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AREA WAGE SURVEY

The Minneapolis—St. Paul, Minnesota, Metropolitan Area, January 1971

Bulletin 1685-44

U.S. DEPARTMENT OF LABOR / Bureau of Labor Statistics

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U.S. DEPARTMENT OF LABOR

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AREA WAGE SURVEY

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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 Minneapolis—St. Paul, Minn., in January 1971. The Standard Metropolitan Statistical Area, as defined by the Bureau of the Budget through January 1968, consists of Anoka, Dakota, Hennepin, Ramsey, and Washington Counties. This study was conducted by the Bureau's regional office in Chicago, Ill., under the general direction of Lois L. Orr, Assistant Regional Director for Operations.

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

Current reports on occupational earnings and supplementary wage provisions in the Minneapolis—St. Paul area are also available for auto dealer repair shops (August 1969); banking (November 1969); hospitals (March 1969); miscellaneous plastics (August 1969); and on earnings only for selected food service and laundry and dry cleaning occupations (January 1971); 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

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.

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

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.

Table 1. Establishments and workers within scope of survey and number studied in Minneapolis—St. Paul, Minn., by major industry division, January 1971

	Minimum	Number of est	ablishments	Wor	kers in establishm	nents
Industry division	employment in establish-	Within scope		Within scop	pe of study 4	
	ments in scope of study	of study 3	Studied	Number	Percent	Studied
All establishments						
All divisions	-	1,606	291	390, 102	100	218, 268
Manufacturing	50	583	100	178,413	46	102,657
Nonmanufacturing	-	1,023	191	211,689	54	115,611
Transportation, communication, and						
other public utilities 5	50	109	30	44,033	11	34,007
Wholesale trade	50	196	40	29,977	8	11,711
Retail trade	50	375	48	81,774	21	45,388
Finance, insurance, and real estate 6	50	148	32	29,090	7	15, 280
Services 7 8	50	195	41	26,815	7	9,225
Large establishments						
All divisions	-	118	86	208,418	100	182,585
Manufacturing	500	54	35	106,981	52	90,937
Nonmanufacturing	2	64	51	101,437	48	91,648
Transportation, communication, and						
other public utilities 5	500	14	13	30,640	15	30,640
Wholesale trade	500	6	6	4,982	2	4,982
Retail trade	500	22	16	46,478	22	40,930
Finance, insurance, and real estate 6	500	15	11	14, 705	7	11,774
Services 7 8	500	7	5	4,632	2	3,322

The Minneapolis-St. Paul Standard Metropolitan Statistical Area, as defined by the Bureau of the Budget through January 1968, consists of Anoka, Dakota, Hennepin, Ramsey, and Washington Counties. 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.

6 Abbreviated to "finance" in the A-series tables.

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, and (4) there is possibility of disclosure of individual establishment data.

8 Hotels and motels; laundries and other personal services; business services; automobile repair, rental, and parking; motion pictures;

o 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.

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

6 F	
Industry groups	Specific industries
Machinery, except electrical. 20 Electrical equipment and supplies 13 Instruments and related products 13 Food and kindred products 11 Paper and allied products 10 Printing and publishing 7 Fabricated metal products 6	Office and computing machines

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

Wage Trends for Selected Occupational Groups

Presented in table 2 are indexes and percentages of change in average salaries of office clerical workers and industrial nurses, and in average earnings of selected plant worker groups. The indexes are a measure of wages at a given time, expressed as a percent of wages during the base period. 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): Office clerical (men and women)- Skilled maintenance (men): Continued Carpenters Bookkeeping-machine Electricians operators, class B Secretaries Machinists Clerks, accounting, classes Stenographers, general Mechanics A and B Stenographers, senior Clerks, file, classes Switchboard operators, classes Mechanics (automotive) A, B, and C A and B Painters Pipefitters Tabulating-machine operators, Clerks, order Tool and die makers Clerks, payroll class B Comptometer operators Typists, classes A and B Keypunch operators, classes Unskilled plant (men): A and B Industrial nurses (men and women): Janitors, porters, and cleaners Office boys and girls Nurses, industrial (registered) 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.

Table 2. Indexes of standard weekly salaries and straight-time hourly earnings for selected occupational groups in Minneapolis—St. Paul, Minn., January 1971 and January 1970, and percents of increase for selected periods

		All in	dustries			Manuf	acturing	
Period	Office	Industrial	Skilled	Unskilled	Office	Industrial	Skilled	Unskilled
	clerical	nurses	maintenance	plant	clerical	nurses	maintenance	plant
	(men and	(men and	trades	workers	(men and	(men and	trades	workers
	women)	women)	(men)	(men)	women)	women)	(men)	(men)
				indexes (Janu	ary 1967=100))		
January 1970	117.9	135.9	121.7	116.4	118.0	139.2	120.8	115.2
	126.3	145.3	133.0	128.4	126.3	149.1	130.9	126.0
			, ,	Indexes (Janu	ary 1961=100))		
January 1967	120.0	120.5	123,4	123.4	119.2	119.3	122.9	121.2
	151.6	175.1	164,3	158.4	150.6	177.9	160.9	152.9
				Percents	of increase			
January 1960 to January 1961	3.4	5.1	3.7	4.5	3.1	5.1	3.8	3.6
January 1961 to January 1962	3.3	2.7	3.5	4.0	4.2	1.6	3.8	4.0
January 1962 to January 1963	2.9	3.7	4.0 3.6	2.7 3.9	2.5 1.8	3.2 2.1	3.3 3.5	2.0 4.0
January 1964 to January 1965	2.1	2.5	2.9	4.0	1.8	2.0	3.1	3.5
January 1965 to January 1966	2.6	3.4	3.4	3.3	2.1	3.0	2.8	3.1
January 1966 to January 1967	5.2	4.7	3.9	3.6	5.5	6.2	4.4	3.0
January 1967 to January 1968	5.0	15.7	5.8	4.3	4.9	18.5	5.4	3.6
January 1968 to January 1969	5.7	7.8	6.4	5.8	5.1	5.7	6.5	
January 1969 to January 1970	6.1	9.0	8.1	5.4	7.1	11.2	7.6	4.9
January 1970 to January 1971	7.1		9.3	10.3	7.0	7.1	8.4	9.4

NOTE: Most previously published indexes for the Minneapolis-St. Paul area used January 1961 as the base period. They can be converted to the new base period by dividing them by the corresponding index numbers for January 1967 on the January 1961 base period as shown in the table. (The result should be multiplied by 100.)

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, Minneapolis-St. Paul, Minn., January 1971)

					/ earnings ¹ indard)					1	Numbe	r of w	orker	s rece	iving	straig	ht-tin	ne wee	kly ea	arning	s of					
Sex, occupation, and industry division	Number of workers	Average weekly hours 1 (standard)	Mean 2	Median ²	Middle range ²	\$ 60 and under	65	70	75					100							\$ 150 -			180	190	\$ a
						65	70	75	80	85	90	95	100	105	110	115	120	130	140	150	160	170	180	190	200	0
MEN																										
LERKS, ACCOUNTING, CLASS A	360	40.0	\$ 155.00	\$ 155.00	\$ \$ \$ 134.00-178.00	-	_	-	_	-	_	5	7	5	8	4	4	34	46	57	24	43	41	37	33	
MANUFACTURING	87	40.0	154.50	153.00	137.50-169.50		-	-	-	-	-	-	-	-	1	2	-	10	12	16	8	19	8	4	3	
NONMANUFACTURING					133.00-181.00	-	-	-	-	-	-	5	7	5	7	2	4	24	34	41	16	24	33	33	30	
WHOLESALE TRADE	129 111				162.00-190.00 118.50-156.50	-	-	-	-	-	-	5	7	5	7	2	3	12	3 25	18 15	5	15	30	23 10	26	
ERKS, ACCOUNTING, CLASS B					107.50-146.50	-	-	-	-	1	17 17	2	2	10	18 17	20	13	15	17	21	18	6	-	6	-	
NONMANUFACTURING PUBLIC UTILITIES	124 28				106.00-149.50	_	_	_		_	-	_	_	-	1	2	11	12	16	8	18	6	_	6	_	
WHOLESALE TRADE	60				109.00-147.00	-	-	-	-	-	1	-	1	2	14	1	6	7	11	4	4	3	-	6	-	
ERKS, ORDER	449				139.50-165.00		-	-	-	11	1	-	11	1	2	12	17	17	45	94	89	82	37	18	6	,
MANUFACTURING	73				136.00-163.00		-	-	-		-	_		-	2	-	-	4	24	8	11	13	11	-	-	,
WHOLESALE TRADE	376 376				140.50-165.50 140.50-165.50		-	-	-	11	1	-	11	1	-	12	17	13 13	21	86 86	78 78	69	26 26	18	6	
FICE BOYS	142	39.5				-	5	7	18	35	16	13	7	7	4	1	-	4	19	5	-	1	_	_	-	
MANUFACTURING	54	40.0				-	-	2	12	15	13	1	1	6	2	-	-	-	1	1	_	-	-	-	-	
PUBLIC UTILITIES	88 27		132.50		81.50-130.50 131.00-135.00		5	5	6	20	1	12	6	1	2	1	-	2	18 18	4	-	1	_	-	_	
ABULATING-MACHINE OPERATORS, CLASS A	68	39.5	168.00	162.50	152.50-195.50	-	-	-	-	-	-	-	-	-	-	1	2	5	2	2	22	2	3	9	14	۲
ABULATING-MACHINE OPERATORS, CLASS B	56	39.5	135.00	145.50	118.00-152.50	-	-	-	-	-	-	-	1	2	6	1	7	10	_	5	21	1	2	-	-	
WOMEN																										
ILLERS, MACHINE (BILLING																										
MACHINE)				100.50			1	2	8	26	10	7	10	27	9	-	2	1	18	8	3	-	-	-	-	
MANUFACTURING	65			100.00			1	2	6	20	10	7	8	21	9	-	2	1	10	8	3	_	-	_	Ξ	
ILLERS, MACHINE (BOOKKEEPING																										
MACHINE)	140 128		102.50		91.00-121.50	_	_	2	11	11	4	36 36	11	1	17	_	5 4	31 29	11	-	_	-	_	_	_	
OOKKEEPING-MACHINE OPERATORS,																										
CLASS A					108.50-128.50	-	-	-	-	-	2	7	7	34	22	26	54	68	24	14	2	-	1	-	-	
MANUFACTURING	96 165				112.00-137.50		_	-	_	_	2	7	4	13	5 17	20	14	21 47	19	13	2	-	1	_	_	
OOKKEEPING-MACHINE OPERATORS,															7											
CLASS B	397	39.5	98.50	94.00	87.00-104.50	-	2	5	9	55	75	66	46	44	10	26	18	7	22	11	-	_	1	-	-	G.
MANUFACTURING		40.0	109.50	106.50	96.50-119.00	-	-	-	-	1	11	15	28	14	3	18	18	6	14	11	-	-	-	-	-	0
NONMANUFACTURING	258						2	5	9	54	64	51	18	30	7	8	-	1	8	-	-	-	1	-	-	
RETAIL TRADE							2	1	8	22	30 10	19	1	17	7	_	_	1	_	_	-	_	_	_	_	

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, Minneapolis-St. Paul, Minn., January 1971)

					r earnings ¹ ndard)						Numbe	r of w	orker	s rece	iving	straig	ht-tin	ne wee	kly ea	rning	s of—					
Sex, occupation, and industry division	Number of	Average weekly				60	65	70	75	80	85	90						120	130	140				180	190	\$
	workers	hours 1 (standard)	Mean 2	Median ²	Middle range ²	and under 65	70	- 75	80	85	90	95	100	105	110	115	120	130	140	150	160	170	180	190	200	a) or
WOMEN - CONTINUED																										
ERKS, ACCOUNTING, CLASS A	1,466	39.5	\$ 119.50	\$ 116.50	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-	-	1	-	8	14	74	72	156	150	190	205	247	173	55	52	36	9	19	4	,
MANUFACTURING	507 959				109.00-127.00		-	1	-	- 8	2	12	13	48	69	78	92	94	73	12	12	-	1 8	-	-	
PUBLIC UTILITIES	182				104.50-131.50		_	_	_	-	12	62	59	108	81	112	113	153	100	43	40	36 21	8	19	4	
WHOLESALE TRADE	203				102.50-124.00		-	-	-	-	1	13	15	44	28	24	17	17	15	16	2	4	-	7	-	
FINANCE	221 247				104.00-126.00 103.00-125.00		_	-	-	4	3	10 29	11	39 21	10 32	35 28	52 14	28 53	21 25	10	14	2	_	_	-	
ERKS, ACCOUNTING, CLASS B	2,388	39.5	101.00				6	39	74 8	187 37	318 110	339 128	339 127	414 177	187	100	89	131	47	28	59	13	14	-	-	
NONMANUFACTURING	1,634	39.5	101.50	98.00	88.50-108.50	4	6	38	66	150	208	211	212	237	137	64	51	98	47	21	57	13	14	-	-	,
PUBLIC UTILITIES	427			104.50			-	-	-	13	53	31	55	66	45	17	24	41	10	3	48	9	12	-	-	į.
WHOLESALE TRADE	293 421			93.50			1	13	15	38 54	42 56	52 67	54	18	19	7 15	11	15	4 2	6	_	-	2	_	_	
FINANCE			103.00				-	3	16	28	45	53	53	50	20	17	8	31	21	11	9	-	-	-	-	,
ERKS, FILE, CLASS A				101.50			-	17	2	2	36	25	25	29	19	20	27	17	6	3	4	-	-	-	-	
MANUFACTURING				96.50			_	1 16	2	2	36	1 24	19	15 14	13	16	20	12	1 5	3	4	_	_	_	_	
PUBLIC UTILITIES	35				109.00-136.00		-	10	-	-	-	-	-	1	10	2	13	-	4	1	4	-	-	-	_	
FINANCE	77	38.0	93.50	93.00	86.00-100.00	-	-	16	-	-	18	9	16	4	3	1	7	2	1	-	-	-	-	-	-	
ERKS, FILE, CLASS B							14	62	75	181	136	139	36	64	10	18	2	3	1	1	5	-	-	-	-	
MANUFACTURING	244 504						5	57	21 54	27 154	96	57 82	23 13	54 10	8	17	2	2	1	1	5	_	_	-	_	
PUBLIC UTILITIES	71	40.0	102.50		91.00-112.50	-	-	-	6	2	4	25	6	3	-	16	-	2	1	1	5	-	-	-	-	
WHOLESALE TRADE	93						2	3	4	28	31	24	1	-	7	-	-	-	-	-	-	-	-	-	_	,
FINANCE	204						6	34 18	13 18	26 82	5 52	5 25	5	3	-	1	-	-	_	-	-	-	-	-	-	
ERKS, FILE, CLASS C	859 134		76.50 79.00				205	126 16	233	209	56 17	9	2 2	19	-	-	-	-	-	-	-	-	-	-	-	
NONMANUFACTURING	725		76.00				195	110	199	156	39	7	-	19	_	-	-	-	_	-	_	_	_	-	_	
WHOLESALE TRADE	94	40.0	81.50	81.50	74.50- 84.50	-	2	24	10	40	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-	
FINANCE	91 493		78.00 74.00				193	61	30 147	70	10 19	5	-	1	-	-	-	-	-	-	-	-	-	_	-	
ERKS, ORDER	521		100.00				9	30	17	50	64	59	82	46	28	41	23	36	11	1	4	7	-	12	-	
MANUFACTURING			98.00	103.50			9	30	15	14 36	13 51	15	17 65	31 15	11	28	22	22 14	7	1	-	7	_	12	_	
WHOLESALE TRADE	194	40.0	106.00	98.00	90.00-117.50	-	-	-	12	22	15	16	53	11	5	2	22	12	4	1	-	7	-	12		
RETAIL TRADE	96	40.0	83.00	82.00	72.50- 91.50	1	9	30	3	13	15	6	8	4	3	2	-	2	-	-	-	-	-	-	-	
ERKS. PAYROLL	573			108.50			-	1	12	18	48	53	50	62	65	55	39	84	30	11	21	16	3	3	2	!
NONMANUFACTURING	244 329			109.00			_	1	10	18	25	27 26	21	41	32	28	16	45	26	6	19	16	3	3	2	2
PUBLIC UTILITIES	94	40.0	132.00	126.50	108.00-160.50	-	-	-	-	-	-	10	6	5	5	3	11	16	1	-	13	16	3	3	2	2
FINANCE				105.00			_	_	_	13	13	9	9	25 7	12	15	4	26	1	5	6	_	-	_	_	
APTOMETER OPERATORS	450		104.50				6	17	10	33	56	66	42	40	57	4	28	13	30	8	33	5	-	2	_	
MANUFACTURING	132	39.0	113.50	115.50	101.50-129.00	-	-	-	-	9	12	1	5	18	18	-	26	11	30	-	-	-	-	2	-	
PUBLIC UTILITIES					87.50-107.00 150.00-154.00		6	17	10	24	.44	65	37	22	39	4	2	2	_	8	33		-	-	_	
WHOLESALE TRADE	71			96.50			_	_	_	_	1	31	13	5	19	1	-	1	-	-	-	-	-	-	-	
RETAIL TRADE				90.00			6	17	10	24	40	32	22	15	20	2	2	-	-	-	-	-	-	-	-	,

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, Minneapolis-St. Paul, Minn., January 1971)

					earnings ¹ ndard)					1	Numbe	r of w	orker	s rece	iving	straig	ht-tin	ne wee	kly ea	rning	s of—					
Sex, occupation, and industry division	Number of workers	Average weekly hours ¹ (standard)	Mean 2	Median ²	Middle range ²	60 and under	65	70	\$ 75 -		\$ 85	\$ 90 -	\$ 95 -	100	\$ 105 -	\$ 110 -	\$ 115 -	120	130	\$ 140 -	\$ 150 -	\$ 160 -	\$ 170 -	180	190	\$
						65	70	75	80	85	90	95	100	105	110	115	120	130	140	150	160	170	180	190	200	c
WOMEN - CONTINUED			•																							
EYPUNCH OPERATORS, CLASS A				105.50			-	-	-	7	29	110	180	244	169	118	134	133	39	10	10	3	-	-	-	
MANUFACTURING	508 678			106.00	100.00-114.50 98.00-119.50		_	_	_	7	23	32 78	96	125	79	54	87 47	22 111	38	8	10	3	_	_	_	
PUBLIC UTILITIES	100			121.00			-	-	-	-	7	16	3	6	7	4	3	32	15	2	4	1	-	-	-	
WHOLESALE TRADE	237				101.50-122.50		-	-	-	4	-	12	33	39	36	17	20	49	19	-	6	2	-	-	-	
FINANCE	115 181			104.50	95.00-114.50		_	-	-	1	8	36	8 47	37 28	14	15	8 15	17 13	1 3	_	-	Ξ	_	_	-	
EYPUNCH OPERATORS, CLASS B	1,419	39.5	99.00	94.00	86.50-106.50	-	2	98	49	146	201	257	155	130	94	59	58	23	23	104	11	1	6	2	_	
MANUFACTURING	369	40.0	98.00				-	1	12	37	62	77	42	54	37	23	3	4	4	3	1	1	6	2	-	
NONMANUFACTURING							2	97	37	109	139	180	113	76	57	36	55	19	19	101	10	-	-	-	-	
PUBLIC UTILITIES			93.50	92.00			2		9	35	26 49	27 67	10	16	18	23	13 35	13	19	100	10	_	_	_	_	
RETAIL TRADE			96.50				-	11	-	12	28	22	32 18	18	12	3	6	4	_	-	_	_	_	-	_	
FINANCE			88.00				-	86	28	59	31	50	49	31	19	10	1	2	-	-	-	-	-	-	-	
FFICE GIRLS			80.50					163	78	93	60	38	5	4	1	-	6	3	1	-	-	1	-	-	-	
MANUFACTURING			81.50				17	26 137	37 41	36 57	14	23 15	1 4	4	1	_	6	3	1	_	_	1	_	_	-	
WHOLESALE TRADE			83.00				-	35	-	1	8	5	-	2	-	-	5	_	_	_	-	-	_	_	_	
FINANCE	199				72.00- 82.50		11	82	35	38	18	9	-	2	-	-	-	-	-	-	-	-	-	-	-	ł
ECRETARIES					113.00-135.50		-	-	-	28	55	98	148	318	399	421		1214	913	437	255	129	99	33	26	
MANUFACTURING					115.50-135.00 109.50-136.50		=	_	_	28	3 52	19	31 117	184	179	230	434 232	786 428	536 377	267 170	142	70 59	55	16 17	18	
PUBLIC UTILITIES	337				122.50-158.50		_	-	-	-	-	9	3	5	14	21	26	72	44	30	38	25	25	7	10	
WHOLESALE TRADE	419				108.50-139.50		-	-	-	6	22	2	24	23	38	35	32	76	60	30	31	16	11	2	5	
RETAIL TRADE	351				110.00-131.50		-	-	-	-	4	17	12	34	19	52	26	83	71	18	6	6	2	1	3	
FINANCE	952				107.50-133.50		-	_	_	18	22	33	62	56	95	79	130	161	173	81	28	3	5	2	-	
SECRETARIES, CLASS A	359				132.50-165.50		-	-	-	-	-	-	-	25	-	-	19	34	55	46	61	52	42	18	3	
MANUFACTURING	166 193				134.50-169.50		_	_	_	_	_	-	-	10	_	-	19	15 19	21 34	29 17	22 39	30	23	15	1 2	
PUBLIC UTILITIES	52				122.50-174.00		-	-	-	-	-	-	-	-	-	-	13	-	2	3	15	3	13	-	-	
SECRETARIES, CLASS B					125.50-147.00		-	-	-	2	-	13	6	10	33	43	78	206	276		135	43	17	1	5	
MANUFACTURING					129.00-150.50		-	-	-	-	-	13	-	2	- 22	16	44 34	100	124	166	113	33	9	1	5	
PUBLIC UTILITIES					120.50-140.00		_	_	_	-	_	9	-	-	33	27	1	21	1	4	22	6	5	-	1	
WHOLESALE TRADE	53				122.50-144.00		-	-	-	-	-	-	-	-	4	7	1	14	8	11	-	1	1	1	3	
RETAIL TRADE					124.00-135.50		-	-	-	-	-	-	1	-	2	11	5	18	41	12	1	1	1	-	-	į
FINANCE	264	38.5	130.00	132.00	120.50-139.50	-	-	-	-	2	-	4	-	6	23	7	22	47	93	40	16	2	1	-	1	
SECRETARIES, CLASS C					114.50-133.00		-	-	-	16	20	46	54	107	152	162	309	574	471	118	38	24	29	12	13	
MANUFACTURING					117.50-132.00 106.50-135.50		_	_	_	16	20	37	9 45	49 58	77 75	96	228 81	452 122	352 119	55 63	32	17	23	11	5	
PUBLIC UTILITIES	108				125.00-150.00		_		_	-	-	-	-	5	10	4	5	18	25	15	4	7	4	5	6	
WHOLESALE TRADE					112.00-153.00		_	-	-	-	2	-	-	12	8	2	12	9	7	9	17	4	2	-	2	
RETAIL TRADE	111				110.00-128.00		-	-	-	-	-	9	3	10	6	28	6	25	18	1	3	1	-	1	-	Ē
FINANCE	403	38.5	115.50	115.50	102.00-128.50	-	-	-	-	16	16	16	40	31	45	32	54	62	56	32	3	-	-	-	-	
SECRETARIES, CLASS D					106.00-123.00		-	-	-	10	35	39	84	170	210	211 118	242 162	377 219	85 39	26 17	15	5	8		2 2	
MANUFACTURING	859 660				107.00-122.50		-	_	_	10	32	29	62	123	67	93	80	158	46	9	14	5	8	-	-	
PUBLIC UTILITIES	98				117.00-139.00		-	-	-	-	-	-	3	-	4	15	7	32	14	6	12	5	-	-	-	
WHOLESALE TRADE	171	40.0	111.50	110.00	98.00-122.50	-	-	-	-	6	20	2	24	9	26	25	8	33	10	-	-	-	8	-	-	
RETAIL TRADE	116				103.50-123.00		-	-	-	-	4	8	8	14	11	13	13	38	7	-	-	-	-	-	-	5
FINANCE	206	38.5	1112.50	114.00	105.00-120.00	-	-	-	-	-	6	13	18	15	23	37	43	42	9	-	-	-	-	-	-	

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, Minneapolis-St. Paul, Minn., January 1971)

					earnings landard)								orker	s rece	iving			ne wee	kly ea	arning	s of					
Sex, occupation, and industry division	Number of workers	Average weekly hours ¹ (standard)	Mean 2	Median ²	Middle range ²	and under	65	70	75 -	80	85	90	-	-	-	110	-	120	-	-	150	160	170	-	-	
WOMEN - CONTINUED						65	70	75	80_	85	90	95	100	105	110	115	120	130	140	150	160	170	180	190	200	Page 1
TENOGRAPHERS, GENERAL	474 984 382 179 148	39.5 39.5 40.0 40.0 39.0	98.50 108.50 129.00 100.50 94.50	98.00 101.50 133.00 102.00 92.00	90.00-126.50 104.00-151.00 88.00-108.00			36 7 29 - 22 - 3	35 - 35 - 1 16 18	106 39 67 - 13 9	159 39 120 9 15 35 57	191 75 116 25 10 36 31	216 127 89 31 9 14 29	211 79 132 38 49 19 6	108 43 65 15 26 1	58 35 23 11 4 1	46 14 32 18 11 3	56 8 48 37 - 4	51 3 48 26 12 9	80 5 75 68 7	81 81 80 - 1	20 20 20 -	3 3	1 1	-	
ENOGRAPHERS, SENIOR MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES WHOLESALE TRADE FINANCE	948 781 95 158 136	39.5 39.0 40.0 40.0 39.5	112.50 118.00 142.50 129.50 109.00	111.50 116.50 150.00 127.00 110.00	103.50-123.00 104.00-118.50 102.50-129.50 117.50-164.00 120.00-148.50 102.50-118.50 99.00-121.00	-	16 - 16 - - 16	1 - 1	2 - 2 - 2	19 - 19 - 1 15 2	42 5 37 - 13 - 18	57 29 28 - 5 4 13	106 62 44 2 4 1 28	258 168 90 11 2 29 36	243 163 80 3 6 20 45	210 164 46 6 2 11	248 163 85 4 6 33 36	106 145 10 58	96 28 68 - 13 5	65 37 28 12 11	49 13 36 13 14	33 30 25 5	30 5 25 8 17	2 2	1 1	
ITCHBOARD OPERATORS, CLASS A MANUFACTURING NONMANUFACTURING	75	39.5	107.00	105.00 106.00 104.50	97.00-114.00	-	-	-	-	3 2 1	6 1 5	31 13 18	11 7 4	23 13 10	27 9 18	19 15 4	7 5 2	9 6 3	6 3 3	2 - 2	3 - 3	-	. 1	-		
ITCHBOARD OPERATORS, CLASS B MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES RETAIL TRADE	66 272 29	40.0 40.0 40.0		99.00 86.50 135.00	92.50-111.00	=	4 - 4 - 4	2 - 2	35 - 35 - 29	80 - 80 - 20	59 13 46 -	31 7 24 -	26 16 10 1 3	38 10 28 3 8	11 4 7 2 4	16 1 15 7 2	10 7 3 - 1	3 1 1	13 2 11 11	7 3 4 3	1 1 1	-	1 -	-	-	
ITCHBOARD OPERATOR-RECEPTIONISTS- MANUFACTURING	250 516 70 155 154	40.0 39.5 39.5 40.0 40.0	95.00 106.00 96.00 91.50	101.00 92.50 99.50 95.50 88.00	93.50-107.50 85.50-103.00 95.00-123.00 84.50-105.50 85.50-102.00	=		-	62 - 62 - 14 16 32	82 27 55 9 29 16	124 13 111 - 21 70 4	100 34 66 9 12 8 32	107 35 72 19 27 -	106 69 37 2 10 15	54 22 32 - 29	63 22 41 13 2 24 2	19 8 11 - 3 2	21 16 5 2 - 3	24 2 22 16 6		2 - 2	1 1		111111		
ANSCRIBING-MACHINE OPERATORS, ENERAL	149 214	39.5 38.5	94.50	100.50 91.50	90.50-107.00 84.50-104.00	-	-		15 6 9	59 8 51 46	60 22 38 29	59 24 35 30	31 11 20 7	42 31 11 8	38 24 14 5	18 2 16 3	17 2 15 7	16 14 2 2	6 4 2 2	1	1 1 -	-	-	-	-	
PISTS, CLASS A	697 623 81 50	39.5 39.0 40.0 40.0 39.5	96.50 97.50	98.50 94.00 109.50 95.00 94.50	91.50-104.50 86.50-105.50 99.50-124.00 91.50-102.50 91.00-101.00	-			20 - 20 - 1 19	123 17 106 - 3 2	217 122 95 10 4 14 64	240 127 113 4 18 31 58	187 122 65 7 10 18 30	215 149 66 10 7 9	86 44 42 11 7 -			11	34 33 1 1 -	9	7 7 7	3 3	1 1		1111111	
PISTS, CLASS B	539 1,249 129 214 114	39.5 39.0 40.0 40.0 39.0	89.00 83.50 103.50 90.00	88.00 83.00 100.00 89.50 85.00	82.50- 94.00 73.00- 92.00 86.00-120.00 83.50- 98.00 81.50- 89.50	129	66 - 2	215 15 200 - 8 7 184	86 9 15 6		272 110 162 15 43 32 54	244 115 129 13 33 9 63	144 42 102 8 33 16 39	93 43 50 9 18 1 20	36 14 22 6 10	18 5 13 4 5 -	14		3 2 -		6 6	11111111				

Table A-1a. Office occupations-large establishments-men and women

(Average straight-time weekly hours and earnings for selected occupations studied in establishments employing 500 workers or more by industry division, Minneapolis-St. Paul, Minn., January 1970)

					earnings I ndard)									recei												
Sex, occupation, and industry division	Number of workers	Average weekly hours ¹ (standard)	Mean 2	Median ²	Middle range ²	60 and under	65 -	70 - 75	\$ 75 - 80	\$ 80 - 85	\$ 85 - 90	90	95	100	105	110	-	120	130	140	150	160	-	180	190	ar
MEN				10																	,,,,		100	170	200	9.
CLERKS, ACCOUNTING, CLASS A MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	219 55 164 93	40.0	158.50 155.50	155.00	\$ 134.00-181.00 138.50-178.00 129.50-182.00 169.50-190.50	:		:	:	=	:	5 - 5 -	7 - 7 -	5 - 5 -	6 -	2 - 2 -	4 - 4 -	17 4 13 3	21 12 9 1	22 7 15 4	16 8 8 3	24 6 18 13	30 7 23 22	29 4 25 23	21 3 18 18	
OFFICE BOYS NONMANUFACTURING PUBLIC UTILITIES	90 27				81.50-131.00 131.00-135.00	-	-	2	14	21	11	4	3	5	2	1	-	2	19 18	5	-	1	-	-	-	
WOMEN																										
BOOKKEEPING-MACHINE OPERATORS, CLASS B	66	39.5	97.50	89.00	81.50-116.50	_	2	1	8	17	7	4	3	5	-	2	4	6	4	2	-	_	1	_	_	
CLERKS, ACCOUNTING, CLASS A MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES RETAIL TRADE FINANCE	701 317 384 117 64 106	39.5 39.5 40.0 39.5	116.50 122.50 143.00 110.00	115.50 116.50 148.50 107.00	105.50-129.00 107.50-124.50 103.50-137.50 116.00-167.00 102.00-118.00 113.00-137.00			1 -		4 -	11 2 9 - 1	27 10 17 1 -	48 13 35 6 8 2	71 25 46 2 21 7	91 56 35 8 10	84 50 34 10 4	95 53 42 14 10	104 67 37 . 5 4 26	67 29 38 7 6 21	24 9 15 8 1	34 1 33 19 -	14 - 14 13 -	9 1 8 8 -	12 12 12	4 4 4	
CLERKS, ACCOUNTING, CLASS B MANUFACTURING NOMMANUFACTURING PUBLIC UTILITIES WHOLESALE TRADE FINANCE	1,343 411 932 238 82 336 220	39.5 39.5 40.0 40.0 39.5	96.00 101.00 112.50 95.50	94.50 97.00 104.50 93.50 93.00	88.50-100.00 88.00-107.00 97.00-120.00 87.00-102.50 85.50-101.50	4 - 4 - 3 - 3	6 - 1 1 -	22 1 21 - 2 6	45 8 37 - 2 20	121 28 93 - 8 51 18	223 98 125 21 18 53 29	209 79 130 21 15 61 33	213 93 120 40 11 41 27	188 57 131 40 11 55 25	89 12 77 32 2 29 14	36 8 28 15 2 5	34 8 26 10 3 5	60 10 50 19 5 5	25 25 2 2 2	22 7 15 3 - 1	25 2 23 14 - 9	9 - 9	12 12 12			
CLERKS, FILE, CLASS A	102 53		110.50 113.00			-	Ξ	1	2	2	2 2	5	18 12	8	17 11	8 2	11	17 5	6	1	4	Ξ	-	-	Ξ	
CLERKS, FILE, CLASS B MANUFACTURING NONMANUFACTURING RETAIL TRADE	400 172 228 62	39.5 39.0	90.50 85.50	90.00 83.50	82.50-100.50 80.00- 89.50	1 1 1	12 5 7 6	32 5 27 18	41 19 22 13	115 27 88 10	60 30 30 5	48 22 26 5	31 18 13	40 34 6 3	8 8 -	2 1 1 1	2 2 -	1 1 -	1 -	1 1 -	5 -	=	:			
CLERKS, FILE, CLASS C	298 67 231 146	38.0 39.0	78.00 78.50	77.50 78.50	75.00- 80.50 76.00- 82.00	-	2 - 2 -	53 16 37 12	150 34 116 95	59 10 49 27	22 3 19 9	9 2 7 2	2 2 -	1 1 1	-	-			-	-	-	-	:	-	-	
CLERKS, ORDER	122 104 96	40.0	85.00	83.50	72.50- 93.50	1 1 1	9 9 9	30 30 30	3 3 3	14 14 13	15 15 15	10 10 6	8 8 8	5 4 4	8 3 3	3 3 2	1 -	2 2	5	1	4 - -	1 1 -	Ē	-	=	
CLERKS, PAYROLL	260 87 173 50 69	40.0 39.5 40.0	114.00	113.50 106.00 157.00	96.50-126.50 101.00-126.00 94.00-127.50 107.00-163.00 90.50-111.50			1 -	4 2 2 -	18 - 18 - 13	12 1 11 - 4	21 7 14 2 6	29 10 19 6 9	28 11 17 3 7	30 8 22 5 12	15 7 8 1 5	17 8 9 4	28 16 12 1 9	12 10 2 1	10 5 5 -	13 2 11 5	16 16 16	3 3 -	1 1 -	2 2 2 -	

Table A-1a. Office occupations-large establishments-men and women-Continued

(Average straight-time weekly hours and earnings for selected occupations studied in establishments employing 500 workers or more by industry division, Minneapolis-St. Paul, Minn., January 1970)

					earnings ¹ idard)					N	Number	of w	orkers	rece	iving s			e wee	kly ea	rnings	of—					
Sex, occupation, and industry division	Number of workers	Average weekly hours ¹ (standard)	Mean 2	Median ²	Middle range ²	60 and under	-	70	75	80	85	90	95	100	105	110	115	120	130	140	150	160	170	-	-	
						65	70	75	80	85	90	95	100	105	110	115	120	130	140	150	160	170	180	190	200) (
WOMEN - CONTINUED			\$	\$	s s												-									
OMPTOMETER OPERATORS					87.00-117.50		6	17	10	24	46	37	26	26	13	3	28	8	3	8	33	5	-	2	-	
MANUFACTURING					105.50-120.00 85.50-107.00		6	17	10	24	43	36	25	8	11	3	26	6 2	3	8	33	5	_	2	_	
PUBLIC UTILITIES	48	40.0	150.00	152.00	150.50-154.00	-	-	-	-	-	-	-	-	-	-	1	-	1	-	8	33	5	-	-	-	
RETAIL TRADE	180	40.0	88.50	89.00	82.50- 96.50	-	6	17	10	24	40	32	22	15	10	2	2	-	-	-	-	-	-	-	-	
YPUNCH OPERATORS, CLASS A				105.50			-	-	-	3	23	63			107	92	93		5		4	1	-	-	-	
MANUFACTURING					100.00-114.00 97.50-114.00		-	-	_	3	17	26 37	70 22	105	62 45	60 32	71		1 4	8	4	1	_	_	-	_
PUBLIC UTILITIES	66	40.0	110.00	106,00	93.00-122.50	-	-	-	-	-	7	16	3	6	7	4	3	10	3	2	4	1	-	-	-	-
FINANCE					102.00-114.50 97.50-113.50		-	_	_	1	8	5	10	22 17	11	15	8	8	1	_	_	_	_	_	_	_
																			22	102				2		
MANUFACTURING			98.50				_	2	12	29	116	115	84	76 36	43	19	22	13	4	103	11	1	6	2	_	
NONMANUFACTURING	473	40.0	109.00	99.50	90.00-137.50	-	-	1	5	45	69	65	55	40	20	16	19		19		10	-	-	-	-	-
PUBLIC UTILITIES			96.50		112.50-146.50 88.50-103.50		_	-		12	26 28	22	18	8 18	12	12	13		19	100	10	_	_	_	_	_
FINANCE							-	-	4	11	9	28	23	12	4	1	-	-	-	-	-	-	-	-	-	-
FFICE GIRLS	310	39.5	80.00	78.00	73.00- 84.50	1	18	104	57	59	43	14	5	2	1	-	1	3	1	-	_	1	-	_	_	_
MANUFACTURING	109						4	24	33	23	14	8	1	2	1	-	-		1	-	-	1	-	-	-	-
NONMANUFACTURINGFINANCE					72.00- 84.50 72.00- 82.50		14	80 52	24 18	36 24	29 10	6	4	2	_	_	1	3	-	-	_	_	-	-	_	
ECRETARIES		39.5	128-50	126.00	116.50-138.00	_	_	_	_	_	13	24	58	176	216	278	469	900	669	352	206	108	78	27	23	3
MANUFACTURING	2,581	39.5			116.50-136.50		-	-	-	-	3	10	29	123	161	196	371				137	67	55	16	8	В
NONMANUFACTURING	1,031				116.00-142.50		-	-	-	-	10	14	29	53	55	82	98		181	116	69	41	23 17	11		
PUBLIC UTILITIES					124.50-166.00		_	_	_	_	2	1	3	5	8	15	11	24 25	30		14	7		í		
RETAIL TRADE	254	39.5	122.00	123.00	112.50-132.00	-	-	-	-	-	4	8	9	15	16	24	26	77	45	15	6	6	2	1	- 2	
FINANCE	375	39.0	127.50	127.50	116.00-139.00	-	-	-	-	-	2	4	9	17	22	32	38	87	79	65	11	3	1	2	2	-
MANUFACTURING					148.50-172.50		-	-	-	-	-	-	-	-	-	_	2	4 2	21	25 17	40	37 27	30 23	17 15	3	
NONMANUFACTURING					142.00-168.50		-	-	-	-	-	-	-	-	-	-	2	2	12	8	21	10	7			
PUBLIC UTILITIES	31	40.0	165.00	158.50	155.50-171.00	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	15	3	5	-	-	•
SECRETARIES, CLASS B					131.50-151.00		-	-	-	-	-	-	2	4	3	10				205		43	17	1	4	÷
MANUFACTURING					134.00-152.50		_	_	_	_	_	_	2	2	3	6	11		100		111	33	8	1	4	4
PUBLIC UTILITIES	27	40.0	154.00	160.00	129.00-172.50	-	-	-	-	-	-	-	-	-	-	1	1	6	1	2	3	6	5	-	1	L
FINANCE					125.00-140.50		_	_	_	-	_	_	1	_	2	1	5		18		7	1 2	1	_	-	-
SECRETARIES, CLASS C					119.00-134.00		_	_	_	_		_	7	30	58	94	230	468	407	89	25	18	28	7	11	1
MANUFACTURING					118.50-133.00		-	-	-	_	-	-	7	22	44	76	208	400	340		6	7	23	1	5	5
NONMANUFACTURING					121.00-143.50		-	-	-	-	-	-	-	8	14	18	22	68	67		19	11	5	6		
FINANCE					118.50-169.00		=	_	_	-	_	_	_	5	4	4	11				2	-	-	-	-	_
SECRETARIES, CLASS D	1,144	39.5	115.50	115.50	107.00-123.00	-	_	_	_	_	13	24	49	138	155	171	201	293	61	21	11	5	_	-	2	2
MANUFACTURING	784	39.5	115.50	116.00	107.50-122.50	-	-	-	-	-	3	10	22	99	117	114	152	208			1		-	-	2	2
NONMANUFACTURING					105.00-123.50		_	-	_	-	10	14	27	39	38	57	49		22			5	-	_		_
RETAIL TRADE					103.50-123.00		_	-	-	-	4	8	8	14		13	13		7		-	_	-	-	-	-

Table A-1a. Office occupations—large establishments—men and women—Continued

(Average straight-time weekly hours and earnings for selected occupations studied in establishments employing 500 workers or more by industry division, Minneapolis-St. Paul, Minn., January 1970)

					earnings 1 ndard)					N	umber	of wo	orkers	recei	ving s	traigh	t-tim	e week	ly ear	nings	of—					
	Number	Average				\$ 60	\$ 65		75	80	\$	\$ 90		\$ 100				120							\$ 100	\$
Sex, occupation, and industry division	of workers	weekly hours 1	Mean 2	Median 2	Middle range ²	and	_	_	_	_	_	-	_	-	_	-	-	-	-	-	-	-	-	-	-	a
		(standard)				under 65	70	75	80	85	90	95	100	105	110	115	120	130	140	150	160	170	180	190	200	
WOMEN - CONTINUED	£.																									
TENOGRAPHERS, GENERAL	922 378 544 322 76	39.5 39.5 40.0	97.50 118.00 132.50		91.50-103.00	=	= = = = = = = = = = = = = = = = = = = =	11 7 4 -	11111	43 30 13 - 4	70 36 34 1 12	145 65 80 17 19	167 107 60 18 23	123 66 57 29 6	71 40 31 13 8	34 15 19 11 4	30 4 26 18	33 - 33 29	27 3 24 24	73 5 68 68	71 71 70	20 - 20 20	3 3 3	1 1 1 -		
TENOGRAPHERS, SENIOR	1,196 782 414 73 168	39.5 39.5 40.0	111.00 119.50 149.50	110.50 116.50 159.00	104.00-119.50 104.00-117.00 104.00-130.00 129.00-166.00 106.00-128.00	=	11111	1 -		2 -	10 1 9 - 2	48 29 19 - 4	78 57 21 2 6	201 139 62 2 26	198 149 49 3 24	186 154 32 2 17	185 138 47 3 19	138 67 71 8 35	57 13 44 - 34	32 22 10 6 1	16 3 13 13	28 3 25 25	13 5 8 8	2	1 1 -	
WITCHBOARD OPERATORS, CLASS A	106 66			105.50			÷	-	-	3 2	5	15 13	8	21 13	15	14 10	7 5	7 4	5	2	3	-	1	-	-	
MITCHBOARD OPERATORS, CLASS B MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	154 54 100 29	40.0	100.50	102.00	97.00-116.50	-	2 - 2 -	2 - 2 -	10 - 10 -	14 - 14 -	13 4 9	16 4 12	24 16 8 1	19 10 9 3	10 4 6 2	11 1 10 7	8 7 1 -	4 3 1 1	13 2 11 11	7 3 4 3	1 1	-	-	-	:	
WITCHBOARD OPERATOR-RECEPTIONISTS- MANUFACTURING	83 52			105.00			Ξ	Ξ	-	4 2	4	12	11	11 5	9	14	5	9	2 2	1	-	1	-	-	Ξ	
TRANSCRIBING-MACHINE OPERATORS, GENERAL	179 90 89 63	39.0 38.5	96.50 97.00	93.50 93.50	87.00-103.50 88.00-104.50	-	-		7 6 1 1	17 8 9 7	43 22 21 18	35 14 21 18	23 11 12 7	15 11 4 1	15 9 6 2	8 2 6 3	4 - 4 2	4 2 2 2	6 4 2 2	1 -	1 1 -	-	:	=	-	
TYPISTS, CLASS A	915 607 308 75 132	39.5 39.5 39.0		98.00 97.00 93.50	91.00-104.50 91.00-104.50 90.50- 97.50	=	:		1 1 1	26 15 11 2 7	163 116 47 14 17	187 110 77 31 30	163 113 50 18 19	164 113 51 9 28	58 35 23 -	24 12 12 -	23 7 16 - 6	11 5 6 - 3	34 33 1 -	52 48 4 -	5 -	3 -	1 1 -	-	-	
YPISTS, CLASS B	778 388 390 85 99 164	39.5 39.5 40.0 39.0	89.00 91.00 109.50 83.50	87.50 87.00 107.50 84.00	81.00- 94.50 82.50- 95.50 91.50-122.50 81.00- 88.00	1 - 1	2 - 2 - 2	25 15 10 - 7	64	190 76 114 5 40 57	171 73 98 15 32 36	105 69 36 5 9	64 34 30 8 1	55 33 22 9 1	17 12 5 2 -	10 3 7 4 - 3	15 1 14 14	21 8 13 13 -	2 2 2 -	2 2 2 -	6 6	= = = = = = = = = = = = = = = = = = = =				

Table A-2. Professional and technical occupations

(Average straight-time weekly hours and earnings for selected occupations studied on an area basis by industry division, Minneapolis-St. Paul, Minn., January 1971)

				(stan	earnings ¹ dard)					N	umber	of wo					t-time			rnings	of—					
Sex, occupation, and industry division	Number of workers	Average weekly hours 1 (standard)	Mean ²	Median ²	Middle range ²	\$ 80 and	90			120							190				230				\$ 270	\$ 2
						under 90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	
MEN AND WOMEN COMBINED*																										
			\$	\$	\$ \$																					
DMPUTER OPERATORS, CLASS A MANUFACTURING NONMANUFACTURING	145	39.5	150.50	148.50	137.50-160.50 139.00-160.00 136.00-162.00	-	=	-	9 5 4	19 5 14	56 29 27	63 41 22	61 30 31	42 23 19	15 5 10	7 2 5	2 - 2	4	1	=	-	-	-	-	-	
DMPUTER OPERATORS, CLASS B	547 203				125.00-144.00 124.50-139.00		1	12	59 21	129	158	95 30	25 8	52	6	8	-	-	-	2 2	-	-	-	-	-	
NONMANUFACTURING					125.00-148.50		1	7	38	67	88	65	17	50	6	5	-	-	-	-	-	-	-	_	-	d
PUBLIC UTILITIES	73	40.0	151.50	148.50	137.50-168.00	-	-	-	-	9	13	16	2		1	5	-	-	-	-	-	-	-	-	-	
FINANCE	156				118.00-144.50 128.50-146.50		1	6	20	17 31	53	10 31	13	12	4	-	-	_	-	-	-	-	-	-	-	
MANUFACTURING					99.00-124.00 113.50-128.50		57	49	55 32	67 37	17	9	1	-	-	-	-	1	-	-	-	-	-	-	-	
NONMANUFACTURING		39.5	107.00	104.50		20	53 49	36 8	23	30 10	8	4	1_	-	-	-	-	-	-	-	-	-	-	-	_	
OMPUTER PROGRAMERS,	27/	20 5	21/ 50	207 50	100 00 000 000										10		24	50	10	21	22		7		10	
MANUFACTURING					189.00-233.00		_	_	_	_	-	_	1	12	18	43	11	50 7	19	31		6	5	4	6	
NONMANUFACTURING	195	39.5	207.00	204.50	186.00-224.00 181.50-209.50	-	-	-	-	-	-	-	1		13	36 15		43	14	29	19	3			4	
DMPUTER PROGRAMERS, BUSINESS, CLASS B	601	30.5	199.00	1 9 9 00	170.00-206.00				1		32	27	29	63	89	77	68	91	41	31	24	9	8	7	1	
MANUFACTURING					183.50-219.50		_	_	-	-	2	12	6	13	28	30	26	55	32			5	6	7	1	
NONMANUFACTURING					165.50-196.00		-	-	1	-	30	15	23	50	61	47	42	36	9				2	-	-	
FINANCE					166.50-201.50 149.00-193.00		-	-	1	-	21	13	9	13	10 24	11	6	20	2			1	2	-	_	
OMPUTER PROGRAMERS, BUSINESS, CLASS C	250	39.5	162.00	163.00	147.00-174.50	_	_	_	_	8	36	35	30	46	45	27	14	8	1	_	_	_		_	_	
MANUFACTURING					155.00-191.50	-	-	-	-	6	6	8	7		18	9	14	8	1		-	-	-	-	-	
NONMANUFACTURING					145.50-171.00 145.50-170.00		_	-	-	2	30 19	27 14	23 17	36 18	27	18	-	-	-	-	_	-	-	-	-	
OMPUTER SYSTEMS ANALYSTS,	207	20 5	252 00	254 50	222 50-27/ 50										,	2	27	17	7	11	26	29	53	37	28	
MANUFACTURING					232.50-274.50 253.00-280.50		_	_	_	-	_	_	_	_	-	-	-	- 1	2		4	9	21	18	17	*
NONMANUFACTURINGFINANCE	203	39.0	246.00	247.00	216.50-266.50 199.00-255.50	-	-	_	-	-	-	-	-	-	1	3	27 27	17 17	5			20 10	32 7			
OMPUTER SYSTEMS ANALYSTS,	200	20 5	217 5	210 50	104 50-220 00								8	9	15	32	20	26	56	22	55	27	14	14	6	,
MANUFACTURING					196.50-238.00 213.00-247.50		_	_	_	-	_	-	-	4	6	9	7				24		12			
NONMANUFACTURING	156	39.0	208.00	211.50	185.00-231.50	-	-	-	-	-	-	-	8	5	9	23	13	16	28	11	31	5	2	4		
PUBLIC UTILITIESFINANCE					183.00-204.00 180.50-216.00		_	-	-	-	-	-	8	5	7	11	3 8	6	1 24			1		1 -	_	
MEN																										
RAFTSMEN, CLASS A					182.50-216.00		-	-	-	-	1	1	2 2				143 105	120 78	81 62			49		3	4	,

^{*} Separate earnings information for men and women not available for these occupations.

** Workers were distributed as follows: 9 at \$280 to \$300; 13 at \$300 to \$320; and 1 at \$320 to \$340.

*** Workers were distributed as follows: 17 at \$280 to \$300; 15 at \$300 to \$320; and 3 at \$320 and over.

Table A-2. Professional and technical occupations—Continued

(Average straight-time weekly hours and earnings for selected occupations studied on an area basis by industry division, Minneapolis-St. Paul, Minn., January 1971)

					earnings l					1	Numbe	r of w	orker	s rece	iving	straig	ht-time	e weel	kly ea	rnings	of					
Sex, occupation, and industry division	Number of workers	Average weekly hours ! (standard)	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	-	-	-	\$ 250 - 260	\$ 260 - 270	-	and
MEN - CONTINUED																										
DRAFTSMEN, CLASS B MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	817 704 113 56	40.0	163.00	162.00 172.50	\$ 154.00-175.00 153.00-173.50 163.00-185.50 167.50-190.00	_	-	=	7 6 1	20 20 -	26 22 4	87 84 3	174 164 10 8	223 197 26 11	122 85 37 13	108 95 13 11	27 17 10 7	20 14 6 4	3 - 3 2	=			=	-	-	
PRAFTSMEN, CLASS C	523 402 121 47	40.0	134.00	135.00	129.00-145.50 127.00-142.50 137.50-160.50 146.00-170.00	_	4 4 -	8 8 - -	25 25 -	111 100 11 1	166 138 28 4	161 122 39 16	17 4 13 3	17 1 16 12	5 4	7 - 7 5	2 - 2 2	-	-	=	-	-	-	-	-	
WOMEN																										
URSES, INDUSTRIAL (REGISTERED)	143 107				151.00-172.50 156.50-173.00		-	-	-	6 2	4	23 12	27 20	33 26	41 40	6	2	1	-	-	-	_	-	-	-	

Table A-2a. Professional and technical occupations-large establishments

(Average straight-time weekly hours and earnings for selected occupations studied in establishments employing 500 workers or more, by industry division, Minneapolis—St. Paul, Minn., January 1971)

					earnings 1 ndard)					Nu	mber	of wo	rkers	receiv	ring st	raight	-time	weekl	y earr	nings	of-					
Sex, occupation, and industry division	Number of workers	Average weekly hours 1 (standard)	Mean 2	Median ²	Middle range ²	and	-	100	110	120	130	140	150	160	170	180	\$ 190 -	200	210	220	230	240	250	-	270	28 an
MEN AND WOMEN COMBINED*						90	_100_	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	ove
COMPUTER OPERATORS, CLASS A MANUFACTURINGNONMANUFACTURING	136	39.5	150.50	149.00	\$ 139.50-163.00 139.00-160.00 140.50-172.00	-	-	-	6 5 1	10 5 5	34 27 7	42 35 7	37 30 7	33 23 10	13 4 9	7 2 5	2 - 2	4	1 1 -	-	-	-	-	-	-	
OMPUTER OPERATORS, CLASS B MANUFACTURING NONMANUFACTURING	181 156	39.5 39.5 40.0	134.00 146.50 156.00	132.50 144.50 165.50	129.00-147.00 125.00-140.00 135.50-163.50 141.00-168.50 132.50-157.50	-	1 - 1	3 - 2	24 21 3 -	64 51 13 - 8	105 65 40 13 9	72 30 42 16 14	20 7 13 -	36 2 34 25 9	2 2 1	8 3 5 5		-	-	2	-				-	
OMPUTER OPERATORS, CLASS C MANUFACTURING NONMANUFACTURING	92	39.5	122.00	121.50	106.50-126.50 114.50-128.50 95.00-122.50	-	12 4 8	27 8 19	48 32 16	51 33 18	15 9 6	9 5 4	1 - 1		-	-	-	1	-	-	-	-	-	-	=	
COMPUTER PROGRAMERS, BUSINESS, CLASS A MANUFACTURING NONMANUFACTURING	71	39.5	237.50	235.50	200.50-247.00 206.50-270.00 196.00-230.50	-	=	=		=		-	1 1	4 - 4	11 5 6	11 5 6	10 5 5	28 7 21	16 5 11	9 2 7		5 3 2		8 4 4	10 6 4	1
COMPUTER PROGRAMERS, BUSINESS, CLASS B MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	244 175	39.5 39.0	202.50	203.50	177.00-212.50 183.00-220.00 173.50-201.50 169.00-204.00	_	-		1 - 1 -	=	5 2 3	15 12 3 1	13 6 7 5	30 10 20 13	55 28 27 10	54 16 38 11	54 26 28 7	79 52 27 5	37 32 5 3	7				7 7 - -	1 1 -	
COMPUTER PROGRAMERS, BUSINESS, CLASS C MANUFACTURING NONMANUFACTURING	69	40.0	175.00	178.00	159.50-181.00 159.50-195.50 160.00-172.50	-	=	=	-	6 4 2	2 1 1	16 6 10	13 7 6	30 1 29	39 18 21	15 9 6	14	8 8 -	1 1 -	-	=	-	-	=	-	
COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS A —————————————————————————————————	88	39.5	269.00	264.00	251.00-288.50 253.00-283.00 246.00-291.50	-	Ξ	=	-	=	-	-	=		=	-	=		6 2 4	4 - 4	11 4 7			28 16 12	15	**
COMPUTER SYSTEMS ANALYSTS, BUSINESS, CLASS B MANUFACTURING NONMANUFACTURING		39.5	229.00	233.50	202.50-241.50 214.50-249.00 194.00-232.50	-	=	-	-	=	-		=	4 4 -	9 6 3	20 4 16	18 7 11	21 9 12	29 18 11		24	23 20 3		13 10 3	6	
MEN DRAFTSMEN, CLASS A MANUFACTURING					182.00-212.00 182.00-212.00		-	-	-	-	1	1	2 2	33 33	60	123 123	84 78	52 51	58 57	35 33	27 27	14 13	1	1	-	
DRAFTSMEN, CLASS B MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	398	40.0	160.50	160.50 177.00	153.00-172.50 152.00-169.50 167.50-189.50 170.00-191.00	-	=	-	7 6 1	10 10 -	16 12 4		110 108 2 2	126 115 11 11	72 58 14 13	31 20 11 11	16 9 7 7	10 6 4 4	2 2 2		=	=	-		=	
DRAFTSMEN, CLASS C					129.00-144.00		4	8	15 15	65 64	113 108	95 85	7 4	13	5	7 -	2 -	-	-	-	-	-	-	-	-	
WOMEN NURSES, INDUSTRIAL (REGISTERED) MANUFACTURING					151.50-172.50 157.50-173.50		-	-	- 1	6 2	4	18	27 20	29 24	36 35	6	2	1	-	-	-	-	-	-	=	

Separate earnings information for men and women not available for these occupations.
Workers were distributed as follows: 9 at \$280 to \$300; 13 at \$300 to \$320; and 1 at \$320 to \$340.
Workers were distributed as follows: 15 at \$280 to \$300; 10 at \$300 to \$320; and 3 at \$320 and over.

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, Minneapolis-St. Paul, Minn., January 1971)

		Av	erage			Av	erage			Av	erage
Occupation and industry division	Number of workers	Weekly hours 1 (standard)	Weekly earnings ¹ (standard)	Occupation and industry division	Number of workers	Weekly hours ¹ (standard)	Weekly earnings 1 (standard)	Occupation and industry division	Number of workers	Weekly hours 1 (standard)	Week earning (stands
OFFICE OCCUPATIONS	OFFICE OCCUPATIONS - CON		OFFICE OCCUPATIONS - CONTINUED				OFFICE OCCUPATIONS - CONTINUED				
							\$				\$
ILLERS, MACHINE (BILLING			Þ	CLERKS, FILE, CLASS C	859			SECRETARIES	5,270		
MACHINE)	133		103.50	MANUFACTURING	134			MANUFACTURING	3,005		
MANUFACTURING	67	39.0		NONMANUFACTURING	725	39.0		NONMANUFACTURING			
NONMANUFACTURING	66	39.5	108.50	WHOLESALE TRADE	94	40.0		PUBLIC UTILITIES	343		
ALLENS MACHINE ADODERSEDANCE				RETAIL TRADE	91	39.5		WHOLESALE TRADE	420		
ILLERS, MACHINE (BOOKKEEPING	151	100	102 50	FINANCE	493	38.5	74.00	RETAIL TRADE	351		
ACHINE)	151		102.50	CLEAKE COOPE				FINANCE	952	38.5	120
NONMANUFACTURING	139	40.0	103.00	CLERKS, URDER	970		123.00				
CONNECTING MACHINE OBERATORS				MANUFACTURING	238		118.50	SECRETARIES, CLASS A			
OKKEEPING-MACHINE OPERATORS,	2/2	20 5	110 50	NONMANUFACTURING	732		124.50	MANUFACTURING	166		
CLASS A	262		119.50	WHOLESALE TRADE	570		134.50	NONMANUFACTURING	193		
MANUFACTURING	96		125.00	RETAIL TRADE	96	40.0	83.00	PUBLIC UTILITIES	52	40.0	154
NONMANUFACTURING	166	39.5	116.00	CLERKS, PAYROLL	609	40 0	113.50	55555545455			
DONNEEDING MACHINE ODERATORS				MANUFACTURING	259		112.50	SECRETARIES, CLASS B			
DOKKEEPING-MACHINE OPERATORS, CLASS B	398	39.5	98.50	NONMANUFACTURING	350		114.00	MANUFACTURING			
	139		109.50	PUBLIC UTILITIES	102		135.00	NONMANUFACTURING			
MANUFACTURING		39.5		RETAIL TRADE	122		105.50	PUBLIC UTILITIES	53		
NONMANUFACTURING	259 87	40.0		FINANCE	51		111.50	WHOLESALE TRADE			
WHOLESALE TRADE	100	39.5		THANGE	71	37.0	111.50	RETAIL TRADE	93		
RETAIL TRADE	100	39.5	67.50	COMPTOMETER OPERATORS	450	39.5	104.50	FINANCE	264	38.5	130
LERKS, ACCOUNTING, CLASS A	1,826	30 5	126.50	MANUFACTURING	132		113.50	SECRETARIES, CLASS C	2,155	39.5	124
MANUFACTURING	594		123.50	NONMANUFACTURING	318		101.00	MANUFACTURING			
NONMANUFACTURING			128.00	PUBLIC UTILITIES	50		148.00	NONMANUFACTURING			
PUBLIC UTILITIES	311		152.00	WHOLESALE TRADE	71	40.0		PUBLIC UTILITIES	111		
WHOLESALE TRADE	314		123.50	RETAIL TRADE	190		89.00	WHOLESALE TRADE			
RETAIL TRADE	228		115.50					RETAIL TRADE			
FINANCE	270		118.00	KEYPUNCH OPERATORS, CLASS A	1,187	39.5	107.50	FINANCE			
				MANUFACTURING	509		106.50				
LERKS, ACCOUNTING, CLASS B	2,554	39.5	102.50	NONMANUFACTURING	678	39.5	108.50	SECRETARIES, CLASS D	1,522	39.5	1115
MANUFACTURING	796	39.5	100.50	PUBLIC UTILITIES	100	40.0	116.00	MANUFACTURING	859	39.5	115
NONMANUFACTURING	1,758	39.5	103.50	WHOLESALE TRADE	237		112.00	NONMANUFACTURING	663	39.5	115
PUBLIC UTILITIES	455		114.00	RETAIL TRADE	115		106.00	PUBLIC UTILITIES			
WHOLESALE TRADE	353		102.00	FINANCE	181	38.5	103.00	WHOLESALE TRADE			
RETAIL TRADE	421		95.50					RETAIL TRADE			
FINANCE	398	38.5	103.00	KEYPUNCH OPERATORS, CLASS B	1,427	39.5		FINANCE	206	38.5	112
				MANUFACTURING	374	40.0		CTENGOS ABUESAS OSUSAN		1 2 2	
LERKS, FILE, CLASS A	236		103.00	NONMANUFACTURING	1,053			STENOGRAPHERS, GENERAL			
MANUFACTURING	69		107.50	PUBLIC UTILITIES	278 258	40.0	93.50	MANUFACTURING	474		
NONMANUFACTURING	167		101.00	RETAIL TRADE	123			NONMANUFACTURING	984 382		
PUBLIC UTILITIES	36	38.5	122.00	FINANCE	366			WHOLESALE TRADE	179		
FINANCE	80	30.5	94.50	THAILE	300	30.0	00.00	RETAIL TRADE	148		
EDVS FILE CLASS B	750	30 E	00 00	OFFICE BOYS AND GIRLS	621	39.5	84.00	FINANCE	208		
ERKS, FILE, CLASS B	750 244	39.5	88.00 91.50	MANUFACTURING	197				200	30.5	1
MANUFACTURING		39.5		NONMANUFACTURING	424	39.0		STENOGRAPHERS, SENIOR	1,730	39.5	1116
PUBLIC UTILITIES		40.0		PUBLIC UTILITIES	46		117.50	MANUFACTURING	948		
		40.0	86.00	WHOLESALE TRADE	77			NONMANUFACTURING	782		
RETAIL TRADE	94	39.5		RETAIL TRADE	54	39.5		PUBLIC UTILITIES	96		
	204			FINANCE	225			WHOLESALE TRADE	158		
FINANCE	204	37.0	04.30			,,,,,	1 .0.00	RETAIL TRADE	136		
								FINANCE	296		
	1		1				1		270	2002	1000

See footnotes at end of tables.

Earnings information for computer operators, computer programers, and computer systems analysts is presented in table A-2. Separate earnings information for men and women, usually presented in table A-2, is not available for these occupations in this area.

Table A-3. Office, professional, and technical occupations-men and women combined-Continued

(Average straight-time weekly hours and earnings for selected occupations studied on an area basis by industry division, Minneapolis-St. Paul, Minn., January 1971)

		Av	erage			Av	erage			Ave	erage
Occupation and industry division	Number of workers	Weekly hours 1 (standard)	Weekly earnings ¹ (standard)	Occupation and industry division	Number of workers	Weekly hours 1 (standard)	Weekly earnings 1 (standard)	Occupation and industry division	Number of workers	Weekly hours 1 (standard)	Weekly earnings 1 (standard)
OFFICE OCCUPATIONS - CONTINUED			\$	OFFICE OCCUPATIONS - CONTINUED				PROFESSIONAL AND TECHNICAL OCCUPATIONS			
WITCHBOARD OPERATORS, CLASS A	150	39.5	107.00				\$				\$
MANUFACTURING	75		107.00	CLASS C	53	39.5	108.50	DRAFTSMEN, CLASS A	853	40.0	199.5
NONMANUFACTURING	75	39.0	107.00					MANUFACTURING	647	40.0	195.0
WITCHBOARD OPERATORS. CLASS B	339	40.0	94.00	TRANSCRIBING-MACHINE OPERATORS,				DRAFTSMEN. CLASS B	829	40.0	164.0
MANUFACTURING	66	40.0	103.00	GENERAL	363	39.0	97.00	MANUFACTURING	716		162.5
NONMANUFACTURING	273	40.0	92.00	MANUFACTURING	149	39.5	100.00	NONMANUFACTURING	113		173.0
PUBLIC UTILITIES	30	40.0	126.00	NONMANUFACTURING	214	38.5	94.50	PUBLIC UTILITIES	56		179.0
RETAIL TRADE	94	39.5	85.50	FINANCE	148	38.0	91.50				
							N. S. S. S.	DRAFTSMEN. CLASS C	534	40.0	137.0
WITCHBOARD OPERATOR-RECEPTIONISTS-	766	39.5	97.00	TYPISTS, CLASS A	1,320	39.5	100.00	MANUFACTURING	409		134.0
MANUFACTURING	250	40.0	101.00	MANUFACTURING	697	39.5	102.00	NONMANUFACTURING	125	40.0	148.0
NONMANUFACTURING	516	39.5	95.00	NONMANUFACTURING	623	39.0	98.00	PUBLIC UTILITIES	47		158.0
PUBLIC UTILITIES	70	39.5	106.00	PUBLIC UTILITIES	81	40.0	114.00				-
WHOLESALE TRADE	155	40.0	96.00	WHOLESALE TRADE	50	40.0	96.50	DRAFTSMEN-TRACERS	70	40.0	103.0
RETAIL TRADE	154	40.0	91.50		90	39.5	97.50				
FINANCE	87	38.5	89.00	FINANCE	369	38.5	93.00	NURSES, INDUSTRIAL (REGISTERED)	146	40.0	162.0
	1	1000	100			13774		MANUFACTURING	110	40.0	165.5
ABULATING-MACHINE OPERATORS,				TYPISTS, CLASS B	1,790	39.0	85.50			D. 11.11	1
CLASS A	77	39.5	163.50	MANUFACTURING	539	39.5	89.00				
		1 500		NONMANUFACTURING	1,251	39.0	84.00				
ABULATING-MACHINE OPERATORS,				PUBLIC UTILITIES	131	40.0	104.50				
CLASS B	83	39.5	128.00	WHOLESALE TRADE	214	40.0	90.00				
NONMANUFACTURING	60	39.5	128.00	RETAIL TRADE	114	39.0	85.50				
PUBLIC UTILITIES	30	40.0	146.50	FINANCE	731	38.5	77.50				

Table A-3a. Office, professional, and technical occupations—large establishments—men and women combined

(Average straight-time weekly hours and earnings for selected occupations studied in establishments employing 500 workers or more in industry division, Minneapolis-St. Paul, Minn., January 1971)

		Av	rerage		Land Company	Av	rerage			Av	verage
Occupation and industry division	Number of workers	Weekly hours 1 (standard	Weekly earnings ¹ (standard)	Occupation and industry division	Number of workers	Weekly hours 1 (standard)	Weekly earnings 1 (standard)	Occupation and industry division	Number of workers	Weekly hours 1 (standard)	earning
OFFICE OCCUPATIONS				OFFICE OCCUPATIONS - CONTINUED				OFFICE OCCUPATIONS - CONTINUED			
DOKKEEPING-MACHINE OPERATORS,			\$	KEYPUNCH OPERATORS, CLASS B	730	39.5	105.50	STENOGRAPHERS, SENIOR	1,197	39.5	\$ 114.0
CLASS B	67	39.5	99.00	MANUFACTURING	254	39.5	98.50	MANUFACTURING	782		111.
				NONMANUFACTURING	476		109.50	NONMANUFACTURING	415		
LERKS, ACCOUNTING, CLASS A	920		128.50	PUBLIC UTILITIES	208		129.00	PUBLIC UTILITIES	74		149
MANUFACTURING	372		122.50	RETAIL TRADE	123	39.5	96.50	FINANCE	168	39.0	1116
PUBLIC UTILITIES	548 210		132.50	FINANCE	92	39.0	94.00	SWITCHBOARD OPERATORS, CLASS A	106	39.5	108
RETAIL TRADE	71		113.00	OFFICE BOYS AND GIRLS	400	39.5	85.00	MANUFACTURING	66	39.0	106
FINANCE	116		127.00	MANUFACTURING	156	39.5	82.50				
				NONMANUFACTURING	244	39.5	86.50	SWITCHBOARD OPERATORS, CLASS B	155		
LERKS, ACCOUNTING, CLASS B	1,389	39.5	100.50	PUBLIC UTILITIES	46		117.50	MANUFACTURING	54		
MANUFACTURING	424		96.50	FINANCE	124	39.0	79.00	PUBLIC UTILITIES	101		
NONMANUFACTURING	965		102.00		2 /10	20 5	120 50	TODETO OTTETTTES	30	40.0	120
PUBLIC UTILITIES	254		114.00		3,618		128.50	SWITCHBOARD OPERATOR-RECEPTIONISTS-	83	39.5	105
WHOLESALE TRADE	96		101.00	MANUFACTURING	2,581		131.00	MANUFACTURING	52		
RETAIL TRADE	336 223		93.00	NONMANUFACTURING	209		148.50	TABULATING-MACHINE OPERATURS,		+	1
FINANCE	223	30.5	107.50	WHOLESALE TRADE	145		133.00	CLASS B	50	40.0	134
ERKS, FILE, CLASS A	106	39.5	111.00	RETAIL TRADE	254		122.00	02.100	, ,,	10.0	1237
NONMANUFACTURING	57		113.50	FINANCE	375		127.50	TRANSCRIBING-MACHINE OPERATORS,			
							1	GENERAL	179	39.0	96
LERKS, FILE, CLASS B	402	39.5	88.00	SECRETARIES, CLASS A	183		160.00	MANUFACTURING	90	39.0	96
MANUFACTURING	172	39.5		MANUFACTURING	113		161.00	NONMANUFACTURING	89	38.5	97
NONMANUFACTURING	230	39.0		NONMANUFACTURING	70		158.00	FINANCE	63	38.0	95
PUBLIC UTILITIES	25	40.0		PUBLIC UTILITIES	31	40.0	165.00	TYPISTS, CLASS A	915	30 5	101
RETAIL TRADE	62	39.5	78.50	CECOETABLES CLASS O	716	20 E	142.00	MANUFACTURING	607		
FRVC F115 C1455 C	200	20.0	70 50	SECRETARIES, CLASS B	715 488		143.50	NONMANUFACTURING	308		
MANUFACTURING	298 67	39.0	78.50 78.00	NONMANUFACTURING	227		139.00	RETAIL TRADE	75	39.0	93
NONMANUFACTURING	231	39.0	78.50	PUBLIC UTILITIES	27		154.00	FINANCE	132	39.0	99
FINANCE	146	38.5	79.00	RETAIL TRADE	60	39.0	131.50				
			1000	FINANCE	100	39.0	138.50	TYPISTS, CLASS B	780		
LERKS, ORDER	155	40.0				100		MANUFACTURING	388 392		
NONMANUFACTURING	120	40.0		SECRETARIES, CLASS C	1,478		128.00	PUBLIC UTILITIES	87		
RETAIL TRADE	96	40.0	83.00	MANUFACTURING	1,196		126.50	RETAIL TRADE	99		
LEBKE DAMOOLI	281	40 0	117.00	NONMANUFACTURING	68		145.00	FINANCE	164		
MANUFACTURING	96		117.00	PUBLIC UTILITIESFINANCE	124		130.50	PROFESSIONAL AND TECHNICAL		1	1
NONMANUFACTURING	185		116.50	1 21111102				OCCUPATIONS			
PUBLIC UTILITIES	58		143.50	SECRETARIES, CLASS D	1,147	39.5	115.50		495	40.0	1106
RETAIL TRADE	71		101.00	MANUFACTURING	784	39.5	115.50	DRAFTSMEN, CLASS A	495		
			1	NONMANUFACTURING	363		115.50	MANUFACTURING	702	40.0	1 90
OMPTOMETER OPERATORS	295	40.0	103.50	PUBLIC UTILITIES	57		130.50	DRAFTSMEN, CLASS B	467	40.0	162
MANUFACTURING	52		115.00	RETAIL TRADE	116	39.5	112.50	MANUFACTURING	410		
NONMANUFACTURING	243		101.00	675-1000 1011506 05115041	022	20 5	100 50	NONMANUFACTURING	57		176
PUBLIC UTILITIES	48		150.00	STENOGRAPHERS, GENERAL	922 378		97.50	PUBLIC UTILITIES	50	40.0	181
RETAIL TRADE	180	40.0	88.50	MANUFACTURING	544		118.00		338	40.0	137
A 224 ID . 200TA GROUN HONINGVA	693	30 5	106.50	PUBLIC UTILITIES	322		132.50	MANUFACTURING	291		
MANUFACTURING	425		107.00	FINANCE	76		96.00		271	40.0	123
NONMANUFACTURING	268		106.50					DRAFTSMEN-TRACERS	54	40.0	101
PUBLIC UTILITIES	66		110.00						,		1
RETAIL TRADE	76		107.50					NURSES, INDUSTRIAL (REGISTERED)	132	40.0	162
FINANCE	83		105.00				1	MANUFACTURING	98		

See footnotes at end of tables.

Earnings information for computer operators, computer programers, and computer systems analysts is presented in table A-2a. Separate earnings information for men and women, usually presented in table A-2a, is not available for these occupations in this area.

Table A-4. Maintenance and powerplant occupations

(Average straight-time hourly earnings for selected occupations studied on an area basis by industry division, Minneapolis-St. Paul, Minn., January 1971)

			Hourly ea	rnings 3								of wo			_	-				-							
Sex, occupation, and industry division	Number of workers	Mean ²	Median ²	Middle range ²	Under	and	_	3.20		3.40		3.60		\$ 4.00 -											\$ 6.20 -	\$ 6.40	\$ 6.
						3.10	3.20	3.30	3.40	3.50	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00	5.20	5.40	5.60	5.80	6.00	6.20	6.40	6.60	01
MEN																											
ARPENTERS, MAINTENANCE MANUFACTURING NOMMANUFACTURING PUBLIC UTILITIES	212 134 78 31	4.32 5.04		3.79- 6.54	3 -	-	-	-	-	2 - 2 2		38 19 19 18	33 26 7 6	10 5 5 4	31 28 3	31 30 1	23 19 4 1	3 1 2 -	5 - 5 -	2 2 -	-	1 -	-	3 -	1 -	19 4 15	
LECTRICIANS, MAINTENANCE MANUFACTURING NONMANUFACTURING	404 308 96	5.33	5.31 4.90 5.35		-	-	-	=	1 1	-	1 1 -	-	11 11 -	8 1 7	43 26 17	40 40 -	2 2 -	79 77 2	5	89 47 42	42 34 8	5 1 4	-	-	=	2 2 -	
NGINEERS, STATIONARY		4.71 4.52 4.16 4.45	4.71 4.66 3.99 4.39	4.40- 4.8 4.50- 4.8 4.26- 4.8 3.84- 4.5 4.23- 4.8 4.45- 4.8				-	-		111111	25 25 11 -	42 10 32 17 15	33 17 16 - - 4	55 6 49 1 20 11	124 76 48 22 1 24	109 70 39 - 12	167 20 147 2 18 72	34 21 13 - 1	14	23 23 - - -						
REMEN, STATIONARY BOILER MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	227 141 86 25	4.62 4.02	4.62 4.12	4.34- 4.9 3.82- 4.4	- 3	6	-	. 2			2 2 2	4 3 1 1	43 21 22 16	11 11 2	24 22 2 -	34 18 16	38 22 16	19 19 -	-	31 31 -	3 -	=	-	-	=	-	
ELPERS, MAINTENANCE TRADES MANUFACTURING NOMMANUFACTURING PUBLIC UTILITIES	85 62	3.66 4.31	3.67 4.44	3.61- 3.8 4.08- 4.4	3 1		1 1 -			9 7 2 2	8 5 3 3	44 39 5 5	29 26 3	2 2 -	2 -	33 33 32		10 10 10	-	-	-	=	=	-	-	-	
CHINE-TOOL OPERATORS, TOOLROOM	239 239		4.27 4.27	4.12- 4.4 4.12- 4.4		-	-	: :	-	Ξ	-	25 25	5	34 34	109 109	32 32	32 32	2 2	-	=	-	Ξ	-	2	-	Ξ	
ACHINISTS, MAINTENANCE MANUFACTURING						-	-	-	-	-	-	-	7	24 24	55 52	46 46	111 110	360 360	20 14	4	15 15	90 90	-	-	-	_	
ECHANICS, AUTOMOTIVE [MAINTENANCE]		4.47 4.70 4.75	4.35 4.74 4.76	4.25- 4.7 4.43- 5.0 4.46- 5.0	4 - 2 - 5 -			-			2 2 2 -	2 - 2	20 11 9 6	112 10 102 70 17	138 85 53 46 6	107 3 104 84 18	286 42 244 218 24	6 54	172 2 170 170	46 6 40 40		4	-				
ECHANICS, MAINTENANCE MANUFACTURING NONMANUFACTURING	793	4.31	4.29		0 -	-	2 2		10 10 -	12 12 -	29 29 -	17 16 1	241 238 3	73 53 20	156 139 17	110 82 28	96 75 21	102 85 17	10 1 9	35 35 -	=	17 16 1	-	-	-	=	
MANUFACTURING	288 287			4.36- 4.8 4.35- 4.8		-		-	-	-	4	2 2	-	54 54	14 14	66 66	77 77	24 23	-	-	24 24	-	Ξ	-	-	23 23	
AINTERS, MAINTENANCE MANUFACTURING NONMANUFACTURING	164 70 94	4.63	4.54	4.38- 6.4 4.31- 4.8 4.85- 6.4	2 -	=	=	-	-	3 - 3	-	9 3 6	10 6 4	4 1 3	17 16 1	27 23 4	2 2	15 11 4	=	3 3 -	=	3 - 3	-	-	1 1	57 5 52	

* Workers were distributed as follows: 53 at \$7 to \$7.20, and 8 at \$7.60 to \$7.80.

** Workers were distributed as follows: 12 at \$7 to \$7.20; 1 at \$7.40 to \$7.60; and 2 at \$7.60 to \$7.80.

Table A-4. Maintenance and powerplant occupations—Continued

(Average straight-time hourly earnings for selected occupations studied on an area basis by industry division, Minneapolis-St. Paul, Minn., January 1971)

			Hourly ea	arnings 3						N	ımbeı	of wo	orkers	recei	ving s	traigh	t-time	hour	rly ear	nings	of—						
Sex, occupation, and industry division	Number of workers	Mean ²	Median ²	Middle range ²	\$ 3.00	3.00 and under 3.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ 5.60	-	-		-	and
MEN - CONTINUED		\$	\$	\$ \$																							
PIPEFITTERS, MAINTENANCE MANUFACTURING	106 95			4.86- 5.44	-	-	-	-	-	-	-	-	1	5	2	4	4	17 17	9	28 28	26	-	=		: :		1
SHEET-METAL WORKERS, MAINTENANCE MANUFACTURING	61 61			3.97- 4.78 3.97- 4.78		Ξ	-	-	=	-	-	-	21 21	1	9	6	12 12	-	Ξ	Ξ	2	=	1	:	: :		- *1 - 1
MANUFACTURING	1,091	4.83 4.83		4.62- 5.15 4.62- 5.15	-	-	-	-	-	-	-	-	-	109 109	63 63	80 80	255 255	86 86	423 423	6	44	25 25	-		: :		2
MANUFACTURING	1,091	4.83	4.07	4.02- 5.15	-	-	-							109	03	80	255	00	423	. 0	44	25	-				-

* All workers were at \$7 to \$7.20.

Table A-4a. Maintenance and powerplant occupations-large establishments

(Average straight-time hourly earnings for selected occupations studied in establishments employing 500 workers or more by industry division, Minneapolis—St. Paul, Minn., January 1971)

			Hourly ea	rnings ³					Nu	ımber	of wor	rkers	receiv	ing st	raight	-time	hourly	earn	ings o	f—							
Sex, occupation, and industry division	Number of workers	Mean ²	Median ²	Middle range ²	Under \$ 3.40	and under	3.50	3.60	3.70	3.80	3.90	-	4.10	4.20	4.30	4.40	4.60	-	5.00	5.20	5.40	5.60	5.80	-	-	-	an
	1					3.50	3.60	3.70	3.80	3.90	4.00	4.10	4.20	4.30	4.40	4.60	4.80	5.00	5.20	5.40	5.60	5.80	6.00	6.20	6.40	6.60) ov
MEN																											
ARPENTERS, MAINTENANCE MANUFACTURING NONMANUFACTURING	106	4.47	4.51	4.22- 4.61	-	-	=	11 3 8	11 - 11	11 5 6	12 11 1	2 1 1	6 2 4	24 24 -	4 4 -	31 30 1	23 19 4	3 1 2	=	2 2 -	-	=	-	3 - 3	1 - 1	19 4 15	4
LECTRICIANS, MAINTENANCE MANUFACTURING NONMANUFACTURING	281	5.28	4.89	4.80- 5.53	-	-	1 1 -	=	-	1 1 -	1	1	7 - 7	39 23 16	4 3 1	38 38 -	2 2 -	79 77 2	5 5 -	89 47 42	42 34 8	1	-	-	-		2 **
NGINEERS, STATIONARY MANUFACTURING NOMMANUFACTURING PUBLIC UTILITIES RETAIL TRADE	114 135 35	4.89 4.39 3.98	5.01 4.43 3.89	4.64- 5.37 4.21- 4.76 3.78- 3.99	=		=	=	11 11 11	15 8 7 7	12 2 10 10	4 4	4 -	20 6 14 - 8	13 13 1 12	32 3 29 4 1	32 13 19 -	47 20 27 2 16	22 21 1 - 1	14 14 - -	23				-		
IREMEN, STATIONARY BOILER	164					-	2	3	1 -	22 8	19 13	1 -	8 -	3	Ξ	26 18	22 22	19 19	-	31 31	3	-	-	-	-	-	-
ACHINE-TOOL OPERATORS, TOOLROOM						-	-	-	-	-	-	14 14	5	15 15	24 24	19 19	19 19	2 2	-	-	-	-	-	-	-	_	_
ACHINISTS, MAINTENANCE MANUFACTURING						-	-	-	-	Ξ	2 2	-	4	50 47	-	32 32	99 98	346 346	17 11	4	15 15		-	-	-		-
ECHANICS, AUTOMOTIVE (MAINTENANCE)	51 142	4.69	4.68	4.07- 4.69	-	=	=	1 -	1 -	-	3 - 3 -	47 - 47 40	15 2 13	17 16 1	1 1 -	27 3 24 16	35 13 22 20	4	32 2 30 30	6 6 -	-	4 4	-	-	-		-
ECHANICS, MAINTENANCE MANUFACTURING NONMANUFACTURING	346	4.64	4.71	4.32- 4.95	-	-	-	2 2 -	1	27 26 1	15 13 2	11 - 11	33 30 3	24 9 15	32 30 2	80 58 22	82 61 21	82 65 17	10 1 9	35 35 -	-	17 16	-	-	=		-
ILLWRIGHTS						7	4	2 2	Ξ	Ξ	-	2 2	44	10 10	4	66 66	77 77	24 23	-	-	24 24		=	-	=	- 23 - 23	
AINTERS, MAINTENANCE MANUFACTURING NONMANUFACTURING	69	4.64	4.54	4.32- 4.82	-	-	=	2 2 -	6	5 4 1	5 2 3	-	1 3	8 7 1	9	27 23 4	4 2 2	15 11 4	-	3	=	3	=	-	1	27	5
PEFITTERS, MAINTENANCE						-	-	-	-	-	1	1	4 3	2 2	-	4	4	17 17	9	28 28	26 26		-	-	_	. 1	1

* Workers were distributed as follows: 37 at \$7 to \$7.20; and 8 at \$7.60 to \$7.80.
** Workers were distributed as follows: 10 at \$7 to \$7.20; 1 at \$7.40 to \$7.60; and 2 at \$7.60 to \$7.80.

Table A-5. Custodial and material movement occupations

(Average straight-time hourly earnings for selected occupations studied on an area basis by industry division, Minneapolis-St. Paul, Minn., January 1971)

			Hourly ear	mings ³														hourl			2000						
Sex, occupation, and industry division	Number of workers	Mean 2	Median ²	Middle range ²	Under	1.80 and under	1.90		\$ 2.10				\$ 2.50 -		\$ 2.70 -	\$ 2.80 -			\$ 3.40		\$ 3.80	\$ 4.00	\$ 4.20		\$ 4.60 -	\$ 4.80	\$ 5.00 and
					1.00			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	ove
MEN GUARDS AND WATCHMEN MANUFACTURINGNOMANUFACTURING	509	3.46	3.38	\$ \$ \$ 1.88- 3.38 3.28- 3.75 1.86- 2.10	-	511	-	78 4 74	11 5 6	14 2 12	7 1 6	4 3 1	5 2 3	12 3 9	11 1 10	17 6 11	48 6 42	269 246 23	82 48 34	156 101 55	78 25 53	65 49 16	-	10 7 3		-	
GUARDS MANUFACTURING	477	3.49	3.39	3.28- 3.76	-	_	-	-	-	_	1	3	2	3	1	6	6	227	48	101	25	47	_	7	-	_	
JANITORS, PORTERS, AND CLEANERS MANUFACTURING NONMANUFACTURING	1,660	3.11 2.72 3.34 3.05 2.73	3.06 2.67 3.41 2.95 2.71	2.53- 3.12 2.92- 3.29 2.43- 3.05 2.99- 3.55 2.46- 3.57 2.33- 2.97 3.02- 3.08	6 - 6	6 - 6 - 6 -	42 - 42 - 14	102 - 102 - 10	192 17 175 - 34	129 5 124 - - 26	189 7 182 - 13 51 18	343 21 322 - 17 11	395 3 392 2 2 4	203 69 134 - 2 55 2	328 140 188 2 8 37 17	686 450 236 63 9 88 11	942 291 651 23 - 17 503	433 351 82 32 - 27 1	185 51 134 78 24 16	278 226 52 30 7 15	51 7 44 23 10 9	35 18 17 - 2 15	3 3	3 1 2 - - - 2			
ABORERS, MATERIAL HANDLING MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES WHOLESALE TRADE RETAIL TRADE	2,208 3,019 763	3.36 3.75 3.98 3.72	3.31 3.91 3.83 3.96	3.19- 4.09 3.14- 3.62 3.46- 4.33 3.74- 3.99 3.42- 4.34 2.53- 4.33	=	2 - 2	3 - 3 - 2 1	11 - 11	32 - 32 - 2 27	52 1 51 - - 51	37 10 27 - - 27	157 20 137 - 120 17	119 1 118 - 84 34	117 108 9 - - 9	162 73 89 - 84 5	137 80 57 - 48 9	513 491 22 - 12 10	619 549 70 42 12	576 281 295 1 288 6	640 293 347 313 32 2	693 176 517 226 176 85	264 54 210 - 191 19	693 4 689 27 433 229	249 22 227 48 149 30	22 22 - - -	129 23 106 106	
ORDER FILLERS MANUFACTURING NONMANUFACTURING HHOLESALE TRADE RETAIL TRADE	3,698 571 3,127 1,975 670	3.58 3.90 3.95	3.65 4.22 4.21	3.48- 4.31 3.25- 3.80 3.71- 4.32 3.84- 4.29 2.72- 4.28	=	:	64	1 - 1	15 15 -	38 - 38 - 18	48 - 48 22 16	84 54 30	35 35 24 11	10 10 -	52 13 39 24 15	93 16 77 54 23	294 87 207 186 21	112 72 40 12 27	164 58 106 90 16	219 181 38 - 30	180 85 95 72 18	25 490	1660 24 1636 1045 246	104 - 104 24 -	-		1
PACKERS, SHIPPING	1,446 743 703 568 135	3.34 4.06 4.06	3.26 4.23 4.23	3.22- 4.23 3.00- 3.46 4.16- 4.27 4.16- 4.27 4.15- 4.27	1	2 - 2	1 - 1	2 2 2 -	1 1	8 8 8	7 7 6 1	2 - 2	3 - 3	8 6 2 2	43 7 36 36	180 180 - -	75 75 - -	249 247 2 2	90 90 - -	34 34 - -	74 74 - -	170 170 122 48	442 442 366 76	24 24 24	-		3
RECEIVING CLERKS	536 237 299 110 161	3.86 3.86 3.89	3.83 3.97 4.31	3.45- 4.37 3.46- 4.32 3.39- 4.43 3.09- 4.40 3.63- 4.47	-		=		:	1 - 1		12 12 - 12	:	2 - 2	2 - 2	20 20 18 2	52 27 25 11 9	25 12 13 5 6	50 39 11 6 3	51 38 13 -	63 10 53 2 40	59 42 17 6 3	89 46 43 35 8	100 13 87 27 60	10 10 - -	-	
SHIPPING CLERKSMANUFACTURING	513 299 214 150 56	3.72 4.23 4.35	3.64 4.31 4.32	3.48- 4.33 3.41- 4.06 4.21- 4.39 4.25- 4.39 4.02- 4.39	=	:				:		2			8 6 2 - 1	2	39 38 1 -	33 19 14 -	70 70 - -	52 51 1 -	16 15 1 -	91 60 31 13 18	126 6 120 104 16	61 20 41 30 11	3 3 -	-	10
SHIPPING AND RECEIVING CLERKS MANUFACTURING NUNMANUFACTURING HHOLESALE TRADE RETAIL TRADE	381 217 164 83 58	3.93 3.89 4.10	4.01 4.03 4.22	3.66- 4.27 3.64- 4.15 3.73- 4.35 3.92- 4.34 3.02- 4.18	-	:		. =				-	10 10 - 10	11111	1 - 1	6 5 1 - 1	15 - 15 - 15	20 16 4 1 2	32 26 6 6	45 32 13 12 1	54 24 30 12 6	85 69 16 6	45 11 34 32 2	52 20 32 12	16 14 2 2		
TRUCKDRIVERS MANUFACTURING NÜNMANUFACTURING PUBLIC UTILITIES WHÜLESALE TRADE RETAIL TRADE	4,243 2,602 1,152	4.02 4.55 4.69 4.36	4.01 4.63 4.84 4.35	4.24- 4.84 3.82- 4.19 4.34- 4.85 4.80- 4.87 4.30- 4.39 4.32- 4.37	-		111111							11 10 1 1		42 24 18 8 -	3 3 3 -	35 7 28 28 -	76 47 29 4 17	168 128 40 1 15	482 330 152 133 3 16	332 108 53 54	1503 108 1395 183 816 396	368 52 316 130 152 4	4 119	2134 100 2034 2034	2:

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, Minneapolis-St. Paul, Minn., January 1971)

			Hourly e	arnings 3											_	straigh											
Sex, occupation, and industry division	Number of workers	Mean ²	Median ²	Middle range ²	Under	and		\$ 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 -	\$ 5.0
							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	ove
MEN - CONTINUED																											
RUCKDRIVERS - CONTINUED																											
TRUCKDRIVERS, LIGHT (UNDER	45.	\$	\$	\$ \$																				2.5		123	
MANUFACTURING	451 190			3.67- 4.40	-	-	_	_	_	_	_	_	_	11	-	32 14	3	3	50 23	43	24 10	70	104	36	_	75 74	
NONMANUFACTURING	261	4.01	4.06		-	-	-	-	-	-	-	-	-	1	-	18	3	1	27	36	14	50	74	36	-	1	
RETAIL TRADE	79 102	3.93 4.15	4.03	3.64- 4.07 4.30- 4.37	-	-	-	-	-	-	Ξ	-	-	-	-	10	-	-	15	12	14	50	74	2	_	_	
TRUCKDRIVERS, MEDIUM (1-1/2 TO	2 222		,	4 31 4 05											1			2.0	.,		210	2.7					
MANUFACTURING	2,232	4.49	3.94	3.82- 4.39	_	-	_	_	_	_	_	_	_	_	_	10	_	32 5	14	19	212	37 32	688	212	18	975 26	1
NONMANUFACTURING	2,001	4.54	4.57	4.33- 4.85	-	-	-	-	-	-	-	-	-	-	-	-	-	27	-	1	138	5	667	196	18	949	
WHOLESALE TRADE	371		4.83	4.40- 4.86		-	-	-	_	_	_	-	_	-	-	-	_	27	=	1	133	5	183 258	86 110	18	949	
TRUCKDRIVERS, HEAVY (OVER 4 TONS,																											
MANUFACTURING	1,676	3.87	4.80		_	_	-	-	-	_	_	-	-	_	_	_	-	_	_	106	27 27	10	467	84	88	836	
NONMANUFACTURING	1,498	4.63	4.81	4.37- 4.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	52	435	84	88	836	
WHOLESALE TRADE	928 517	4.78			-	_	_	-	-	_	_	_	-	_	-	-	_	-	_	3	_	48	382	44	88	836	
TRUCKDRIVERS, HEAVY (OVER 4 TONS,																											
OTHER THAN TRAILER TYPE)	840 521	3.98		3.90- 4.36	_	_	_	-	-	-	_	-	_	_	_	_	_	_	2	- 2	219	271	219	28 28	17	84	
NONMANUFACTURING	319		4.37		-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1	219	-	13	84	
TRUCKERS, POWER (FORKLIFT)						-	-	-	-	-	-	-	-	-	-	17	33	222	430	79	125	216 189	383	137	1	20	
MANUFACTURING	641	3.63	3.48			_	_	_	_	_	_	_	_	-	_	13	32	220	370 60	34 45	25	27	65 318	130	1	20	
PUBLIC UTILITIES	51	4.19	3.79			-	-	-	-	-	-	-	-	-	-	-	-	-	1	29	1	-	-	-	-	20	
WHOLESALE TRADE	398 186		4.27	4.09- 4.36		-	-	-	-	-	-	-	-	_	-	12	1	2	54	8	18	17 10	230 88	59 71	-	_	
TRUCKERS, POWER (OTHER THAN	200	2 00	2 01	2 // 2 00												4	15	10	22	86	98	39	24	2			
MANUFACTURING	308			3.64- 3.99		_	-	_	_	_	-	_	-	_	_	4	15	18	22 17	40	95	39	9	2	_	-	
NONMANUFACTURING PUBLIC UTILITIES	81 63	3.78		3.66- 3.80 3.58- 3.76		-	_	_	Ξ	_	-	-	_	-	-	-	_	12	5	46	3	-	15	_	_	_	
WOMEN																											
JANITORS, PORTERS, AND CLEANERS	1.320	2.38	2.35	2.31- 2.39	3	45	10	86	19	83	845	23	3	13	54	44	57	13	20	2	_	_	_	_	_	-	
MANUFACTURING	155	2.90	2.93	2.74- 3.06	-	-	-	-	-	-	-	5	1	13	47	41	35	12	1	-	-	-	-	-	-	-	
PUBLIC UTILITIES	1,165	2.31	2.34			45	10	86	19	83	845	18	2	_	7	3	22	1	19	2	_	_	_	_	_	_	
RETAIL TRADEFINANCE	68	2.30	2.33	2.10- 2.37	3	_	_	15	1	6	36 529	17	2	-	3	3 -	21	-	-	-	-	-	-	-	-	-	
ACKERS. SHIPPING				2.44- 3.28		2	5	2	4	4	110	312	116	4	60	20	50	459	4	_	_	-	-	-	-	-	
MANUFACTURING				2.45- 3.31		2	5	- 2	- 4	4	104	310	112	4	60	20	50	459	4	-	_	-	-	-	_	-	
NONMANUFACTURING	196	2.55	2.75	2.28- 3.00	33	2	,	2	4	4	.0	2	*	4	00	20	30	_	_	-	_	-	_	-	_	_	

* All workers were at \$1.70 to \$1.80.

Table A-5a. Custodial and material movement occupations-large establishments

(Average straight-time hourly earnings for selected occupations studied in establishments employing 500 workers or more by industry division, Minneapolis-St. Paul, Minn., January 1971)

			Hourly e	rmings 3						Nt	ımber	of wo	rkers	recei			nt-time										
Sex, occupation, and industry division	Number of workers	Mean ²	Median ²	Middle range ²	\$	1.90 and under	_	\$ 2.10	\$ 2.20 -	\$ 2.30	\$ 2.40 -	\$ 2.50 -	\$ 2.60 -	\$ 2.70 -	\$ 2.80	\$ 2.90	3.00	\$ 3.20	\$ 3.40	\$ 3.60	\$ 3.80 -	\$ 4.00	\$ 4.20	\$ 4.40	\$ 4.60	\$ 4.80	\$ 5.0
						2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00	5.
MEN																											
WARDS AND WATCHMEN	1,353					99	72	-	-	1	4	5 2	5	10	9	6 2	42	267 244	72 48	154 101	78 25	65 49	-	7	_	-	
GUARDS MANUFACTURING	469	3.50	3.39	3.28- 3.76	-	-	-		-	1	3	2	3	1	2	2	2	225	48	101	25	47	-	7	_	-	
IANITORS, PORTERS, AND CLEANERS MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES RETAIL TRADE	1,844 999 845 211 232	3.16 2.95 3.35	3.02 3.03 3.41	2.93- 3.39 2.85- 3.16 2.99- 3.51	6	14 - 14 - 14	10 10 -	57 2 55 -	19 19 - 13	33 30 -	13 1 12 - 11	9 3 6 - 4	34 18 16 -	111 82 29 2 17	57 30 27 - 26	438 336 102 55 41	483 153 330 11 17	182 122 60 32 27	95 18 77 72 1	227 202 25 24	32 7 25 15	20 18 2 -	3	1 1 - -		-	
ABORERS, MATERIAL HANDLING MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES RETAIL TRADE	1,960 978 982 404 244	3.39 3.75 3.82	3.21 3.84 3.77	3.13- 3.44 3.70- 4.13 3.72- 3.92	2	1 - 1	11 11 -	6 - 6	35 1 34 - 34	17 17 -	6 - 6	19 1 18 - 18	24 15 9 - 9	7 3 4 - 4	17 16 1 -	47 39 8 - 8	414 404 10 - 10	231 209 22 6 16	134 109 25 1 6	299 4 295 267 2	102	133 4 129 - 19	125 4 121 - 34	52 22 30 -	22 22 - -	23 23 - -	
RDER FILLERS	1,025 362 663 504	3.50 3.58	3.53 4.13	3.08- 3.77 2.71- 4.29	=	64 64	1 1	15 15 15	18 18 18	16 16 16	30 30 30	11 11 11	10 10 10	28 13 15 15	26 16 10 10	13 13 13	83 77 6 6	84 56 28 27	45 29 16 16	115 107 8	20 15 5	154 25 129 40	275 24 251 212	17 17		-	
PACKERS, SHIPPING	431 111		3.07 4.21	2.96- 3.99 4.12- 4.26		1	1	1	-	1	2 2	3	6	3	-	146	69	7	4	11	74	40 40	60	-	_	-	
RECEIVING CLERKS	239 95 144 117	3.80	3.75	3.29- 4.34	_	-	=	-	1 1 1	-	12 - 12 12	-	2 2 2	2 - 2 2	-	2 2 2	32 23 9	10 4 6 6	13 10 3 3	14 12 2 2	57 5 52 40	13 5 8	45 36 9 8	36 36 30	-	-	
SHIPPING CLERKS	69	3.57	3.48	3.25- 4.03	-	-	-	-	-	-	2	-	-	8	2	-	1	13	12	7	7	2	3	12	-	-	
HIPPING AND RECEIVING CLERKS	62	3.77	3.85	3.48- 4.01	-	-	-	-	-	-	-	-	-	1	-	1	-	3	14	11	17	11	-	4	-	-	
RUCKDRIVERS	1,024 280 744 482 192	4.51 4.37 4.42	4.38	4.32- 4.95 4.31- 4.55 4.32- 4.81	=	-		-	-	-	-		1 1 1	11111	6 6	2 2 2	3 - 3 3 -	6 6	6 2 4 4 -	20 16 4 1	83 40 43 27 16	41	397 43 354 183 171	131 52 79 50 4		234 100 134 134	2
TRUCKDRIVERS, LIGHT (UNDER 1-1/2 TONS) NONMANUFACTURING RETAIL TRADE	251 148 92	4.10	4.31	4.02- 4.36	-	=	-	-	=	:	=	=	1	-	6	2 2 -	3 3 -	1	4 4 -	2 -	24 14 14	38 38 -	91 74 74	4 4 4	=	75 1	
TRUCKDRIVERS, MEDIUM (1-1/2 TO AND INCLUDING 4 TONS) MANUFACTURING	352 67				-	=	Ξ	-	-	-	Ξ	-	-	-	2	-	-	5 -	2 2	3 2	32 3	7 2	215	22 16	18	33 26	1
TRUCKDRIVERS, HEAVY (OVER 4 TONS, TRAILER TYPE)NONMANUFACTURING	335 291 206	4.55	4.56	4.36- 4.84	-	-	:	=	-	Ē	:	:	:	-	-	-	-	=	-	15 3	26 - -	40 40 36	53 53	69 69 44		126 126 126	

* All workers were at \$1.80 to \$1.90.

Table A-5a. Custodial and material movement occupations-large establishments-Continued

(Average straight-time hourly earnings for selected occupations studied in establishments employing 500 workers or more by industry division, Minneapolis-St. Paul, Minn., January 1971)

			Hourly ea	rnings 3							Nu	mber	of wor	kers	receiv	ing str	aight											
Sex, occupation, and industry division	Number of workers	Mean ²	Median ²	Middle	range ²	Under \$ 1.90	and under	-	-	2.20	2.30 2	-	-	-60 2	- 2	- 80 2	90 3	-	- 20 3	-	3.60	3.80	-	4.20	-	-	\$ \$ 4.80 5 - 5.00 5	-
MEN - CONTINUED																												
RUCKDRIVERS - CONTINUED																												
TRUCKDRIVERS, HEAVY (OVER 4 TONS, OTHER THAN TRAILER TYPE)	53	\$ 4.47	\$ 4.44	\$ 4.39-	\$ 4.49	-	èse	-	-	-	_	-	-	-	-	-	-	-	-	-	-	1	1	13	28	10	-	
RUCKERS, POWER (FORKLIFT) MANUFACTURING NOMMANUFACTURING PUBLIC UTILITIES RETAIL TRADE	876 641 235 39 111	3.71 4.19 3.99	3.54 4.37 3.77	3.46- 3.43- 3.92- 3.73- 4.31-	4.47	-					11111				-	3 2 1 - 1	-	13 12 1 - 1		256 250 6 1 5	60 15 45 29 8	125 100 25 1	130 111 19 - 10	88 65 23 -	112 7 105 - 71	1 1 - -	8 - 8 8	
RUCKERS, POWER (OTHER THAN FORKLIFT)	276 222 54	3.81	3.91 3.93 3.74	3.63-	3.99	- (-		-	-	-	-	-		-	=	4 4 -	15 15	6 6 -	22 17 5	86 40 46	93 90 3	39 39 -	9 9 -	2 2 -	-	-	
WOMEN																												
MANUFACTURING	492 153 36	2.91			3.06	-	-	1 - 1	3 -	11 -	258 -	21 3	1	13 13	54 47	5 2	39 39	57 35	13 12	14 1	2 - 2		-	-	-	-	-	

Footnotes

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.

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.

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

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.

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, STENOGRAPHER, GENERAL 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.

- 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

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.)

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 transcribingmachine work. (See transcribing-machine operator.)

STENOGRAPHER, SENIOR

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

OR

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

SWITCHBOARD OPERATOR

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

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

SWITCHBOARD OPERATOR-RECEPTIONIST

In addition to performing duties of operator on a single-position or monitor-type switch-board, 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

<u>Class C.</u> 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 <u>most of the following</u>: 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:

<u>Class A.</u> 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.

<u>Class B.</u> 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.

OF

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.

<u>Class C.</u> 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.

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.

<u>Class C.</u> 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 analysts 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.

<u>Class B.</u> 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.

<u>Class C.</u> 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 transposès 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.

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 crossindustry 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

Performs a variety of electrical trade functions such as the installation, maintenance, r of equipment for the generation, distribution, or utilization of electric energy in an 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 apprendicable of equipment such as generators, transformers, switchboards, controllers, circuit break-

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 dutties involve setting up or adjusting machines.

MILLWRIGHT

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

OILER

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

PAINTER, MAINTENANCE

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

PIPEFITTER, MAINTENANCE

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

PLUMBER, MAINTENANCE

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

SHEET-METAL WORKER, MAINTENANCE

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

SHEET-METAL WORKER, MAINTENANCE-Continued

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

TOOL AND DIE MAKER

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

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

TOOL AND DIE MAKER-Continued

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

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

CUSTODIAL AND MATERIAL MOVEMENT

GUARD AND WATCHMAN

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

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 $1^{1}/_{2}$ tons) Truckdriver, medium ($1^{1}/_{2}$ 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)

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.

<u>Area</u>	Bulletin number and price		<u>Area</u>	Bulletin number and price	
Akron, Ohio, July 1970	1660 88	30 cente	Muskegon-Muskegon Heights, Mich., June 1970	1660 05	2E conto
Albany-Schenectady-Troy, N.Y., Feb. 1970			Newark and Jersey City, N.J., Jan. 1971		
Albuquerque, N. Mex., Mar. 1970			New Haven, Conn., Jan. 1971		
Allentown—Bethlehem—Easton, Pa.—N.J., May 1970 1	1660 83	35 cents	New Orleans, La., Jan. 1971	1605-35,	40 cents
Atlanta, Ga., May 1970 1	1660 76	50 cents	New York, N.Y., Apr. 1970		
Baltimore, Md., Aug. 1970	1685_18	50 cents	Norfolk-Portsmouth and Newport News-	1000-07,	75 Cents
Beaumont-Port Arthur-Orange, Tex., May 1970	1660_84	30 cents	Hampton, Va., Jan. 1971	1605 46	35 cents
Binghamton, N.Y., July 1970	1685 6	30 cents	Oklahoma City, Okla., July 1970	1605-40,	30 cents
Birmingham, Ala., Mar. 1970	1660-57	30 cents	Omaha, Nebr.—Iowa, Sept. 1970	16.95 14	
Boise City, Idaho, Nov. 1970	1605-31,		Patersom-Clifton-Passaic, N.J., June 1970 1		
Boston, Mass., Aug. 1970	1605-21,	50 cents	Philadelphia, Pa.—N.J., Nov. 1970————————————————————————————————————		
Buffalo, N.Y., Oct. 1970	1605-11,	50 cents	Phoenix, Ariz., Mar. 1970		
Burlington, Vt., Mar. 1970	1660 52	25 cents	Pittsburgh, Pa., Jan. 1971		35 cents
Canton, Ohio, May 1970	1660-55,	35 cents	Portland, Maine, Nov. 1970	1085-49,	50 cents
Charleston, W. Va., Apr. 1970	1660-61,	35 cents	Portland, Maine, Nov. 1970	1685-19,	30 cents
Charlotte, N.C., Jan. 1971	1600-00,	30 cents		1000-77,	40 cents
Chattanooga, Tenn.—Ga., Sept. 1970 1	1605-40,	35 cents	Providence-Pawtucket-Warwick, R.IMass.,	1440 72	20
Chiana III Jana 1070	1660-10,	40 cents	May 1970 Raleigh, N.C., Aug. 1970 ¹		
Chicago, Ill., June 1970	1660-90,		Raieign, N.C., Aug. 1970	1085-12,	35 cents
Cincinnati, Ohio-KyInd., Feb. 1970	1/05 30	35 cents	Richmond, Va., Mar. 19701	1660-65,	40 cents
Cleveland, Ohio, Sept. 1970	1685-28,	50 cents	Rochester, N.Y. (office occupations only),	1/05 7	
Columbus, Ohio, Oct. 1970	1685-33,	40 cents	Aug. 1970	1685-7,	30 cents
Dallas, Tex., Oct. 1970 1	1685-22,	50 cents	Rockford, Ill., May 1970 1		
Davenport-Rock Island-Moline, Iowa-Ill.,			St. Louis, MoIII., Mar. 1970		
Feb. 1971			Salt Lake City, Utah, Nov. 1970 1	1685-26,	35 cents
Dayton, Ohio, Dec. 1970 1			San Antonio, Tex., May 1970	1660-71,	30 cents
Denver, Colo., Dec. 1970	1685-41,	35 cents	San Bernardino-Riverside-Ontario, Calif.,	1/0= 10	
Des Moines, Iowa, May 1970 1	1660-73,	35 cents	Dec. 1970 1	1685-42,	40 cents
Detroit, Mich., Feb. 1970	1660-58,		San Diego, Calif., Nov. 1970		
Fort Worth, Tex., Oct. 1970 1		35 cents	San Francisco-Oakland, Calif., Oct. 1970	1685-23,	40 cents
Green Bay, Wis., July 1970 1	1685-4,	35 cents	San Jose, Calif., Aug. 1970	1685-13,	30 cents
Greenville, S.C., May 1970	1660-79,	30 cents	Savannah, Ga., May 1970 1	1660-80,	
Houston, Tex., Apr. 1970	1660-67,	35 cents	Scranton, Pa., July 1970 1	1685-3,	35 cents
Indianapolis, Ind., Oct. 1970	1685-31,		Seattle-Everett, Wash., Jan. 1970	1660-52,	30 cents
Jackson, Miss., Jan. 1971	1685-39,	35 cents	Sioux Falls, S. Dak., Dec. 1970 1	1685-38,	35 cents
Jacksonville, Fla., Dec. 1970 1	1685-37,	35 cents	South Bend, Ind., Mar. 1970 1	1660-62,	35 cents
Kansas City, MoKans., Sept. 1970 1	1685-16,	45 cents	Spokane, Wash., June 1970 1	1660-86,	
Lawrence-Haverhill, MassN.H., June 1970 1			Syracuse, N.Y., July 1970	1685-8,	30 cents
Little Rock-North Little Rock, Ark., July 1970 1	1685-1,	35 cents	Tampa-St. Petersburg, Fla., Nov. 1970	1685-17,	30 cents
Los Angeles-Long Beach and Anaheim-Santa Ana-			Toledo, Ohio-Mich., Feb. 1970	1660-56,	30 cents
Garden Grove, Calif., Mar. 1970	1660-64,	45 cents	Trenton, N.J., Sept. 1970 1	1685-15,	
Louisville, KyInd., Nov. 1970	1685-27,	30 cents	Utica-Rome, N.Y., July 1970	1685-9,	30 cents
Lubbock, Tex., Mar. 1970 1	1660-50,		Washington, D.CMdVa., Sept. 19691	1660-19,	50 cents
Manchester, N.H., July 1970 1	1685-2,	35 cents	Waterbury, Conn., Mar. 1970	1660-54,	35 cents
Memphis, TennArk., Nov. 1970	1685-30,	30 cents	Waterloo, Iowa, Nov. 1970	1685-32,	35 cents
Miami, Fla., Nov. 1970 1		40 cents	Wichita, Kans., Apr. 1970	1660-69,	35 cents
Midland and Odessa, Tex., Jan. 1971	1685-40,	30 cents	Worcester, Mass., May 1970 1	1660-78,	35 cents
Milwaukee, Wis., May 1970 1	1660-74,	50 cents	York, Pa., Feb. 1971	1685-50,	30 cents
Minneapolis-St. Paul, Minn., Jan. 1971	1685-44,	40 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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