$ 230	\$ 240	\$ 250	\$ 260	\$ 270	\$ 280			
						and under																							
MEN																													
COMPUTER OPERATORS, CLASS A -----	179	39.0	\$ 146.50	\$ 144.50	\$ 134.00-160.00	-	-	-	5	23	45	35	26	27	11	4	1	1	1	-	-	-	-	-	-	-	-		
MANUFACTURING -----	70	40.0	151.50	155.50	141.50-162.50	-	-	-	-	4	12	17	11	18	7	-	-	-	1	-	-	-	-	-	-	-			
NONMANUFACTURING -----	105	38.0	143.00	139.50	131.50-154.00	-	-	-	5	19	33	18	15	9	4	4	1	1	-	-	-	-	-	-	-	-			
COMPUTER OPERATORS, CLASS B -----	552	39.0	134.00	131.50	118.00-149.00	-	6	45	114	93	82	91	51	40	28	2	-	-	-	-	-	-	-	-	-	-			
MANUFACTURING -----	250	39.5	125.50	123.50	114.00-134.50	-	-	29	76	59	43	18	21	-	2	2	-	-	-	-	-	-	-	-	-	-			
NONMANUFACTURING -----	302	38.5	141.00	145.50	126.00-157.50	-	6	16	38	34	39	73	30	40	26	-	-	-	-	-	-	-	-	-	-	-			
FINANCE ³ -----	99	36.5	132.50	131.50	116.00-155.00	-	2	11	27	8	13	10	21	5	2	-	-	-	-	-	-	-	-	-	-	-			
COMPUTER OPERATORS, CLASS C -----	239	37.5	116.00	114.50	103.50-128.00	-	43	49	51	50	23	17	5	1	-	-	-	-	-	-	-	-	-	-	-	-			
MANUFACTURING -----	191	37.0	116.50	116.00	102.50-129.00	-	38	36	36	40	22	16	2	1	-	-	-	-	-	-	-	-	-	-	-	-			
RETAIL TRADE -----	56	37.5	122.50	127.00	109.50-133.00	-	6	9	5	20	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
FINANCE ³ -----	107	36.5	113.50	111.50	97.50-128.50	-	28	22	20	14	12	8	2	1	-	-	-	-	-	-	-	-	-	-	-	-			
COMPUTER PROGRAMERS, BUSINESS, CLASS A -----	383	39.0	223.50	223.00	205.00-246.50	-	-	-	-	-	-	14	11	16	14	31	21	74	24	65	29	30	38	1	15				
MANUFACTURING -----	104	39.5	214.50	219.50	206.00-233.00	-	-	-	-	-	-	-	10	11	-	1	5	28	13	18	11	5	1	1	-				
NONMANUFACTURING -----	279	39.0	226.50	231.00	209.00-251.50	-	-	-	-	-	-	14	1	5	14	30	16	46	11	47	18	25	37	-	15				
FINANCE ³ -----	76	36.5	208.00	211.00	196.50-218.00	-	-	-	-	-	-	-	-	1	9	12	14	28	5	3	4	-	-	-	-				
COMPUTER PROGRAMERS, BUSINESS, CLASS B -----	413	38.5	180.00	180.00	167.50-193.00	-	-	-	-	6	14	12	35	50	91	88	34	40	25	16	1	1	-	-	-				
MANUFACTURING -----	157	39.0	180.00	182.00	170.00-193.00	-	-	-	-	6	5	-	10	18	25	49	17	15	9	3	-	-	-	-	-				
NONMANUFACTURING -----	256	38.5	179.50	175.50	165.50-193.00	-	-	-	-	-	9	12	25	32	66	39	17	25	16	13	1	1	-	-	-				
FINANCE ³ -----	109	37.0	169.00	170.00	157.00-182.00	-	-	-	-	-	5	10	17	23	24	13	11	6	-	-	-	-	-	-	-				
COMPUTER PROGRAMERS, BUSINESS, CLASS C -----	208	38.0	150.50	148.50	140.50-162.50	2	1	-	-	9	37	61	32	39	21	5	1	-	-	-	-	-	-	-	-				
MANUFACTURING -----	70	39.5	156.00	159.00	149.00-165.00	2	-	-	-	-	4	13	18	20	12	1	-	-	-	-	-	-	-	-	-				
NONMANUFACTURING -----	138	37.5	148.00	144.00	138.00-159.50	-	1	-	-	9	33	48	14	19	9	4	1	-	-	-	-	-	-	-	-				
FINANCE ³ -----	102	37.0	148.00	144.00	138.00-160.50	-	-	-	-	4	28	34	10	17	7	2	-	-	-	-	-	-	-	-	-				
COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS A -----	325	38.5	244.00	244.00	221.50-262.50	-	-	-	-	-	3	-	1	5	6	10	10	40	26	53	37	46	25	13	50				
MANUFACTURING -----	109	39.5	253.50	249.00	232.00-274.00	-	-	-	-	-	-	-	-	-	-	4	2	8	7	23	13	11	6	22					
NONMANUFACTURING -----	216	38.0	239.50	237.50	214.50-259.00	-	-	-	-	-	3	-	1	5	6	8	32	19	30	24	33	14	7	28					
FINANCE ³ -----	86	36.5	235.50	236.00	221.50-257.00	-	-	-	-	-	-	-	1	1	2	5	4	6	11	16	11	16	6	4	3				
COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS B -----	336	38.5	210.00	204.50	191.00-228.00	-	-	-	-	4	-	5	15	19	37	69	35	50	21	31	11	17	4	9	9				
MANUFACTURING -----	129	39.5	223.00	218.50	207.50-234.00	-	-	-	-	-	-	-	5	3	15	12	38	12	18	6	6	2	5	7					
NONMANUFACTURING -----	207	38.0	211.50	197.50	185.00-214.00	-	-	-	-	4	-	5	15	14	34	54	23	12	9	13	5	11	2	4	2				
FINANCE ³ -----	71	37.0	200.00	196.50	181.50-220.00	-	-	-	-	-	-	2	4	10	14	10	11	3	1	11	5	-	-	-	-				
COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS C -----	104	39.0	175.00	168.00	143.00-204.00	-	-	-	1	1	17	13	12	11	8	7	8	3	10	4	5	1	3	-	-				
NONMANUFACTURING -----	66	38.0	157.00	154.00	139.00-170.50	-	-	-	1	1	17	13	10	8	4	5	5	-	2	-	-	-	-	-	-				
DRAFTSMEN, CLASS A -----	1,152	39.5	198.00	196.00	181.50-213.00	-	-	-	-	2	4	17	33	103	104	222	174	157	108	44	67	100	13	1	3	-			
MANUFACTURING -----	534	40.0	188.00	188.50	175.50-201.00	-	-	-	-	2	4	8	8	57	69	145	101	68	70	2	-	-	-	-	-				
NONMANUFACTURING -----	618	39.0	206.50	206.00	184.50-232.50	-	-	-	-	-	9	25	46	35	77	73	89	38	42	67	100	13	1	3	-				
SERVICES -----	552	39.0	206.50	206.00	183.00-233.50	-	-	-	-	-	8	25	45	35	76	51	66	28	35	66	100	13	1	3	-				
DRAFTSMEN, CLASS B -----	1,149	39.5	160.00	162.50	147.50-179.00	42	12	9	30	50	64	108	174	269	110	122	86	42	12	6	13	-	-	-	-				
MANUFACTURING -----	579	39.5	160.00	161.50	149.00-173.50	-	-	1	22	32	41	56	103	137	79	58	33	3	3	-	11	-	-	-	-				
NONMANUFACTURING -----	570	39.0	160.00	164.50	146.50-182.50	42	12	8	8	18	23	52	71	132	31	64	53	39	9	6	2	-	-	-	-				
SERVICES -----	484	39.0	158.00	164.50	143.50-182.50	42	12	8	6	18	21	49	60	93	27	63	33	38	7	5	2	-	-	-	-				

See footnotes at end of table.

Table A-2. Professional and Technical Occupations—Men and Women—Continued

(Average straight-time weekly hours and earnings for selected occupations studied on an area basis by industry division, Boston, Mass., August 1969)

Sex, occupation, and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Number of workers receiving straight-time weekly earnings of—																						
			Mean ²	Median ²	Middle range ²	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
						80 and under	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280 and over		
MEN - CONTINUED																												
DRAFTSMEN, CLASS C -----	685	39.5	\$ 127.00	\$ 128.50	\$ 112.50-140.50	13	60	70	105	123	141	55	95	3	10	10	-	-	-	-	-	-	-	-	-	-	-	
MANUFACTURING -----	427	40.0	124.50	127.00	112.00-138.00	4	28	57	84	81	96	32	38	3	2	2	-	-	-	-	-	-	-	-	-	-	-	
NONMANUFACTURING -----	258	39.0	130.50	131.50	116.50-151.00	9	32	13	21	42	45	23	57	-	8	8	-	-	-	-	-	-	-	-	-	-	-	
PUBLIC UTILITIES ⁴ -----	28	40.0	128.50	128.00	117.50-139.00	-	-	2	8	7	6	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SERVICES -----	224	39.0	131.00	132.00	116.50-152.00	7	32	11	11	35	39	17	56	-	8	8	-	-	-	-	-	-	-	-	-	-	-	
DRAFTSMEN-TRACERS -----	150	39.0	98.50	95.00	92.00-111.00	9	83	15	35	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MANUFACTURING -----	90	40.0	98.50	96.00	92.50-110.50	-	54	13	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NONMANUFACTURING -----	60	38.0	99.00	94.50	91.50-112.50	9	29	2	12	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SERVICES -----	60	38.0	99.00	94.50	91.50-112.50	9	29	2	12	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
WOMEN																												
COMPUTER PROGRAMERS, BUSINESS, CLASS A -----	53	39.5	212.50	218.50	184.00-246.50	-	-	-	-	3	3	-	-	1	4	4	-	-	16	4	1	13	3	1	-	-	-	
COMPUTER PROGRAMERS, BUSINESS, CLASS B -----	183	37.5	163.00	168.00	142.50-189.50	12	12	-	1	3	8	27	12	24	22	18	12	15	3	12	2	-	-	-	-	-	-	
NONMANUFACTURING -----	155	37.5	161.00	167.00	141.00-190.00	12	12	-	-	3	7	26	7	21	18	11	9	15	-	12	2	-	-	-	-	-	-	
FINANCE ³ -----	109	36.5	148.50	154.00	140.00-175.00	12	12	-	-	-	3	25	7	9	18	11	9	3	-	-	-	-	-	-	-	-	-	
COMPUTER PROGRAMERS, BUSINESS, CLASS C -----	137	38.0	146.50	146.50	132.50-160.50	-	-	-	2	24	21	35	20	25	7	1	1	1	-	-	-	-	-	-	-	-	-	
NONMANUFACTURING -----	125	37.5	145.50	146.00	131.50-160.00	-	-	-	2	24	21	30	17	23	7	-	-	1	-	-	-	-	-	-	-	-	-	
DRAFTSMEN, CLASS C -----	52	38.5	134.00	127.50	111.00-151.50	-	5	7	7	8	1	10	6	-	-	-	8	-	-	-	-	-	-	-	-	-	-	
NURSES, INDUSTRIAL (REGISTERED) ---	240	39.5	142.00	140.50	132.50-153.00	-	6	1	8	34	69	47	55	7	5	2	6	-	-	-	-	-	-	-	-	-	-	
MANUFACTURING -----	171	39.5	140.50	139.00	130.00-151.50	-	6	1	6	30	50	31	35	5	1	-	6	-	-	-	-	-	-	-	-	-	-	
NONMANUFACTURING -----	69	38.5	145.50	145.00	137.00-155.50	-	-	-	2	4	19	16	20	2	4	2	-	-	-	-	-	-	-	-	-	-	-	

¹ Standard hours reflect the workweek for which employees receive their regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates), and the earnings correspond to these weekly hours.

² For definition of terms, see footnote 2, table A-1.

³ Finance, insurance, and real estate.

⁴ Transportation, communication, and other public utilities.

Table A-2a. Professional and Technical Occupations—Large Establishments—Men and Women

(Average straight-time weekly hours and earnings for selected occupations studied in establishments employing 500 workers or more by industry division, Boston, Mass., August 1969)

Sex, occupation, and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Number of workers receiving straight-time weekly earnings of—																							
			Mean ²	Median ²	Middle range ²	\$ 80	\$ 90	\$ 100	\$ 110	\$ 120	\$ 130	\$ 140	\$ 150	\$ 160	\$ 170	\$ 180	\$ 190	\$ 200	\$ 210	\$ 220	\$ 230	\$ 240	\$ 250	\$ 260	\$ 270	\$ 280			
						and under																							
MEN																													
COMPUTER OPERATORS, CLASS A -----	145	38.5	\$ 147.50	\$ 146.00	\$ 134.00-161.50	-	-	-	5	20	36	23	20	23	11	4	1	1	1	-	-	-	-	-	-	-	-		
MANUFACTURING -----	70	40.0	151.50	155.50	141.50-162.50	-	-	-	-	4	12	17	11	18	7	-	-	1	-	-	-	-	-	-	-	-			
NONMANUFACTURING -----	75	37.5	143.50	138.00	128.50-157.50	-	-	-	5	16	24	6	9	5	4	4	1	1	-	-	-	-	-	-	-	-			
COMPUTER OPERATORS, CLASS B -----	369	39.0	128.00	126.00	114.00-140.50	-	6	45	95	67	62	35	43	10	4	2	-	-	-	-	-	-	-	-	-	-			
MANUFACTURING -----	234	39.5	125.00	123.00	113.50-134.50	-	-	29	72	51	43	18	17	-	2	2	-	-	-	-	-	-	-	-	-	-			
NONMANUFACTURING -----	135	37.5	133.00	134.00	115.50-153.00	-	6	16	23	16	19	17	26	10	2	-	-	-	-	-	-	-	-	-	-	-			
FINANCE ³ -----	86	36.5	135.00	137.00	115.50-156.00	-	2	11	16	8	11	10	21	5	2	-	-	-	-	-	-	-	-	-	-	-			
COMPUTER OPERATORS, CLASS C -----	174	37.5	117.50	115.50	101.00-130.50	-	41	25	31	33	21	17	5	1	-	-	-	-	-	-	-	-	-	-	-	-			
MANUFACTURING -----	128	37.0	118.00	119.00	97.50-135.00	-	36	14	16	23	20	16	2	1	-	-	-	-	-	-	-	-	-	-	-	-			
FINANCE ³ -----	77	36.5	116.50	117.00	94.00-136.00	-	28	3	11	12	12	6	2	1	-	-	-	-	-	-	-	-	-	-	-	-			
COMPUTER PROGRAMERS, BUSINESS, CLASS A -----	174	39.0	214.00	217.50	196.50-232.50	-	-	-	-	-	-	-	-	11	12	8	17	10	41	21	25	17	6	2	1	2			
MANUFACTURING -----	100	39.5	216.00	220.00	211.00-233.50	-	-	-	-	-	-	-	-	10	9	-	1	3	28	13	18	11	5	1	1	-			
NONMANUFACTURING -----	74	37.5	211.50	211.50	193.50-230.00	-	-	-	-	-	-	-	-	1	3	8	16	7	13	8	8	6	1	1	-	2			
COMPUTER PROGRAMERS, BUSINESS, CLASS B -----	296	38.5	178.00	180.50	164.50-191.00	-	-	-	-	-	11	12	32	45	43	76	34	24	13	4	1	1	-	-	-	-			
MANUFACTURING -----	151	39.0	182.50	182.00	172.00-193.50	-	-	-	-	-	5	-	10	18	25	49	17	15	5	3	-	-	-	-	-	-			
NONMANUFACTURING -----	145	37.5	173.00	172.00	158.00-187.00	-	-	-	-	-	6	12	22	27	18	27	17	9	4	1	1	1	-	-	-	-			
FINANCE ³ -----	97	37.0	168.50	168.00	155.50-183.00	-	-	-	-	-	5	10	17	21	14	13	11	6	-	-	-	-	-	-	-	-			
COMPUTER PROGRAMERS, BUSINESS, CLASS C -----	166	38.0	154.00	154.00	143.00-164.50	-	1	-	-	6	16	49	30	37	21	5	1	-	-	-	-	-	-	-	-	-			
MANUFACTURING -----	68	39.5	158.00	159.50	150.00-165.00	-	-	-	-	-	4	13	18	20	12	1	-	-	-	-	-	-	-	-	-	-			
NONMANUFACTURING -----	98	37.0	151.00	148.00	141.00-164.00	-	1	-	-	6	12	36	12	17	9	4	1	-	-	-	-	-	-	-	-	-			
FINANCE ³ -----	84	37.0	150.50	147.50	141.50-163.00	-	-	-	-	4	10	34	10	17	7	2	-	-	-	-	-	-	-	-	-	-			
COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS A -----	206	38.5	248.50	248.00	229.50-268.50	-	-	-	-	-	-	-	-	1	2	6	10	6	16	11	32	28	23	23	13	35			
MANUFACTURING -----	109	35.5	253.50	249.00	232.00-274.00	-	-	-	-	-	-	-	-	-	-	4	2	8	7	23	13	13	11	6	22				
NONMANUFACTURING -----	97	37.5	243.00	247.50	216.00-265.50	-	-	-	-	-	-	-	-	1	2	6	6	4	8	4	9	15	10	12	7	13			
FINANCE ³ -----	59	37.0	235.00	243.50	212.00-258.50	-	-	-	-	-	-	-	-	1	1	2	5	4	6	2	7	11	7	6	4	3			
COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS B -----	258	38.5	212.50	210.50	192.50-231.50	-	-	-	-	-	-	5	11	19	20	40	32	50	11	31	11	6	4	9	9				
MANUFACTURING -----	123	39.5	223.50	218.00	206.00-234.50	-	-	-	-	-	-	-	-	5	3	15	12	38	6	18	6	6	2	5	7				
NONMANUFACTURING -----	135	37.5	202.50	198.50	182.00-216.50	-	-	-	-	-	-	5	11	14	17	25	20	12	5	13	5	-	2	4	2				
FINANCE ³ -----	71	37.0	200.00	196.50	181.50-220.00	-	-	-	-	-	-	2	4	10	14	10	11	3	1	11	5	-	-	-	-				
COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS C -----	70	38.5	187.00	184.50	160.00-216.00	-	-	-	1	1	5	1	10	6	8	4	8	3	10	4	9	1	3	-	-	-			
DRAFTSMEN, CLASS A -----	648	40.0	190.00	189.00	178.50-204.00	-	-	-	-	2	4	17	27	49	71	171	112	77	89	11	9	3	2	1	3	-			
MANUFACTURING -----	474	40.0	189.50	189.00	181.00-203.00	-	-	-	-	2	4	8	8	34	54	145	73	68	70	2	-	-	-	-	-	-			
NONMANUFACTURING -----	174	39.5	191.50	191.00	170.50-211.50	-	-	-	-	-	9	19	15	17	26	33	9	19	9	9	3	2	1	3	-				
SERVICES -----	131	39.5	187.00	181.50	163.00-203.50	-	-	-	-	-	8	19	15	17	25	11	8	9	2	8	3	2	1	3	-				
DRAFTSMEN, CLASS B -----	658	39.5	165.00	163.50	152.00-177.00	-	-	3	7	9	40	81	96	179	92	64	59	8	12	6	2	-	-	-	-				
MANUFACTURING -----	473	40.0	163.50	163.00	152.50-174.50	-	-	1	5	9	23	53	80	126	79	58	33	3	3	-	-	-	-	-	-				
NONMANUFACTURING -----	185	39.5	168.50	164.00	149.50-190.50	-	-	2	2	-	17	28	16	53	13	6	26	5	6	2	-	-	-	-	-				
SERVICES -----	101	39.5	167.50	161.00	146.00-189.00	-	-	2	-	-	15	25	7	14	9	5	6	4	7	5	2	-	-	-	-				
DRAFTSMEN, CLASS C -----	363	40.0	122.50	123.00	109.00-137.00	7	30	58	76	68	60	40	17	3	2	2	-	-	-	-	-	-	-	-	-	-			
MANUFACTURING -----	303	40.0	122.50	123.00	107.50-137.50	4	28	51	60	53	52	32	16	3	2	2	-	-	-	-	-	-	-	-	-	-			
NONMANUFACTURING -----	60	39.5	122.00	123.00	112.50-133.00	3	2	7	16	15	8	8	1	-	-	-	-	-	-	-	-	-	-	-	-	-			

See footnotes at end of table.

Table A-3. Office, Professional, and Technical Occupations—Men and Women Combined

(Average straight-time weekly hours and earnings for selected occupations studied on an area basis by industry division, Boston, Mass., August 1969)

Occupation and industry division	Number of workers	Average		Occupation and industry division	Number of workers	Average		Occupation and industry division	Number of workers	Average	
		Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)
OFFICE OCCUPATIONS				OFFICE OCCUPATIONS - CONTINUED				OFFICE OCCUPATIONS - CONTINUED			
BILLERS, MACHINE (BILLING MACHINE) -----	302	39.0	\$ 92.00	CLERKS, ORDER -----	1,228	39.0	\$ 113.50	SECRETARIES ⁴ - CONTINUED			
NONMANUFACTURING -----	273	39.0	91.00	MANUFACTURING -----	561	39.0	106.00	SECRETARIES, CLASS A -----	511	38.0	\$ 148.50
WHOLESALE TRADE -----	187	39.0	94.00	NONMANUFACTURING -----	667	39.5	119.00	MANUFACTURING -----	199	38.5	150.50
RETAIL TRADE -----	69	38.0	81.50	WHOLESALE TRADE -----	604	39.5	123.00	NONMANUFACTURING -----	312	37.5	147.00
				RETAIL TRADE -----	58	39.0	79.50	WHOLESALE TRADE -----	101	37.5	140.00
BILLERS, MACHINE (BOOKKEEPING MACHINE) -----	190	37.5	94.50	CLERKS, PAYROLL -----	783	38.0	106.00	RETAIL TRADE -----	81	37.0	134.00
NONMANUFACTURING -----	160	37.5	92.00	MANUFACTURING -----	381	38.5	104.50	FINANCE ² -----	63	37.0	155.50
RETAIL TRADE -----	90	38.0	80.00	NONMANUFACTURING -----	402	38.0	107.50	SERVICES -----	57	38.0	164.50
BOOKKEEPING-MACHINE OPERATORS, CLASS A -----	222	37.5	111.00	PUBLIC UTILITIES ³ -----	42	39.0	132.50	SECRETARIES, CLASS B -----	2,239	38.0	136.50
MANUFACTURING -----	72	39.0	114.50	WHOLESALE TRADE -----	55	38.5	116.50	MANUFACTURING -----	959	39.0	135.00
NONMANUFACTURING -----	150	36.5	109.00	RETAIL TRADE -----	162	37.5	97.00	NONMANUFACTURING -----	1,280	37.5	137.50
WHOLESALE TRADE -----	61	37.5	101.00	FINANCE ² -----	69	36.5	108.50	WHOLESALE TRADE -----	142	39.0	134.00
				SERVICES -----	74	37.5	108.50	RETAIL TRADE -----	144	37.0	122.00
BOOKKEEPING-MACHINE OPERATORS, CLASS B -----	437	38.0	94.00	COMPTOMETER OPERATORS -----	875	37.5	94.50	FINANCE ² -----	529	36.5	136.00
MANUFACTURING -----	132	39.0	99.50	MANUFACTURING -----	316	38.0	93.50	SERVICES -----	285	38.0	139.00
NONMANUFACTURING -----	305	38.0	92.00	NONMANUFACTURING -----	559	37.5	95.00	SECRETARIES, CLASS C -----	2,950	38.0	121.00
WHOLESALE TRADE -----	141	39.5	87.50	WHOLESALE TRADE -----	134	39.5	94.00	MANUFACTURING -----	1,454	39.0	120.50
FINANCE ² -----	104	36.0	95.50	RETAIL TRADE -----	321	36.0	91.50	NONMANUFACTURING -----	1,496	37.5	122.00
CLERKS, ACCOUNTING, CLASS A -----	2,273	38.0	119.50	KEYPUNCH OPERATORS, CLASS A -----	1,590	38.0	100.50	PUBLIC UTILITIES ³ -----	153	38.5	129.50
MANUFACTURING -----	588	38.5	123.50	MANUFACTURING -----	583	39.0	101.00	WHOLESALE TRADE -----	190	39.0	124.50
NONMANUFACTURING -----	1,685	38.0	118.00	NONMANUFACTURING -----	1,007	37.5	100.00	RETAIL TRADE -----	180	38.0	117.50
PUBLIC UTILITIES ³ -----	479	39.0	128.00	PUBLIC UTILITIES ³ -----	110	39.0	108.50	FINANCE ² -----	636	37.0	122.00
WHOLESALE TRADE -----	190	39.0	114.50	WHOLESALE TRADE -----	148	38.5	105.00	SERVICES -----	337	38.0	120.00
RETAIL TRADE -----	253	38.0	112.00	RETAIL TRADE -----	158	37.5	95.50	SECRETARIES, CLASS D -----	3,968	38.0	110.00
FINANCE ² -----	541	36.5	111.50	FINANCE ² -----	460	36.5	97.50	MANUFACTURING -----	1,618	39.0	111.00
SERVICES -----	222	38.5	121.50	SERVICES -----	131	39.0	100.00	NONMANUFACTURING -----	2,350	37.0	109.00
CLERKS, ACCOUNTING, CLASS B -----	3,777	38.0	94.50	KEYPUNCH OPERATORS, CLASS B -----	1,143	38.5	90.00	PUBLIC UTILITIES ³ -----	67	39.5	128.00
MANUFACTURING -----	752	39.0	95.50	MANUFACTURING -----	512	39.0	92.00	WHOLESALE TRADE -----	343	38.0	111.50
NONMANUFACTURING -----	3,025	37.5	94.00	NONMANUFACTURING -----	631	38.0	88.50	RETAIL TRADE -----	203	37.5	104.00
WHOLESALE TRADE -----	613	38.5	97.50	PUBLIC UTILITIES ³ -----	92	39.0	99.50	FINANCE ² -----	1,338	36.0	106.50
RETAIL TRADE -----	775	37.0	88.00	WHOLESALE TRADE -----	62	38.5	93.50	SERVICES -----	399	39.5	114.50
FINANCE ² -----	622	36.5	92.50	RETAIL TRADE -----	223	37.5	82.50	STENOGRAPHERS, GENERAL -----	1,758	38.5	100.50
SERVICES -----	240	38.0	95.50	FINANCE ² -----	228	37.0	88.50	MANUFACTURING -----	730	39.0	100.50
CLERKS, FILE, CLASS A -----	347	38.0	97.50	OFFICE BOYS AND GIRLS -----	1,099	38.0	81.50	NONMANUFACTURING -----	1,028	38.0	100.50
MANUFACTURING -----	69	39.0	95.50	MANUFACTURING -----	239	39.0	85.50	PUBLIC UTILITIES ³ -----	140	39.0	110.50
NONMANUFACTURING -----	278	37.5	98.00	NONMANUFACTURING -----	860	37.5	80.50	WHOLESALE TRADE -----	189	38.5	99.00
FINANCE ² -----	191	37.0	90.00	PUBLIC UTILITIES ³ -----	48	39.0	81.00	RETAIL TRADE -----	65	36.5	89.00
SERVICES -----	50	39.0	117.00	WHOLESALE TRADE -----	85	38.5	82.50	FINANCE ² -----	361	37.0	99.00
CLERKS, FILE, CLASS B -----	800	37.5	82.50	RETAIL TRADE -----	111	37.5	78.00	SERVICES -----	273	38.5	100.50
MANUFACTURING -----	89	39.5	87.50	FINANCE ² -----	460	37.5	79.50	STENOGRAPHERS, SENIOR -----	1,321	37.5	107.00
NONMANUFACTURING -----	711	37.0	82.00	SERVICES -----	156	38.0	84.50	MANUFACTURING -----	430	38.0	101.50
FINANCE ² -----	498	36.5	79.50	SECRETARIES ⁴ -----	9,930	38.0	121.50	NONMANUFACTURING -----	891	37.5	109.50
				MANUFACTURING -----	4,230	39.0	121.50	PUBLIC UTILITIES ³ -----	41	39.5	122.50
CLERKS, FILE, CLASS C -----	856	38.0	80.00	NONMANUFACTURING -----	5,700	37.5	121.50	WHOLESALE TRADE -----	158	39.5	119.50
MANUFACTURING -----	123	37.5	84.00	PUBLIC UTILITIES ³ -----	410	38.5	141.00	FINANCE ² -----	243	37.0	103.00
NONMANUFACTURING -----	733	38.0	79.50	WHOLESALE TRADE -----	776	38.0	122.50	SERVICES -----	366	37.0	111.50
PUBLIC UTILITIES ³ -----	36	38.5	86.00	RETAIL TRADE -----	612	37.5	116.50	SWITCHBOARD OPERATORS, CLASS A -----	620	38.5	103.50
WHOLESALE TRADE -----	82	40.0	77.50	FINANCE ² -----	2,566	36.5	118.00	MANUFACTURING -----	213	38.5	104.50
FINANCE ² -----	375	37.5	78.00	SERVICES -----	1,336	39.0	124.50	NONMANUFACTURING -----	407	38.0	103.00
SERVICES -----	202	38.0	84.50					PUBLIC UTILITIES ³ -----	53	40.0	113.50
								WHOLESALE TRADE -----	87	39.0	105.50
								RETAIL TRADE -----	91	38.5	94.50
								FINANCE ² -----	108	36.5	102.00
								SERVICES -----	68	38.0	104.50

See footnotes at end of table.

Table A-3. Office, Professional, and Technical Occupations—Men and Women Combined—Continued

(Average straight-time weekly hours and earnings for selected occupations studied on an area basis by industry division, Boston, Mass., August 1969)

Occupation and industry division	Number of workers	Average		Occupation and industry division	Number of workers	Average		Occupation and industry division	Number of workers	Average	
		Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)
OFFICE OCCUPATIONS - CONTINUED				OFFICE OCCUPATIONS - CONTINUED				PROFESSIONAL AND TECHNICAL OCCUPATIONS - CONTINUED			
			\$				\$				\$
SWITCHBOARD OPERATORS, CLASS B ----	389	37.5	84.50	TYPISTS, CLASS B -----	2,809	38.0	86.50	COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS A -----	354	38.5	243.50
NONMANUFACTURING -----	353	37.5	83.50	MANUFACTURING -----	602	39.0	90.00	MANUFACTURING -----	112	39.5	253.00
FINANCE ² -----	131	36.0	89.50	NONMANUFACTURING -----	2,207	37.5	85.50	NONMANUFACTURING -----	242	38.0	239.00
SERVICES -----	153	38.0	77.50	PUBLIC UTILITIES ³ -----	97	39.0	109.00	FINANCE ² -----	94	37.0	236.00
SWITCHBOARD OPERATOR-RECEPTIONISTS- MANUFACTURING -----	783	38.0	95.00	WHOLESALE TRADE -----	271	38.5	87.50	COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS B -----	401	38.0	206.00
NONMANUFACTURING -----	316	38.5	95.50	FINANCE ² -----	1,508	36.5	83.50	MANUFACTURING -----	132	39.5	223.00
PUBLIC UTILITIES ³ -----	467	38.0	95.00	SERVICES -----	182	39.0	87.50	NONMANUFACTURING -----	269	37.5	198.00
WHOLESALE TRADE -----	28	39.5	114.00	PROFESSIONAL AND TECHNICAL OCCUPATIONS				FINANCE ² -----	86	37.0	200.00
FINANCE ² -----	153	38.5	95.50	COMPUTER OPERATORS, CLASS A -----	190	39.0	145.50	COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS C -----	146	38.5	168.00
SERVICES -----	121	36.5	90.50	MANUFACTURING -----	61	39.5	149.00	NONMANUFACTURING -----	104	38.0	154.50
	119	38.5	98.50	NONMANUFACTURING -----	109	38.0	143.00	DRAFTSMEN, CLASS A -----	1,159	39.5	197.50
TABULATING-MACHINE OPERATORS, CLASS A -----	177	38.0	125.00	COMPUTER OPERATORS, CLASS B -----	587	39.0	133.00	MANUFACTURING -----	534	40.0	188.00
MANUFACTURING -----	74	39.0	127.00	MANUFACTURING -----	266	39.5	125.00	NONMANUFACTURING -----	625	39.0	206.00
NONMANUFACTURING -----	103	37.0	123.50	NONMANUFACTURING -----	321	38.5	140.00	SERVICES -----	559	39.0	206.00
FINANCE ² -----	86	37.0	122.00	FINANCE ² -----	105	36.5	132.00	DRAFTSMEN, CLASS B -----	1,164	39.5	160.00
TABULATING-MACHINE OPERATORS, CLASS B -----	201	38.5	113.00	COMPUTER OPERATORS, CLASS C -----	266	37.5	116.50	MANUFACTURING -----	588	39.5	160.50
MANUFACTURING -----	77	39.5	113.00	MANUFACTURING -----	53	39.5	115.00	NONMANUFACTURING -----	576	39.0	160.00
NONMANUFACTURING -----	124	38.0	113.50	NONMANUFACTURING -----	213	37.0	116.50	SERVICES -----	490	39.0	158.50
FINANCE ² -----	64	37.0	104.00	RETAIL TRADE -----	58	37.5	121.50	DRAFTSMEN, CLASS C -----	737	39.5	127.50
TABULATING-MACHINE OPERATORS, CLASS C -----	87	37.5	93.50	FINANCE ² -----	119	36.5	115.50	MANUFACTURING -----	443	40.0	124.00
NONMANUFACTURING -----	73	37.5	91.00	COMPUTER PROGRAMERS, BUSINESS, CLASS A -----	436	39.0	222.00	NONMANUFACTURING -----	294	39.0	132.50
FINANCE ² -----	57	37.0	90.00	MANUFACTURING -----	121	39.5	210.50	PUBLIC UTILITIES ³ -----	28	40.0	128.50
TRANSCRIBING-MACHINE OPERATORS, GENERAL -----	413	38.0	98.00	NONMANUFACTURING -----	315	39.0	226.50	SERVICES -----	257	39.0	133.50
MANUFACTURING -----	156	39.5	101.00	FINANCE ² -----	87	36.5	208.00	DRAFTSMEN-TRACERS -----	160	39.0	98.50
NONMANUFACTURING -----	257	37.5	96.50	COMPUTER PROGRAMERS, BUSINESS, CLASS B -----	596	38.5	175.00	MANUFACTURING -----	100	40.0	98.00
FINANCE ² -----	168	37.0	95.00	MANUFACTURING -----	185	39.0	179.50	NONMANUFACTURING -----	60	38.0	99.00
TYPISTS, CLASS A -----	1,606	38.0	96.50	NONMANUFACTURING -----	411	38.0	172.50	SERVICES -----	60	38.0	99.00
MANUFACTURING -----	473	39.5	93.50	FINANCE ² -----	218	36.5	158.50	NURSES, INDUSTRIAL (REGISTERED) --- MANUFACTURING -----	249	39.5	141.50
NONMANUFACTURING -----	1,133	37.5	97.50	COMPUTER PROGRAMERS, BUSINESS, CLASS C -----	345	38.0	149.00	NONMANUFACTURING -----	180	39.5	140.50
PUBLIC UTILITIES ³ -----	124	39.0	99.00	MANUFACTURING -----	82	39.5	156.50		69	38.5	145.50
WHOLESALE TRADE -----	92	39.0	104.00	NONMANUFACTURING -----	263	37.5	146.50				
FINANCE ² -----	474	37.0	92.00	FINANCE ² -----	196	37.0	148.50				
SERVICES -----	390	38.0	103.00								

¹ Standard hours reflect the workweek for which employees receive their regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates), and the earnings correspond to these weekly hours.² Finance, insurance, and real estate.³ Transportation, communication, and other public utilities.⁴ May include workers other than those presented separately.

Table A-3a. Office, Professional, and Technical Occupations—Large Establishments—Men and Women Combined

(Average straight-time weekly hours and earnings for selected occupations studied in establishments employing 500 workers or more by industry division, Boston, Mass., August 1969)

Occupation and industry division	Number of workers	Average		Occupation and industry division	Number of workers	Average		Occupation and industry division	Number of workers	Average	
		Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)
OFFICE OCCUPATIONS				OFFICE OCCUPATIONS - CONTINUED				OFFICE OCCUPATIONS - CONTINUED			
BILLERS, MACHINE (BOOKKEEPING MACHINE) -----	80	38.0	\$ 91.50	KEYPUNCH OPERATORS, CLASS B -----	774	38.5	\$ 89.00	SWITCHBOARD OPERATORS, CLASS A -----	377	38.5	\$ 104.50
NONMANUFACTURING -----	68	38.0	84.50	MANUFACTURING -----	328	39.5	91.50	MANUFACTURING -----	201	39.0	105.00
BOOKKEEPING-MACHINE OPERATORS, CLASS B -----	77	37.5	100.00	NONMANUFACTURING -----	446	37.5	87.00	NONMANUFACTURING -----	176	38.5	103.50
CLERKS, ACCOUNTING, CLASS A -----	1,169	38.0	120.00	PUBLIC UTILITIES ² -----	70	38.5	96.00	PUBLIC UTILITIES ² -----	40	40.0	113.00
MANUFACTURING -----	324	39.0	119.50	RETAIL TRADE -----	182	37.5	82.00	RETAIL TRADE -----	57	38.5	99.50
NONMANUFACTURING -----	845	38.0	120.00	FINANCE -----	179	37.0	87.00	SWITCHBOARD OPERATORS, CLASS B -----	109	38.5	91.00
PUBLIC UTILITIES ² -----	381	38.5	130.50	OFFICE BOYS AND GIRLS -----	606	38.0	81.00	NONMANUFACTURING -----	73	38.0	89.00
RETAIL TRADE -----	175	37.5	111.50	MANUFACTURING -----	178	38.5	85.00	SWITCHBOARD OPERATOR-RECEPTIONISTS-MANUFACTURING -----	63	39.0	99.00
FINANCE ³ -----	209	36.5	109.50	NONMANUFACTURING -----	428	37.5	79.50	TABULATING-MACHINE OPERATORS, CLASS A -----	107	38.5	128.50
SERVICES -----	61	39.5	117.00	PUBLIC UTILITIES ² -----	35	39.0	80.50	CLASS A -----	63	37.5	126.00
CLERKS, ACCOUNTING, CLASS B -----	1,763	38.0	93.50	RETAIL TRADE -----	84	37.5	77.50	NONMANUFACTURING -----	53	37.0	123.50
MANUFACTURING -----	419	39.0	95.50	FINANCE -----	237	37.0	80.50	FINANCE ³ -----	178	38.5	113.00
NONMANUFACTURING -----	1,344	37.5	93.00	SECRETARIES ⁴ -----	5,832	38.5	123.00	CLASS B -----	77	39.5	113.00
RETAIL TRADE -----	384	37.5	85.00	MANUFACTURING -----	3,113	39.5	123.00	MANUFACTURING -----	101	37.5	113.00
FINANCE -----	172	36.5	91.50	NONMANUFACTURING -----	2,719	38.0	123.50	NONMANUFACTURING -----	101	37.5	113.00
CLERKS, FILE, CLASS A -----	239	38.0	94.50	RETAIL TRADE -----	282	37.5	114.50	FINANCE ³ -----	60	37.0	104.00
MANUFACTURING -----	63	39.5	94.00	FINANCE -----	1,108	36.5	119.00	TABULATING-MACHINE OPERATORS, CLASS C -----	87	37.5	93.50
NONMANUFACTURING -----	176	37.5	94.50	SERVICES -----	846	40.0	124.00	NONMANUFACTURING -----	73	37.5	91.00
FINANCE -----	141	37.5	88.50	SECRETARIES, CLASS A -----	246	38.0	154.50	FINANCE ³ -----	57	37.0	90.00
CLERKS, FILE, CLASS B -----	373	37.5	83.00	MANUFACTURING -----	101	39.0	163.00	TRANScribing-MACHINE OPERATORS, GENERAL -----	163	38.0	96.50
NONMANUFACTURING -----	325	37.0	82.00	NONMANUFACTURING -----	145	37.0	148.00	MANUFACTURING -----	56	39.5	93.50
FINANCE -----	263	37.0	80.50	RETAIL TRADE -----	54	37.0	137.00	NONMANUFACTURING -----	107	37.5	98.50
CLERKS, FILE, CLASS C -----	337	37.5	79.50	SECRETARIES, CLASS B -----	1,209	38.5	140.00	FINANCE ³ -----	98	37.0	96.00
NONMANUFACTURING -----	306	38.0	79.00	MANUFACTURING -----	678	39.5	136.00	TYPISTS, CLASS A -----	933	38.5	94.00
FINANCE ³ -----	196	37.5	77.50	NONMANUFACTURING -----	531	38.0	144.50	MANUFACTURING -----	390	39.5	93.00
CLERKS, ORDER -----	397	39.0	105.50	RETAIL TRADE -----	71	36.5	112.50	NONMANUFACTURING -----	543	37.5	94.50
MANUFACTURING -----	325	39.0	110.50	FINANCE -----	167	37.0	142.00	FINANCE ³ -----	257	36.5	91.00
NONMANUFACTURING -----	72	38.5	82.00	SERVICES -----	109	40.0	147.50	SERVICES -----	142	39.5	99.00
RETAIL TRADE -----	58	39.0	79.50	SECRETARIES, CLASS C -----	1,937	38.5	123.50	TYPISTS, CLASS B -----	1,368	38.0	86.00
CLERKS, PAYROLL -----	393	38.5	104.00	MANUFACTURING -----	1,154	39.5	122.50	MANUFACTURING -----	383	39.5	91.50
MANUFACTURING -----	179	39.0	107.50	NONMANUFACTURING -----	783	38.0	124.00	NONMANUFACTURING -----	985	37.5	84.00
NONMANUFACTURING -----	214	38.0	100.50	PUBLIC UTILITIES ² -----	127	38.5	129.50	FINANCE ³ -----	709	37.0	82.50
RETAIL TRADE -----	138	38.0	93.50	RETAIL TRADE -----	52	38.5	111.00	SERVICES -----	101	39.5	87.50
COMPTOMETER OPERATORS -----	682	37.5	95.00	FINANCE -----	417	36.5	123.00	PROFESSIONAL AND TECHNICAL OCCUPATIONS			
MANUFACTURING -----	306	38.0	93.50	SERVICES -----	161	40.0	126.50	COMPUTER OPERATORS, CLASS A -----	156	38.5	146.00
NONMANUFACTURING -----	376	37.0	96.50	SECRETARIES, CLASS D -----	2,178	38.5	110.50	MANUFACTURING -----	81	39.5	149.00
RETAIL TRADE -----	291	36.0	91.50	MANUFACTURING -----	1,180	39.5	111.50	NONMANUFACTURING -----	75	37.5	143.50
KEYPUNCH OPERATORS, CLASS A -----	1,001	38.5	100.50	NONMANUFACTURING -----	998	37.5	109.00	COMPUTER OPERATORS, CLASS B -----	388	38.5	128.00
MANUFACTURING -----	418	39.0	101.00	PUBLIC UTILITIES ² -----	27	40.0	131.50	MANUFACTURING -----	239	39.5	125.00
NONMANUFACTURING -----	583	37.5	100.00	RETAIL TRADE -----	101	37.5	105.50	NONMANUFACTURING -----	149	37.0	132.50
PUBLIC UTILITIES ² -----	108	39.0	108.50	FINANCE -----	502	36.5	106.00	FINANCE ³ -----	90	36.5	134.50
RETAIL TRADE -----	82	38.0	96.00	SERVICES -----	294	40.0	113.00				
FINANCE ³ -----	295	36.5	96.50	STENOGRAPHERS, GENERAL -----	1,064	38.5	99.00				
SERVICES -----	65	40.0	99.50	MANUFACTURING -----	621	39.5	100.00				
				NONMANUFACTURING -----	443	38.0	98.00				
				PUBLIC UTILITIES ² -----	120	39.0	106.50				
				FINANCE -----	135	36.5	94.50				
				SERVICES -----	119	39.5	97.00				
				STENOGRAPHERS, SENIOR -----	701	38.0	103.00				
				MANUFACTURING -----	325	39.0	104.00				
				NONMANUFACTURING -----	376	37.0	101.50				
				FINANCE -----	202	36.5	99.50				
				SERVICES -----	64	39.5	106.00				

See footnotes at end of table.

Table A-3a. Office, Professional, and Technical Occupations—Large Establishments—Men and Women Combined—Continued

(Average straight-time weekly hours and earnings for selected occupations studied in establishments employing 500 workers or more by industry division, Boston, Mass., August 1969)

Occupation and industry division	Number of workers	Average		Occupation and industry division	Number of workers	Average		Occupation and industry division	Number of workers	Average	
		Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)
PROFESSIONAL AND TECHNICAL OCCUPATIONS - CONTINUED				PROFESSIONAL AND TECHNICAL OCCUPATIONS - CONTINUED				PROFESSIONAL AND TECHNICAL OCCUPATIONS - CONTINUED			
COMPUTER OPERATORS, CLASS C -----	186	37.5	\$ 117.00	COMPUTER PROGRAMERS, BUSINESS, CLASS C -----	269	38.0	\$ 153.50	COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS C -----	98	38.0	\$ 179.50
MANUFACTURING -----	51	39.5	115.50	MANUFACTURING -----	80	39.5	158.00	NONMANUFACTURING -----	56	36.5	162.00
NONMANUFACTURING -----	135	37.0	117.50	NONMANUFACTURING -----	189	37.5	151.50				
FINANCE ³ -----	77	36.5	116.50					DRAFTSMEN, CLASS A -----	655	40.0	189.50
COMPUTER PROGRAMERS, BUSINESS, CLASS A -----	201	39.0	211.50	COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS A -----	235	38.5	247.00	MANUFACTURING -----	474	40.0	189.50
MANUFACTURING -----	117	39.5	211.50	MANUFACTURING -----	112	39.5	253.00	NONMANUFACTURING -----	181	39.5	189.50
NONMANUFACTURING -----	84	37.5	212.00	NONMANUFACTURING -----	123	37.5	241.50	SERVICES -----	138	39.5	185.00
FINANCE ³ -----	56	37.0	208.00	FINANCE ³ -----	7	37.0	235.50				
COMPUTER PROGRAMERS, BUSINESS, CLASS B -----	385	38.5	176.50	COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS B -----	314	38.0	207.00	DRAFTSMEN, CLASS B -----	667	39.5	165.00
MANUFACTURING -----	179	39.0	181.50	MANUFACTURING -----	126	39.5	223.50	MANUFACTURING -----	482	40.0	163.50
NONMANUFACTURING -----	206	37.5	172.50	NONMANUFACTURING -----	188	37.5	196.50	NONMANUFACTURING -----	185	39.5	168.50
FINANCE ³ -----	152	37.0	169.50	FINANCE ³ -----	77	37.0	198.50	SERVICES -----	101	39.5	167.50
								DRAFTSMEN, CLASS C -----	385	40.0	121.50
								MANUFACTURING -----	319	40.0	121.50
								NONMANUFACTURING -----	66	39.5	120.50
								NURSES, INDUSTRIAL (REGISTERED) -----	197	39.5	141.00
								MANUFACTURING -----	131	40.0	138.50
								NONMANUFACTURING -----	66	38.5	146.00

¹ Standard hours reflect the workweek for which employees receive their regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates), and the earnings correspond to these weekly hours.

² Transportation, communication, and other public utilities.

³ Finance, insurance, and real estate.

⁴ May include workers other than those presented separately.

Table A-4. Maintenance and Powerplant Occupations

(Average straight-time hourly earnings for men in selected occupations studied on an area basis by industry division, Boston, Mass., August 1969)

Occupation and industry division	Number of workers	Hourly earnings ¹			Number of workers receiving straight-time hourly earnings of—																							
		Mean ²	Median ²	Middle range ²	Under \$ 2.50	\$ 2.50	\$ 2.60	\$ 2.70	\$ 2.80	\$ 2.90	\$ 3.00	\$ 3.10	\$ 3.20	\$ 3.30	\$ 3.40	\$ 3.50	\$ 3.60	\$ 3.70	\$ 3.80	\$ 3.90	\$ 4.00	\$ 4.10	\$ 4.20	\$ 4.40	\$ 4.60	\$ 4.80	\$ 5.00	
					and under																							
CARPENTERS, MAINTENANCE -----	446	3.84	3.64	3.47- 4.10	13	2	-	-	12	9	5	10	15	29	24	81	64	28	15	7	21	11		17	20	13	7	43
MANUFACTURING -----	272	3.73	3.62	3.52- 3.85						3	5	8	9	19	13	69	55	19	10	7	13	8		5	16	9	-	4
NONMANUFACTURING -----	174	4.00	3.75	3.33- 4.85	13	2	-	-	12	6	-	2	6	10	11	12	9	9	5	-	8	3		12	4	4	7	39
RETAIL TRADE -----	85	4.56	4.85	3.71- 5.64	-	2	-	-	9	4	-	2	2	-	-	1	1	6	-	-	5	2		-	3	4	5	39
ELECTRICIANS, MAINTENANCE -----	998	4.03	3.88	3.72- 4.33	-	-	-	1	1	4	21	15	19	26	36	44	46	173	137	42	64	39		89	86	112	9	34
MANUFACTURING -----	792	3.99	3.83	3.70- 4.27	-	-	-	-	4	21	14	17	23	32	39	41	172	122	33	17	20		60	40	102	6	29	
NONMANUFACTURING -----	206	4.17	4.15	4.01- 4.44	-	-	-	1	1	-	-	1	2	3	4	5	5	1	15	9	47	19		29	46	10	3	5
SERVICES -----	51	4.02	4.13	3.79- 4.24	-	-	-	-	-	-	-	-	-	2	3	2	5	1	1	7	13		10	2	4	-	-	

See footnotes at end of table.

Table A-4. Maintenance and Powerplant Occupations—Continued

(Average straight-time hourly earnings for men in selected occupations studied on an area basis by industry division, Boston, Mass., August 1969)

Occupation and industry division	Number of workers	Hourly earnings ¹			Number of workers receiving straight-time hourly earnings of—																							
		Mean ²	Median ²	Middle range ²	Under	\$ 2.50	\$ 2.60	\$ 2.70	\$ 2.80	\$ 2.90	\$ 3.00	\$ 3.10	\$ 3.20	\$ 3.30	\$ 3.40	\$ 3.50	\$ 3.60	\$ 3.70	\$ 3.80	\$ 3.90	\$ 4.00	\$ 4.10	\$ 4.20	\$ 4.40	\$ 4.60	\$ 4.80	\$ 5.00	and over
					\$ 2.50 and under	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENGINEERS, STATIONARY MANUFACTURING	306	3.99	3.98	3.63-4.48	-	-	-	14	-	11	-	17	1	-	-	32	6	10	26	43	37	10	20	6	45	27	1	
NONMANUFACTURING SERVICES	97	3.62	3.64	3.00-4.12	-	-	-	14	-	11	-	7	1	-	-	14	5	1	9	-	11	3	17	2	1	-	1	
FIREMEN, STATIONARY BOILER MANUFACTURING	415	3.34	3.33	2.79-3.78	-	34	63	8	-	35	35	12	13	25	24	38	5	25	1	34	11	8	43	1	-	-	-	
NONMANUFACTURING	103	3.02	2.69	2.64-3.52	-	12	40	-	-	10	4	2	2	-	5	13	4	1	1	-	7	-	2	-	-	-	-	
HELPERS, MAINTENANCE TRADES MANUFACTURING	273	3.21	3.34	2.88-3.46	8	2	12	13	41	13	7	29	4	19	97	6	4	-	17	1	-	-	-	-	-	-	-	
NONMANUFACTURING PUBLIC UTILITIES ⁴	61	3.14	3.17	2.86-3.43	4	2	11	13	41	12	5	28	-	18	75	-	-	-	2	1	-	-	-	-	-	-	-	
MACHINE-TOOL OPERATORS, TOOLROOM MANUFACTURING	320	3.79	3.78	3.58-4.12	-	-	-	-	-	5	3	1	3	3	20	59	39	33	19	33	8	91	3	-	-	-	-	
MACHINISTS, MAINTENANCE MANUFACTURING	1,139	3.92	3.91	3.71-4.20	-	-	-	3	3	5	23	27	26	21	20	37	97	169	101	286	26	7	99	177	8	4	-	
MECHANICS, AUTOMOTIVE (MAINTENANCE) MANUFACTURING	861	3.81	3.80	3.52-4.05	-	-	-	-	-	-	5	17	8	64	104	74	21	142	69	31	208	41	50	12	15	-	-	
NONMANUFACTURING PUBLIC UTILITIES ⁴	202	3.68	3.59	3.51-3.98	-	-	-	-	-	-	16	2	9	14	70	9	17	4	15	29	5	6	44	12	9	-	-	
MECHANICS, MAINTENANCE MANUFACTURING	659	3.85	3.85	3.63-4.06	-	-	-	-	-	5	1	6	55	90	4	12	125	65	16	179	36	3	44	12	9	-	-	
NONMANUFACTURING WHOLESALE TRADE RETAIL TRADE	429	3.92	4.02	3.66-4.08	-	-	-	-	-	-	-	6	6	85	4	11	1	53	16	179	3	44	12	9	-	-	-	
MILLWRIGHTS MANUFACTURING	1,596	3.70	3.66	3.45-4.01	-	12	6	6	-	13	37	65	93	32	270	145	192	156	84	67	194	45	110	62	7	-	-	
NONMANUFACTURING	1,254	3.63	3.61	3.44-3.82	-	6	6	6	-	13	32	49	83	32	252	130	177	154	31	61	123	44	61	-	7	-	-	
WHOLESALE TRADE RETAIL TRADE	342	3.93	4.03	3.67-4.32	-	6	6	-	-	5	16	10	-	18	15	15	2	53	6	71	1	49	62	7	-	-		
MILLWRIGHTS MANUFACTURING	58	4.12	4.09	4.01-4.35	-	-	-	-	-	2	-	-	-	-	-	-	-	10	-	20	-	21	5	-	-	-	-	
WHOLESALE TRADE RETAIL TRADE	108	3.74	3.82	3.29-3.95	-	-	-	-	-	3	16	9	-	4	1	13	1	32	6	9	1	5	1	7	-	-	-	
MILLWRIGHTS MANUFACTURING	358	3.56	3.49	3.27-3.78	-	-	-	11	11	14	21	11	30	34	52	71	1	16	2	7	-	51	-	2	24	-	-	
NONMANUFACTURING	352	3.56	3.49	3.27-3.79	-	-	-	11	11	14	21	11	30	33	52	67	1	16	1	7	-	51	-	2	24	-	-	
OILERS MANUFACTURING	179	3.03	2.98	2.67-3.45	14	3	40	1	22	13	12	5	19	1	10	18	10	6	-	4	1	-	-	-	-	-	-	
NONMANUFACTURING	168	3.04	3.02	2.66-3.48	14	3	40	1	22	13	12	5	19	1	10	18	10	6	-	4	1	-	-	-	-	-	-	
PAINTERS, MAINTENANCE MANUFACTURING	319	3.41	3.50	2.87-4.03	5	33	-	40	-	10	13	11	5	9	36	2	36	11	16	8	6	16	19	19	12	9	5	3
NONMANUFACTURING PUBLIC UTILITIES ⁴	133	3.64	3.55	3.33-3.85	-	-	-	-	1	7	8	1	8	27	1	30	4	13	-	4	7	-	5	11	-	4	2	
NONMANUFACTURING SERVICES	186	3.24	3.16	2.63-4.09	33	-	40	-	9	6	3	4	1	9	1	6	7	3	8	2	9	19	14	1	9	1	1	
PIPEFITTERS, MAINTENANCE MANUFACTURING	27	3.97	4.13	3.83-4.31	-	-	-	-	-	-	-	-	-	3	-	1	6	-	1	6	-	9	7	-	-	-	-	
NONMANUFACTURING SERVICES	64	2.73	2.30	2.07-3.34	33	-	-	-	7	2	3	1	1	4	-	2	5	-	-	-	-	-	6	-	-	-	-	
PIPEFITTERS, MAINTENANCE MANUFACTURING	420	3.82	3.74	3.56-3.89	-	-	-	-	-	9	12	3	23	11	6	66	16	149	22	7	10	19	7	11	39	6	4	
NONMANUFACTURING	404	3.82	3.74	3.56-3.88	-	-	-	-	-	9	12	3	23	11	5	64	10	149	22	6	6	17	7	11	39	6	4	
PLUMBERS, MAINTENANCE MANUFACTURING	70	3.83	3.71	3.59-4.14	-	-	-	-	-	1	3	-	-	6	4	4	17	8	3	-	2	14	1	4	-	1	2	
NONMANUFACTURING	53	3.75	3.69	3.55-4.11	-	-	-	-	-	3	-	-	-	6	4	-	16	8	2	-	12	-	1	-	-	1	1	
SHEET-METAL WORKERS, MAINTENANCE MANUFACTURING	117	3.75	3.71	3.56-3.79	-	-	-	-	-	-	4	1	5	3	26	16	39	-	9	1	3	3	5	1	-	1	1	
NONMANUFACTURING	97	3.74	3.72	3.60-3.79	-	-	-	-	-	-	4	1	5	3	21	16	39	-	9	1	1	2	3	1	-	1	1	
TOOL AND DIE MAKERS MANUFACTURING	663	4.13	4.18	3.89-4.26	-	-	-	-	-	-	2	-	2	9	20	12	53	68	35	33	123	232	36	2	35	1	1	
NONMANUFACTURING	658	4.13	4.18	3.91-4.26	-	-	-	-	-	-	2	-	2	9	15	12	53	68	35	33	123	232	36	2	35	1	1	

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.² For definition of terms, see footnote 2, table A-1.³ Workers were distributed as follows: 6 at \$5.20 to \$5.40; 1 at \$5.40 to \$5.60; 30 at \$5.60 to \$5.80; and 2 at \$5.80 and over.⁴ Transportation, communication, and other public utilities.⁵ Workers were distributed as follows: 22 at \$2 to \$2.10; and 11 at \$2.20 to \$2.30.

Table A-4a. Maintenance and Powerplant Occupations—Large Establishments

(Average straight-time hourly earnings for men in selected occupations studied in establishments employing 500 workers or more by industry division, Boston, Mass., August 1969)

Occupation and industry division	Number of workers	Hourly earnings ¹			Number of workers receiving straight-time hourly earnings of—																							
		Mean ²	Median ²	Middle range ²	Under	\$ 2.60	\$ 2.70	\$ 2.80	\$ 2.90	\$ 3.00	\$ 3.10	\$ 3.20	\$ 3.30	\$ 3.40	\$ 3.50	\$ 3.60	\$ 3.70	\$ 3.80	\$ 3.90	\$ 4.00	\$ 4.10	\$ 4.20	\$ 4.30	\$ 4.40	\$ 4.50	\$ 4.60	\$ 4.80	\$ 4.80
					and under																							
CARPENTERS, MAINTENANCE -----	384	3.88	3.63	3.50- 4.09	2	-	-	12	4	5	10	13	27	24	80	50	24	13	7	19	11	11	-	3	7	13	49	
MANUFACTURING -----	248	3.70	3.60	3.51- 3.81	-	-	-	-	3	5	8	9	19	13	69	41	19	10	7	13	8	5	-	-	6	9	4	
NONMANUFACTURING -----	136	4.21	3.95	3.45- 5.28	2	-	-	12	1	-	2	4	8	11	11	9	5	3	-	6	3	6	-	3	1	4	45	
RETAIL TRADE -----	76	4.67	5.10	3.85- 5.64	2	-	-	9	-	-	2	2	-	-	1	1	2	-	-	5	2	-	-	2	1	4	43	
ELECTRICIANS, MAINTENANCE -----	760	4.00	3.85	3.72- 4.21	-	-	1	1	4	15	5	7	26	24	38	37	162	121	34	55	39	21	3	38	42	52	35	
MANUFACTURING -----	595	3.95	3.80	3.71- 4.07	-	-	-	4	15	4	5	23	20	33	32	161	111	27	17	20	12	-	8	32	42	29		
NONMANUFACTURING -----	165	4.14	4.13	4.00- 4.45	-	-	1	1	-	-	1	2	3	4	5	5	1	10	7	38	19	9	3	30	10	10	6	
ENGINEERS, STATIONARY -----	143	3.91	3.94	3.59- 4.08	-	-	3	-	-	-	-	1	-	-	32	6	10	15	13	34	10	1	3	4	2	5	4	
MANUFACTURING -----	94	3.96	4.00	3.75- 4.09	-	-	-	-	-	-	-	-	-	-	18	1	9	6	13	26	7	-	3	4	-	4	3	
FIREMEN, STATIONARY BOILER -----	148	3.43	3.41	3.12- 3.58	-	-	2	-	28	5	10	13	14	19	27	4	1	1	4	8	8	1	2	-	1	-	-	
MANUFACTURING -----	126	3.41	3.40	3.14- 3.55	-	-	2	-	25	1	10	11	14	19	25	1	-	-	4	4	8	1	-	-	1	-	-	
HELPERS, MAINTENANCE TRADES -----	204	3.21	3.21	2.87- 3.46	10	6	7	41	2	7	29	4	1	79	-	-	-	17	1	-	-	-	-	-	-	-	-	
MANUFACTURING -----	171	3.17	3.18	2.86- 3.45	6	5	7	41	1	5	28	-	-	75	-	-	-	2	1	-	-	-	-	-	-	-	-	
MACHINE-TOOL OPERATORS, TOOLROOM -----	294	3.80	3.77	3.58- 4.11	-	-	-	-	-	3	1	3	3	20	54	39	33	19	33	3	80	-	3	-	-	-	-	
MANUFACTURING -----	294	3.80	3.77	3.58- 4.11	-	-	-	-	-	3	1	3	3	20	54	39	33	19	33	3	80	-	3	-	-	-	-	
MACHINISTS, MAINTENANCE -----	842	3.78	3.85	3.66- 3.96	-	-	3	3	5	23	11	26	21	20	37	97	125	96	280	15	7	38	12	-	15	4	4	
MANUFACTURING -----	832	3.78	3.85	3.66- 3.96	-	-	3	3	5	23	11	26	21	20	36	96	125	94	280	15	2	38	12	-	15	4	3	
MECHANICS, AUTOMOTIVE (MAINTENANCE) -----	320	3.85	3.88	3.55- 4.09	-	-	-	-	-	5	7	2	16	17	70	11	19	17	29	53	8	29	10	5	7	15	-	
MANUFACTURING -----	174	3.66	3.58	3.52- 3.90	-	-	-	-	-	6	2	9	14	70	9	17	4	15	17	5	-	-	-	-	-	6	-	
NONMANUFACTURING -----	146	4.07	4.07	3.93- 4.28	-	-	-	-	-	5	1	-	7	3	-	2	2	13	14	36	3	29	10	5	7	9	-	
PUBLIC UTILITIES ⁴ -----	116	4.22	4.21	4.03- 4.33	-	-	-	-	-	-	-	-	-	-	-	1	1	1	14	36	3	29	10	5	7	9	-	
MECHANICS, MAINTENANCE -----	1,090	3.66	3.63	3.45- 3.83	-	-	-	-	13	19	27	87	32	190	134	164	139	45	43	114	3	6	10	56	1	7	-	
MANUFACTURING -----	871	3.58	3.58	3.44- 3.73	-	-	-	-	13	14	11	77	32	186	130	149	137	13	37	63	2	-	7	-	-	7	-	
NONMANUFACTURING -----	219	3.98	4.03	3.75- 4.42	-	-	-	-	5	16	10	-	4	4	15	2	32	6	51	1	6	3	56	1	7	-		
RETAIL TRADE -----	108	3.74	3.82	3.29- 3.95	-	-	-	-	-	3	16	9	-	4	1	13	1	32	6	9	1	2	3	-	1	7	-	
MILLWRIGHTS -----	200	3.61	3.54	3.29- 3.73	-	-	-	-	3	21	-	30	12	8	71	1	16	2	7	-	3	-	-	2	-	24	-	
MANUFACTURING -----	194	3.61	3.54	3.28- 3.73	-	-	-	-	3	21	-	30	11	8	67	1	16	1	7	-	3	-	-	2	-	24	-	
OILERS -----	124	3.09	3.00	2.68- 3.52	5	31	1	22	3	12	5	1	1	10	18	4	6	-	4	1	-	-	-	-	-	-	-	
MANUFACTURING -----	123	3.09	3.01	2.68- 3.52	5	31	1	22	2	12	5	1	1	10	18	4	6	-	4	1	-	-	-	-	-	-	-	
PAINTERS, MAINTENANCE -----	224	3.72	3.59	3.34- 4.13	-	-	-	8	9	10	5	9	36	2	36	8	16	2	6	16	19	5	8	-	12	9	8	
MANUFACTURING -----	130	3.64	3.54	3.33- 3.93	-	-	-	1	7	8	1	8	27	1	30	1	13	-	4	7	-	4	1	-	11	6		
NONMANUFACTURING -----	94	3.83	4.02	3.39- 4.19	-	-	-	7	2	2	4	1	9	1	6	7	3	2	2	9	19	1	7	-	1	9	2	
PIPEFITTERS, MAINTENANCE -----	393	3.83	3.74	3.57- 3.86	-	-	-	-	3	12	3	20	11	6	66	13	149	22	7	6	8	7	-	6	5	39	10	
MANUFACTURING -----	381	3.83	3.74	3.56- 3.86	-	-	-	-	3	12	3	20	11	5	64	7	149	22	6	6	6	7	-	6	5	39	10	
PLUMBERS, MAINTENANCE -----	69	3.84	3.71	3.60- 4.14	-	-	-	-	-	3	-	-	-	6	4	4	17	8	3	-	2	14	-	1	-	4	3	
MANUFACTURING -----	53	3.75	3.69	3.55- 4.11	-	-	-	-	-	3	-	-	-	6	4	-	16	8	2	-	12	-	1	-	-	1	-	
SHEET-METAL WORKERS, MAINTENANCE -----	117	3.75	3.71	3.56- 3.79	-	-	-	-	-	4	1	5	3	26	16	39	-	9	1	3	3	-	-	-	5	1	1	
MANUFACTURING -----	97	3.74	3.72	3.60- 3.79	-	-	-	-	-	4	1	5	3	11	16	39	-	9	1	1	2	-	-	-	3	1	1	
TOOL AND DIE MAKERS -----	610	4.15	4.20	3.98- 4.26	-	-	-	-	-	2	-	2	3	3	12	47	62	29	33	117	232	-	-	-	30	2	36	
MANUFACTURING -----	610	4.15	4.20	3.98- 4.26	-	-	-	-	-	2	-	2	3	3	12	47	62	29	33	117	232	-	-	-	30	2	36	

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.² For definition of terms, see footnote 2, table A-1.³ Workers were distributed as follows: 5 at \$4.80 to \$5; 6 at \$5.20 to \$5.40; 1 at \$5.40 to \$5.60; 30 at \$5.60 to \$5.80; and 1 at \$5.80 and over.⁴ Transportation, communication, and other public utilities.

Table A-5. Custodial and Material Movement Occupations

(Average straight-time hourly earnings for selected occupations studied on an area basis by industry division, Boston, Mass., August 1969)

Occupation ¹ and industry division	Number of workers	Hourly earnings ²			Number of workers receiving straight-time hourly earnings of																							
		Mean ³	Median ³	Middle range ³	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
					1.60 and under	1.70	1.80	1.90	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	3.00	3.10	3.20	3.30	3.40	3.60	3.80	4.00	4.20	4.40
GUARDS AND WATCHMEN -----	4,002	\$ 2.17	\$ 1.89	\$ 1.81- 2.63	68	783	1235	369	109	48	71	57	121	116	77	280	123	85	61	102	57	65	40	117	18	-	-	
MANUFACTURING -----	776	2.86	2.78	2.66- 3.17	-	-	2	4	9	33	18	24	39	38	46	225	73	17	6	67	36	24	10	87	18	-	-	
NONMANUFACTURING -----	3,226	2.01	1.86	1.79- 1.99	68	783	1233	365	100	15	53	33	82	78	31	55	50	68	55	35	21	41	30	30	-	-	-	
GUARDS:																												
MANUFACTURING -----	551	2.91	2.78	2.71- 3.15	-	-	-	-	-	-	-	11	35	32	29	222	65	-	-	40	-	6	6	87	18	-	-	
WATCHMEN:																												
MANUFACTURING -----	225	2.73	2.85	2.25- 3.21	-	-	2	4	9	33	18	13	4	6	17	3	8	17	6	27	36	18	4	-	-	-	-	
JANITORS, PORTERS, AND CLEANERS ---	7,861	2.26	2.18	1.90- 2.53	72	514	1438	530	1168	276	512	525	544	922	248	154	172	149	138	15	47	309	110	18	-	-	-	
MANUFACTURING -----	2,204	2.55	2.46	2.29- 2.74	17	34	17	116	84	96	215	231	469	243	103	69	102	78	12	6	3	229	62	18	-	-	-	
NONMANUFACTURING -----	5,657	2.15	2.04	1.86- 2.42	55	480	1421	414	1084	180	297	294	75	679	145	85	70	71	126	9	44	80	48	-	-	-	-	
PUBLIC UTILITIES ⁴ -----	375	2.81	2.86	2.56- 3.09	-	-	-	-	-	32	30	12	9	18	54	5	46	39	40	5	20	65	-	-	-	-	-	
WHOLESALE TRADE -----	130	2.73	2.77	2.26- 3.08	-	-	-	-	20	21	3	-	4	10	11	-	-	35	3	4	15	4	-	-	-	-	-	
RETAIL TRADE -----	502	2.44	2.33	2.10- 2.84	13	20	24	11	57	16	94	58	29	30	20	2	9	26	47	-	4	-	42	-	-	-	-	
FINANCE -----	291	2.48	2.51	2.26- 2.72	-	-	2	2	42	11	29	35	22	38	27	49	5	6	4	1	16	-	2	-	-	-	-	
SERVICES -----	4,359	2.02	1.97	1.84- 2.10	42	460	1395	401	985	101	123	186	15	589	34	18	10	-	-	-	-	-	-	-	-	-	-	
JANITORS, PORTERS, AND CLEANERS (WOMEN)	2,003	1.94	1.88	1.83- 2.01	10	99	1168	182	305	43	57	36	41	21	6	9	18	2	-	-	-	6	-	-	-	-	-	
MANUFACTURING -----	143	2.33	2.32	2.05- 2.56	-	-	21	-	28	8	30	9	7	1	9	14	2	-	-	-	-	6	-	-	-	-	-	
NONMANUFACTURING -----	1,860	1.91	1.87	1.83- 1.98	10	99	1147	182	277	35	49	6	32	14	5	-	4	-	-	-	-	-	-	-	-	-	-	
RETAIL TRADE -----	50	2.06	1.89	1.83- 2.33	2	6	19	1	1	1	7	5	7	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
SERVICES -----	1,218	1.89	1.87	1.83- 1.98	8	83	766	70	271	2	9	1	3	1	4	-	-	-	-	-	-	-	-	-	-	-	-	
LABORERS, MATERIAL HANDLING -----	4,079	2.79	2.76	2.41- 3.20	23	85	75	60	141	158	225	219	278	356	300	185	286	170	328	165	141	207	498	45	122	12	-	
MANUFACTURING -----	2,245	2.63	2.61	2.35- 2.88	-	1	40	33	112	130	177	129	192	291	258	137	228	36	159	46	101	108	56	7	4	-	-	
NONMANUFACTURING -----	1,834	2.98	3.07	2.51- 3.53	23	84	35	27	29	28	48	90	86	65	42	48	58	134	169	119	40	99	442	38	118	12	-	
WHOLESALE TRADE -----	850	3.14	3.25	3.02- 3.57	22	31	8	8	13	5	21	34	12	12	-	17	1	152	88	-	74	194	27	118	12	-	-	
RETAIL TRADE -----	721	2.75	2.84	2.40- 3.14	1	50	27	10	16	9	14	52	56	40	39	30	44	128	17	23	38	25	102	-	-	-	-	
ORDER FILLERS -----	2,009	2.96	3.06	2.49- 3.36	6	5	12	7	21	62	82	111	225	81	66	55	58	76	224	109	261	84	348	34	80	2	-	
MANUFACTURING -----	615	2.71	2.50	2.41- 3.04	-	-	-	-	16	18	31	67	184	31	39	15	10	21	74	14	4	12	18	30	29	2	-	
NONMANUFACTURING -----	1,394	3.07	3.21	2.83- 3.51	6	5	12	7	5	44	51	44	41	50	27	40	48	55	150	95	257	72	330	4	51	-	-	
WHOLESALE TRADE -----	744	2.99	3.06	2.60- 3.52	-	5	10	5	5	36	30	29	38	28	17	35	43	10	133	52	28	18	178	-	44	-	-	
RETAIL TRADE -----	484	3.20	3.28	3.20- 3.52	6	-	2	2	-	2	16	11	1	18	9	-	4	41	5	2	159	54	152	-	-	-	-	
PACKERS, SHIPPING -----	1,053	2.88	2.89	2.41- 3.50	2	2	-	7	97	58	42	52	54	43	63	29	83	4	111	-	14	127	265	-	-	-	-	
MANUFACTURING -----	636	2.83	2.86	2.42- 3.34	-	-	-	-	92	6	23	29	42	17	45	21	78	2	68	-	10	123	80	-	-	-	-	
NONMANUFACTURING -----	417	2.96	3.07	2.38- 3.54	2	2	-	7	5	52	19	23	12	26	18	8	5	2	43	-	4	4	185	-	-	-	-	
WHOLESALE TRADE -----	379	3.00	3.10	2.39- 3.55	-	-	-	5	4	50	16	20	12	25	4	8	5	-	42	-	4	184	-	-	-	-	-	
PACKERS, SHIPPING (WOMEN) -----	289	2.45	2.29	2.03- 3.11	1	19	8	35	32	19	31	21	17	7	5	-	10	-	-	-	84	-	-	-	-	-	-	
MANUFACTURING -----	244	2.45	2.25	2.00- 3.13	1	19	8	32	30	19	30	18	3	-	-	-	-	-	84	-	-	-	-	-	-	-	-	
RECEIVING CLERKS -----	723	2.87	2.95	2.51- 3.22	-	-	-	5	26	29	66	19	34	33	38	23	56	68	38	89	79	60	21	37	2	-	-	
MANUFACTURING -----	234	2.82	2.89	2.46- 3.15	-	-	-	2	-	6	40	3	14	6	14	9	25	23	30	8	23	26	-	3	2	-	-	
NONMANUFACTURING -----	489	2.89	2.98	2.53- 3.24	-	-	-	3	26	23	26	16	20	27	24	14	31	45	8	81	56	34	21	34	-	-	-	
WHOLESALE TRADE -----	232	2.75	2.70	2.29- 3.19	-	-	-	-	20	20	21	12	16	9	19	11	13	11	-	24	13	15	2	26	-	-	-	
RETAIL TRADE -----	226	3.00	3.13	2.88- 3.24	-	-	-	3	6	3	2	3	2	17	5	1	18	33	5	57	34	17	17	3	-	-	-	
SHIPPING CLERKS -----	517	2.98	2.99	2.68- 3.32	1	-	4	-	8	2	36	7	3	42	34	32	16	87	38	58	14	34	69	15	6	11	-	
MANUFACTURING -----	212	2.96	2.88	2.63- 3.25	-	-	-	-	-	22	6	-	19	20	31	11	14	22	11	7	2	15	15	6	11	-	-	
NONMANUFACTURING -----	305	2.99	3.03	2.90- 3.33	1	-	4	-	8	2	14	1	3	23	14	1	5	73	16	47	7	32	54	-	-	-	-	
WHOLESALE TRADE -----	236	3.05	3.05	2.93- 3.33	-	-	-	-	-	8	-	1	18	12	2	72	11	46	-	24	42	-	-	-	-	-	-	
RETAIL TRADE -----	57	2.71	2.59	2.18- 3.38	1	-	4	-	8	2	6	1	2	5	1	1	1	-	4	-	1	8	12	-	-	-	-	

See footnotes at end of table.

Appendix. Occupational Descriptions

The primary purpose of preparing job descriptions for the Bureau's wage surveys is to assist its field staff in classifying into appropriate occupations workers who are employed under a variety of payroll titles and different work arrangements from establishment to establishment and from area to area. This permits the grouping of occupational wage rates representing comparable job content. Because of this emphasis on interestablishment and interarea comparability of occupational content, the Bureau's job descriptions may differ significantly from those in use in individual establishments or those prepared for other purposes. In applying these job descriptions, the Bureau's field economists are instructed to exclude working supervisors; apprentices; learners; beginners; trainees; and handicapped, part-time, temporary, and probationary workers.

OFFICE

BILLER, MACHINE

Prepares statements, bills, and invoices on a machine other than an ordinary or electro-matic typewriter. May also keep records as to billings or shipping charges or perform other clerical work incidental to billing operations. For wage study purposes, billers, machine, are classified by type of machine, as follows:

Biller, machine (billing machine). Uses a special billing machine (Moon Hopkins, Elliott Fisher, Burroughs, etc., which are combination typing and adding machines) to prepare bills and invoices from customers' purchase orders, internally prepared orders, shipping memorandums, etc. Usually involves application of predetermined discounts and shipping charges, and entry of necessary extensions, which may or may not be computed on the billing machine, and totals which are automatically accumulated by machine. The operation usually involves a large number of carbon copies of the bill being prepared and is often done on a fanfold machine.

Biller, machine (bookkeeping machine). Uses a bookkeeping machine (Sundstrand, Elliott Fisher, Remington Rand, etc., which may or may not have typewriter keyboard) to prepare customers' bills as part of the accounts receivable operation. Generally involves the simultaneous entry of figures on customers' ledger record. The machine automatically accumulates figures on a number of vertical columns and computes, and usually prints automatically the debit or credit balances. Does not involve a knowledge of bookkeeping. Works from uniform and standard types of sales and credit slips.

BOOKKEEPING-MACHINE OPERATOR

Operates a bookkeeping machine (Remington Rand, Elliott Fisher, Sundstrand, Burroughs, National Cash Register, with or without a typewriter keyboard) to keep a record of business transactions.

Class A. Keeps a set of records requiring a knowledge of and experience in basic bookkeeping principles, and familiarity with the structure of the particular accounting system used. Determines proper records and distribution of debit and credit items to be used in each phase of the work. May prepare consolidated reports, balance sheets, and other records by hand.

Class B. Keeps a record of one or more phases or sections of a set of records usually requiring little knowledge of basic bookkeeping. Phases or sections include accounts payable, payroll, customers' accounts (not including a simple type of billing described under biller, machine), cost distribution, expense distribution, inventory control, etc. May check or assist in preparation of trial balances and prepare control sheets for the accounting department.

CLERK, ACCOUNTING

Class A. Under general direction of a bookkeeper or accountant, has responsibility for keeping one or more sections of a complete set of books or records relating to one phase of an establishment's business transactions. Work involves posting and balancing subsidiary ledger or ledgers such as accounts receivable or accounts payable; examining and coding invoices or vouchers with proper accounting distribution; and requires judgment and experience in making proper assignments and allocations. May assist in preparing, adjusting, and closing journal entries; and may direct class B accounting clerks.

Class B. Under supervision, performs one or more routine accounting operations such as posting simple journal vouchers or accounts payable vouchers, entering vouchers in voucher registers; reconciling bank accounts; and posting subsidiary ledgers controlled by general ledgers, or posting simple cost accounting data. This job does not require a knowledge of accounting and bookkeeping principles but is found in offices in which the more routine accounting work is subdivided on a functional basis among several workers.

CLERK, FILE

Class A. In an established filing system containing a number of varied subject matter files, classifies and indexes file material such as correspondence, reports, technical documents, etc. May also file this material. May keep records of various types in conjunction with the files. May lead a small group of lower level file clerks.

Class B. Sorts, codes, and files unclassified material by simple (subject matter) headings or partly classified material by finer subheadings. Prepares simple related index and cross-reference aids. As requested, locates clearly identified material in files and forwards material. May perform related clerical tasks required to maintain and service files.

Class C. Performs routine filing of material that has already been classified or which is easily classified in a simple serial classification system (e.g., alphabetical, chronological, or numerical). As requested, locates readily available material in files and forwards material; and may fill out withdrawal charge. Performs simple clerical and manual tasks required to maintain and service files.

CLERK, ORDER

Receives customers' orders for material or merchandise by mail, phone, or personally. Duties involve any combination of the following: Quoting prices to customers; making out an order sheet listing the items to make up the order; checking prices and quantities of items on order sheet; and distributing order sheets to respective departments to be filled. May check with credit department to determine credit rating of customer, acknowledge receipt of orders from customers, follow up orders to see that they have been filled, keep file of orders received, and check shipping invoices with original orders.

CLERK, PAYROLL

Computes wages of company employees and enters the necessary data on the payroll sheets. Duties involve: Calculating workers' earnings based on time or production records; and posting calculated data on payroll sheet, showing information such as worker's name, working days, time, rate, deductions for insurance, and total wages due. May make out paychecks and assist paymaster in making up and distributing pay envelopes. May use a calculating machine.

COMPTOMETER OPERATOR

Primary duty is to operate a Comptometer to perform mathematical computations. This job is not to be confused with that of statistical or other type of clerk, which may involve frequent use of a Comptometer but, in which, use of this machine is incidental to performance of other duties.

KEYPUNCH OPERATOR

Class A. Operates a numerical and/or alphabetical or combination keypunch machine to transcribe data from various source documents to keypunch tabulating cards. Performs same tasks as lower level keypunch operator but, in addition, work requires application of coding skills and the making of some determinations, for example, locates on the source document the items to be punched; extracts information from several documents; and searches for and interprets information on the document to determine information to be punched. May train inexperienced operators.

KEYPUNCH OPERATOR—Continued

Class B. Under close supervision or following specific procedures or instructions, transcribes data from source documents to punched cards. Operates a numerical and/or alphabetical or combination keypunch machine to keypunch tabulating cards. May verify cards. Working from various standardized source documents, follows specified sequences which have been coded or prescribed in detail and require little or no selecting, coding, or interpreting of data to be punched. Problems arising from erroneous items or codes, missing information, etc., are referred to supervisor.

OFFICE BOY OR GIRL

Performs various routine duties such as running errands, operating minor office machines such as sealers or mailers, opening and distributing mail, and other minor clerical work.

SECRETARY

Assigned as personal secretary, normally to one individual. Maintains a close and highly responsive relationship to the day-to-day work activities of the supervisor. Works fairly independently receiving a minimum of detailed supervision and guidance. Performs varied clerical and secretarial duties, usually including most of the following: (a) Receives telephone calls, personal callers, and incoming mail, answers routine inquiries, and routes the technical inquiries to the proper persons; (b) establishes, maintains, and revises the supervisor's files; (c) maintains the supervisor's calendar and makes appointments as instructed; (d) relays messages from supervisor to subordinates; (e) reviews correspondence, memoranda, and reports prepared by others for the supervisor's signature to assure procedural and typographic accuracy; and (f) performs stenographic and typing work.

May also perform other clerical and secretarial tasks of comparable nature and difficulty. The work typically requires knowledge of office routine and understanding of the organization, programs, and procedures related to the work of the supervisor.

Exclusions

Not all positions that are titled "secretary" possess the above characteristics. Examples of positions which are excluded from the definition are as follows: (a) Positions which do not meet the "personal" secretary concept described above; (b) stenographers not fully trained in secretarial type duties; (c) stenographers serving as office assistants to a group of professional, technical, or managerial persons; (d) secretary positions in which the duties are either substantially more routine or substantially more complex and responsible than those characterized in the definition; and (e) assistant type positions which involve more difficult or more responsible technical, administrative, supervisory, or specialized clerical duties which are not typical of secretarial work.

NOTE: The term "corporate officer," used in the level definitions following, refers to those officials who have a significant corporate-wide policymaking role with regard to major company activities. The title "vice president," though normally indicative of this role, does not in all cases identify such positions. Vice presidents whose primary responsibility is to act personally on individual cases or transactions (e.g., approve or deny individual loan or credit actions; administer individual trust accounts; directly supervise a clerical staff) are not considered to be "corporate officers" for purposes of applying the following level definitions.

Class A

- a. Secretary to the chairman of the board or president of a company that employs, in all, over 100 but fewer than 5,000 persons; or
- b. Secretary to a corporate officer (other than the chairman of the board or president) of a company that employs, in all, over 5,000 but fewer than 25,000 persons; or
- c. Secretary to the head (immediately below the corporate officer level) of a major segment or subsidiary of a company that employs, in all, over 25,000 persons.

Class B

- a. Secretary to the chairman of the board or president of a company that employs, in all, fewer than 100 persons; or
- b. Secretary to a corporate officer (other than the chairman of the board or president) of a company that employs, in all, over 100 but fewer than 5,000 persons; or
- c. Secretary to the head (immediately below the officer level) over either a major corporate-wide functional activity (e.g., marketing, research, operations, industrial relations, etc.) or a major geographic or organizational segment (e.g., a regional headquarters; a major division) of a company that employs, in all, over 5,000 but fewer than 25,000 employees; or

SECRETARY—Continued

d. Secretary to the head of an individual plant, factory, etc. (or other equivalent level of official) that employs, in all, over 5,000 persons; or

e. Secretary to the head of a large and important organizational segment (e.g., a middle management supervisor of an organizational segment often involving as many as several hundred persons) of a company that employs, in all, over 25,000 persons.

Class C

a. Secretary to an executive or managerial person whose responsibility is not equivalent to one of the specific level situations in the definition for class B, but whose subordinate staff normally numbers at least several dozen employees and is usually divided into organizational segments which are often, in turn, further subdivided. In some companies, this level includes a wide range of organizational echelons; in others, only one or two; or

b. Secretary to the head of an individual plant, factory, etc. (or other equivalent level of official) that employs, in all, fewer than 5,000 persons.

Class D

a. Secretary to the supervisor or head of a small organizational unit (e.g., fewer than about 25 or 30 persons); or

b. Secretary to a nonsupervisory staff specialist, professional employee, administrative officer, or assistant, skilled technician or expert. (NOTE: Many companies assign stenographers, rather than secretaries as described above, to this level of supervisory or nonsupervisory worker.)

STENOGRAPHER, GENERAL

Primary duty is to take dictation involving a normal routine vocabulary from one or more persons either in shorthand or by Stenotype or similar machine; and transcribe dictation. May also type from written copy. May maintain files, keep simple records, or perform other relatively routine clerical tasks. May operate from a stenographic pool. Does not include transcribing-machine work. (See transcribing-machine operator.)

STENOGRAPHER, SENIOR

Primary duty is to take dictation involving a varied technical or specialized vocabulary such as in legal briefs or reports on scientific research from one or more persons either in shorthand or by Stenotype or similar machine; and transcribe dictation. May also type from written copy. May also set up and maintain files, keep records, etc.

OR

Performs stenographic duties requiring significantly greater independence and responsibility than stenographers, general as evidenced by the following: Work requires high degree of stenographic speed and accuracy; and a thorough working knowledge of general business and office procedures and of the specific business operations, organization, policies, procedures, files, workflow, etc. Uses this knowledge in performing stenographic duties and responsible clerical tasks such as, maintaining followup files; assembling material for reports, memorandums, letters, etc.; composing simple letters from general instructions; reading and routing incoming mail; and answering routine questions, etc. Does not include transcribing-machine work.

SWITCHBOARD OPERATOR

Class A. Operates a single- or multiple-position telephone switchboard handling incoming, outgoing, intraplant or office calls. Performs full telephone information service or handles complex calls, such as conference, collect, overseas, or similar calls, either in addition to doing routine work as described for switchboard operator, class B, or as a full-time assignment. ("Full" telephone information service occurs when the establishment has varied functions that are not readily understandable for telephone information purposes, e.g., because of overlapping or interrelated functions, and consequently present frequent problems as to which extensions are appropriate for calls.)

Class B. Operates a single- or multiple-position telephone switchboard handling incoming, outgoing, intraplant or office calls. May handle routine long distance calls and record tolls. May perform limited telephone information service. ("Limited" telephone information service occurs if the functions of the establishment serviced are readily understandable for telephone information purposes, or if the requests are routine, e.g., giving extension numbers when specific names are furnished, or if complex calls are referred to another operator.)

SWITCHBOARD OPERATOR-RECEPTIONIST

In addition to performing duties of operator on a single-position or monitor-type switchboard, acts as receptionist and may also type or perform routine clerical work as part of regular duties. This typing or clerical work may take the major part of this worker's time while at switchboard.

TABULATING-MACHINE OPERATOR

Class A. Operates a variety of tabulating or electrical accounting machines, typically including such machines as the tabulator, calculator, interpreter, collator, and others. Performs complete reporting assignments without close supervision, and performs difficult wiring as required. The complete reporting and tabulating assignments typically involve a variety of long and complex reports which often are of irregular or nonrecurring type requiring some planning and sequencing of steps to be taken. As a more experienced operator, is typically involved in training new operators in machine operations, or partially trained operators in wiring from diagrams and operating sequences of long and complex reports. Does not include working supervisors performing tabulating-machine operations and day-to-day supervision of the work and production of a group of tabulating-machine operators.

Class B. Operates more difficult tabulating or electrical accounting machines such as the tabulator and calculator, in addition to the sorter, reproducer, and collator. This work is performed under specific instructions and may include the performance of some wiring from diagrams. The work typically involves, for example, tabulations involving a repetitive accounting exercise, a complete but small tabulating study, or parts of a longer and more complex report. Such reports and studies are usually of a recurring nature where the procedures are well established. May also include the training of new employees in the basic operation of the machine.

COMPUTER OPERATOR

Monitors and operates the control console of a digital computer to process data according to operating instructions, usually prepared by a programmer. Work includes most of the following: Studies instructions to determine equipment setup and operations; loads equipment with required items (tape reels, cards, etc.); switches necessary auxiliary equipment into circuit, and starts and operates computer; makes adjustments to computer to correct operating problems and meet special conditions; reviews errors made during operation and determines cause or refers problem to supervisor or programmer; and maintains operating records. May test and assist in correcting program.

For wage study purposes, computer operators are classified as follows:

Class A. Operates independently, or under only general direction, a computer running programs with most of the following characteristics: New programs are frequently tested and introduced; scheduling requirements are of critical importance to minimize downtime; the programs are of complex design so that identification of error source often requires a working knowledge of the total program, and alternate programs may not be available. May give direction and guidance to lower level operators.

Class B. Operates independently, or under only general direction, a computer running programs with most of the following characteristics: Most of the programs are established production runs, typically run on a regularly recurring basis; there is little or no testing of new programs required; alternate programs are provided in case original program needs major change or cannot be corrected within a reasonable time. In common error situations, diagnoses cause and takes corrective action. This usually involves applying previously programmed corrective steps, or using standard correction techniques.

OR

Operates under direct supervision a computer running programs or segments of programs with the characteristics described for class A. May assist a higher level operator by independently performing less difficult tasks assigned, and performing difficult tasks following detailed instructions and with frequent review of operations performed.

Class C. Works on routine programs under close supervision. Is expected to develop working knowledge of the computer equipment used and ability to detect problems involved in running routine programs. Usually has received some formal training in computer operation. May assist higher level operator on complex programs.

TABULATING-MACHINE OPERATOR—Continued

Class C. Operates simple tabulating or electrical accounting machines such as the sorter, reproducing punch, collator, etc., with specific instructions. May include simple wiring from diagrams and some filing work. The work typically involves portions of a work unit, for example, individual sorting or collating runs or repetitive operations.

TRANSCRIBING-MACHINE OPERATOR, GENERAL

Primary duty is to transcribe dictation involving a normal routine vocabulary from transcribing-machine records. May also type from written copy and do simple clerical work. Workers transcribing dictation involving a varied technical or specialized vocabulary such as legal briefs or reports on scientific research are not included. A worker who takes dictation in shorthand or by Stenotype or similar machine is classified as a stenographer, general.

TYPIST

Uses a typewriter to make copies of various material or to make out bills after calculations have been made by another person. May include typing of stencils, mats, or similar materials for use in duplicating processes. May do clerical work involving little special training, such as keeping simple records, filing records and reports, or sorting and distributing incoming mail.

Class A. Performs one or more of the following: Typing material in final form when it involves combining material from several sources or responsibility for correct spelling, syllabication, punctuation, etc., of technical or unusual words or foreign language material; and planning layout and typing of complicated statistical tables to maintain uniformity and balance in spacing. May type routine form letters varying details to suit circumstances.

Class B. Performs one or more of the following: Copy typing from rough or clear drafts; routine typing of forms, insurance policies, etc.; and setting up simple standard tabulations, or copying more complex tables already setup and spaced properly.

PROFESSIONAL AND TECHNICAL

COMPUTER PROGRAMER, BUSINESS

Converts statements of business problems, typically prepared by a systems analyst, into a sequence of detailed instructions which are required to solve the problems by automatic data processing equipment. Working from charts or diagrams, the programmer develops the precise instructions which, when entered into the computer system in coded language, cause the manipulation of data to achieve desired results. Work involves most of the following: Applies knowledge of computer capabilities, mathematics, logic employed by computers, and particular subject matter involved to analyze charts and diagrams of the problem to be programmed. Develops sequence of program steps, writes detailed flow charts to show order in which data will be processed; converts these charts to coded instructions for machine to follow; tests and corrects programs; prepares instructions for operating personnel during production run; analyzes, reviews, and alters programs to increase operating efficiency or adapt to new requirements; maintains records of program development and revisions. (NOTE: Workers performing both systems analysis and programming should be classified as systems analysts if this is the skill used to determine their pay.)

Does not include employees primarily responsible for the management or supervision of other electronic data processing (EDP) employees, or programmers primarily concerned with scientific and/or engineering problems.

For wage study purposes, programmers are classified as follows:

Class A. Works independently or under only general direction on complex problems which require competence in all phases of programming concepts and practices. Working from diagrams and charts which identify the nature of desired results, major processing steps to be accomplished, and the relationships between various steps of the problem solving routine; plans the full range of programming actions needed to efficiently utilize the computer system in achieving desired end products.

At this level, programming is difficult because computer equipment must be organized to produce several interrelated but diverse products from numerous and diverse data elements. A wide variety and extensive number of internal processing actions must occur. This requires such actions as development of common operations which can be reused, establishment of linkage points between operations, adjustments to data when program requirements exceed computer storage capacity, and substantial manipulation and resequencing of data elements to form a highly integrated program.

May provide functional direction to lower level programmers who are assigned to assist.

COMPUTER PROGRAMER, BUSINESS—Continued

Class B. Works independently or under only general direction on relatively simple programs, or on simple segments of complex programs. Programs (or segments) usually process information to produce data in two or three varied sequences or formats. Reports and listings are produced by refining, adapting, arraying, or making minor additions to or deletions from input data which are readily available. While numerous records may be processed, the data have been refined in prior actions so that the accuracy and sequencing of data can be tested by using a few routine checks. Typically, the program deals with routine record-keeping type operations.

OR

Works on complex programs (as described for class A) under close direction of a higher level programmer or supervisor. May assist higher level programmer by independently performing less difficult tasks assigned, and performing more difficult tasks under fairly close direction.

May guide or instruct lower level programmers.

Class C. Makes practical applications of programing practices and concepts usually learned in formal training courses. Assignments are designed to develop competence in the application of standard procedures to routine problems. Receives close supervision on new aspects of assignments; and work is reviewed to verify its accuracy and conformance with required procedures.

COMPUTER SYSTEMS ANALYST, BUSINESS

Analyzes business problems to formulate procedures for solving them by use of electronic data processing equipment. Develops a complete description of all specifications needed to enable programmers to prepare required digital computer programs. Work involves most of the following: Analyzes subject-matter operations to be automated and identifies conditions and criteria required to achieve satisfactory results; specifies number and types of records, files, and documents to be used; outlines actions to be performed by personnel and computers in sufficient detail for presentation to management and for programing (typically this involves preparation of work and data flow charts); coordinates the development of test problems and participates in trial runs of new and revised systems; and recommends equipment changes to obtain more effective overall operations. (NOTE: Workers performing both systems analysis and programing should be classified as systems analysts if this is the skill used to determine their pay.)

Does not include employees primarily responsible for the management or supervision of other electronic data processing (EDP) employees, or systems analysts primarily concerned with scientific or engineering problems.

For wage study purposes, systems analysts are classified as follows:

Class A. Works independently or under only general direction on complex problems involving all phases of systems analysis. Problems are complex because of diverse sources of input data and multiple-use requirements of output data. (For example, develops an integrated production scheduling, inventory control, cost analysis, and sales analysis record in which every item of each type is automatically processed through the full system of records and appropriate followup actions are initiated by the computer.) Confers with persons concerned to determine the data processing problems and advises subject-matter personnel on the implications of new or revised systems of data processing operations. Makes recommendations, if needed, for approval of major systems installations or changes and for obtaining equipment.

May provide functional direction to lower level systems analysts who are assigned to assist.

Class B. Works independently or under only general direction on problems that are relatively uncomplicated to analyze, plan, program, and operate. Problems are of limited complexity because sources of input data are homogeneous and the output data are closely related. (For example, develops systems for maintaining depositor accounts in a bank,

CARPENTER, MAINTENANCE

Performs the carpentry duties necessary to construct and maintain in good repair building woodwork and equipment such as bins, cribs, counters, benches, partitions, doors, floors, stairs, casings, and trim made of wood in an establishment. Work involves most of the following: Planning and laying out of work from blueprints, drawings, models, or verbal instructions using a variety

COMPUTER SYSTEMS ANALYST, BUSINESS—Continued

maintaining accounts receivable in a retail establishment, or maintaining inventory accounts in a manufacturing or wholesale establishment.) Confers with persons concerned to determine the data processing problems and advises subject-matter personnel on the implications of the data processing systems to be applied.

OR

Works on a segment of a complex data processing scheme or system, as described for class A. Works independently on routine assignments and receives instruction and guidance on complex assignments. Work is reviewed for accuracy of judgment, compliance with instructions, and to insure proper alinement with the overall system.

Class C. Works under immediate supervision, carrying out analyses as assigned, usually of a single activity. Assignments are designed to develop and expand practical experience in the application of procedures and skills required for systems analysis work. For example, may assist a higher level systems analyst by preparing the detailed specifications required by programmers from information developed by the higher level analyst.

DRAFTSMAN

Class A. Plans the graphic presentation of complex items having distinctive design features that differ significantly from established drafting precedents. Works in close support with the design originator, and may recommend minor design changes. Analyzes the effect of each change on the details of form, function, and positional relationships of components and parts. Works with a minimum of supervisory assistance. Completed work is reviewed by design originator for consistency with prior engineering determinations. May either prepare drawings, or direct their preparation by lower level draftsmen.

Class B. Performs nonroutine and complex drafting assignments that require the application of most of the standardized drawing techniques regularly used. Duties typically involve such work as: Prepares working drawings of subassemblies with irregular shapes, multiple functions, and precise positional relationships between components; prepares architectural drawings for construction of a building including detail drawings of foundations, wall sections, floor plans, and roof. Uses accepted formulas and manuals in making necessary computations to determine quantities of materials to be used, load capacities, strengths, stresses, etc. Receives initial instructions, requirements, and advice from supervisor. Completed work is checked for technical adequacy.

Class C. Prepares detail drawings of single units or parts for engineering, construction, manufacturing, or repair purposes. Types of drawings prepared include isometric projections (depicting three dimensions in accurate scale) and sectional views to clarify positioning of components and convey needed information. Consolidates details from a number of sources and adjusts or transposes scale as required. Suggested methods of approach, applicable precedents, and advice on source materials are given with initial assignments. Instructions are less complete when assignments recur. Work may be spot-checked during progress.

DRAFTSMAN-TRACER

Copies plans and drawings prepared by others by placing tracing cloth or paper over drawings and tracing with pen or pencil. (Does not include tracing limited to plans primarily consisting of straight lines and a large scale not requiring close delineation.)

and/or

Prepares simple or repetitive drawings of easily visualized items. Work is closely supervised during progress.

NURSE, INDUSTRIAL (REGISTERED)

A registered nurse who gives nursing service under general medical direction to ill or injured employees or other persons who become ill or suffer an accident on the premises of a factory or other establishment. Duties involve a combination of the following: Giving first aid to the ill or injured; attending to subsequent dressing of employees' injuries; keeping records of patients treated; preparing accident reports for compensation or other purposes; assisting in physical examinations and health evaluations of applicants and employees; and planning and carrying out programs involving health education, accident prevention, evaluation of plant environment, or other activities affecting the health, welfare, and safety of all personnel.

MAINTENANCE AND POWERPLANT

CARPENTER, MAINTENANCE—Continued

of carpenter's handtools, portable power tools, and standard measuring instruments; making standard shop computations relating to dimensions of work; and selecting materials necessary for the work. In general, the work of the maintenance carpenter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

ELECTRICIAN, MAINTENANCE

Performs a variety of electrical trade functions such as the installation, maintenance, or repair of equipment for the generation, distribution, or utilization of electric energy in an establishment. Work involves most of the following: Installing or repairing any of a variety of electrical equipment such as generators, transformers, switchboards, controllers, circuit breakers, motors, heating units, conduit systems, or other transmission equipment; working from blueprints, drawings, layouts, or other specifications; locating and diagnosing trouble in the electrical system or equipment; working standard computations relating to load requirements of wiring or electrical equipment; and using a variety of electrician's handtools and measuring and testing instruments. In general, the work of the maintenance electrician requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

ENGINEER, STATIONARY

Operates and maintains and may also supervise the operation of stationary engines and equipment (mechanical or electrical) to supply the establishment in which employed with power, heat, refrigeration, or air-conditioning. Work involves: Operating and maintaining equipment such as steam engines, air compressors, generators, motors, turbines, ventilating and refrigerating equipment, steam boilers and boiler-fed water pumps; making equipment repairs; and keeping a record of operation of machinery, temperature, and fuel consumption. May also supervise these operations. Head or chief engineers in establishments employing more than one engineer are excluded.

FIREMAN, STATIONARY BOILER

Fires stationary boilers to furnish the establishment in which employed with heat, power, or steam. Feeds fuels to fire by hand or operates a mechanical stoker, or gas or oil burner; and checks water and safety valves. May clean, oil, or assist in repairing boilerroom equipment.

HELPER, MAINTENANCE TRADES

Assists one or more workers in the skilled maintenance trades, by performing specific or general duties of lesser skill, such as keeping a worker supplied with materials and tools; cleaning working area, machine, and equipment; assisting journeyman by holding materials or tools; and performing other unskilled tasks as directed by journeyman. The kind of work the helper is permitted to perform varies from trade to trade: In some trades the helper is confined to supplying, lifting, and holding materials and tools and cleaning working areas; and in others he is permitted to perform specialized machine operations, or parts of a trade that are also performed by workers on a full-time basis.

MACHINE-TOOL OPERATOR, TOOLROOM

Specializes in the operation of one or more types of machine tools, such as jig borers, cylindrical or surface grinders, engine lathes, or milling machines, in the construction of machine-shop tools, gages, jigs, fixtures, or dies. Work involves most of the following: Planning and performing difficult machining operations; processing items requiring complicated setups or a high degree of accuracy; using a variety of precision measuring instruments; selecting feeds, speeds, tooling, and operation sequence; and making necessary adjustments during operation to achieve requisite tolerances or dimensions. May be required to recognize when tools need dressing, to dress tools, and to select proper coolants and cutting and lubricating oils. For cross-industry wage study purposes, machine-tool operators, toolroom, in tool and die jobbing shops are excluded from this classification.

MACHINIST, MAINTENANCE

Produces replacement parts and new parts in making repairs of metal parts of mechanical equipment operated in an establishment. Work involves most of the following: Interpreting written instructions and specifications; planning and laying out of work; using a variety of machinist's handtools and precision measuring instruments; setting up and operating standard machine tools; shaping of metal parts to close tolerances; making standard shop computations relating to dimensions of work, tooling, feeds, and speeds of machining; knowledge of the working properties of the common metals; selecting standard materials, parts, and equipment required for his work; and fitting and assembling parts into mechanical equipment. In general, the machinist's work normally requires a rounded training in machine-shop practice usually acquired through a formal apprenticeship or equivalent training and experience.

MECHANIC, AUTOMOTIVE (MAINTENANCE)

Repairs automobiles, buses, motortrucks, and tractors of an establishment. Work involves most of the following: Examining automotive equipment to diagnose source of trouble; disassembling equipment and performing repairs that involve the use of such handtools as wrenches, gages, drills, or specialized equipment in disassembling or fitting parts; replacing broken or defective parts from stock; grinding and adjusting valves; reassembling and installing

MECHANIC, AUTOMOTIVE (MAINTENANCE)—Continued

the various assemblies in the vehicle and making necessary adjustments; and alining wheels, adjusting brakes and lights, or tightening body bolts. In general, the work of the automotive mechanic requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

MECHANIC, MAINTENANCE

Repairs machinery or mechanical equipment of an establishment. Work involves most of the following: Examining machines and mechanical equipment to diagnose source of trouble; dismantling or partly dismantling machines and performing repairs that mainly involve the use of handtools in scraping and fitting parts; replacing broken or defective parts with items obtained from stock; ordering the production of a replacement part by a machine shop or sending of the machine to a machine shop for major repairs; preparing written specifications for major repairs or for the production of parts ordered from machine shop; reassembling machines; and making all necessary adjustments for operation. In general, the work of a maintenance mechanic requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience. Excluded from this classification are workers whose primary duties involve setting up or adjusting machines.

MILLWRIGHT

Installs new machines or heavy equipment, and dismantles and installs machines or heavy equipment when changes in the plant layout are required. Work involves most of the following: Planning and laying out of the work; interpreting blueprints or other specifications; using a variety of handtools and rigging; making standard shop computations relating to stresses, strength of materials, and centers of gravity; alining and balancing of equipment; selecting standard tools, equipment, and parts to be used; and installing and maintaining in good order power transmission equipment such as drives and speed reducers. In general, the millwright's work normally requires a rounded training and experience in the trade acquired through a formal apprenticeship or equivalent training and experience.

OILER

Lubricates, with oil or grease, the moving parts or wearing surfaces of mechanical equipment of an establishment.

PAINTER, MAINTENANCE

Paints and redecorates walls, woodwork, and fixtures of an establishment. Work involves the following: Knowledge of surface peculiarities and types of paint required for different applications; preparing surface for painting by removing old finish or by placing putty or filler in nail holes and interstices; and applying paint with spray gun or brush. May mix colors, oils, white lead, and other paint ingredients to obtain proper color or consistency. In general, the work of the maintenance painter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

PIPEFITTER, MAINTENANCE

Installs or repairs water, steam, gas, or other types of pipe and pipefittings in an establishment. Work involves most of the following: Laying out of work and measuring to locate position of pipe from drawings or other written specifications; cutting various sizes of pipe to correct lengths with chisel and hammer or oxyacetylene torch or pipe-cutting machine; threading pipe with stocks and dies; bending pipe by hand-driven or power-driven machines; assembling pipe with couplings and fastening pipe to hangers; making standard shop computations relating to pressures, flow, and size of pipe required; and making standard tests to determine whether finished pipes meet specifications. In general, the work of the maintenance pipefitter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience. Workers primarily engaged in installing and repairing building sanitation or heating systems are excluded.

PLUMBER, MAINTENANCE

Keeps the plumbing system of an establishment in good order. Work involves: Knowledge of sanitary codes regarding installation of vents and traps in plumbing system; installing or repairing pipes and fixtures; and opening clogged drains with a plunger or plumber's snake. In general, the work of the maintenance plumber requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

SHEET-METAL WORKER, MAINTENANCE

Fabricates, installs, and maintains in good repair the sheet-metal equipment and fixtures (such as machine guards, grease pans, shelves, lockers, tanks, ventilators, chutes, ducts, metal roofing) of an establishment. Work involves most of the following: Planning and laying out all types of sheet-metal maintenance work from blueprints, models, or other specifications; setting up and operating all available types of sheet-metal working machines; using a variety of

SHEET-METAL WORKER, MAINTENANCE—Continued

handtools in cutting, bending, forming, shaping, fitting, and assembling; and installing sheet-metal articles as required. In general, the work of the maintenance sheet-metal worker requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

TOOL AND DIE MAKER

(Die maker; jig maker; tool maker; fixture maker; gage maker)

Constructs and repairs machine-shop tools, gages, jigs, fixtures or dies for forgings, punching, and other metal-forming work. Work involves most of the following: Planning and laying out of work from models, blueprints, drawings, or other oral and written specifications;

TOOL AND DIE MAKER—Continued

using a variety of tool and die maker's handtools and precision measuring instruments; understanding of the working properties of common metals and alloys; setting up and operating of machine tools and related equipment; making necessary shop computations relating to dimensions of work, speeds, feeds, and tooling of machines; heat-treating of metal parts during fabrication as well as of finished tools and dies to achieve required qualities; working to close tolerances; fitting and assembling of parts to prescribed tolerances and allowances; and selecting appropriate materials, tools, and processes. In general, the tool and die maker's work requires a rounded training in machine-shop and toolroom practice usually acquired through a formal apprenticeship or equivalent training and experience.

For cross-industry wage study purposes, tool and die makers in tool and die jobbing shops are excluded from this classification.

CUSTODIAL AND MATERIAL MOVEMENT

GUARD AND WATCHMAN

Guard. Performs routine police duties, either at fixed post or on tour, maintaining order, using arms or force where necessary. Includes gatemen who are stationed at gate and check on identity of employees and other persons entering.

Watchman. Makes rounds of premises periodically in protecting property against fire, theft, and illegal entry.

JANITOR, PORTER, OR CLEANER

(Sweeper; charwoman; janitress)

Cleans and keeps in an orderly condition factory working areas and washrooms, or premises of an office, apartment house, or commercial or other establishment. Duties involve a combination of the following: Sweeping, mopping or scrubbing, and polishing floors; removing chips, trash, and other refuse; dusting equipment, furniture, or fixtures; polishing metal fixtures or trimmings; providing supplies and minor maintenance services; and cleaning lavatories, showers, and restrooms. Workers who specialize in window washing are excluded.

LABORER, MATERIAL HANDLING

(Loader and unloader; handler and stacker; shelver; trucker; stockman or stock helper; warehouseman or warehouse helper)

A worker employed in a warehouse, manufacturing plant, store, or other establishment whose duties involve one or more of the following: Loading and unloading various materials and merchandise on or from freight cars, trucks, or other transporting devices; unpacking, shelving, or placing materials or merchandise in proper storage location; and transporting materials or merchandise by handtruck, car, or wheelbarrow. Longshoremen, who load and unload ships are excluded.

ORDER FILLER

(Order picker; stock selector; warehouse stockman)

Fills shipping or transfer orders for finished goods from stored merchandise in accordance with specifications on sales slips, customers' orders, or other instructions. May, in addition to filling orders and indicating items filled or omitted, keep records of outgoing orders, requisition additional stock or report short supplies to supervisor, and perform other related duties.

PACKER, SHIPPING

Prepares finished products for shipment or storage by placing them in shipping containers, the specific operations performed being dependent upon the type, size, and number of units to be packed, the type of container employed, and method of shipment. Work requires the placing of items in shipping containers and may involve one or more of the following: Knowledge of various items of stock in order to verify content; selection of appropriate type and size of container; inserting enclosures in container; using excelsior or other material to prevent breakage or damage; closing and sealing container; and applying labels or entering identifying data on container. Packers who also make wooden boxes or crates are excluded.

SHIPPING AND RECEIVING CLERK

Prepares merchandise for shipment, or receives and is responsible for incoming shipments of merchandise or other materials. Shipping work involves: A knowledge of shipping procedures, practices, routes, available means of transportation, and rate; and preparing records of the goods shipped, making up bills of lading, posting weight and shipping charges, and keeping a file of shipping records. May direct or assist in preparing the merchandise for shipment. Receiving work involves: Verifying or directing others in verifying the correctness of shipments against bills of lading, invoices, or other records; checking for shortages and rejecting damaged goods; routing merchandise or materials to proper departments; and maintaining necessary records and files.

For wage study purposes, workers are classified as follows:

Receiving clerk
Shipping clerk
Shipping and receiving clerk

TRUCKDRIVER

Drives a truck within a city or industrial area to transport materials, merchandise, equipment, or men between various types of establishments such as: Manufacturing plants, freight depots, warehouses, wholesale and retail establishments, or between retail establishments and customers' houses or places of business. May also load or unload truck with or without helpers, make minor mechanical repairs, and keep truck in good working order. Driver-salesmen and over-the-road drivers are excluded.

For wage study purposes, truckdrivers are classified by size and type of equipment, as follows: (Tractor-trailer should be rated on the basis of trailer capacity.)

Truckdriver (combination of sizes listed separately)
Truckdriver, light (under 1½ tons)
Truckdriver, medium (1½ to and including 4 tons)
Truckdriver, heavy (over 4 tons, trailer type)
Truckdriver, heavy (over 4 tons, other than trailer type)

TRUCKER, POWER

Operates a manually controlled gasoline- or electric-powered truck or tractor to transport goods and materials of all kinds about a warehouse, manufacturing plant, or other establishment.

For wage study purposes, workers are classified by type of truck, as follows:

Trucker, power (forklift)
Trucker, power (other than forklift)

Available On Request—

The ninth annual report on salaries for accountants, auditors, attorneys, chemists, engineers, engineering technicians, draftsmen, tracers, job analysts, directors of personnel, managers of office services, buyers, and clerical employees.

Order as BLS Bulletin 1617, National Survey of Professional, Administrative, Technical, and Clerical Pay, June 1968. Seventy-five cents a copy.

Area Wage Surveys

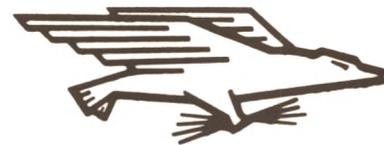
A list of the latest available bulletins is presented below. A directory of area wage studies including more limited studies conducted at the request of the Wage and Hour and Public Contracts Divisions of the Department of Labor is available on request. Bulletins may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402, or from any of the BLS regional sales offices shown on the inside front cover.

Area	Bulletin number and price	Area	Bulletin number and price
Akron, Ohio, July 1969 ¹	1625-89, 35 cents	Muskegon-Muskegon Heights, Mich., May 1969	1625-80, 30 cents
Albany-Schenectady-Troy, N.Y., Mar. 1969 ¹	1625-56, 35 cents	Newark and Jersey City, N.J., Jan. 1969	1625-46, 40 cents
Albuquerque, N. Mex., Apr. 1969	1625-67, 30 cents	New Haven, Conn., Jan. 1969	1625-38, 30 cents
Allentown-Bethlehem-Easton, Pa.-N.J., May 1969	1625-86, 30 cents	New Orleans, La., Feb. 1969 ¹	1625-51, 35 cents
Atlanta, Ga., May 1969	1625-77, 35 cents	New York, N.Y., Apr. 1969	1625-88, 60 cents
Baltimore, Md., Aug. 1969	1660-11, 35 cents	Norfolk-Portsmouth and Newport News- Hampton, Va., June 1968	1575-85, 30 cents
Beaumont-Port Arthur-Orange, Tex., May 1969 ¹	1625-75, 35 cents	Oklahoma City, Okla., July 1968	1625-9, 30 cents
Binghamton, N.Y., July 1969	1660-5, 30 cents	Omaha, Nebr.-Iowa, Sept. 1969	1660-12, 30 cents
Birmingham, Ala., Apr. 1969 ¹	1625-65, 35 cents	Paterson-Clifton-Passaic, N.J., May 1969	1625-87, 35 cents
Boise City, Idaho, July 1968 ¹	1625-6, 35 cents	Philadelphia, Pa.-N.J., Nov. 1968	1625-48, 50 cents
Boston, Mass., Aug. 1969	1660-16, 45 cents	Phoenix, Ariz., Mar. 1969	1625-60, 30 cents
Buffalo, N.Y., Nov. 1968 ¹	1625-35, 50 cents	Pittsburgh, Pa., Jan. 1969	1625-59, 35 cents
Burlington, Vt., Mar. 1969 ¹	1625-54, 35 cents	Portland, Maine, Nov. 1968	1625-20, 30 cents
Canton, Ohio, May 1969	1625-73, 30 cents	Portland, Oreg.-Wash., May 1969	1625-76, 30 cents
Charleston, W. Va., Apr. 1969	1625-71, 30 cents	Providence-Pawtucket-Warwick, R.I.-Mass., May 1969 ¹	1625-74, 35 cents
Charlotte, N.C., Mar. 1969	1625-61, 30 cents	Raleigh, N.C., Aug. 1969	1660-6, 30 cents
Chattanooga, Tenn.-Ga., Sept. 1969	1660-9, 30 cents	Richmond, Va., Mar. 1969	1625-69, 30 cents
Chicago, Ill., Apr. 1969 ¹	1625-82, 65 cents	Rochester, N.Y. (office occupations only), July 1969	1660-4, 30 cents
Cincinnati, Ohio-Ky.-Ind., Mar. 1969 ¹	1625-63, 45 cents	Rockford, Ill., May 1969	1625-72, 30 cents
Cleveland, Ohio, Sept. 1968 ¹	1625-19, 50 cents	St. Louis, Mo.-Ill., Mar. 1969 ¹	1625-64, 50 cents
Columbus, Ohio, Oct. 1968 ¹	1625-24, 35 cents	Salt Lake City, Utah, Dec. 1968	1625-36, 30 cents
Dallas, Tex., Nov. 1968 ¹	1625-28, 50 cents	San Antonio, Tex., June 1969 ¹	1625-85, 35 cents
Davenport-Rock Island-Moline, Iowa-Ill., Oct. 1968	1625-16, 30 cents	San Bernardino-Riverside-Ontario, Calif., Oct. 1968 ¹	1625-25, 40 cents
Dayton, Ohio, Jan. 1969 ¹	1625-42, 35 cents	San Diego, Calif., Nov. 1968	1625-32, 30 cents
Denver, Colo., Dec. 1968	1625-39, 30 cents	San Francisco-Oakland, Calif., Oct. 1968	1625-44, 35 cents
Des Moines, Iowa, Mar. 1969	1625-62, 30 cents	San Jose, Calif., Sept. 1968	1625-21, 30 cents
Detroit, Mich., Jan. 1969 ¹	1625-58, 50 cents	Savannah, Ga., May 1969	1625-68, 30 cents
Fort Worth, Tex., Nov. 1968 ¹	1625-27, 35 cents	Scranton, Pa., July 1969	1660-15, 30 cents
Green Bay, Wis., July 1969	1660-8, 30 cents	Seattle-Everett, Wash., Nov. 1968 ¹	1625-43, 35 cents
Greenville, S.C., May 1969 ¹	1625-70, 35 cents	Sioux Falls, S. Dak., Sept. 1969	1660-14, 25 cents
Houston, Tex., May 1969 ¹	1625-83, 45 cents	South Bend, Ind., Mar. 1969	1625-55, 30 cents
Indianapolis, Ind., Dec. 1968 ¹	1625-40, 35 cents	Spokane, Wash., June 1969	1625-81, 30 cents
Jackson, Miss., Feb. 1969 ¹	1625-45, 35 cents	Syracuse, N.Y., July 1969	1660-13, 30 cents
Jacksonville, Fla., Jan. 1969 ¹	1625-37, 35 cents	Tampa-St. Petersburg, Fla., Aug. 1969 ¹	1660-7, 35 cents
Kansas City, Mo.-Kans., Sept. 1969	1660-10, 35 cents	Toledo, Ohio-Mich., Feb. 1969 ¹	1625-57, 35 cents
Lawrence-Haverhill, Mass.-N.H., June 1969	1625-79, 30 cents	Trenton, N.J., Oct. 1968 ¹	1625-18, 35 cents
Little Rock-North Little Rock, Ark., July 1969	1660-2, 30 cents	Utica-Rome, N.Y., July 1969	1660-1, 30 cents
Los Angeles-Long Beach and Anaheim-Santa Ana- Garden Grove, Calif., Mar. 1969 ¹	1625-78, 50 cents	Washington, D.C.-Md.-Va., Sept. 1968	1625-22, 35 cents
Louisville, Ky.-Ind., Nov. 1968	1625-33, 30 cents	Waterbury, Conn., Mar. 1969	1625-50, 30 cents
Lubbock, Tex., Mar. 1969	1625-53, 30 cents	Waterloo, Iowa, Nov. 1968 ¹	1625-31, 35 cents
Manchester, N.H., July 1969	1660-3, 30 cents	Wichita, Kans., Dec. 1968	1625-41, 30 cents
Memphis, Tenn.-Ark., Nov. 1968	1625-30, 30 cents	Worcester, Mass., May 1969	1625-84, 30 cents
Miami, Fla., Dec. 1968 ¹	1625-29, 35 cents	York, Pa., Feb. 1969	1625-52, 30 cents
Midland and Odessa, Tex., Mar. 1969	1625-49, 25 cents	Youngstown-Warren, Ohio, Nov. 1968	1625-34, 30 cents
Milwaukee, Wis., Apr. 1969	1625-66, 35 cents		
Minneapolis-St. Paul, Minn., Jan. 1969	1625-47, 35 cents		

Data on establishment practices and supplementary wage provisions are also presented.

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