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AREA WAGE SURVEY

The Richmond, Virginia, Metropolitan Area, March 1971

Bulletin 1685-62

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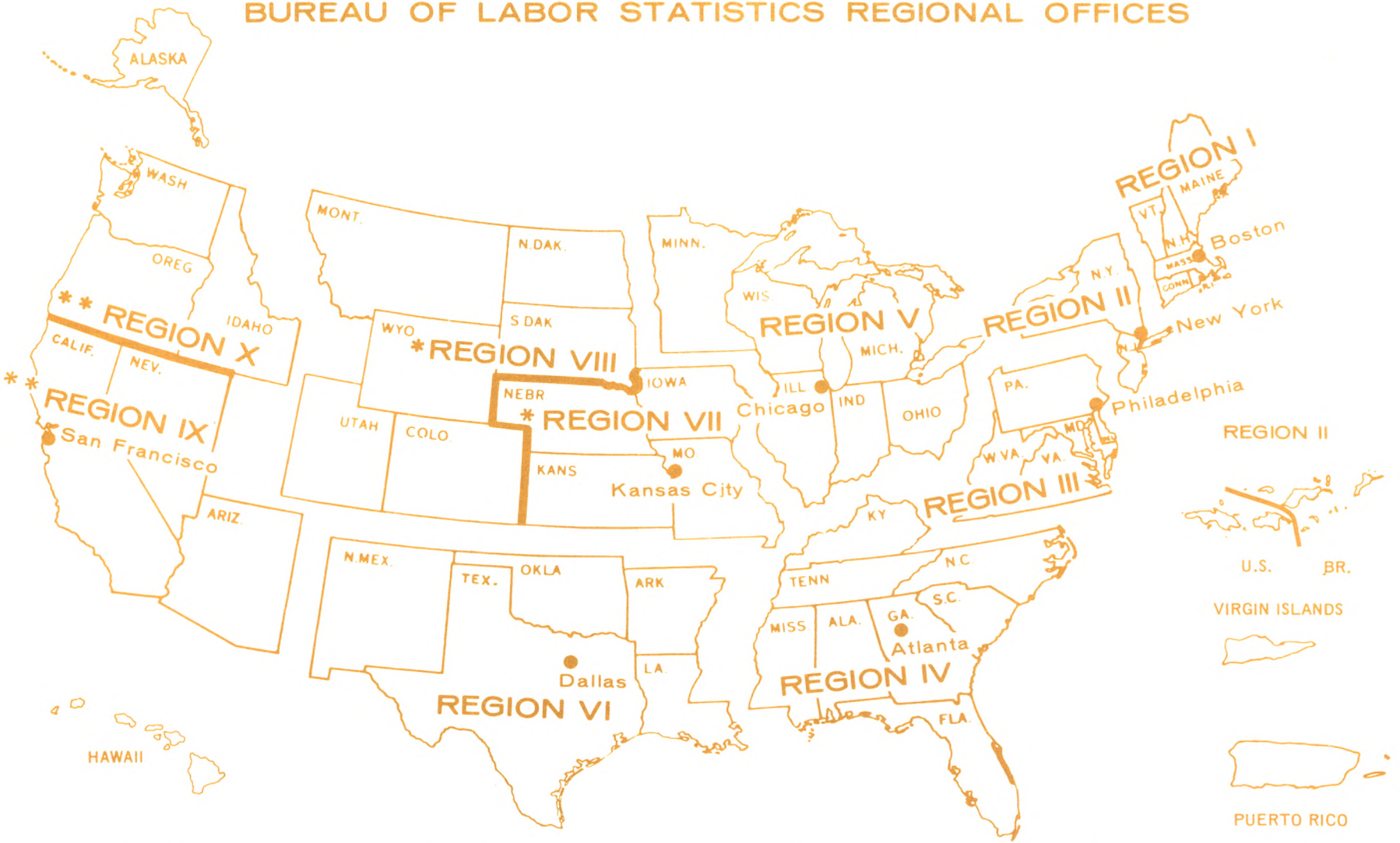

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U.S. DEPARTMENT OF LABOR
J. D. Hodgson, Secretary

BUREAU OF LABOR STATISTICS
Geoffrey H. Moore, Commissioner

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June 1971

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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 the survey results. 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 metropolitan 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 Richmond, Va., in March 1971. The Standard Metropolitan Statistical Area, as defined by the Bureau of the Budget through January 1968, consists of the city of Richmond; and the counties of Chesterfield, Hanover, and Henrico. This study was conducted by the Bureau's regional office in Philadelphia, Pa., under the general direction of Irwin L. Feigenbaum, Assistant Regional Director for Operations.

Contents

	Page
Introduction	1
Wage trends for selected occupational groups	4
Tables:	
1. Establishments and workers within scope of survey and number studied	3
2. Indexes of standard weekly salaries and straight-time hourly earnings for selected occupational groups, and percents of increase for selected periods	5
A. Occupational earnings:	
A-1. Office occupations—men and women	6
A-2. Professional and technical occupations—men and women	9
A-3. Office, professional, and technical occupations—men and women combined	10
A-4. Maintenance and powerplant occupations	11
A-5. Custodial and material movement occupations	12
Appendix. Occupational descriptions	15

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

A current report on occupational earnings and supplementary wage provisions in the Richmond area is also available for auto dealer repair shops (August 1969). Union scales, indicative of prevailing pay levels, are available for building construction; printing; local-transit operating employees; and local truckdrivers and helpers.

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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. Earnings data not shown separately for industry divisions are included in all industries combined data, where shown. Likewise, data are included in the overall classification when a subclassification of secretaries or truckdrivers is not shown or information to subclassify is not available.

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.

These surveys measure the level of occupational earnings in an area at a particular time. Comparisons of individual occupational averages over time may not reflect expected wage changes. The averages for individual jobs are affected by changes in wages and employment patterns. For example, proportions of workers employed by high- or low-wage firms may change or high-wage workers may advance to better jobs and be replaced by new workers at lower rates. Such shifts in employment could decrease an occupational average even though most establishments in an area increase wages during the year. Trends in earnings of occupational groups, shown in table 2, are better indicators of wage trends than individual jobs within the groups.

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

[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 77 areas at the request of the Wage and Hour Division of the U. S. Department of Labor.

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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.

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Table 1. Establishments and workers within scope of survey and number studied in Richmond, Va.,[1] by major industry division, March 1971[2]

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	
All divisions	-	453	146	91,613	100	62,887
Manufacturing	50	140	53	41,356	45	29,950
Nonmanufacturing	-	313	93	50,257	55	32,937
Transportation, communication, and other public utilities[5]	50	50	19	12,798	14	10,630
Wholesale trade[6]	50	64	16	5,482	6	2,523
Retail trade[6]	50	89	21	15,430	17	9,345
Finance, insurance, and real estate[6]	50	49	18	10,079	11	7,241
Services[6 7]	50	61	19	6,468	7	3,198

[1] The Richmond Standard Metropolitan Statistical Area, as defined by the Bureau of the Budget through January 1968, consists of the city of Richmond; and the counties of Chesterfield, Hanover, and Henrico. 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] Abbreviated to "public utilities" in the A-series tables. Taxicabs and services incidental to water transportation were excluded. Richmond's gas utility is municipally operated and is excluded by definition from the scope of the study.

[6] This industry division is represented in estimates for "all industries" and "nonmanufacturing" in the Series A tables. Separate presentation of data for this division is not made for one or more of the following reasons: (1) Employment in the division is too small to provide enough data to merit separate study, (2) the sample was not designed initially to permit separate presentation, (3) response was insufficient or inadequate to permit separate presentation, and (4) there is possibility of disclosure of individual establishment data.

[7] 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.

Almost one-half of the workers within scope of the survey in the Richmond area were employed in manufacturing firms. The following presents the major industry groups and specific industries as a percent of all manufacturing:

Industry groups		Specific industries	
Tobacco manufactures	21	Cigarettes	16
Chemicals and allied products	16	Plastics materials and synthetics	14
Paper and allied products	11	Nonferrous rolling and drawing	10
Food and kindred products	10		
Primary metal industries	10		
Printing and publishing	9		
Apparel and other textile products	8		

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.

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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. 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. Annual rates of increase, where shown, reflect the amount of increase for 12 months when the time period between surveys was other than 12 months. These computations were based on the assumption that wages increased at a constant rate between surveys. 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 following key occupations within an occupational group was assigned a constant weight based on its proportionate employment in the occupational group:

Office clerical (men and women):
- Bookkeeping-machine operators, class B
- Clerks, accounting, classes A and B
- Clerks, file, classes A, B, and C
- Clerks, order
- Clerks, payroll
- Comptometer operators
- Keypunch operators, classes A and B
- Office boys and girls

Office clerical (men and women)—Continued
- Secretaries
- Stenographers, general
- Stenographers, senior
- Switchboard operators, classes A and B
- Tabulating-machine operators, class B
- Typists, classes A and B

Industrial nurses (men and women):
- Nurses, industrial (registered)

Skilled maintenance (men):
- Carpenters
- Electricians
- Machinists
- Mechanics
- Mechanics (automotive)
- Painters
- Pipefitters
- Tool and die makers

Unskilled plant (men):
- Janitors, porters, and cleaners
- Laborers, material handling

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.

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.

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Table 2. Indexes of standard weekly salaries and straight-time hourly earnings for selected occupational groups in Richmond, Va., March 1970 and March 1971, 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 (November 1967=100)							
March 1970	113.1	116.3	116.1	[1]114.4	112.7	115.5	115.7	[1]115.4
March 1971	120.1	125.5	128.5	122.9	118.4	125.7	126.6	124.9
	Indexes (December 1960=100)							
November 1967	124.6	121.8	126.8	137.8	120.9	121.3	125.4	137.0
March 1971	149.7	152.8	162.9	169.2	143.3	152.5	158.7	171.2
	Percents of increase							
February 1960 to December 1960:								
10-month increase	2.6	3.7	3.4	5.3	2.9	3.6	3.2	2.5
Annual rate of increase	3.1	4.5	4.1	6.4	3.5	4.3	3.9	3.0
December 1960 to November 1961:								
11-month increase	3.9	1.5	3.5	8.3	2.8	.5	3.2	8.4
Annual rate of increase	4.3	1.6	3.8	9.1	3.1	.5	3.5	9.2
November 1961 to November 1962	2.5	1.0	2.6	3.2	2.0	1.5	2.7	3.2
November 1962 to November 1963	2.6	3.5	2.3	3.1	2.8	3.4	1.9	3.7
November 1963 to November 1964	2.6	.5	2.6	2.7	2.1	0	2.3	3.3
November 1964 to November 1965	5.4	3.8	5.5	4.0	3.5	4.2	5.1	5.1
November 1965 to November 1966	3.8	4.1	3.3	[2]8.5	2.9	5.0	3.3	4.0
November 1966 to November 1967	1.6	5.7	4.3	3.1	3.2	5.2	4.5	4.7
November 1967 to March 1969:								
16-month increase	6.1	7.5	7.8	8.7	6.5	7.8	7.8	5.5
Annual rate of increase	4.5	5.6	5.8	6.5	4.8	5.8	5.8	4.1
March 1969 to March 1970	6.6	8.1	7.7	[1]5.2	5.8	7.2	7.3	[1]9.4
March 1970 to March 1971	6.2	7.9	10.7	7.4	5.1	8.8	9.4	8.2

[1] Revised estimate.
[2] This increase reflects changes in employment among establishments with different pay levels in addition to general wage changes.

NOTE: Most previously published indexes for the Richmond area used December 1960 as the base period. They can be converted to the new base period by dividing them by the corresponding index numbers for November 1967 on the December 1960 base period as shown in the table. (The result should be multiplied by 100.)

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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, Richmond, Va., March 1971)

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 and under $65	$65 – $70	$70 – $75	$75 – $80	$80 – $85	$85 – $90	$90 – $95	$95 – $100	$100 – $105	$105 – $110	$110 – $115	$115 – $120	$120 – $130	$130 – $140	$140 – $150	$150 – $160	$160 – $170	$170 – $180	$180 – $190	$190 – $200	$200 and over
MEN																										
CLERKS, ACCOUNTING, CLASS A	120	38.0	$148.50	$141.00	$131.00–169.00	–	–	–	–	–	–	–	1	1	3	2	1	17	33	12	14	8	19	1	2	6
MANUFACTURING	63	37.5	154.50	145.00	133.50–169.00	–	–	–	–	–	–	–	–	–	–	–	1	6	18	8	10	6	6	–	2	6
NONMANUFACTURING	57	39.0	142.00	137.00	124.00–170.00	–	–	–	–	–	–	–	1	1	3	2	–	11	15	4	4	2	13	1	–	–
PUBLIC UTILITIES	33	40.0	153.00	160.00	131.00–173.00	–	–	–	–	–	–	–	–	–	–	2	–	6	2	3	4	2	13	1	–	–
CLERKS, ACCOUNTING, CLASS B	62	39.0	131.50	127.00	102.50–166.50	–	–	1	3	–	5	1	2	7	2	2	4	9	5	2	2	5	4	2	6	–
NONMANUFACTURING	41	39.5	134.50	130.00	97.50–176.00	–	–	1	3	–	5	1	1	6	1	1	–	2	–	2	2	5	3	2	6	–
PUBLIC UTILITIES	30	39.5	145.50	165.50	102.50–183.00	–	–	–	1	–	4	–	–	6	–	1	–	–	–	–	2	5	3	2	6	–
CLERKS, ORDER	89	40.0	148.00	139.50	132.00–163.50	–	–	–	–	–	–	–	2	2	4	3	6	3	26	2	16	5	5	5	5	5
OFFICE BOYS	55	38.5	91.50	86.00	80.50–100.00	–	3	6	3	15	4	5	6	7	–	–	–	1	4	1	–	–	–	–	–	–
NONMANUFACTURING	47	38.5	91.00	85.00	80.00–100.00	–	3	6	3	12	2	5	5	6	–	–	–	–	4	1	–	–	–	–	–	–
WOMEN																										
BILLERS, MACHINE (BILLING MACHINE)	27	39.5	110.50	95.00	87.50–135.00	–	–	–	2	4	2	6	1	2	–	–	–	1	3	1	1	4	–	–	–	–
BILLERS, MACHINE (BOOKKEEPING MACHINE)	44	39.5	101.00	97.50	86.50–126.50	–	–	3	3	4	4	8	1	4	2	–	1	11	3	–	–	–	–	–	–	–
MANUFACTURING	29	39.0	110.50	120.00	93.50–128.00	–	–	–	–	1	1	8	–	3	1	–	1	11	3	–	–	–	–	–	–	–
BOOKKEEPING-MACHINE OPERATORS, CLASS A	59	38.0	110.00	108.00	102.50–119.00	–	–	1	1	1	–	2	4	11	18	3	5	8	3	2	–	–	–	–	–	–
NONMANUFACTURING	42	38.0	111.00	108.00	101.00–126.50	–	–	1	1	1	–	2	4	8	7	2	4	7	3	2	–	–	–	–	–	–
BOOKKEEPING-MACHINE OPERATORS, CLASS B	124	39.0	92.00	91.50	86.50–100.50	–	–	1	3	19	32	25	12	26	2	3	1	–	–	–	–	–	–	–	–	–
MANUFACTURING	31	38.5	97.00	100.50	92.00–104.50	–	–	1	–	3	2	5	4	10	2	3	1	–	–	–	–	–	–	–	–	–
NONMANUFACTURING	93	39.5	90.50	89.50	86.00– 96.00	–	–	–	3	16	30	20	8	16	–	–	–	–	–	–	–	–	–	–	–	–
CLERKS, ACCOUNTING, CLASS A	365	38.0	118.00	117.00	112.00–119.50	–	–	1	–	1	4	9	19	16	30	28	176	24	20	21	7	3	2	1	–	3
MANUFACTURING	61	38.5	133.00	130.50	119.00–143.50	–	–	–	–	–	–	1	3	–	4	3	6	13	13	7	6	2	–	–	–	3
NONMANUFACTURING	304	38.0	115.00	116.50	111.00–119.00	–	–	1	–	1	4	8	16	16	26	25	170	11	7	14	1	1	2	1	–	–
CLERKS, ACCOUNTING, CLASS B	565	38.5	102.00	95.50	88.00–108.50	–	–	4	24	53	97	96	73	51	39	36	10	24	19	3	4	6	14	9	3	–
MANUFACTURING	98	38.0	105.50	103.00	94.50–118.00	–	–	–	2	8	5	11	17	11	11	7	4	12	6	2	1	1	–	–	–	–
NONMANUFACTURING	467	38.5	101.50	94.00	87.50–106.00	–	–	4	22	45	92	85	56	40	28	29	6	12	13	1	3	5	14	9	3	–
PUBLIC UTILITIES	175	39.0	111.00	99.50	87.00–114.00	–	–	4	6	20	31	15	14	14	13	20	1	1	1	1	3	5	14	9	3	–
CLERKS, FILE, CLASS A	64	37.5	102.00	93.00	84.50–114.50	–	1	2	1	13	7	15	4	2	2	2	1	4	–	6	1	3	–	–	–	–
NONMANUFACTURING	62	37.5	102.00	93.00	84.50–116.00	–	1	2	1	13	7	13	4	2	2	2	1	4	–	6	1	3	–	–	–	–
CLERKS, FILE, CLASS B	212	38.0	84.00	83.50	77.00– 88.00	1	16	24	29	55	55	13	7	6	2	–	–	1	–	–	–	2	1	–	–	–
NONMANUFACTURING	192	38.0	83.00	82.50	76.50– 87.50	1	16	24	28	51	49	13	3	3	–	–	–	1	–	–	–	2	1	–	–	–
CLERKS, FILE, CLASS C	132	38.0	83.50	82.50	74.00– 90.00	–	11	27	16	27	18	16	7	4	–	–	6	–	–	–	–	–	–	–	–	–
NONMANUFACTURING	111	37.5	82.50	81.00	74.00– 90.50	–	9	25	16	27	5	16	7	–	–	–	6	–	–	–	–	–	–	–	–	–

See footnotes at end of tables.

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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, Richmond, Va., March 1971)

Sex, occupation, and industry division	Number of workers	Average weekly hours[1] (standard)	Weekly earnings[1] (standard) Mean[2]	Median[2]	Middle range[2]	Number of workers receiving straight-time weekly earnings of— $60 and under $65	$65–$70	$70–$75	$75–$80	$80–$85	$85–$90	$90–$95	$95–$100	$100–$105	$105–$110	$110–$115	$115–$120	$120 and over $130	$130–$140	$140–$150	$150–$160	$160–$170	$170–$180	$180–$190	$190–$200
WOMEN - CONTINUED																									
CLERKS, ORDER	105	39.0	$108.00	$104.00	$99.00–116.50	–	–	2	3	5	5	4	10	29	12	8	5	6	5	11	–	–	–	–	–
MANUFACTURING	78	38.5	112.50	105.00	101.50–122.00	–	–	–	–	2	2	1	6	29	5	8	5	4	5	11	–	–	–	–	–
NONMANUFACTURING	27	39.5	95.00	95.00	83.50–107.00	–	–	2	3	3	3	3	4	–	7	–	–	2	–	–	–	–	–	–	–
CLERKS, PAYROLL	85	38.0	106.50	103.00	89.50–119.00	–	–	1	7	7	7	3	12	10	3	8	8	11	1	3	–	2	1	1	–
MANUFACTURING	34	38.0	104.00	102.50	96.00–115.50	–	–	1	2	–	3	1	7	7	–	5	3	4	–	1	–	–	–	–	–
NONMANUFACTURING	51	37.5	108.00	105.00	86.00–121.50	–	–	–	5	7	4	2	5	3	3	3	5	7	1	2	–	2	1	1	–
COMPTOMETER OPERATORS	134	38.0	91.00	87.00	78.50–101.00	–	9	12	19	20	17	12	11	5	5	14	2	5	1	–	–	2	–	–	–
MANUFACTURING	44	38.5	98.00	93.50	88.50–111.50	–	–	–	–	1	14	11	–	3	3	6	1	5	–	–	–	–	–	–	–
NONMANUFACTURING	90	37.5	87.50	81.50	75.50– 97.50	–	9	12	19	19	3	1	11	2	2	8	1	–	1	–	–	2	–	–	–
KEYPUNCH OPERATORS, CLASS A	193	39.0	106.00	104.00	98.50–110.50	–	–	–	–	1	5	12	43	47	35	19	14	6	6	3	–	1	1	–	–	–
MANUFACTURING	52	39.0	116.00	112.50	107.00–123.00	–	–	–	–	–	–	3	1	4	14	9	7	4	6	3	–	1	–	–	–	–
NONMANUFACTURING	141	38.5	102.00	101.50	97.50–106.50	–	–	–	–	1	5	9	42	43	21	10	7	2	–	–	–	–	1	–	–	–
KEYPUNCH OPERATORS, CLASS B	337	38.0	97.50	91.50	84.50–102.00	–	4	11	15	59	59	65	31	27	24	3	2	2	1	–	33	–	1	–	–	–
MANUFACTURING	60	39.0	100.00	99.00	93.00–105.00	–	–	–	–	2	2	20	8	14	7	2	2	2	1	–	–	–	–	–	–	–
NONMANUFACTURING	277	38.0	97.00	89.50	83.50– 99.00	–	4	11	15	57	57	45	23	13	17	1	–	–	–	–	33	–	1	–	–	–
PUBLIC UTILITIES	124	38.5	109.50	97.00	86.50–151.00	–	–	–	3	24	15	16	11	9	12	–	–	–	–	–	33	–	1	–	–	–
OFFICE GIRLS	63	37.5	79.50	76.50	71.50– 83.50	–	10	20	7	15	4	4	–	–	1	1	–	–	1	–	–	–	–	–	–	–
NONMANUFACTURING	58	37.0	78.50	75.00	71.00– 83.00	–	10	20	7	13	4	3	–	–	–	–	–	–	1	–	–	–	–	–	–	–
SECRETARIES	1,194	38.5	121.50	118.00	106.50–134.00	–	–	2	3	7	25	42	69	121	118	131	139	185	133	89	67	25	11	12	4	11
MANUFACTURING	540	38.5	123.50	119.50	109.50–134.00	–	–	–	–	–	–	10	16	51	63	64	77	89	70	48	30	4	6	3	3	6
NONMANUFACTURING	654	38.5	119.50	116.00	103.00–134.00	–	–	2	3	7	25	32	53	70	55	67	62	96	63	41	37	21	5	9	1	5
PUBLIC UTILITIES	111	39.5	136.00	132.50	111.00–154.00	–	–	–	–	–	–	–	8	8	9	15	5	10	7	13	13	11	1	9	–	2
SECRETARIES, CLASS A	66	38.5	148.00	144.50	131.00–160.50	–	–	–	–	–	–	–	–	–	–	–	5	11	11	9	14	5	5	3	1	2
MANUFACTURING	27	38.0	144.50	143.50	129.00–160.00	–	–	–	–	–	–	–	–	–	–	–	–	8	4	3	6	2	3	1	–	–
NONMANUFACTURING	39	39.0	150.50	147.50	136.00–162.50	–	–	–	–	–	–	–	–	–	–	–	5	3	7	6	8	3	2	2	1	2
SECRETARIES, CLASS B	298	38.5	129.50	129.00	117.50–142.00	–	–	–	–	–	–	6	16	7	12	16	33	66	59	39	23	15	4	–	–	2
MANUFACTURING	115	39.0	126.50	131.00	116.50–141.00	–	–	–	–	–	–	5	13	5	3	1	7	20	30	24	3	2	2	–	–	–
NONMANUFACTURING	183	38.0	131.50	127.50	118.00–144.50	–	–	–	–	–	–	1	3	2	9	15	26	46	29	15	20	13	2	–	–	2
SECRETARIES, CLASS C	354	38.5	121.00	117.00	104.50–136.50	–	–	–	1	–	15	16	21	40	25	48	29	50	34	38	26	4	–	2	1	4
MANUFACTURING	115	38.0	131.00	129.00	114.50–146.00	–	–	–	–	–	–	2	2	7	5	15	10	18	16	18	18	–	–	–	1	3
NONMANUFACTURING	239	38.5	116.00	112.50	101.50–128.50	–	–	–	1	–	15	14	19	33	20	33	19	32	18	20	8	4	–	2	–	1
PUBLIC UTILITIES	52	39.5	128.50	121.00	108.50–149.00	–	–	–	–	–	–	–	5	4	6	9	2	5	4	6	7	1	–	2	–	1
SECRETARIES, CLASS D	273	38.5	113.00	109.00	100.00–120.50	–	–	2	2	7	9	20	30	39	33	29	32	30	19	2	4	1	2	7	2	3
MANUFACTURING	87	38.5	126.00	119.00	113.00–132.00	–	–	–	–	–	–	3	1	4	8	10	22	16	10	2	3	–	1	2	2	3
NONMANUFACTURING	186	38.5	107.00	104.00	96.50–114.00	–	–	2	2	7	9	17	29	35	25	19	10	14	9	–	1	1	1	5	–	–
PUBLIC UTILITIES	26	40.0	131.00	114.50	106.00–171.00	–	–	–	–	–	–	2	4	3	5	1	2	1	–	1	1	1	5	–	–
STENOGRAPHERS, GENERAL	429	38.5	107.00	98.50	91.00–112.00	–	1	5	9	22	59	64	81	50	20	26	7	14	1	3	44	13	7	3	–	–
NONMANUFACTURING	275	38.5	110.50	97.50	88.00–145.00	–	1	5	9	20	56	28	39	12	12	17	4	2	–	3	44	13	7	3	–	–
PUBLIC UTILITIES	134	39.0	128.50	147.50	94.00–158.50	–	–	–	–	5	21	10	8	4	4	13	–	–	–	3	44	12	7	3	–	–
STENOGRAPHERS, SENIOR	200	38.5	119.50	112.50	101.00–136.50	–	–	–	–	1	6	16	21	31	14	22	11	16	20	18	6	11	5	1	1	–
MANUFACTURING	71	38.5	133.50	133.50	112.50–160.00	–	–	–	–	–	–	8	2	4	2	4	6	6	13	5	4	10	5	1	1	–
NONMANUFACTURING	129	39.0	112.00	106.50	99.50–125.50	–	–	–	–	1	6	8	19	27	12	18	5	10	7	13	2	1	–	–	–	–

See footnotes at end of tables.

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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, Richmond, Va., March 1971)

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 and under 65	$ 65 – 70	$ 70 – 75	$ 75 – 80	$ 80 – 85	$ 85 – 90	$ 90 – 95	$ 95 – 100	$ 100 – 105	$ 105 – 110	$ 110 – 115	$ 115 – 120	$ 120 – 130	$ 130 – 140	$ 140 – 150	$ 150 – 160	$ 160 – 170	$ 170 – 180	$ 180 – 190	$ 190 – 200	$ 200 and over
WOMEN - CONTINUED																								
SWITCHBOARD OPERATORS, CLASS A	52	39.0	$107.50	$100.50	$96.00-113.00	-	-	-	-	1	3	7	14	11	2	3	-	3	2	-	6	-	-	-	-	-
NONMANUFACTURING	35	39.0	110.00	99.50	96.00-125.00	-	-	-	-	1	3	2	13	3	1	3	-	1	2	-	6	-	-	-	-	-
SWITCHBOARD OPERATORS, CLASS B	102	39.5	95.00	94.00	83.00-109.00	-	1	5	14	9	16	8	9	6	12	4	14	4	-	-	-	-	-	-	-	-
NONMANUFACTURING	95	39.5	93.50	92.00	82.00-107.50	-	1	5	14	9	16	7	9	6	11	2	13	2	-	-	-	-	-	-	-	-
SWITCHBOARD OPERATOR-RECEPTIONISTS	169	39.0	96.50	94.00	88.00-105.00	-	-	2	2	13	43	32	21	14	14	15	2	2	9	-	-	-	-	-	-	-
MANUFACTURING	74	38.5	101.50	99.00	92.00-111.00	-	-	-	-	6	9	10	16	10	4	8	2	2	7	-	-	-	-	-	-	-
NONMANUFACTURING	95	39.5	93.00	90.50	87.00-100.00	-	-	2	2	7	34	22	5	4	10	7	-	-	2	-	-	-	-	-	-	-
TABULATING-MACHINE OPERATORS, CLASS C	29	38.0	99.00	97.00	91.00-100.50	-	-	-	2	3	2	3	12	5	-	-	-	-	-	-	-	-	2	-	-	-
NONMANUFACTURING	27	38.0	93.00	96.50	90.00- 99.50	-	-	-	2	3	2	3	12	5	-	-	-	-	-	-	-	-	-	-	-	-
TRANSCRIBING-MACHINE OPERATORS, GENERAL	103	39.0	105.50	103.00	94.00-115.00	-	-	1	-	4	11	12	8	25	9	8	3	9	10	-	3	-	-	-	-	-
MANUFACTURING	40	39.5	113.00	117.50	102.50-129.00	-	-	1	-	2	-	2	-	11	-	3	3	8	10	-	-	-	-	-	-	-
NONMANUFACTURING	63	39.0	100.50	100.50	91.50-106.50	-	-	-	-	2	11	10	8	14	9	5	-	1	-	-	3	-	-	-	-	-
TYPISTS, CLASS A	183	39.0	94.00	91.50	85.50-101.00	-	-	2	10	31	39	30	22	22	11	9	4	-	-	-	1	2	-	-	-	-
MANUFACTURING	43	39.5	100.50	101.50	94.00-109.00	-	-	-	-	7	1	4	7	9	6	5	4	-	-	-	-	-	-	-	-	-
NONMANUFACTURING	140	38.5	92.00	89.50	85.00- 97.00	-	-	2	10	24	38	26	15	13	5	4	-	-	-	-	1	2	-	-	-	-
PUBLIC UTILITIES	48	39.0	100.00	94.00	89.50-106.00	-	-	-	-	1	12	14	5	4	5	4	-	-	-	-	1	2	-	-	-	-
TYPISTS, CLASS B	567	37.5	86.00	84.50	78.50- 91.00	2	20	61	84	128	119	51	32	30	8	24	2	2	1	1	2	-	-	-	-	-
MANUFACTURING	75	38.0	94.50	94.00	87.00-103.50	-	2	1	2	6	18	11	6	15	7	3	1	2	1	-	-	-	-	-	-	-
NONMANUFACTURING	492	37.0	84.50	83.50	77.50- 89.00	2	18	60	82	122	101	40	26	15	1	21	1	-	-	1	2	-	-	-	-	-
PUBLIC UTILITIES	60	39.0	86.00	83.00	80.50- 86.50	-	-	6	5	31	11	4	-	-	-	-	-	-	-	1	2	-	-	-	-	-

See footnotes at end of tables.

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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, Richmond, Va., March 1971)

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	$ 90 – 100	$ 100 – 110	$ 110 – 120	$ 120 – 130	$ 130 – 140	$ 140 – 150	$ 150 – 160	$ 160 – 170	$ 170 – 180	$ 180 – 190	$ 190 – 200	$ 200 – 210	$ 210 – 220	$ 220 – 230	$ 230 – 240	$ 240 – 250	$ 250 – 260	$ 260 – 270	$ 270 – 280	$ 280 and over
MEN																									
COMPUTER OPERATORS, CLASS A	43	39.0	$148.00	$147.50	$135.00-161.50	–	–	1	4	2	12	5	8	5	2	1	2	1	–	–	–	–	–	–	–	–
COMPUTER OPERATORS, CLASS B	80	38.0	131.00	130.00	112.00-148.00	5	4	9	11	12	7	15	10	2	3	–	1	–	–	–	1	–	–	–	–	–
MANUFACTURING	31	38.5	138.50	137.50	127.00-144.50	1	–	–	3	8	5	9	2	1	–	–	1	–	–	–	1	–	–	–	–	–
NONMANUFACTURING	49	37.5	126.50	120.00	107.00-152.50	4	4	9	8	4	2	6	8	1	3	–	–	–	–	–	–	–	–	–	–	–
COMPUTER OPERATORS, CLASS C	49	38.5	122.00	124.00	113.50-132.50	2	3	4	11	15	9	2	2	1	–	–	–	–	–	–	–	–	–	–	–	–
NONMANUFACTURING	31	38.5	120.00	121.00	104.00-135.00	2	3	4	6	6	5	2	2	1	–	–	–	–	–	–	–	–	–	–	–	–
COMPUTER PROGRAMERS, BUSINESS, CLASS A	39	38.5	215.00	220.00	197.50-233.00	–	–	–	–	–	–	–	1	2	3	–	5	2	7	7	7	3	–	–	1	1
COMPUTER PROGRAMERS, BUSINESS, CLASS B	101	38.5	181.00	184.00	164.50-193.50	–	–	–	–	–	9	5	8	9	13	17	26	5	1	2	3	3	–	–	–	–
MANUFACTURING	25	38.5	199.00	194.00	187.50-207.50	–	–	–	–	–	–	–	1	–	2	5	9	3	–	2	–	3	–	–	–	–
NONMANUFACTURING	76	39.0	175.00	178.00	158.00-191.50	–	–	–	–	–	9	5	7	9	11	12	17	2	1	–	3	–	–	–	–	–
COMPUTER PROGRAMERS, BUSINESS, CLASS C	39	38.0	152.00	157.50	137.50-164.50	–	–	1	2	3	5	5	7	12	2	–	2	–	–	–	–	–	–	–	–	–
NONMANUFACTURING	26	38.5	146.00	149.50	134.50-161.00	–	–	1	2	1	5	5	5	6	1	–	–	–	–	–	–	–	–	–	–	–
COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS A	39	39.5	272.00	280.00	245.00-311.00	–	–	–	–	–	–	–	–	–	–	–	2	1	3	3	–	1	5	2	3	*19
COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS B	43	38.5	228.00	235.00	200.00-250.00	–	–	–	–	–	–	–	–	1	4	–	6	4	–	3	6	9	5	1	1	3
NONMANUFACTURING	28	38.0	214.50	204.50	195.50-248.00	–	–	–	–	–	–	–	–	1	4	–	6	4	–	3	2	3	4	1	–	–
DRAFTSMEN, CLASS A	66	39.5	189.00	185.50	171.00-207.00	–	–	–	–	–	–	3	3	8	15	8	12	3	5	1	6	1	–	1	–	–
MANUFACTURING	61	39.5	189.50	184.00	170.50-209.00	–	–	–	–	–	–	3	3	8	14	6	10	3	5	1	6	1	–	1	–	–
DRAFTSMEN, CLASS B	85	39.5	163.00	159.50	152.00-174.50	–	–	–	3	1	3	3	34	6	21	6	5	2	1	–	–	–	–	–	–	–
MANUFACTURING	77	39.5	164.00	160.00	152.50-174.00	–	–	–	1	–	3	2	33	6	21	4	4	2	1	–	–	–	–	–	–	–
DRAFTSMEN, CLASS C	73	40.0	147.00	152.50	135.00-166.50	–	2	2	5	1	22	–	20	11	10	–	–	–	–	–	–	–	–	–	–	–
MANUFACTURING	70	40.0	148.50	153.00	135.50-167.00	–	–	2	5	1	21	–	20	11	10	–	–	–	–	–	–	–	–	–	–	–
WOMEN																										
COMPUTER OPERATORS, CLASS B	41	39.0	126.00	123.50	112.50-142.50	–	2	5	7	10	–	15	2	–	–	–	–	–	–	–	–	–	–	–	–	–
NONMANUFACTURING	36	39.0	123.50	122.00	111.50-142.00	–	2	5	7	10	–	10	2	–	–	–	–	–	–	–	–	–	–	–	–	–
COMPUTER PROGRAMERS, BUSINESS, CLASS B	30	38.5	182.00	183.00	169.50-196.00	–	–	–	–	–	–	1	2	5	4	9	3	4	1	1	–	–	–	–	–	–
NURSES, INDUSTRIAL (REGISTERED)	58	38.5	150.50	147.00	138.50-159.00	–	–	–	3	3	11	17	11	5	2	1	2	2	1	–	–	–	–	–	–	–
MANUFACTURING	44	38.5	154.00	148.00	141.00-162.00	–	–	–	1	1	7	16	8	3	2	1	2	2	1	–	–	–	–	–	–	–

* Workers were distributed as follows: 7 at $280 to $300; 8 at $300 to $320; and 4 at $320 to $340.

See footnotes at end of tables.

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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, Richmond, Va., March 1971)

Occupation and industry division	Number of workers	Average weekly hours [1] (standard)	Average weekly earnings [1] (standard)
OFFICE OCCUPATIONS			
BILLERS, MACHINE (BILLING MACHINE)	30	39.5	$116.00
BILLERS, MACHINE (BOOKKEEPING MACHINE)	44	39.5	101.00
MANUFACTURING	29	39.0	110.50
BOOKKEEPING-MACHINE OPERATORS, CLASS A	59	38.0	110.00
NONMANUFACTURING	42	38.0	111.00
BOOKKEEPING-MACHINE OPERATORS, CLASS B	125	39.0	92.00
MANUFACTURING	31	38.5	97.00
NONMANUFACTURING	94	39.5	90.50
CLERKS, ACCOUNTING, CLASS A	485	38.0	125.50
MANUFACTURING	124	38.0	144.00
NONMANUFACTURING	361	38.0	119.00
CLERKS, ACCOUNTING, CLASS B	627	38.5	105.00
MANUFACTURING	119	38.0	109.00
NONMANUFACTURING	508	38.5	104.00
PUBLIC UTILITIES	205	39.0	116.00
CLERKS, FILE, CLASS A	69	38.0	104.50
NONMANUFACTURING	67	38.0	105.00
PUBLIC UTILITIES	28	39.0	119.00
CLERKS, FILE, CLASS B	220	38.0	84.50
NONMANUFACTURING	200	38.0	84.00
CLERKS, FILE, CLASS C	132	38.0	83.50
NONMANUFACTURING	111	37.5	82.50
CLERKS, ORDER	194	39.5	126.50
MANUFACTURING	113	39.0	130.00
NONMANUFACTURING	81	40.0	121.00
CLERKS, PAYROLL	97	38.0	112.50
MANUFACTURING	41	38.5	111.50
NONMANUFACTURING	56	38.0	113.50
COMPTOMETER OPERATORS	134	38.0	91.00
MANUFACTURING	44	38.5	98.00
NONMANUFACTURING	90	37.5	87.50
KEYPUNCH OPERATORS, CLASS A	193	39.0	106.00
MANUFACTURING	52	39.0	116.00
NONMANUFACTURING	141	38.5	102.00
KEYPUNCH OPERATORS, CLASS B	338	38.0	97.50
MANUFACTURING	60	39.0	100.00
NONMANUFACTURING	278	38.0	97.00
PUBLIC UTILITIES	124	38.5	109.50
OFFICE OCCUPATIONS - CONTINUED			
OFFICE BOYS AND GIRLS	118	38.0	$85.00
NONMANUFACTURING	105	38.0	84.00
SECRETARIES	1,200	38.5	122.00
MANUFACTURING	540	38.5	123.50
NONMANUFACTURING	660	38.5	120.50
PUBLIC UTILITIES	117	39.5	138.50
SECRETARIES, CLASS A	66	38.5	148.00
MANUFACTURING	27	38.0	144.50
NONMANUFACTURING	39	39.0	150.50
SECRETARIES, CLASS B	300	38.5	130.00
MANUFACTURING	115	39.0	126.50
NONMANUFACTURING	185	38.0	132.00
PUBLIC UTILITIES	26	38.5	150.00
SECRETARIES, CLASS C	355	38.5	121.50
MANUFACTURING	115	38.0	131.00
NONMANUFACTURING	240	38.5	116.50
PUBLIC UTILITIES	53	39.5	130.50
SECRETARIES, CLASS D	276	38.5	113.50
MANUFACTURING	87	38.5	126.00
NONMANUFACTURING	189	38.5	108.00
PUBLIC UTILITIES	29	40.0	135.50
STENOGRAPHERS, GENERAL	435	38.5	108.00
NONMANUFACTURING	281	38.5	111.50
PUBLIC UTILITIES	140	39.0	130.00
STENOGRAPHERS, SENIOR	200	38.5	119.50
MANUFACTURING	71	38.5	133.50
NONMANUFACTURING	129	39.0	112.00
SWITCHBOARD OPERATORS, CLASS A	52	39.0	107.50
NONMANUFACTURING	35	39.0	110.00
SWITCHBOARD OPERATORS, CLASS B	102	39.5	95.00
NONMANUFACTURING	95	39.5	93.50
SWITCHBOARD OPERATOR-RECEPTIONISTS	169	39.0	96.50
MANUFACTURING	74	38.5	101.50
NONMANUFACTURING	95	39.5	93.00
TABULATING-MACHINE OPERATORS, CLASS C	46	38.0	99.00
NONMANUFACTURING	41	38.0	93.00
TRANSCRIBING-MACHINE OPERATORS, GENERAL	103	39.0	105.50
MANUFACTURING	40	39.5	113.00
NONMANUFACTURING	63	39.0	100.50
OFFICE OCCUPATIONS - CONTINUED			
TYPISTS, CLASS A	183	39.0	$94.00
MANUFACTURING	43	39.5	100.50
NONMANUFACTURING	140	38.5	92.00
PUBLIC UTILITIES	48	39.0	100.00
TYPISTS, CLASS B	568	37.5	86.00
MANUFACTURING	75	38.0	94.50
NONMANUFACTURING	493	37.0	85.00
PUBLIC UTILITIES	61	39.0	87.00
PROFESSIONAL AND TECHNICAL OCCUPATIONS			
COMPUTER OPERATORS, CLASS A	46	39.0	147.00
COMPUTER OPERATORS, CLASS B	121	38.5	129.50
MANUFACTURING	36	39.0	139.00
NONMANUFACTURING	85	38.0	125.00
COMPUTER OPERATORS, CLASS C	69	38.0	113.50
NONMANUFACTURING	50	38.5	109.50
COMPUTER PROGRAMERS, BUSINESS, CLASS A	57	38.5	218.00
NONMANUFACTURING	37	38.5	218.50
COMPUTER PROGRAMERS, BUSINESS, CLASS B	131	38.5	181.00
MANUFACTURING	32	38.5	198.50
NONMANUFACTURING	99	39.0	175.50
COMPUTER PROGRAMERS, BUSINESS, CLASS C	46	38.5	152.50
NONMANUFACTURING	29	38.5	145.50
COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS A	42	39.5	271.00
NONMANUFACTURING	27	39.5	265.50
COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS B	52	38.5	227.50
NONMANUFACTURING	36	38.0	215.50
DRAFTSMEN, CLASS A	72	39.5	187.00
MANUFACTURING	66	39.5	187.50
DRAFTSMEN, CLASS B	86	39.5	163.00
MANUFACTURING	77	39.5	164.00
DRAFTSMEN, CLASS C	81	40.0	145.00
MANUFACTURING	75	40.0	148.00
NURSES, INDUSTRIAL (REGISTERED)	58	38.5	150.50
MANUFACTURING	44	38.5	154.00

See footnotes at end of tables.

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Table A-4. Maintenance and powerplant occupations

(Average straight-time hourly earnings for selected occupations studied on an area basis by industry division, Richmond, Va., March 1971)

Sex, occupation, and industry division	Number of workers	Hourly earnings[3]			Number of workers receiving straight-time hourly earnings of—																					
		Mean[2]	Median[2]	Middle range[2]	Under $2.00	$2.00 and under $2.10	$2.10 – $2.20	$2.20 – $2.30	$2.30 – $2.40	$2.40 – $2.50	$2.50 – $2.60	$2.60 – $2.70	$2.70 – $2.80	$2.80 – $2.90	$2.90 – $3.00	$3.00 – $3.10	$3.10 – $3.20	$3.20 – $3.40	$3.40 – $3.60	$3.60 – $3.80	$3.80 – $4.00	$4.00 – $4.20	$4.20 – $4.40	$4.40 – $4.60	$4.60 – $4.80	$4.80 – $5.00	$5.00 and over
MEN																										
CARPENTERS, MAINTENANCE	52	$4.40	$4.56	$4.08– $4.77	–	–	–	–	–	–	–	–	–	–	–	2	–	–	6	–	7	4	10	16	3	4
MANUFACTURING	32	4.36	4.54	4.08– 4.75	–	–	–	–	–	–	–	–	–	–	–	2	–	–	1	–	7	1	10	8	3	–
ELECTRICIANS, MAINTENANCE	272	4.55	4.72	4.32– 4.78	–	–	–	–	–	–	–	–	–	1	–	–	–	3	2	–	21	61	25	112	47	–
MANUFACTURING	233	4.53	4.71	4.30– 4.78	–	–	–	–	–	–	–	–	–	1	–	–	–	3	1	–	19	60	23	85	41	–
ENGINEERS, STATIONARY	72	4.17	4.31	3.80– 4.58	–	–	–	–	–	–	–	–	–	–	–	–	2	6	10	15	2	7	16	13	–	1
MANUFACTURING	62	4.20	4.36	3.83– 4.59	–	–	–	–	–	–	–	–	–	–	–	–	1	4	6	15	2	6	15	13	–	–
FIREMEN, STATIONARY BOILER	57	3.11	3.37	2.14– 3.90	*12	1	4	1	1	2	–	–	3	1	–	–	–	6	–	12	–	1	13	–	–	–	–
MANUFACTURING	45	3.48	3.73	2.78– 4.32	–	1	4	1	1	2	–	–	3	1	–	–	–	6	–	12	–	1	13	–	–	–	–
HELPERS, MAINTENANCE TRADES	139	3.32	3.25	2.73– 4.03	3	7	2	2	4	–	3	10	12	2	5	4	15	3	12	16	–	19	–	20	–	–	–
MANUFACTURING	76	3.34	3.48	3.01– 3.93	3	–	2	1	4	–	–	–	6	–	3	4	3	3	12	16	–	19	–	–	–	–	–
NONMANUFACTURING	63	3.28	3.11	2.65– 4.53	–	7	–	1	–	–	3	10	6	2	2	–	12	–	–	–	–	–	–	20	–	–	–
PUBLIC UTILITIES	46	3.52	3.18	2.88– 4.55	–	7	–	–	–	–	1	–	3	1	2	–	12	–	–	–	–	–	–	20	–	–	–
MACHINISTS, MAINTENANCE	249	4.43	4.38	4.33– 4.77	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4	5	10	8	129	14	25	53	1
MANUFACTURING	246	4.44	4.38	4.33– 4.77	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4	4	10	8	129	14	23	53	1
MECHANICS, AUTOMOTIVE (MAINTENANCE)	306	4.08	4.31	3.46– 4.46	–	–	–	–	–	–	2	–	5	1	1	6	2	39	37	25	9	11	86	10	3	68	1
MANUFACTURING	39	3.78	3.79	3.28– 4.19	–	–	–	–	–	–	2	–	4	–	–	–	1	4	7	2	–	10	1	4	3	–	1
NONMANUFACTURING	267	4.12	4.32	3.47– 4.90	–	–	–	–	–	–	–	–	1	1	1	6	1	35	30	23	9	1	85	6	–	68	–
PUBLIC UTILITIES	234	4.20	4.34	3.63– 4.92	–	–	–	–	–	–	–	–	–	–	–	6	–	25	22	23	5	–	79	6	–	68	–
MECHANICS, MAINTENANCE	629	4.33	4.43	4.21– 4.73	–	–	–	–	–	–	–	4	–	2	–	14	20	3	25	5	5	72	126	146	202	5	–
MANUFACTURING	595	4.35	4.43	4.23– 4.73	–	–	–	–	–	–	–	4	–	2	–	12	20	3	19	3	4	65	119	137	202	5	–
NONMANUFACTURING	34	4.04	4.09	3.68– 4.51	–	–	–	–	–	–	–	–	–	–	–	2	–	–	6	2	1	7	7	9	–	–	–
PAINTERS, MAINTENANCE	70	4.08	4.15	3.97– 4.55	–	–	–	1	–	1	1	–	–	–	–	3	–	1	5	3	4	17	1	33	–	–	–
MANUFACTURING	55	4.25	4.51	4.03– 4.56	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	2	4	16	–	30	–	–	–
PIPEFITTERS, MAINTENANCE	146	4.60	4.72	4.45– 4.77	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	17	34	83	10	–
MANUFACTURING	145	4.60	4.73	4.45– 4.77	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	17	33	83	10	–
SHEET-METAL WORKERS, MAINTENANCE	56	4.59	4.72	4.41– 4.78	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	13	10	26	7	–
MANUFACTURING	56	4.59	4.72	4.41– 4.78	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	13	10	26	7	–

* Workers were distributed as follows: 6 at $1.60 to $1.70; 1 at $1.70 to $1.80; and 5 at $1.80 to $1.90.

See footnotes at end of tables.

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Table A-5. Custodial and material movement occupations

(Average straight-time hourly earnings for selected occupations studied on an area basis by industry division, Richmond, Va., March 1971)

Sex, occupation, and industry division	Number of workers	Hourly earnings[3]			Number of workers receiving straight-time hourly earnings of—																							
		Mean[2]	Median[2]	Middle range[2]	$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 –	$3.00 –	$3.20 –	$3.40 –	$3.60 –	$3.80 –	$4.00 –	$4.20 –	$4.40 –	$4.60 –	$4.80 –	
					1.70	1.80	1.90	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00	
MEN																												
GUARDS AND WATCHMEN	497	$2.34	$1.80	$1.75– 3.22	15	240	10	11	17	17	3	7	4	4	3	8	3	17	88	11	10	11	4	13	1	–	–	
MANUFACTURING	153	3.08	3.23	2.78– 3.28	–	9	6	2	3	2	2	4	3	–	1	8	2	10	82	3	–	1	1	13	1	–	–	
NONMANUFACTURING	344	2.01	1.77	1.73– 2.00	15	231	4	9	14	15	1	3	1	4	2	–	1	7	6	8	10	10	3	–	–	–	–	
GUARDS																												
MANUFACTURING	52	3.29	3.21	2.73– 4.26	–	–	–	–	3	2	2	4	–	–	1	5	1	8	7	3	–	1	1	13	1	–	–	
WATCHMEN																												
MANUFACTURING	101	2.97	3.23	3.15– 3.27	–	9	6	2	–	–	–	–	3	–	–	3	1	2	75	–	–	–	–	–	–	–	–	
JANITORS, PORTERS, AND CLEANERS	1,276	2.13	1.98	1.68– 2.49	381	153	76	35	124	58	42	27	66	45	20	16	41	85	94	12	1	–	–	–	–	–	–	
MANUFACTURING	427	2.65	2.61	2.20– 3.17	3	3	20	18	41	23	13	15	52	25	14	3	32	75	88	2	–	–	–	–	–	–	–	
NONMANUFACTURING	849	1.87	1.73	1.66– 2.04	378	150	56	17	83	35	29	12	14	20	6	13	9	10	6	10	1	–	–	–	–	–	–	
PUBLIC UTILITIES	52	2.70	2.58	2.27– 3.18	–	–	–	–	–	–	19	1	1	7	3	8	–	–	2	10	1	–	–	–	–	–	–	
LABORERS, MATERIAL HANDLING	998	2.60	2.56	2.28– 3.06	26	16	14	23	53	31	113	44	132	83	90	27	56	143	127	11	8	1	–	–	–	–	–	
MANUFACTURING	524	2.60	2.49	2.29– 3.05	23	–	1	18	4	24	65	26	113	26	59	–	2	74	75	9	4	1	–	–	–	–	–	
NONMANUFACTURING	474	2.61	2.61	2.25– 3.11	3	16	13	5	49	7	48	18	19	57	31	27	54	69	52	2	4	–	–	–	–	–	–	
PUBLIC UTILITIES	169	2.82	2.89	2.62– 3.23	–	–	–	–	22	–	8	–	1	9	12	5	51	3	52	2	4	–	–	–	–	–	–	
ORDER FILLERS	316	2.83	2.74	2.55– 3.14	1	–	2	2	13	9	12	4	10	48	32	64	15	60	9	3	1	31	–	–	–	–	–	
MANUFACTURING	104	3.07	2.77	2.54– 3.92	–	–	–	–	2	3	10	–	1	23	6	11	3	1	9	3	1	31	–	–	–	–	–	
NONMANUFACTURING	212	2.72	2.73	2.57– 3.11	1	–	2	2	11	6	2	4	9	25	26	53	12	59	–	–	–	–	–	–	–	–	–	
PACKERS, SHIPPING	201	2.86	2.79	2.50– 3.25	3	–	4	4	3	–	15	9	12	11	–	40	6	35	27	31	1	–	–	–	–	–	–	
MANUFACTURING	163	2.99	3.14	2.73– 3.29	2	–	1	–	1	–	6	–	11	11	–	31	6	35	27	31	1	–	–	–	–	–	–	
RECEIVING CLERKS	104	3.21	3.50	2.88– 3.58	–	–	–	–	3	7	1	2	2	2	2	–	17	12	–	37	3	15	1	–	–	–	–	
MANUFACTURING	72	3.47	3.55	3.25– 3.68	–	–	–	–	–	–	1	–	2	–	–	–	3	12	–	36	3	15	–	–	–	–	–	
NONMANUFACTURING	32	2.62	2.75	2.18– 2.93	–	–	–	–	3	7	–	2	–	2	2	–	14	–	–	1	–	–	1	–	–	–	–	
SHIPPING CLERKS	32	2.84	2.79	2.61– 3.11	–	–	–	–	–	1	–	–	2	5	4	5	4	10	–	–	–	1	–	–	–	–	–	
SHIPPING AND RECEIVING CLERKS	66	3.31	3.36	3.23– 3.58	–	–	–	–	–	–	2	–	3	2	1	–	5	1	26	12	8	6	–	–	–	–	–	
MANUFACTURING	42	3.25	3.36	2.89– 3.62	–	–	–	–	–	–	2	–	3	1	1	–	4	1	17	2	6	5	–	–	–	–	–	
TRUCKDRIVERS	1,862	2.98	2.64	2.33– 3.56	17	5	12	99	85	57	75	400	37	74	181	36	56	33	159	115	75	87	6	24	–	–	229	
MANUFACTURING	372	2.75	2.58	2.01– 3.51	–	1	–	90	17	3	16	8	18	41	3	19	6	22	21	40	46	20	1	–	–	–	–	
NONMANUFACTURING	1,490	3.03	2.64	2.34– 3.58	17	4	12	9	68	54	59	392	19	33	178	17	50	11	138	75	29	67	5	24	–	–	229	
PUBLIC UTILITIES	1,018	3.29	3.31	2.37– 3.96	–	–	–	–	–	–	35	304	–	–	153	–	3	4	134	75	16	63	2	–	–	–	229	
TRUCKDRIVERS, LIGHT (UNDER 1-1/2 TONS)	85	2.35	2.37	2.08– 2.67	9	–	2	4	8	7	9	6	5	11	5	11	4	1	2	1	–	–	–	–	–	–	–	
NONMANUFACTURING	71	2.30	2.29	2.04– 2.68	9	–	2	4	8	4	9	3	5	6	5	11	4	1	–	–	–	–	–	–	–	–	–	
TRUCKDRIVERS, MEDIUM (1-1/2 TO AND INCLUDING 4 TONS)	426	2.85	2.48	1.99– 3.35	8	5	10	95	6	10	50	13	20	27	22	9	15	19	19	2	16	1	1	–	–	–	78	
MANUFACTURING	187	2.34	2.21	1.95– 2.63	–	1	–	90	2	–	11	3	18	15	3	7	5	13	15	2	–	1	1	–	–	–	–	
NONMANUFACTURING	239	3.25	2.68	2.25– 4.82	8	4	10	5	4	10	39	10	2	12	19	2	10	6	4	–	16	–	–	–	–	–	78	
PUBLIC UTILITIES	149	3.82	4.81	2.61– 4.85	–	–	–	–	–	–	35	–	–	–	18	–	2	–	–	–	16	–	–	–	–	–	78	
TRUCKDRIVERS, HEAVY (OVER 4 TONS, TRAILER TYPE)	551	3.53	3.38	2.66– 4.81	–	–	–	–	8	16	2	18	–	13	138	14	3	10	68	35	26	22	5	22	–	–	151	
MANUFACTURING	80	3.27	3.44	2.75– 3.80	–	–	–	–	–	–	2	2	–	10	–	12	–	9	1	12	13	19	–	–	–	–	–	
NONMANUFACTURING	471	3.57	3.37	2.65– 4.82	–	–	–	–	8	16	–	16	–	3	138	2	3	1	67	23	13	3	5	22	–	–	151	
PUBLIC UTILITIES	380	3.69	3.38	2.67– 4.84	–	–	–	–	–	–	–	–	–	–	135	–	1	1	67	23	–	–	2	–	–	–	151	

See footnotes at end of tables.

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Table A-5. Custodial and material movement occupations—Continued

(Average straight-time hourly earnings for selected occupations studied on an area basis by industry division, Richmond, Va., March 1971)

Sex, occupation, and industry division	Number of workers	Hourly earnings[3]			Number of workers receiving straight-time hourly earnings of—																						
		Mean[2]	Median[2]	Middle range[2]	$1.60 and under 1.70	$1.70 – 1.80	$1.80 – 1.90	$1.90 – 2.00	$2.00 – 2.10	$2.10 – 2.20	$2.20 – 2.30	$2.30 – 2.40	$2.40 – 2.50	$2.50 – 2.60	$2.60 – 2.70	$2.70 – 2.80	$2.80 – 3.00	$3.00 – 3.20	$3.20 – 3.40	$3.40 – 3.60	$3.60 – 3.80	$3.80 – 4.00	$4.00 – 4.20	$4.20 – 4.40	$4.40 – 4.60	$4.60 – 4.80	$4.80 – 5.00
MEN - CONTINUED																											
TRUCKDRIVERS - CONTINUED																											
TRUCKDRIVERS, HEAVY (OVER 4 TONS, OTHER THAN TRAILER TYPE)	163	$3.07	$3.32	$2.92– 3.39	–	–	–	–	15	–	–	–	–	15	–	2	34	2	63	26	–	4	–	2	–	–	–
NONMANUFACTURING	136	3.23	3.34	2.98– 3.40	–	–	–	–	–	–	–	–	–	4	–	2	33	2	63	26	–	4	–	2	–	–	–
TRUCKERS, POWER (FORKLIFT)	599	2.88	2.85	2.55– 3.32	–	–	–	12	6	30	11	31	36	44	14	82	87	15	162	66	2	1	–	–	–	–	–
MANUFACTURING	431	2.86	2.79	2.48– 3.36	–	–	–	10	6	29	8	28	36	44	11	50	36	3	106	64	–	–	–	–	–	–	–
NONMANUFACTURING	168	2.94	2.94	2.79– 3.24	–	–	–	2	–	1	3	3	–	–	3	32	51	12	56	2	2	1	–	–	–	–	–
WOMEN																											
JANITORS, PORTERS, AND CLEANERS	612	1.79	1.67	1.64– 1.81	425	31	27	19	21	11	10	12	7	16	2	2	–	23	5	1	–	–	–	–	–	–	–
MANUFACTURING	72	2.39	2.25	1.96– 3.12	1	4	2	18	9	2	–	7	3	3	–	–	–	23	–	–	–	–	–	–	–	–	–
NONMANUFACTURING	540	1.71	1.66	1.63– 1.70	424	27	25	1	12	9	10	5	4	13	2	2	–	–	5	1	–	–	–	–	–	–	–
PACKERS, SHIPPING	139	2.62	2.37	1.95– 3.44	–	10	7	39	–	4	–	15	–	3	4	–	–	–	1	56	–	–	–	–	–	–	–
MANUFACTURING	123	2.70	2.59	1.96– 3.45	–	9	–	39	–	–	–	11	–	3	4	–	–	–	1	56	–	–	–	–	–	–	–

See footnotes at end of tables.

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Footnotes

[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] Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

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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 electromatic 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 assignations 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.

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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, memorandums, 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.)

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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.

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 OPERATOR

Monitors and operates the control console of a digital computer to process data according to operating instructions, usually prepared by a programer. 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 programer; 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 programed 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.

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 programer 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 programed. 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 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 programers primarily concerned with scientific and/or engineering problems.

For wage study purposes, programers are classified as follows:

Class A. Works independently or under only general direction on complex problems which require competence in all phases of programing 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 programing actions needed to efficiently utilize the computer system in achieving desired end products.

At this level, programing 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 programers who are assigned to assist.

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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 programer or supervisor. May assist higher level programer by independently performing less difficult tasks assigned, and performing more difficult tasks under fairly close direction.

May guide or instruct lower level programers.

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 programers 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,

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 programers 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 diminsions 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

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

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.

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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

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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; 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)

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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 Division 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
Akron, Ohio, July 1970	1660-88, 30 cents
Albany–Schenectady–Troy, N.Y., Mar. 1971 [1]	1685-54, 35 cents
Albuquerque, N. Mex., Mar. 1971	1685-58, 30 cents
Allentown–Bethlehem–Easton, Pa.–N.J., May 1970 [1]	1660-83, 35 cents
Atlanta, Ga., May 1970 [1]	1660-76, 50 cents
Baltimore, Md., Aug. 1970 [1]	1685-18, 50 cents
Beaumont–Port Arthur–Orange, Tex., May 1970	1660-84, 30 cents
Binghamton, N.Y., July 1970	1685-6, 30 cents
Birmingham, Ala., Mar. 1970	1660-57, 30 cents
Boise City, Idaho, Nov. 1970 [1]	1685-21, 35 cents
Boston, Mass., Aug. 1970 [1]	1685-11, 50 cents
Buffalo, N.Y., Oct. 1970 [1]	1685-43, 50 cents
Burlington, Vt., Mar. 1971 [1]	1685-59, 35 cents
Canton, Ohio, May 1970 [1]	1660-81, 35 cents
Charleston, W. Va., Mar. 1971	1685-57, 30 cents
Charlotte, N.C., Jan. 1971	1685-48, 30 cents
Chattanooga, Tenn.–Ga., Sept. 1970 [1]	1685-10, 35 cents
Chicago, Ill., June 1970	1660-90, 60 cents
Cincinnati, Ohio–Ky.–Ind., Feb. 1971 [1]	1685-53, 45 cents
Cleveland, Ohio, Sept. 1970 [1]	1685-28, 50 cents
Columbus, Ohio, Oct. 1970 [1]	1685-33, 40 cents
Dallas, Tex., Oct. 1970 [1]	1685-22, 50 cents
Davenport–Rock Island–Moline, Iowa–Ill., Feb. 1971	1685-51, 30 cents
Dayton, Ohio, Dec. 1970 [1]	1685-45, 40 cents
Denver, Colo., Dec. 1970	1685-41, 35 cents
Des Moines, Iowa, May 1970 [1]	1660-73, 35 cents
Detroit, Mich., Feb. 1970	1660-58, 35 cents
Fort Worth, Tex., Oct. 1970 [1]	1685-25, 35 cents
Green Bay, Wis., July 1970 [1]	1685-4, 35 cents
Greenville, S.C., May 1970	1660-79, 30 cents
Houston, Tex., Apr. 1970	1660-67, 35 cents
Indianapolis, Ind., Oct. 1970 [1]	1685-31, 40 cents
Jackson, Miss., Jan. 1971 [1]	1685-39, 35 cents
Jacksonville, Fla., Dec. 1970 [1]	1685-37, 35 cents
Kansas City, Mo.–Kans., Sept. 1970 [1]	1685-16, 45 cents
Lawrence–Haverhill, Mass.–N.H., June 1970 [1]	1660-82, 35 cents
Little Rock–North Little Rock, Ark., July 1970 [1]	1685-1, 35 cents
Los Angeles–Long Beach and Anaheim–Santa Ana–Garden Grove, Calif., Mar. 1970	1660-64, 45 cents
Louisville, Ky.–Ind., Nov. 1970	1685-27, 30 cents
Lubbock, Tex., Mar. 1971	1685-60, 30 cents
Manchester, N.H., July 1970 [1]	1685-2, 35 cents
Memphis, Tenn.–Ark., Nov. 1970	1685-30, 30 cents
Miami, Fla., Nov. 1970 [1]	1685-29, 40 cents
Midland and Odessa, Tex., Jan. 1971	1685-40, 30 cents
Milwaukee, Wis., May 1970 [1]	1660-74, 50 cents
Minneapolis–St. Paul, Minn., Jan. 1971	1685-44, 40 cents
Muskegon–Muskegon Heights, Mich., June 1970 [1]	1660-85, 35 cents
Newark and Jersey City, N.J., Jan. 1971	1685-47, 40 cents
New Haven, Conn., Jan. 1971	1685-35, 30 cents
New Orleans, La., Jan. 1971 [1]	1685-36, 40 cents
New York, N.Y., Apr. 1970 [1]	1660-89, 75 cents
Norfolk–Portsmouth and Newport News–Hampton, Va., Jan. 1971 [1]	1685-46, 35 cents
Oklahoma City, Okla., July 1970	1685-5, 30 cents
Omaha, Nebr.–Iowa, Sept. 1970 [1]	1685-14, 35 cents
Paterson–Clifton–Passaic, N.J., June 1970 [1]	1660-87, 45 cents
Philadelphia, Pa.–N.J., Nov. 1970	1685-34, 50 cents
Phoenix, Ariz., Mar. 1970 [1]	1660-70, 35 cents
Pittsburgh, Pa., Jan. 1971 [1]	1685-49, 50 cents
Portland, Maine, Nov. 1970	1685-19, 30 cents
Portland, Oreg.–Wash., May 1970 [1]	1660-77, 40 cents
Providence–Pawtucket–Warwick, R.I.–Mass., May 1970	1660-72, 30 cents
Raleigh, N.C., Aug. 1970 [1]	1685-12, 35 cents
Richmond, Va., Mar. 1971	1685-62, 30 cents
Rochester, N.Y. (office occupations only), Aug. 1970	1685-7, 30 cents
Rockford, Ill., May 1970 [1]	1660-75, 35 cents
St. Louis, Mo.–Ill., Mar. 1970	1660-66, 40 cents
Salt Lake City, Utah, Nov. 1970 [1]	1685-26, 35 cents
San Antonio, Tex., May 1970	1660-71, 30 cents
San Bernardino–Riverside–Ontario, Calif., Dec. 1970 [1]	1685-42, 40 cents
San Diego, Calif., Nov. 1970	1685-20, 30 cents
San Francisco–Oakland, Calif., Oct. 1970	1685-23, 40 cents
San Jose, Calif., Aug. 1970	1685-13, 30 cents
Savannah, Ga., May 1970 [1]	1660-80, 35 cents
Scranton, Pa., July 1970 [1]	1685-3, 35 cents
Seattle–Everett, Wash., Jan. 1971 [1]	1685-52, 35 cents
Sioux Falls, S. Dak., Dec. 1970 [1]	1685-38, 35 cents
South Bend, Ind., Mar. 1971	1685-61, 30 cents
Spokane, Wash., June 1970 [1]	1660-86, 35 cents
Syracuse, N.Y., July 1970	1685-8, 30 cents
Tampa–St. Petersburg, Fla., Nov. 1970	1685-17, 30 cents
Toledo, Ohio–Mich., Feb. 1970	1660-56, 30 cents
Trenton, N.J., Sept. 1970 [1]	1685-15, 35 cents
Utica–Rome, N.Y., July 1970	1685-9, 30 cents
Washington, D.C.–Md.–Va., Apr. 1971	1685-56, 40 cents
Waterbury, Conn., Mar. 1971	1685-55, 30 cents
Waterloo, Iowa, Nov. 1970 [1]	1685-32, 35 cents
Wichita, Kans., Apr. 1970 [1]	1660-69, 35 cents
Worcester, Mass., May 1970 [1]	1660-78, 35 cents
York, Pa., Feb. 1971	1685-50, 30 cents
Youngstown–Warren, Ohio, Nov. 1970	1685-24, 30 cents

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

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