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Industry
Wage Survey

Machinery
Manufacturing,
September—
November 1968

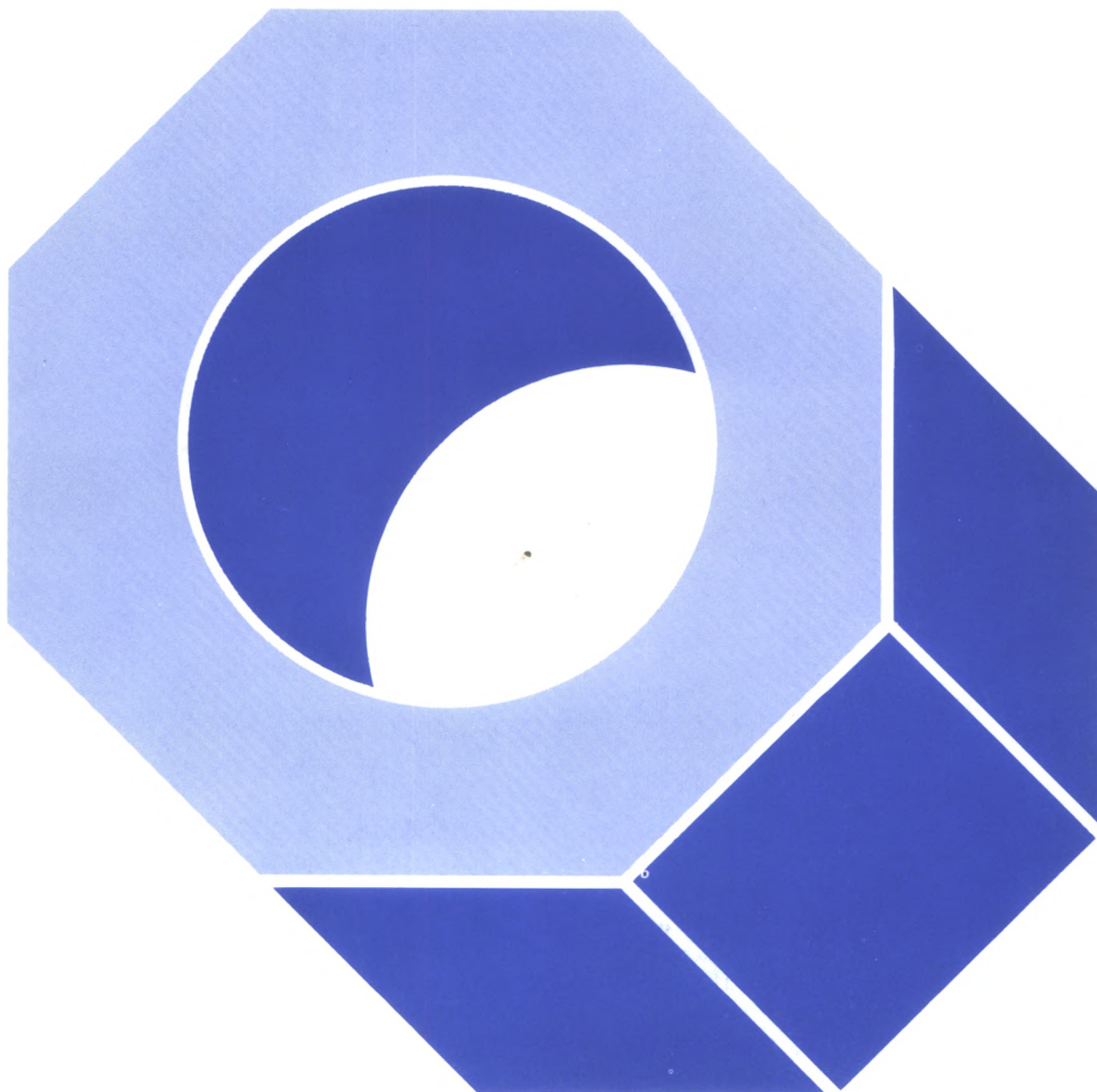
BULLETIN 1664

U.S. DEPARTMENT OF LABOR
Bureau of Labor Statistics
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**Industry
Wage Survey**

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

BUREAU OF LABOR STATISTICS
Geoffrey H. Moore, Commissioner

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Preface

This bulletin summarizes the results of a Bureau of Labor Statistics survey of wages and supplementary benefits in the nonelectrical machinery manufacturing industries in 21 selected areas in September–November 1968. Separate releases for each of the areas were issued earlier and may be obtained from the Bureau of Labor Statistics, Washington, D.C. 20212, or any of its regional offices.

Occupational data are presented for the machinery industries as a whole in each area. Separate information on average hourly earnings by occupation also is presented for selected industries (e.g., special dies and tools, die sets, jigs, and fixtures; machine-tool accessories; oil-field machinery) in nine areas. The distributions of workers by occupational earnings for these industries are included in the individual area releases. Data on establishment practices and supplementary wage benefits are presented for the industries as a whole in each area.

The study was conducted in the Bureau's Office of Wages and Industrial Relations. The analysis was prepared by Joseph C. Bush in the Division of Occupational Wage Structures. Field work for the survey was directed by the Assistant Regional Directors for Operations.

Other reports available from the Bureau's program of industry wage studies and the addresses of the Bureau's regional offices are listed at the end of this bulletin.

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Machinery Manufacturing, September–November, 1968

Summary

Average straight-time hourly earnings of production and related workers in the nonelectrical machinery manufacturing industries increased 13.5 percent between mid-1966 and September–November 1968 in 21 metropolitan areas surveyed by the Bureau of Labor Statistics.¹ The annual rate of increase for the 21 areas combined was 5.7 percent; it ranged from 3.3 percent in Pittsburgh to 7.5 percent in St. Louis.

Pay levels were generally highest in San Francisco–Oakland and lowest in Dallas among the areas surveyed. Tool and die makers usually had the highest level of earnings in the occupations selected for separate study. Men producing or maintaining tools and dies for in-plant use, rather than for sale, had average earnings ranging from \$5.12 an hour in San Francisco–Oakland to \$3.53 in Worcester. Janitors were lowest paid among the jobs studied in most areas. They averaged from \$3.07 in Detroit to \$2 in Dallas.

Virtually all workers were in establishments providing paid holidays and vacations. Provisions for life, sickness and accident, hospitalization, surgical, and medical insurance, as well as retirement pension benefits, were also widespread.

Industry Characteristics

Products. Establishments within scope of the 21-area survey² manufacture a wide variety of nonelectrical machinery, differing in complexity, size, and character of demand. The products include diverse goods such as special dies and tools (usually manufactured on a job order basis), engines and turbines; typewriters; farm tractors and hay racks; bulldozers and powersaws; escalators and dumb waiters; complex machine tools and metal working drill bits; ball bearings; and large special industry machinery. The establishments studies were classified according to their primary product and were grouped in a number of industry related categories. As indicated below, the percent distribution of production workers among these major product groups in the 21 areas combined was generally similar to the nationwide distribution:³

Product group	21 areas combined	Nationwide
Engines and turbines -----	6	6
Farm machinery -----	3	7
Construction and related machinery -----	15	14
Metalworking machinery -----	24	19
Special industry machinery -----	9	10
General industrial machinery -----	17	13
Office and computing machines -----	9	10
Service industry machinery -----	7	7
Miscellaneous machinery, except electrical ----	11	13
Total -----	100	100

NOTE: Because of rounding, sums of individual items may not equal totals.

¹ See appendix A for scope and method of survey. Wage data presented in this bulletin exclude premium pay for overtime and for work on weekends, holidays, and late shifts.

² The survey included establishments primarily engaged in manufacturing nonelectrical machinery. Omitted from the survey were (1) establishments with fewer than 8 workers primarily manufacturing special dies, tools, jigs, and fixtures, or machine-tool accessories, and (2) other nonelectrical machinery establishments with fewer than 20 workers.

³ Nationwide employment as reported in the Bureau's employment and earnings series. (See Employment and Earnings, vol. 16, No. 5, November 1969.)

The types of machinery manufactured differed, however, among areas. For example, three-fourths of the workers in Houston were in establishments primarily manufacturing construction and related machinery (almost always oil-field machinery), whereas slightly over one-half of the workers in Detroit were in plants manufacturing metalworking machinery. In nearly all other areas, no one product category constituted as much as half of the work force.

Employment. The 21-area survey constituted nearly two-fifths of the 1,326,300 production and related workers estimated to be in the industry (nationwide) at the time of the survey. Employment ranged from fewer than 10,000 in Baltimore, Buffalo, Dallas, Denver, Portland, San Francisco-Oakland, and Worcester to 85,000 in Chicago. Other major areas of industry employment included Detroit (62,000), Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove (46,000), Milwaukee (42,000), and Cleveland and Philadelphia (34,000).

About two-fifths of the production workers in the 21 areas combined were in establishments with fewer than 250 workers. A similar proportion were in establishments with 250 to 2,499 workers, and the remainder were in plants with 2,500 employees or more. Establishments with fewer than 250 workers constituted a majority of the production workers in Dallas, Detroit, Los Angeles, New York, Portland, and San Francisco-Oakland. Corresponding proportions in other areas ranged from one-sixth in Milwaukee to nearly one-half in Boston. Establishments with 2,500 workers or more were found in 16 of the 21 areas. They constituted one-third to one-half of the production workers in Baltimore, Denver, Hartford, Houston, Milwaukee, and Minneapolis-St. Paul, and less than one-fourth of those in other areas.

Processes. Mass production is used to manufacture nonelectrical machinery having a relatively large demand (e.g., typewriters, tractors), but not to manufacture items required to meet specific customer needs (e.g., special dies, tools, jigs, and fixtures). Nevertheless, processes are similar and include various types of metal fabrication (machining), assembling, and inspection. Some plants also operate their own foundries, forge shops, and stamping departments. Among the other types of operations found in machinery manufacturing establishments are heattreating, polishing, plating, and painting.

Assembling operations were reported by establishments employing four-fifths of the production workers in the 21 areas combined. Three principal types of assembly were used: (1) Floor assembling was the predominant method reported by establishments employing nearly two-fifths of the workers; (2) bench assembling, usually employed when the product is relatively small, was the predominant method in establishments employing one-third of the workers; and (3) conveyorline assembling was reported by establishments constituting one-tenth of the workers. The types of assembling varied substantially by area. Plants using floor assembling, for example, employed one-half or more of the workers in Milwaukee, Minneapolis-St. Paul, Philadelphia, Pittsburgh, Portland, and Worcester whereas most workers in Denver, Houston, Los Angeles, and San Francisco-Oakland were in plants using bench assembling.

The numerical control of machine tools is among the relatively new technological developments in machinery manufacturing. This technique permits automatic operation of machine tools by electronic devices (control units) and changeable tapes. The control unit interprets coded tape instructions, prepared in advance by the programmer, and directs the machine tool through the programmed sequence of machining operations (drilling, milling, boring, turning, etc.) while controlling machine speeds and feeds, distance and direction of movement of the tool or workpiece, flow of coolant, and even selection of the proper preset cutting tool for each operation. In the 21 areas combined, nearly one-half of the production workers were in plants which used these machines. Areas which had a majority of the workers employed in such plants were Boston, Buffalo, Denver, Hartford, Houston, Milwaukee, Minneapolis-St. Paul, Newark and Jersey City, Philadelphia, Pittsburgh, San Francisco-Oakland, and Worcester. A few plants in nearly all of the areas studied plan to install numerically-controlled machine tools within the next year.

Unionization. Establishments having collective bargaining agreements covered a majority of the production workers and employed nearly two-thirds of the industry's work force in the 21 areas combined. The extent of collective bargaining agreement coverage varied substantially among the areas; it was lowest in Los Angeles and highest in Milwaukee, Pittsburgh, St. Louis, and San Francisco-Oakland. The percent of production workers in establishments with collective bargaining contracts covering a majority of their workers is shown below:

	Coverage
Pittsburgh, Milwaukee, St. Louis, and San Francisco-Oakland -----	90+
Portland -----	80-89
Hartford, Buffalo, Newark and Jersey City, New York, Philadelphia, Cleveland, Detroit, and Minneapolis-St. Paul -----	70-79
Houston -----	60-69
Boston and Chicago -----	50-59
Worcester, Baltimore, and Dallas -----	40-49
Denver -----	30-39
Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove ----	20-29

The major unions in the industry were the Machinists (IAM), Auto Workers (UAW), and the Steelworkers (USA).

The survey also developed information on the incidence of supplementary wage benefits and the extent of collective bargaining agreement coverage for office clerical employees in the industry.⁴ Approximately 95,000 office clerical employees in plants were covered; those in separate central offices were excluded from the study. The proportion of workers in plants having collective bargaining agreements covering a majority of their office workers were nearly two-fifths in Buffalo, one-third in Pittsburgh, nearly three-tenths in Baltimore, approximately one-fourth in New York and Newark and Jersey City, and less than one-fifth in the remaining areas.

Method of Wage Payment. A large majority of the production workers in each of the selected areas were paid time rates, usually under formal wage systems providing either a single rate or ranges of rates for specified occupations (table 25). Informal systems, under which rates were determined by qualifications of the individual workers, applied to nearly one-half of the workers in New York, about one-third in Los Angeles, nearly three-tenths in Newark and Jersey City, and one-fourth or less of the workers in the remaining areas.

Incentive wage systems, reported by some plants in all areas except Portland, applied to one-third of the workers in Milwaukee, one-fourth in Hartford, and about one-fifth in Buffalo, Cleveland, Pittsburgh, St. Louis, and Worcester. In most other areas, one-tenth or less of the workers were paid under incentive wage systems.

Sex. Men constituted nine-tenths of the production workers in the 21 areas combined. Women made up between one- and two-tenths of the workers in Baltimore, Chicago, Hartford, Los Angeles, Milwaukee, Minneapolis, St. Louis, and San Francisco-Oakland, and less than one-tenth in the other areas. Among the occupations selected for separate study, women were most frequently employed in jobs such as routine assemblers and inspectors and, in some areas, as machine-tool operators.

Trends in Earnings

Average straight-time hourly earnings of production workers in the 21 areas combined rose 13.5 percent between mid-1966⁵ and September-November 1968. Computed on an annual basis, the increase was 5.7 percent. This exceeded the annual rates of increase for each of the years during the 1960's which ranged from 2.3 percent in

⁴ Wage information was not developed for office clerical employees.

⁵ See Industry Wage Survey: Machinery Manufacturing, Mid-1966, BLS Bulletin 1563 (1967). The mid-1966 was nationwide in scope, but provided separate data for the 21 selected areas surveyed in 1968.

1964-65 to 3.6 percent in 1965-66. The index of wage rates for all production workers covered by the survey was 142.9 (1958-59 = 100) in September-November 1968. The corresponding indexes were 142.6 for material handling laborers and 149.5 for tool and die makers (other than jobbing).

The annual rate of increase in average earnings between the 1966 and 1968 surveys varied substantially by area. It ranged from 3.3 percent in Pittsburgh to 7.5 percent in St. Louis. In most other areas, increases were between 5 and 6 percent. They exceeded 6 percent in Chicago, Dallas, Denver, Detroit, Portland, and San Francisco-Oakland and were less than 5 percent in New York, Cleveland, and Worcester.

Percent increases in average hourly earnings¹ of production workers in nonelectrical machinery manufacturing in selected areas and occupations and indexes of average hourly earnings

Area and occupation	Percent increases in average earnings prorated on an annual basis ²							Indexes (1958-59 = 100) ³	
	1960 to 1961	1961 to 1962	1962 to 1963	1963 to 1964	1964 to 1965	1965 to 1966	1966 to 1967 and 1967 to 1968 ⁴	June- July 1966	September- November 1968
All areas combined-----	2.6	2.6	2.7	2.7	2.3	3.6	5.7	125.8	142.9
<u>Areas</u>									
Baltimore -----	3.7	1.9	4.9	3.0	2.4	3.5	5.0	129.1	144.7
Boston -----	3.7	3.0	2.8	1.4	1.8	4.1	5.9	128.7	147.1
Buffalo -----	3.2	1.9	3.5	3.2	2.9	2.2	5.9	125.2	143.0
Chicago -----	1.3	2.8	3.4	3.7	2.0	2.5	6.5	124.7	143.5
Cleveland -----	1.9	3.8	2.7	2.7	2.4	3.3	4.9	128.2	142.7
Dallas -----	2.9	2.6	2.6	4.0	2.8	3.5	6.6	127.3	146.1
Denver -----	2.4	1.0	2.7	2.6	2.7	2.8	7.0	122.3	142.4
Detroit -----	2.6	1.8	2.6	2.1	2.4	3.1	7.0	122.4	142.5
Hartford -----	3.7	2.4	3.2	3.9	2.1	3.5	5.9	129.5	148.7
Houston -----	-.2	2.1	1.9	1.4	2.0	4.7	5.3	122.9	138.0
Los Angeles-Long Beach and Anaheim-Santa Ana- Garden Grove -----	3.3	3.0	3.4	1.0	3.8	4.3	5.1	127.0	142.0
Milwaukee -----	3.2	2.6	2.7	2.6	1.3	4.6	5.2	125.7	141.3
Minneapolis-St. Paul -----	4.7	2.0	2.5	4.1	2.4	4.5	5.6	130.6	148.2
Newark and Jersey City -----	3.6	3.0	2.7	4.7	1.6	3.1	5.9	125.5	144.2
New York -----	3.8	3.7	3.0	3.1	1.4	4.1	3.9	126.2	137.1
Philadelphia -----	2.8	2.4	1.2	2.3	2.4	2.4	5.2	122.7	138.0
Pittsburgh -----	2.3	1.6	.6	1.2	1.6	4.4	3.3	119.7	129.3
Portland (Oreg. - Wash.) -----	1.8	3.5	2.9	3.1	3.7	2.4	6.8	132.4	154.4
St. Louis -----	3.8	5.1	3.1	2.3	2.9	3.2	7.5	130.6	154.5
San Francisco-Oakland -----	2.6	2.5	3.0	2.7	5.3	3.9	6.5	131.6	150.7
Worcester -----	4.2	2.7	3.7	2.1	3.0	4.6	4.9	128.2	143.2
<u>Occupations</u>									
Laborers, material handling -----	3.5	2.1	2.9	3.3	1.8	3.0	5.6	125.9	142.6
Tool and die (other than jobbing) -----	3.1	2.5	2.4	3.3	2.5	4.1	7.2	127.8	149.5

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

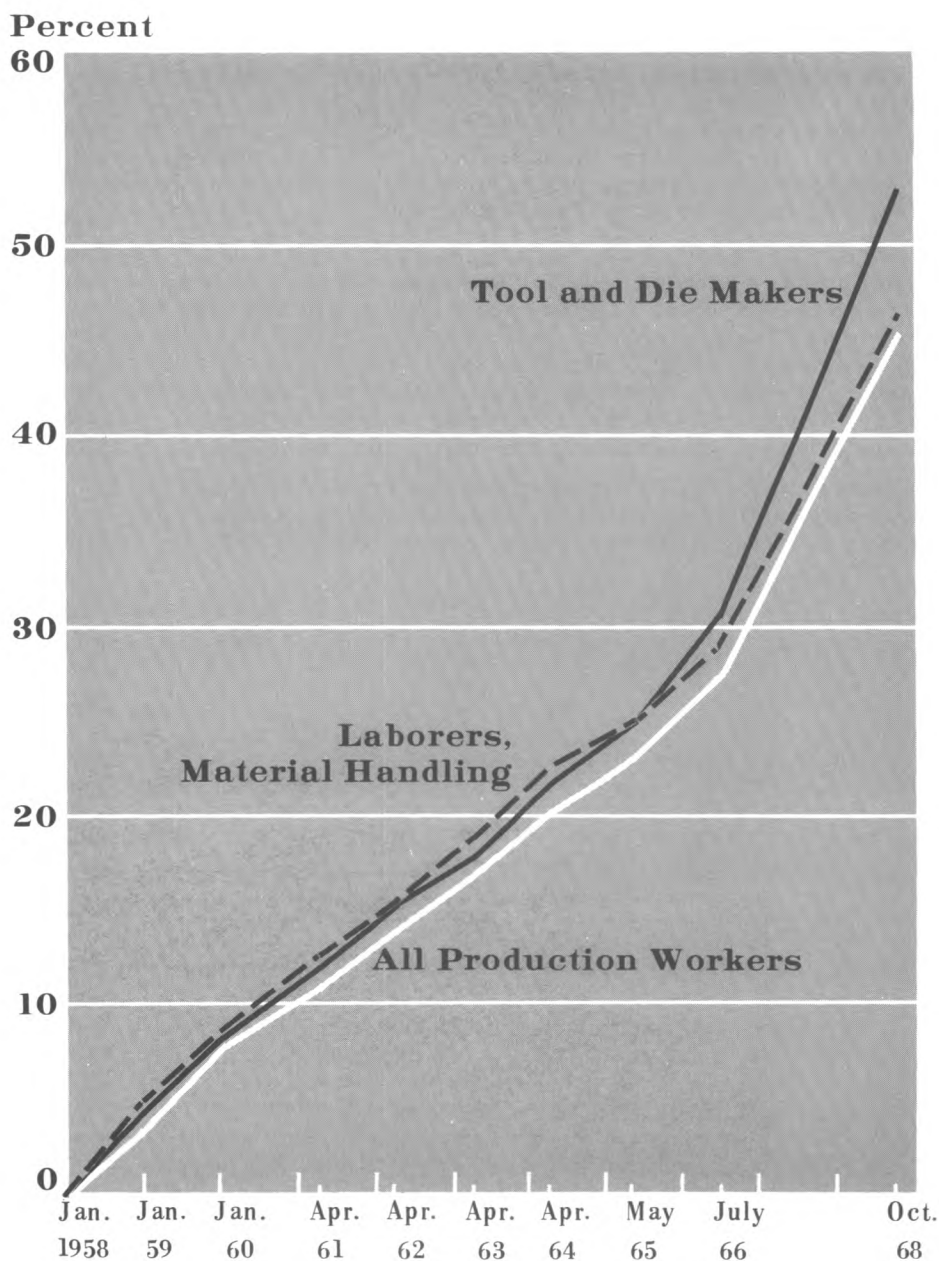
² Changes which vary from area to area are for payroll periods approximately a year apart. Because the intervals between the 1965 and 1966, and the 1966 and 1968 surveys were over 1 year, the percents of change since 1961 have been adjusted to reflect annual changes. The compound effect of wage changes was considered in computing the annual percent of change between the 1966 and 1968 surveys.

³ For methods used to construct indexes see appendix A.

⁴ Since a survey was not made in 1967, data for the 2 periods are the same.

In the 21 areas combined, the annual rate of increase in average straight-time hourly earnings between the 1966 and 1968 surveys was 7.2 percent for tool and die makers, compared with 5.6 percent for material handling laborers. Since 1960, the annual rate of increase in average earnings for tool and die makers has exceeded that for laborers in all years except 1960-61, 1962-63, and 1963-64.

**INCREASE IN AVERAGE STRAIGHT-TIME HOURLY
EARNINGS, NONELECTRICAL MACHINERY
MANUFACTURING IN 21 AREAS,
JANUARY 1958 TO SPECIFIED DATES**



Occupational Earnings

The occupations selected for separate study constituted one-half of the 506,000 production workers within scope of the survey. These jobs were selected to represent wage levels for the various activities performed by production workers in the industry.

Tool and die makers had the highest average hourly earnings in nearly all areas. Men producing or maintaining tools and dies for use within the establishment (other than jobbing) averaged from \$5.12 an hour in San Francisco—Oakland to \$3.53 in Worcester (table 1); in 13 other areas they averaged \$4 or more an hour. In most areas, averages for men producing tools and dies for sale (jobbing) were within 5 percent of the earnings levels for tool and die makers (other than jobbing).

Production machine-tool operators were the most numerous occupational group studied and, for survey purposes, were divided into three groups. Men operators, who set up their own machines and perform a variety of machining operations to close tolerances (class A), averaged from \$4.40 an hour in San Francisco—Oakland to \$3.14 in Dallas. The corresponding range for the intermediate group of operators (class B) was from \$3.68 in St. Louis to \$2.65 in Dallas. Averages for operators who perform routine repetitive operations and do not set up machines (class C) were highest in Hartford (\$3.30) and lowest in Dallas (\$2.19).

Special inquiry was made concerning formal wage-setting practices for workers operating numerically controlled (N/C) machine tools. Nearly one-half of the production workers in the 21 areas combined were in establishments that had N/C machine tools. In these establishments, one-half of the workers were in plants that set wage rates for N/C machine tools the same as the rate for operators of standard machine tools, and nearly one-fourth were in plants which set higher rates for N/C machine-tool operators. Nearly all of the remaining workers were in plants which had no formal policy relating to rate-setting for operators of N/C machine tools.

Janitors were lowest paid among the jobs studied in most areas. They averaged from \$3.07 an hour in Detroit to \$2 in Dallas. Hourly averages for material-handling laborers, another relatively low-pay job, ranged from \$3.30 in Portland to \$2.16 in Dallas.

Occupational pay levels were generally highest in San Francisco—Oakland and lowest in Dallas. The relative pay levels⁶ of the 21 areas surveyed, using Chicago as base = 100, are shown below:

San Francisco—Oakland -----	116
Portland -----	112
Detroit -----	109
St. Louis -----	107
Milwaukee -----	103
Denver and Cleveland -----	101
Chicago and Los Angeles -----	100
Pittsburgh -----	99
Buffalo and Newark and Jersey City -----	97
Hartford and Houston -----	95
Baltimore and Minneapolis—St. Paul -----	94
Boston and Philadelphia -----	92
Worcester -----	91
New York -----	87
Dallas -----	79

⁶ Average hourly earnings for men in 15 occupational classifications common to all areas were used in computing the relative pay levels. To minimize interarea differences in occupational composition, weights expressing constant employment relationships based on total employment in the respective jobs in the 21 areas were used. Aggregates were computed for each area by multiplying the average straight-time earnings for the jobs by these weights and totaling. The ratio of these aggregates formed the basis for the relatives.

Relative differences in wage levels among the areas varied by occupations. Janitors in San Francisco-Oakland, for example, averaged 53 percent more than those in Dallas; the corresponding spread was 40 percent for class A production machine-tool operators, and 33 percent for tool and die makers (jobbing).

Where comparisons were possible, workers paid under incentive wage systems generally had higher average earnings than time-rated workers in the same occupation and area (table 2). Differences in averages for time and incentive workers differed by occupation and area. For example, class A and class B assemblers paid under incentive wage systems in Chicago averaged 8 and 17 percent, respectively, more than their time-rated counterparts. The corresponding differences in Milwaukee were 24 and 19 percent.

The preceding discussion of occupational earnings related to men in the jobs selected for separate study. Tables 4 through 24 provide earnings for women in a few of the occupations studied.

Earnings of individuals performing similar tasks varied considerably within the same job and area (tables 4 through 24). Earnings of the highest paid workers frequently exceeded those of the lowest paid workers in the same job and area by \$1 an hour or more. Thus, some workers in comparatively low-paid jobs earned more than some workers in jobs for which significantly higher averages were recorded. For example, the following tabulation indicates a considerable earnings overlapping for men class A grinding-machine operators and polishing- and buffing-machine operators in Cleveland, despite a 60 cents difference in the hourly averages of the two jobs:

Earnings	Polishing- and buffing- machine operators	Class A grinding- machine operators
Under \$3.00 -----	78	18
\$3.00 and under \$3.20 -----	49	78
\$3.20 and under \$3.40 -----	33	101
\$3.40 and under \$3.60 -----	20	74
\$3.60 and under \$3.80 -----	14	143
\$3.80 and under \$4.00 -----	-	95
\$4.00 and over -----	18	255
Total workers -----	212	764
Average hourly earnings -----	\$3.28	\$3.88

Establishment Practices and Supplementary Wage Provisions

Data also were obtained on certain establishment practices, including shift differentials for production workers; and work schedules and selected supplementary wage benefits, such as paid holidays and vacations, and health, insurance, and retirement plans, for production and office workers.

Scheduled Weekly Hours. Work schedules of 40 hours a week were in effect in establishments employing a majority of the production workers in each area (table 26). Most of the remaining workers had weekly work schedules of more than 40 hours. Office workers also typically had 40-hour weekly work schedules, except in New York where schedules of 35 or 37½ hours applied to a majority of the workers (table 27).

Shift Differential Provisions and Practices. A large majority of the production workers in nearly all areas were in establishments which had provisions for late-shift operations with extra pay above day-shift rates (table 28). Proportions of workers employed on late shifts at the time of the survey ranged from one-third in Baltimore and Houston to less than one-tenth in Boston and New York. From 15 to 25 percent of the production workers were employed on late shifts in most other areas (table 29).

Workers on second shifts outnumber those on third shifts by more than 5 to 1 in 14 of the 21 areas. The amount of shift differential pay, nearly always specified in uniform cents per hour or uniform percentages of day-shifts rates, varied among and within areas.

Paid Holidays. Almost all establishments studied provided paid holidays to production and office workers (tables 30 and 31). The number of paid holidays provided annually varied among and within areas. A majority of the production workers were in establishments providing at least 9 holidays in Boston, Buffalo, Detroit, Hartford, Milwaukee, Newark and Jersey City, New York, Philadelphia, St. Louis, and San Francisco-Oakland. In a majority of the remaining areas, workers were most commonly provided 8 paid holidays a year. With some exceptions, paid holiday provisions for office workers were generally similar to those for production workers.

Paid Vacations. Paid vacations were provided by establishments employing nearly all of the production and office workers (tables 32 and 33). Typical provisions for production workers were 1 week of vacation pay after 1 year of service, 2 weeks after 3 years, and 3 weeks after 10 years, and at least 4 weeks after 20 years. In most areas, vacation provisions for office workers were more liberal than those for production workers, particularly after 1 year of service.

Health, Insurance, and Retirement Plans. Life, hospitalization, surgical, and medical insurance for which the employer paid at least part of the cost, were provided to more than nine-tenths of the workers (tables 34 and 35). A majority of the workers in most areas also were provided other types of health benefits, including sickness and accident insurance and/or sick leave, and accidental death and dismemberment and catastrophe (major medical) insurance.

Pension plans that provide for regular payments on retirement (in addition to social security) were reported by establishments employing at least two-thirds of the production and office workers in nearly all areas. In most areas, employers usually pay for the entire cost of the plans. The proportions of production and office workers covered by retirement pension plans were generally similar within the same area.

Table 1. Occupational Averages in 21 Areas: Men

(Number and average straight-time hourly earnings¹ of men in selected occupations in machinery manufacturing establishments, September–November 1968²)

Occupation	Northeast																South					
	Boston		Buffalo		Hartford–New Britain–Bristol		Newark and Jersey City		New York		Philadelphia		Pittsburgh		Worcester		Baltimore		Dallas		Houston	
	Num- ber of work- ers	Aver- age hourly earn- ings	Num- ber of work- ers	Aver- age hourly earn- ings	Num- ber of work- ers	Aver- age hourly earn- ings	Num- ber of work- ers	Aver- age hourly earn- ings	Num- ber of work- ers	Aver- age hourly earn- ings	Num- ber of work- ers	Aver- age hourly earn- ings	Num- ber of work- ers	Aver- age hourly earn- ings	Num- ber of work- ers	Aver- age hourly earn- ings	Num- ber of work- ers	Aver- age hourly earn- ings	Num- ber of work- ers	Aver- age hourly earn- ings	Num- ber of work- ers	Aver- age hourly earn- ings
Assemblers, class A -----	718	\$3.47	332	\$3.58	258	\$3.63	666	\$3.55	851	\$3.51	1,385	\$3.24	442	\$3.67	304	\$3.47	146	\$3.63	286	\$2.92	482	\$3.39
Assemblers, class B -----	450	3.00	322	3.12	476	3.00	674	3.30	758	2.79	868	2.76	189	3.27	196	3.06	197	2.91	203	2.41	286	2.89
Assemblers, class C -----	186	2.62	69	3.03	250	3.01	440	2.77	994	2.32	535	2.28	69	2.92	46	2.92	82	2.54	274	1.93	103	2.73
Carpenters, maintenance -----	25	3.23	-	-	15	3.49	25	3.46	-	-	28	3.67	32	3.88	7	3.43	-	-	-	-	14	3.49
Electricians, maintenance -----	79	3.61	74	3.56	93	4.06	132	4.16	48	3.61	102	3.63	125	3.75	36	3.45	39	3.59	31	3.12	159	3.85
Inspectors, class A -----	205	3.42	114	3.69	204	3.40	255	3.48	174	3.52	427	3.42	191	3.78	109	3.27	87	3.60	98	3.34	328	3.59
Inspectors, class B -----	144	3.01	75	3.38	206	3.26	270	3.37	178	3.10	380	3.27	82	3.18	59	3.07	43	3.20	86	2.72	151	3.34
Inspectors, class C -----	83	2.74	57	2.68	-	-	130	3.19	138	2.16	55	2.88	43	2.85	-	-	-	-	68	2.00	-	-
Janitors, porters, and cleaners -----	223	2.37	188	2.44	210	2.63	231	2.50	291	2.22	366	2.59	165	2.65	91	2.46	115	2.10	166	2.00	291	2.31
Laborers, material handling -----	249	2.68	79	2.66	222	2.67	307	2.77	474	2.38	367	2.53	163	2.73	75	2.53	76	2.34	116	2.16	223	2.46
Machine-tool operators, production, class A ³ -----	1,619	3.44	970	3.47	1,418	3.53	1,397	3.57	1,869	3.55	2,658	3.51	1,764	3.61	1,003	3.35	733	3.54	665	3.14	1,646	3.45
Automatic-lathe operators, class A -----	-	-	-	-	27	3.62	-	-	97	3.59	70	3.39	-	-	10	3.40	16	3.73	52	3.05	171	3.36
Drill-press operators, radial, class A -----	96	3.52	-	-	60	3.50	82	3.44	-	-	274	3.45	106	3.28	70	3.40	-	-	20	2.94	90	3.30
Drill-press operators, single- or multiple-spindle, class A -----	81	3.49	15	3.30	24	3.51	93	3.13	66	3.23	160	3.19	-	-	43	3.19	25	3.29	29	2.83	73	3.21
Engine-lathe operators, class A -----	135	3.49	174	3.43	134	3.65	224	3.51	302	3.62	305	3.59	262	3.66	106	3.31	114	3.44	106	3.12	186	3.57
Grinding-machine operators, class A -----	195	3.56	117	3.57	562	3.49	164	3.55	275	3.45	340	3.11	317	3.63	235	3.27	98	3.50	44	3.24	112	3.47
Milling-machine operators, class A -----	194	3.49	105	3.49	176	3.47	254	3.58	346	3.57	291	3.49	305	3.60	148	3.45	84	3.70	86	3.13	215	3.45
Screw-machine operators, auto- matic, class A -----	80	3.55	-	-	-	-	43	3.99	30	3.85	-	-	8	3.67	28	3.46	-	-	43	3.41	-	-
Turret-lathe operators, hand (including hand screw machine), class A -----	217	3.41	263	3.42	160	3.64	226	3.68	162	3.51	393	3.62	153	3.45	124	3.33	94	3.44	214	3.11	425	3.44
Machine-tool operators, production, class B ³ -----	1,051	2.99	470	3.35	1,591	3.26	1,964	3.55	1,513	2.92	2,012	3.28	585	3.21	462	3.01	387	3.15	461	2.65	781	3.08
Automatic-lathe operators, class B -----	-	-	-	-	-	-	-	-	71	2.62	89	2.86	-	-	18	2.96	10	3.43	43	2.59	-	-
Drill-press operators, radial, class B -----	53	3.15	16	3.25	23	3.18	97	3.46	68	3.33	101	2.95	18	3.21	32	3.05	-	-	26	2.48	48	2.90
Drill-press operators, single- or multiple-spindle, class B -----	61	2.92	-	-	87	2.91	111	2.85	169	2.69	75	2.79	28	3.13	47	3.12	28	3.13	44	2.40	81	3.06
Engine-lathe operators, class B -----	71	3.18	60	3.15	35	3.14	114	3.31	82	3.13	142	3.12	40	3.46	40	2.94	43	2.84	21	2.53	101	3.01
Grinding-machine operators, class B -----	111	3.05	82	3.26	777	3.16	-	-	192	2.90	-	-	138	3.40	131	2.96	27	3.40	28	2.73	184	3.17
Milling-machine operators, class B -----	106	2.93	27	3.22	105	3.24	110	3.33	262	2.99	355	3.13	57	3.24	50	3.26	41	3.24	84	2.67	66	3.15
Screw-machine operators, auto- matic, class B -----	-	-	-	-	-	-	-	-	40	2.97	34	3.55	-	-	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine), class B -----	185	3.03	47	3.10	64	3.38	131	3.19	69	3.11	362	3.40	-	-	47	2.95	20	2.94	105	2.59	86	3.14

See footnotes at end of table.

Table 1. Occupational Averages in 21 Areas: Men—Continued

(Number and average straight-time hourly earnings¹ of men in selected occupations in machinery manufacturing establishments, September–November 1968²)

Occupation	Northeast																South					
	Boston		Buffalo		Hartford-New Britain-Bristol		Newark and Jersey City		New York		Philadelphia		Pittsburgh		Worcester		Baltimore		Dallas		Houston	
	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings
Machine-tool operators, production, class C ³ -----	467	\$2.52	125	\$2.81	1,171	\$3.30	461	\$2.64	1,286	\$2.28	902	\$2.40	148	\$2.71	115	\$2.59	561	\$2.67	278	\$2.19	284	\$2.63
Automatic-lathe operators, class C -----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	3.19	-	-	-	-
Drill-press operators, radial, class C -----	-	-	-	-	14	2.85	28	3.24	-	-	-	-	-	-	-	-	-	-	-	-	28	2.54
Drill-press operators, single- or multiple-spindle, class C -----	37	2.35	33	2.69	66	3.25	86	2.88	238	2.23	107	2.08	-	-	24	2.46	43	2.41	43	2.03	-	-
Engine-lathe operators, class C -----	-	-	-	-	-	-	-	-	68	2.39	-	-	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators, class C -----	16	2.43	-	-	710	3.40	61	2.70	105	2.32	-	-	37	2.78	18	2.72	12	2.63	-	-	31	2.79
Milling-machine operators, class C -----	48	2.37	-	-	100	3.15	41	2.85	122	2.48	129	2.48	-	-	-	-	-	-	22	2.24	18	3.09
Screw-machine operators, auto-matic, class C -----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine), class C -----	55	2.75	-	-	41	3.13	10	3.02	-	-	69	2.31	-	-	-	-	41	2.48	50	2.28	32	2.57
Machine-tool operators, toolroom (operate 1 type of machine) -----	47	3.38	-	-	347	4.22	373	4.12	-	-	121	3.72	23	3.65	-	-	46	3.67	23	3.96	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine) -----	46	3.45	197	3.52	166	3.41	303	3.52	136	3.57	136	3.55	80	3.63	11	3.52	58	3.65	40	3.39	180	3.58
Machinists, maintenance -----	22	3.87	54	3.59	115	3.57	-	-	46	3.73	181	3.73	-	-	-	-	24	3.53	-	-	131	3.83
Machinists, production -----	426	3.58	209	3.69	75	3.53	130	3.32	196	3.61	494	3.76	-	-	84	3.35	252	3.57	152	3.49	879	3.71
Mechanics, maintenance -----	55	3.63	72	3.50	-	-	29	3.58	60	3.26	125	3.58	98	3.60	30	3.38	-	-	40	3.12	205	3.78
Polishers and buffers, metal -----	12	2.77	26	3.33	29	3.16	50	3.17	-	-	81	3.27	-	-	-	-	-	-	-	-	-	-
Polishing- and buffing-machine operators -----	-	-	-	-	90	3.14	116	2.96	27	2.29	71	3.70	22	2.83	-	-	-	-	-	-	-	-
Punch-press operators, class A -----	48	2.93	-	-	-	-	-	-	-	-	116	2.80	-	-	14	3.26	-	-	72	2.78	-	-
Punch-press operators, class B -----	113	2.37	-	-	92	2.94	433	2.75	124	2.24	239	2.58	-	-	-	-	-	-	135	2.12	11	2.65
Setup men, machine tools -----	58	3.19	-	-	693	3.48	-	-	107	3.74	141	3.29	-	-	33	3.49	-	-	-	-	52	3.60
Tool and die makers (jobbing) -----	266	3.76	285	4.08	436	3.71	705	3.95	243	3.99	601	3.94	319	3.75	111	3.39	-	-	212	3.97	-	-
Tool and die makers (other than jobbing) -----	134	3.88	69	3.66	376	4.03	316	4.11	251	4.03	333	4.00	48	3.83	68	3.53	75	3.75	57	3.58	106	3.91
Tool clerks -----	97	2.95	38	2.93	114	2.83	121	3.03	82	2.80	194	2.93	66	2.93	39	2.62	20	2.65	67	2.52	131	2.99
Welders, hand, class A -----	217	3.21	234	3.64	91	3.74	336	3.72	223	3.69	544	3.55	346	3.57	43	3.55	73	3.50	307	2.98	642	3.54
Welders, hand, class B -----	-	-	73	3.24	33	2.88	128	3.34	332	2.74	241	3.15	100	2.97	-	-	35	3.00	140	2.59	371	3.04
Welders, machine, class A -----	-	-	-	-	-	-	-	-	-	-	-	-	46	3.41	-	-	7	3.79	29	2.82	14	3.51
Welders, machine, class B -----	-	-	-	-	29	2.76	-	-	30	2.93	119	2.73	17	2.93	-	-	-	-	31	2.29	-	-

See footnotes at end of table.

Table 1. Occupational Averages in 21 Areas: Men—Continued

(Number and average straight-time hourly earnings¹ of men in selected occupations in machinery manufacturing establishments, September–November 1968²)

Occupation	North Central												West							
	Chicago		Cleveland		Detroit		Milwaukee		Minneapolis–St. Paul		St. Louis		Denver		Long Angeles–Long Beach and Anaheim–Santa Ana–Garden Grove		Portland		San Francisco–Oakland	
	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings
Assemblers, class A -----	3,501	\$3.72	1,266	\$3.75	1,224	\$4.39	1,096	\$3.88	1,229	\$3.31	434	\$3.85	240	\$3.20	1,136	\$3.32	360	\$3.97	165	\$4.21
Assemblers, class B -----	2,930	3.15	788	3.32	1,734	3.59	1,855	3.57	1,153	2.91	563	3.52	75	2.95	1,184	2.76	165	3.49	309	3.39
Assemblers, class C -----	1,831	2.62	256	3.07	1,298	3.37	823	3.24	498	2.81	467	2.82	200	1.92	600	2.37	-	-	392	3.01
Carpenters, maintenance -----	66	3.77	38	3.61	30	4.19	26	4.01	-	-	-	-	-	-	34	3.72	-	-	8	4.41
Electricians, maintenance -----	447	4.32	194	3.87	241	4.55	237	4.07	58	4.16	92	4.29	15	3.70	83	3.95	-	-	24	4.62
Inspectors, class A -----	1,075	3.74	411	3.65	514	4.09	645	3.76	378	3.54	88	4.28	69	3.50	712	3.76	59	4.03	138	4.54
Inspectors, class B -----	740	3.31	375	3.56	720	3.57	474	3.44	307	3.20	188	3.46	41	2.97	273	3.15	-	-	-	-
Inspectors, class C -----	340	2.86	77	3.38	228	3.35	129	3.12	-	-	-	-	6	2.95	107	2.65	-	-	-	-
Janitors, porters, and cleaners -----	1,394	2.63	399	2.75	1,253	3.07	570	2.89	431	2.56	209	2.74	80	2.46	644	2.37	76	2.88	85	3.06
Laborers, material handling -----	2,204	2.77	461	2.99	894	3.28	922	2.81	476	2.87	420	2.82	50	2.56	228	2.55	61	3.30	128	3.21
Machine-tool operators, production, class A ³ -----	9,172	3.84	4,388	3.73	5,485	4.20	2,951	3.89	1,965	3.54	1,056	4.33	352	3.92	3,703	3.82	582	4.02	848	4.40
Automatic-lathe operators, class A -----	585	3.96	94	3.66	70	3.62	145	4.03	132	3.60	-	-	8	3.55	61	3.72	34	3.94	18	4.35
Drill-press operators, radial, class A -----	854	3.72	289	3.66	144	4.36	239	3.75	125	3.52	41	4.11	30	4.06	148	3.52	44	3.85	-	-
Drill-press operators, single- or multiple-spindle, class A -----	380	3.53	192	3.76	200	3.51	48	4.02	156	3.25	-	-	13	3.58	54	3.43	-	-	-	-
Engine-lathe operators, class A -----	1,212	3.83	350	3.66	406	4.42	234	3.80	154	3.60	-	-	77	3.59	620	3.82	158	4.05	113	4.37
Grinding-machine operators, class A -----	1,423	3.95	764	3.88	2,450	4.23	259	4.02	193	3.52	80	4.20	-	-	610	3.79	8	3.95	-	-
Milling-machine operators, class A -----	919	3.83	670	3.82	542	4.30	261	4.00	140	3.53	142	4.43	-	-	646	3.79	53	4.02	70	4.33
Screw-machine operators, auto-matic, class A -----	435	4.03	227	3.86	206	3.96	141	3.91	75	3.76	67	4.19	-	-	48	3.78	-	-	81	4.13
Turret-lathe operators, hand (including hand screw machine), class A -----	1,096	3.79	516	3.68	788	4.11	605	3.79	284	3.59	102	4.08	72	4.19	630	3.74	88	4.01	102	4.26
Machine-tool operators, production, class B ³ -----	4,535	3.39	2,030	3.44	6,144	3.53	2,578	3.53	1,351	3.14	734	3.68	176	3.18	1,726	3.25	270	3.46	473	3.52
Automatic-lathe operators, class B -----	152	3.67	-	-	68	3.60	87	3.58	-	-	-	-	7	2.89	14	3.20	-	-	-	-
Drill-press operators, radial, class B -----	321	3.33	86	3.44	548	3.50	425	3.50	161	3.28	34	4.01	23	3.11	114	3.19	88	3.51	70	3.51
Drill-press operators, single- or multiple-spindle, class B -----	690	3.25	242	3.76	929	3.41	173	3.52	113	3.05	-	-	29	3.00	119	2.82	34	3.32	54	3.37
Engine-lathe operators, class B -----	458	3.39	169	3.51	246	3.40	133	3.57	78	3.17	-	-	-	-	117	3.29	-	-	-	-
Grinding-machine operators, class B -----	740	3.36	369	3.41	2,137	3.57	239	3.64	50	3.23	90	3.49	-	-	538	3.26	-	-	84	3.85
Milling-machine operators, class B -----	604	3.45	326	3.56	837	3.60	266	3.46	112	3.19	158	4.04	19	3.44	107	3.07	6	3.41	-	-
Screw-machine operators, auto-matic, class B -----	139	3.51	34	3.55	196	3.81	138	3.40	-	-	61	4.39	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine), class B -----	514	3.37	163	3.43	575	3.48	422	3.39	108	3.16	63	3.35	16	3.70	172	3.04	25	3.50	14	3.48

See footnotes at end of table.

51 Table 1. Occupational Averages in 21 Areas: Men—Continued

(Number and average straight-time hourly earnings¹ of men in selected occupations in machinery manufacturing establishments, September–November 1968²)

Occupation	North Central												West							
	Chicago		Cleveland		Detroit		Milwaukee		Minneapolis–St. Paul		St. Louis		Denver		Los Angeles–Long Beach and Anaheim–Santa Ana–Garden Grove		Portland		San Francisco–Oakland	
	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings	Num-ber of work-ers	Aver-age hourly earn-ings
Machine-tool operators, production, class C ³ -----	2,252	\$2.80	1,152	\$2.57	2,353	\$3.07	588	\$2.93	572	\$2.88	129	\$2.98	18	\$2.77	1,038	\$2.69	-	-	-	-
Automatic-lathe operators, class C -----	-	-	-	-	22	3.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, radial, class C -----	89	2.79	-	-	132	3.16	56	2.93	-	-	-	-	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple-spindle, class C -----	323	2.69	59	2.87	145	3.46	170	3.00	87	2.79	21	2.91	-	-	169	2.37	-	-	-	-
Engine-lathe operators, class C -----	27	3.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators, class C -----	-	-	93	3.06	996	2.86	10	3.20	-	-	-	-	-	-	214	2.56	-	-	-	-
Milling-machine operators, class C -----	207	2.54	56	2.99	278	3.32	58	3.33	13	2.71	-	-	-	-	-	-	-	-	-	-
Screw-machine operators, auto-matic, class C -----	76	2.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine), class C -----	506	2.76	44	3.00	33	3.05	100	2.65	-	-	-	-	-	-	87	2.93	-	-	-	-
Machine-tool operators, toolroom (operate 1 type of machine) -----	1,423	4.29	413	4.12	4,859	4.81	323	3.88	107	3.55	57	4.08	9	3.92	678	4.29	-	-	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine) -----	786	4.05	186	3.64	417	4.64	320	3.98	210	3.63	218	4.56	45	3.56	483	3.98	26	\$4.10	-	-
Machinists, maintenance -----	314	3.90	86	3.90	102	4.65	139	3.81	42	3.58	57	4.17	22	3.81	53	3.90	17	4.07	48	\$4.39
Machinists, production -----	215	3.98	83	3.78	-	-	26	3.80	154	3.57	402	4.52	54	3.25	1,117	4.04	-	-	581	4.36
Mechanics, maintenance -----	488	3.84	149	3.87	372	4.59	151	4.17	55	3.74	67	4.24	22	3.53	193	3.60	-	-	-	-
Polishers and buffers, metal -----	283	3.54	64	3.40	147	4.36	78	3.61	-	-	-	-	-	-	38	3.37	-	-	-	-
Polishing- and buffing-machine operators -----	137	3.06	212	3.28	37	3.34	48	3.20	-	-	-	-	-	-	-	-	-	-	-	-
Punch-press operators, class A -----	481	3.32	82	3.13	-	-	173	3.45	126	3.24	226	3.75	-	-	63	3.16	14	3.78	-	-
Punch-press operators, class B -----	915	2.72	185	2.81	485	3.55	192	3.29	225	2.94	125	3.19	70	2.35	100	2.51	-	-	113	3.21
Setup men, machine tools -----	371	3.71	173	3.58	864	3.77	-	-	45	3.51	91	4.03	-	-	48	4.04	-	-	-	-
Tool and die makers (jobbing) -----	2,420	4.58	1,266	4.11	4,936	4.97	605	4.36	382	4.27	352	5.18	-	-	988	4.52	-	-	147	5.29
Tool and die makers (other than jobbing) -----	1,213	4.37	367	4.00	457	4.82	327	4.37	265	4.08	240	4.72	96	4.45	339	4.34	12	4.50	200	5.12
Tool clerks -----	405	3.19	178	3.30	297	3.58	144	3.19	76	3.10	45	3.10	26	2.97	183	2.89	13	3.50	56	3.55
Welders, hand, class A -----	2,227	3.75	513	3.39	399	3.92	820	3.70	798	3.44	395	3.98	141	3.43	1,176	3.63	566	3.99	332	4.17
Welders, hand, class B -----	652	3.81	331	3.38	480	3.43	1,185	3.51	585	3.01	61	3.24	55	3.11	217	3.08	41	3.50	-	-
Welders, machine, class A -----	201	3.49	-	-	37	4.09	119	3.67	-	-	-	-	-	-	21	3.52	-	-	-	-
Welders, machine, class B -----	232	2.85	28	3.40	-	-	81	3.13	32	2.96	41	2.86	-	-	-	-	-	-	-	-

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

² Payroll periods covered in individual areas are indicated in the tables 4–24.

³ Includes data for operators of other machine tools in addition to those shown separately.

NOTE: Dashes indicate no data reported or data that do not meet publication criteria.

Table 2. Occupational Averages in 12 Areas: By Method of Wage Payment

(Number and average straight-time hourly earnings¹ of men in selected occupations in machinery manufacturing establishments, September–November 1968)

Occupation	Northeast											
	Boston		Hartford–New Britain–Bristol		Newark, and Jersey City		New York		Philadelphia		Worcester	
	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings
Assemblers, class A:												
Timeworkers	579	\$3.26	84	\$3.59	553	\$3.51	779	\$3.47	1,301	\$3.18	225	\$3.33
Incentive workers	139	4.36	174	3.65	113	3.76	-	-	84	4.12	-	-
Assemblers, class B:												
Timeworkers	398	2.92	133	3.01	434	3.21	737	2.77	789	2.69	149	2.96
Incentive workers	52	3.60	-	-	240	3.46	21	3.47	-	-	-	-
Assemblers, class C:												
Timeworkers	185	2.62	153	2.83	336	2.62	744	2.30	525	2.25	31	2.83
Incentive workers	-	-	-	-	-	-	250	2.37	-	-	-	-
Machine-tool operators, production, class A:												
Timeworkers	1,246	3.30	960	3.48	1,144	3.51	1,738	3.54	2,093	3.38	827	3.25
Incentive workers	373	3.92	458	3.64	253	3.85	131	3.71	565	4.00	176	3.84
Machine-tool operators, production, class B:												
Timeworkers	980	2.95	681	3.19	1,844	3.55	1,372	2.86	1,516	3.07	331	2.88
Incentive workers	71	3.49	910	3.32	120	3.60	141	3.43	-	-	-	-
Machine-tool operators, production, class C:												
Timeworkers	465	2.52	737	3.21	391	2.53	1,113	2.25	852	2.35	98	2.58
Incentive workers	-	-	434	3.45	70	3.25	173	2.46	-	-	-	-
South			North Central						West			
Baltimore			Chicago		Cleveland		Milwaukee		St. Louis		Los Angeles–Long Beach and Anaheim–Santa Ana–Garden Grove	
Assemblers, class A:												
Timeworkers	59	\$3.26	3,028	\$3.68	886	\$3.46	614	\$3.52	389	\$3.88	1,123	\$3.32
Incentive workers	87	3.88	473	3.97	380	4.44	482	4.35	-	-	-	-
Assemblers, class B:												
Timeworkers	168	2.86	2,359	3.05	590	3.05	1,028	3.29	338	3.18	1,184	2.77
Incentive workers	29	3.24	571	3.56	198	4.13	827	3.92	225	4.03	-	-
Assemblers, class C:												
Timeworkers	79	2.50	1,728	2.53	168	2.73	494	3.05	464	2.81	600	2.37
Incentive workers	-	-	103	4.14	88	3.71	329	3.51	-	-	-	-
Machine-tool operators, production, class A:												
Timeworkers	552	3.45	7,306	3.77	3,265	3.54	1,473	3.65	615	4.07	3,628	3.81
Incentive workers	181	3.83	1,866	4.10	1,123	4.31	1,478	4.12	-	-	-	-
Machine-tool operators, production, class B:												
Timeworkers	250	2.92	3,141	3.25	1,490	3.22	1,432	3.32	457	3.60	1,701	3.25
Incentive workers	-	-	1,394	3.72	540	4.04	1,146	3.79	277	3.82	-	-
Machine-tool operators, production, class C:												
Timeworkers	483	2.64	2,044	2.73	1,100	2.52	363	2.81	107	2.93	1,038	2.69
Incentive workers	-	-	208	3.53	52	3.47	225	3.13	22	3.21	-	-

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

NOTE: Dashes indicate no data reported or data that do not meet publication criteria.

1 Table 3. Occupational Averages in 9 Areas: By Selected Industries

(Number and average straight-time hourly earnings ¹ of men in selected occupations in establishments primarily manufacturing selected products, September–November 1968)

Occupation	Chicago				Cleveland		Detroit				Los Angeles–Long Beach and Anaheim–Santa Ana– Garden Grove		New York	
	Special dies and tools ²		Machine-tool accessories ³		Special dies and tools ²		Special dies and tools ²		Machine-tool accessories ³		Oil field machinery ⁴		Paper and printing trades machinery ⁵	
	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings
Assemblers, class A	-	-	69	\$ 3.74	-	-	33	\$ 4.49	35	\$ 4.52	115	\$ 3.53	317	\$ 3.59
Assemblers, class B	-	-	38	3.23	-	-	17	3.59	-	-	-	-	118	2.97
Assemblers, class C	-	-	16	2.92	-	-	-	-	-	-	-	-	54	2.93
Electricians, maintenance	-	-	20	3.87	8	\$ 3.67	41	4.40	8	4.53	15	3.72	24	3.54
Inspectors, class A	26	\$ 3.66	38	3.75	13	3.62	-	-	96	4.01	35	3.61	59	3.58
Inspectors, class B	-	-	47	3.32	-	-	-	-	55	3.55	-	-	28	3.12
Inspectors, class C	-	-	21	2.75	-	-	-	-	23	3.26	-	-	-	-
Janitors, porters, and cleaners	92	2.58	76	2.51	57	2.36	392	3.21	124	2.88	38	2.97	54	2.45
Laborers, material handling	-	-	49	2.71	-	-	-	-	37	3.35	-	-	105	2.61
Machine-tool operators, production, class A ⁶	-	-	672	3.92	-	-	-	-	1,917	4.04	370	3.68	457	3.60
Engine-lathe operators	-	-	86	3.77	-	-	-	-	98	3.99	58	3.77	-	-
Grinding-machine operators	-	-	358	4.05	-	-	-	-	1,187	4.03	43	3.55	39	3.64
Milling-machine operators	-	-	70	3.85	-	-	-	-	264	4.09	72	3.38	123	3.64
Screw-machine operators, automatic	-	-	45	3.86	-	-	-	-	79	3.93	-	-	-	-
Turret-lathe operators, hand (including hand screw machine)	-	-	44	3.50	-	-	-	-	132	3.99	71	3.91	-	-
Machine-tool operators, production, class B ⁶	268	3.33	403	3.40	297	3.31	283	3.99	1,471	3.53	64	3.25	194	3.10
Drill-press operators, radial	23	3.06	-	-	19	3.28	-	-	-	-	-	-	-	-
Drill-press operators, single- or multiple- spindle	-	-	40	3.17	-	-	-	-	-	-	-	-	12	3.07
Engine-lathe operators	-	-	35	3.49	34	3.35	-	-	75	3.41	-	-	10	3.20
Grinding-machine operators	-	-	148	3.48	43	3.36	-	-	864	3.50	-	-	18	3.29
Milling-machine operators	-	-	92	3.33	-	-	106	4.24	328	3.62	-	-	36	2.96
Turret-lathe operators, hand (including hand screw machine)	-	-	49	3.29	-	-	-	-	69	3.28	-	-	-	-
Machine-tool operators, production, class C ⁶	89	2.55	257	2.82	43	2.72	248	3.60	566	3.07	-	-	147	2.54
Drill-press operators, radial	-	-	-	-	-	-	93	3.41	-	-	-	-	-	-
Drill-press operators, single- or multiple- spindle	-	-	44	2.54	-	-	-	-	-	-	-	-	-	-
Engine-lathe operators	-	-	16	3.42	-	-	-	-	-	-	-	-	-	-
Grinding-machine operators	-	-	92	3.14	-	-	-	-	366	3.25	-	-	7	2.86
Milling-machine operators	-	-	58	2.66	-	-	47	4.02	141	3.11	-	-	-	-
Turret-lathe operators, hand (including hand screw machine)	-	-	38	2.45	-	-	-	-	23	2.92	-	-	-	-
Machine-tool operators, toolroom (operate 1 type of machine)	744	4.41	-	-	286	4.10	4,481	4.82	-	-	-	-	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine)	314	4.06	-	-	64	3.45	304	4.75	-	-	37	3.84	-	-
Machinists, maintenance	-	-	32	4.01	-	-	21	4.86	-	-	-	-	10	3.64
Mechanics, maintenance	-	-	6	3.55	9	3.77	134	4.75	48	4.30	17	3.73	-	-
Punch-press operators, class B	263	2.53	-	-	66	2.36	-	-	-	-	-	-	13	2.45
Tool and die makers (jobbing)	2,132	4.62	-	-	876	4.18	4,936	4.97	-	-	-	-	-	-
Tool and die makers (other than jobbing)	-	-	29	4.33	-	-	-	-	15	4.57	-	-	19	3.82
Tool clerks	51	3.17	8	2.92	8	2.85	99	3.60	8	3.68	-	-	6	3.10
Welders, hand, class A	-	-	7	3.91	10	4.14	71	4.35	18	3.90	121	3.67	10	3.57

See footnotes at end of table.

Table 3. Occupational Averages in 9 Areas: By Selected Industries—Continued

(Number and average straight-time hourly earnings¹ of men in selected occupations in establishments primarily manufacturing selected products, September–November 1968)

Occupation	Boston		Hartford-New Britain-Bristol		Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove		Milwaukee		Newark and Jersey City		New York	
	Special dies and tools and machine-tool accessories ⁷											
	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings	Number of workers	Average hourly earnings
Inspectors, class A -----	16	\$3.57	32	\$3.33	177	\$4.01	6	\$4.16	21	\$3.74	24	\$3.75
Inspectors, class B -----	23	2.92	43	3.08	11	2.97	-	-	-	-	-	-
Inspectors, class C -----	-	-	-	-	14	2.51	-	-	-	-	-	-
Janitors, porters, and cleaners -----	8	2.22	29	2.45	97	2.36	15	2.51	66	2.22	34	2.11
Laborers, material handling -----	-	-	-	-	-	-	-	-	-	-	27	2.23
Machine-tool operators, class A ⁶ -----	177	3.40	463	3.56	266	3.80	-	-	109	3.45	159	3.57
Engine-lathe operators -----	-	-	36	3.63	69	4.00	-	-	-	-	-	-
Grinding-machine operators -----	52	3.48	248	3.57	71	3.64	-	-	-	-	44	3.41
Milling-machine operators -----	25	3.28	72	3.31	-	-	-	-	-	-	-	-
Turret-lathe operators, hand (including hand screw machine) -----	-	-	51	3.65	16	3.26	-	-	-	-	-	-
Machine-tool operators, class B ⁶ -----	204	2.89	385	3.09	220	3.29	83	3.01	173	3.19	370	2.95
Drill-press operators, single- or multiple-spindle -----	-	-	-	-	9	2.96	-	-	20	2.72	-	-
Engine-lathe operators -----	-	-	18	3.26	-	-	-	-	22	3.22	-	-
Grinding-machine operators -----	32	2.98	273	3.00	96	3.04	44	3.03	61	3.25	104	2.92
Milling-machine operators -----	24	2.74	39	3.34	-	-	-	-	-	-	39	2.88
Turret-lathe operators, hand (including hand screw machine) -----	-	-	6	3.36	11	2.74	-	-	-	-	-	-
Machine-tool operators, class C ⁶ -----	125	2.45	158	2.81	88	2.28	-	-	210	2.38	277	2.36
Grinding-machine operators -----	10	2.49	76	2.58	-	-	-	-	44	2.72	-	-
Machine-tool operators, toolroom (operate 1 type of machine) -----	-	-	154	3.89	653	4.31	157	4.00	187	3.60	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine) -----	-	-	96	3.35	302	3.99	67	4.04	240	3.49	-	-
Mechanics, maintenance -----	-	-	-	-	19	3.70	-	-	-	-	-	-
Punch-press operators, class B -----	78	2.19	-	-	-	-	-	-	92	2.34	-	-
Tool and die makers (jobbing) -----	254	3.77	400	3.70	980	4.53	605	4.36	705	3.95	207	4.02
Tool and die makers (other than jobbing) -----	-	-	28	3.72	189	4.51	-	-	-	-	-	-
Tool clerks -----	-	-	6	2.66	46	2.94	-	-	7	2.62	-	-
Welders, hand, class A -----	-	-	-	-	61	3.97	-	-	-	-	-	-

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.² Includes data for establishments classified in SIC 3544.³ Includes data for establishments classified in SIC 3545.⁴ Includes data for establishments classified in SIC 3533.⁵ Includes data for establishments classified in SIC 3554 and SIC 3555.⁶ Includes data for operators of machine tools in addition to those shown separately.⁷ Includes data for establishments classified in SIC 3544 and SIC 3545.

NOTE: Dashes indicate no data reported or data that do not meet publication criteria.

61 Table 4. Occupational Earnings: Baltimore, Md.¹

(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, October 1968)

Occupation and sex	Number workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			\$1.60 and under	\$1.70	\$1.80	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$4.00	\$4.20	\$4.40 and over
			\$1.70	\$1.80	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$4.00	\$4.20	\$4.40	
<u>Men</u>																												
Assemblers, class A	146	\$3.63	-	-	-	-	-	-	-	-	-	-	2	7	20	5	3	-	6	24	13	10	1	6	-	2	5	42
Assemblers, class B	197	2.91	-	-	-	-	-	-	5	4	2	10	19	51	35	7	4	36	6	5	-	1	-	-	3	9	-	-
Assemblers, class C	82	2.54	-	5	-	-	2	2	3	13	5	9	27	5	8	-	-	1	-	-	-	1	-	-	1	-	-	-
Electricians, maintenance	39	3.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	2	9	9	13	-	-	-	-
Inspectors, class A	87	3.60	-	-	-	-	-	-	-	-	-	1	-	-	1	4	-	2	12	-	9	28	9	13	7	-	1	-
Inspectors, class B	43	3.20	-	-	-	-	-	-	-	-	2	2	-	-	2	1	12	7	2	-	1	9	-	1	2	2	-	-
Janitors, porters, and cleaners	115	2.10	7	17	23	4	7	12	6	13	13	2	6	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling	76	2.34	-	8	6	12	-	1	1	16	13	4	-	-	-	1	2	12	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A	733	3.54	-	-	-	-	-	-	-	-	3	3	13	4	3	3	23	22	65	148	136	118	36	13	28	26	29	60
Machine-tool operators, production, class B	387	3.15	-	1	1	4	4	5	5	1	6	9	6	25	15	58	55	42	38	13	12	21	11	14	18	17	4	2
Machine-tool operators, production, class C	561	2.67	5	4	-	-	2	7	30	2	71	113	65	86	91	32	20	12	4	2	6	3	2	1	1	2	-	-
Machine-tool operators, toolroom (operate 1 type of machine)	46	3.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	1	16	6	-	-	-	10	3	5	-
Machine-tool operators, toolroom (operate more than 1 type of machine)	58	3.65	-	-	-	-	-	-	-	-	-	-	-	-	1	1	4	1	6	8	7	-	-	4	9	15	1	1
Machinists, maintenance	24	3.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	2	1	4	9	4	-	-	-	-
Machinists, production	252	3.57	-	-	-	-	-	-	-	-	-	-	-	11	10	-	-	11	4	-	36	-	-	103	55	11	2	9
Tool and die makers (other than jobbing)	75	3.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	6	-	2	2	22	1	29	11	-	-
Tool clerks	20	2.65	-	-	-	-	-	-	4	2	2	-	1	5	-	3	-	3	-	-	-	-	-	-	-	-	-	-
Welders, hand, class A	73	3.50	-	-	-	-	-	-	-	-	-	-	-	-	3	-	7	2	2	14	9	21	-	-	-	15	-	-
Welders, hand, class B	35	3.00	-	-	-	-	-	-	-	-	-	4	2	7	4	1	4	8	-	-	2	-	-	-	2	1	-	-
Welders, machine, class A	7	3.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	1	2	-	-	-	32
<u>Women</u>																												
Machine-tool operators, production, class C	106	2.92	-	-	-	-	-	-	-	-	2	2	42	21	3	7	3	4	4	5	2	2	3	1	2	1	1	1

¹ The Baltimore Standard Metropolitan Statistical Area consists of Baltimore City, Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

³ All workers were at \$4.40 to \$4.60.

Table 5. Occupational Earnings: Boston, Mass.¹(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, October 1968)

Occupation and sex	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																											
			Under \$2.00	\$2.00 and under \$2.10	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80 and over		
Men																														
Assemblers, class A	718	\$ 3.47	-	-	-	6	-	6	-	-	10	22	6	46	55	179	124	146	5	14	20	1	4	2	-	-	6	66		
Assemblers, class B	450	3.00	-	-	-	-	13	12	28	40	27	51	61	96	39	34	5	21	1	2	4	1	1	1	2	4	4	3		
Assemblers, class C	186	2.62	2	1	18	20	31	1	11	1	57	6	14	17	6	-	-	-	1	-	-	-	-	-	-	-	-	-		
Carpenters, maintenance	25	3.23	-	-	-	-	-	-	-	5	1	-	1	-	-	4	3	2	9	-	-	-	-	-	-	-	-	-		
Electricians, maintenance	79	3.61	-	-	-	-	-	-	-	2	-	-	6	-	8	-	4	3	10	18	2	10	-	10	6	-	-	-		
Inspectors, class A	205	3.42	-	-	-	-	-	-	-	-	6	7	11	11	43	17	35	10	44	14	3	-	4	-	-	-	-	-		
Inspectors, class B	144	3.01	-	-	-	1	3	2	2	10	12	4	42	12	23	20	7	5	1	-	-	-	-	-	-	-	-	-		
Inspectors, class C	83	2.74	2	3	4	4	2	2	2	5	10	7	34	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Janitors, porters, and cleaners	223	2.37	1	31	23	41	34	43	16	-	4	20	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Laborers, material handling	249	2.68	4	13	18	14	13	17	19	17	23	31	22	39	-	-	19	-	-	-	-	-	-	-	-	-	-	-		
Machine-tool operators, production, class A	1,619	3.44	-	-	-	-	-	-	10	6	44	37	54	98	136	213	296	264	100	55	66	43	27	52	23	25	36	34		
Machine-tool operators, production, class B	1,051	2.99	-	-	-	2	12	32	82	73	117	96	99	109	126	162	58	37	14	2	3	12	2	6	-	3	-	4		
Machine-tool operators, production, class C	467	2.52	4	14	-	36	56	142	89	43	8	29	20	5	10	11	-	-	-	-	-	-	-	-	-	-	-	-		
Machine-tool operators, toolroom (operate 1 type of machine)	47	3.38	-	-	-	-	-	-	-	-	4	1	1	5	3	1	1	13	9	-	2	6	1	-	-	-	-	-		
Machine-tool operators, toolroom (operate more than 1 type of machine)	46	3.45	-	-	-	-	-	-	-	-	-	-	6	-	-	-	8	1	21	-	10	-	-	-	-	-	-	-		
Machinists, maintenance	22	3.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	4	2	-	-	-	7	-	-	-		
Machinists, production	426	3.58	-	-	-	-	-	-	-	-	8	-	-	10	8	27	16	108	132	4	79	5	3	8	-	-	-	18		
Mechanics, maintenance	55	3.63	-	-	-	-	-	-	-	-	-	-	-	2	4	4	2	1	5	13	8	11	-	5	-	-	-	-		
Polishers and buffers, metal	12	2.77	-	2	3	1	-	-	-	-	1	1	1	-	-	-	-	2	-	-	-	-	-	-	-	-	-	1		
Punch-press operators, class A	48	2.93	-	-	-	-	-	-	-	1	4	35	1	-	-	2	2	2	-	1	-	-	-	-	-	-	-	-		
Punch-press operators, class B	113	2.37	-	26	18	14	4	12	22	1	-	-	1	8	7	-	-	-	-	-	-	-	-	-	-	-	-	-		
Setup men, machine tools	58	3.19	-	-	-	-	-	-	-	-	-	-	-	38	2	-	11	1	-	5	-	-	-	-	1	-	-	-		
Tool and die makers (jobbing)	266	3.76	-	-	-	-	-	-	-	-	-	4	-	4	4	8	20	18	42	4	28	24	12	76	14	8	-	-		
Tool and die makers (other than jobbing)	134	3.88	-	-	-	-	-	-	-	-	-	-	-	1	-	3	-	15	6	20	16	-	31	7	32	1	2	-		
Tool clerks	97	2.95	-	-	-	3	1	1	7	11	8	17	5	7	4	-	29	4	-	-	-	-	-	-	-	-	-	-		
Welders, hand, class A	217	3.21	-	-	-	-	-	-	-	1	21	9	6	40	39	6	41	37	5	5	4	-	-	3	-	-	-	-		
Women																														
Inspectors, class C	58	2.35	-	2	5	26	2	7	15	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Janitors, porters, and cleaners	7	2.17	-	4	-	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

¹ The Boston Standard Metropolitan Statistical Area consists of Suffolk County, 15 communities in Essex County, 30 in Middlesex County, 20 in Norfolk County, and 9 in Plymouth County.² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

61 Table 6. Occupational Earnings: Buffalo, N.Y.¹

(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, October 1968)

Occupation and sex	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																								
			\$1.80 and under	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60
			\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80
<u>Men</u>																											
Assemblers, class A -----	332	\$ 3.58	-	-	-	-	-	-	-	-	-	-	8	-	22	6	14	41	81	2	24	24	84	26	-	-	-
Assemblers, class B -----	322	3.12	-	-	-	-	-	-	-	11	8	28	55	27	12	23	44	72	18	10	8	1	5	-	-	-	-
Assemblers, class C -----	69	3.03	-	-	-	-	-	3	-	-	3	-	14	-	16	15	12	3	3	-	-	-	-	-	-	-	-
Electricians, maintenance -----	74	3.56	-	-	-	-	-	-	-	-	-	-	-	2	-	2	4	4	9	29	5	-	19	-	-	-	-
Inspectors, class A -----	114	3.69	-	-	-	-	-	-	-	-	-	-	-	2	5	-	4	4	-	4	23	70	3	3	-	-	-
Inspectors, class B -----	75	3.38	-	-	-	-	-	1	-	-	-	-	4	-	20	5	19	7	11	-	-	-	8	-	-	-	-
Inspectors, class C -----	57	2.68	-	-	-	-	-	-	-	20	22	2	9	2	1	1	-	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners -----	188	2.44	³ 12	10	2	24	-	2	14	80	15	9	15	3	2	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling -----	79	2.66	3	-	-	-	-	-	12	14	19	7	12	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A -----	970	3.47	-	-	-	-	-	-	-	-	6	12	2	9	34	49	136	155	106	135	119	107	58	40	2	-	-
Machine-tool operators, production, class B -----	470	3.35	-	-	-	-	-	-	-	-	6	10	15	78	41	37	24	27	14	53	48	108	6	2	-	1	-
Machine-tool operators, production, class C -----	125	2.81	-	-	3	-	18	1	8	10	6	2	20	6	22	8	12	6	1	-	2	-	-	-	-	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine) -----	197	3.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	77	10	29	35	13	30	-	-	-	-
Machinists, maintenance -----	54	3.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	9	32	-	3	3	5	-	-	-
Machinists, production -----	209	3.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	19	-	113	7	11	-	-	42	8	-
Mechanics, maintenance -----	72	3.50	-	-	-	-	-	-	-	-	-	-	-	12	-	-	1	19	4	9	3	4	15	5	-	-	-
Polishers and buffers, metal -----	26	3.33	-	-	-	-	-	-	-	-	3	-	-	5	-	-	4	-	6	2	-	4	-	2	-	-	-
Tool and die makers (jobbing) -----	285	4.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	10	30	63	20	63	-	72	24
Tool and die makers (other than jobbing) -----	69	3.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	13	4	16	23	10	-	-	-	-
Tool clerks -----	38	2.93	-	-	-	-	-	1	-	-	2	6	10	6	2	5	6	-	-	-	-	-	-	-	-	-	-
Welders, hand, class A -----	234	3.64	-	-	-	-	-	-	-	-	-	-	17	-	4	2	-	-	11	86	22	10	57	15	8	2	-
Welders, hand, class B -----	73	3.25	-	-	-	-	-	-	-	-	12	-	-	-	-	11	15	-	31	-	2	2	-	-	-	-	-
<u>Women</u>																											
Janitors, porters, and cleaners ---	32	2.50	2	-	-	5	-	2	-	12	2	7	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ The Buffalo Standard Metropolitan Statistical Area consists of Erie and Niagara Counties.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

³ Includes 10 workers at \$1.60 to \$1.70.

Table 7. Occupational Earnings: Chicago, Ill.¹(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, October 1968)

Occupation and sex	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																										
			Under \$1.90	\$1.90 and under \$2.00	\$2.00 to \$2.10	\$2.10 to \$2.20	\$2.20 to \$2.30	\$2.30 to \$2.40	\$2.40 to \$2.50	\$2.50 to \$2.60	\$2.60 to \$2.70	\$2.70 to \$2.80	\$2.80 to \$2.90	\$2.90 to \$3.00	\$3.00 to \$3.10	\$3.10 to \$3.20	\$3.20 to \$3.30	\$3.30 to \$3.40	\$3.40 to \$3.50	\$3.50 to \$3.60	\$3.60 to \$3.70	\$3.70 to \$3.80	\$3.80 to \$4.00	\$4.00 to \$4.20	\$4.20 to \$4.40	\$4.40 to \$4.60	\$4.60 to \$4.80	\$4.80 and over	
Men																													
Assemblers, class A	3,501	\$3.72	-	-	-	-	-	-	-	-	3	4	11	21	151	57	178	272	187	117	335	635	936	406	97	15	28	48	
Assemblers, class B	2,930	3.15	-	-	-	54	25	279	64	97	70	60	214	227	122	541	166	223	85	115	194	90	128	56	28	38	15	39	
Assemblers, class C	1,831	2.62	-	209	85	450	266	206	107	16	37	27	62	57	33	18	18	39	47	10	7	6	14	20	2	-	-	95	
Carpenters, maintenance	66	3.77	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	3	10	16	1	8	1	4	-	2	12	-	
Electricians, maintenance	447	4.32	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	7	21	9	23	34	75	37	31	26	110	372	
Inspectors, class A	1,075	3.74	-	-	-	-	-	-	-	-	-	-	-	9	51	32	28	47	74	60	44	203	312	194	20	1	-	-	
Inspectors, class B	740	3.31	-	-	-	-	-	9	8	1	28	21	29	24	55	77	61	96	41	33	212	44	1	-	-	-	-	-	
Inspectors, class C	340	2.86	2	-	2	2	87	14	32	6	11	8	23	19	24	39	5	1	6	27	1	3	5	10	8	2	3	-	
Janitors, porters, and cleaners	1,394	2.63	11	2	59	49	167	48	209	165	112	136	120	98	11	33	134	40	-	-	-	-	-	-	-	-	-	-	
Laborers, material handling	2,204	2.77	-	-	55	27	52	298	95	244	278	251	179	147	25	50	336	136	2	3	3	1	22	-	-	-	-	-	
Machine-tool operators, production, class A	9,172	3.84	-	-	-	-	-	-	-	3	-	-	6	49	134	202	323	321	600	906	603	553	2123	1936	870	436	36	71	
Machine-tool operators, production, class B	4,535	3.39	-	-	-	35	2	-	8	53	163	134	179	312	377	201	325	428	421	516	345	180	392	266	113	51	18	16	
Machine-tool operators, production, class C	2,252	2.80	4	38	36	41	188	107	129	186	92	278	220	174	280	70	180	59	30	36	30	7	21	26	7	6	2	5	
Machine-tool operators, toolroom (operate 1 type of machine)	1,423	4.29	-	-	-	-	-	-	-	-	-	1	-	5	5	3	7	22	31	23	26	65	174	201	268	272	171	149	
Machine-tool operators, toolroom (operate more than 1 type of machine)	786	4.05	-	-	-	-	-	-	-	-	-	1	-	-	5	1	21	29	20	6	20	36	231	160	126	88	20	22	
Machinists, maintenance	314	3.90	-	-	-	-	-	-	-	-	-	1	-	-	-	-	18	15	16	32	60	76	45	18	6	-	27		
Machinists, production	215	3.98	-	-	-	-	-	-	-	-	-	-	-	-	-	2	12	-	-	1	-	1	120	26	49	2	1	1	
Mechanics, maintenance	488	3.84	-	-	-	-	-	-	-	-	-	-	-	7	13	22	22	90	23	18	13	44	43	58	15	40	79	1	
Polishers and buffers, metal	283	3.54	-	-	-	-	-	-	-	1	-	3	27	10	67	1	15	7	39	-	18	2	14	18	39	18	3	1	
Polishing- and buffing-machine operators	137	3.06	-	-	-	2	1	-	-	-	-	14	1	49	26	15	8	13	-	1	-	-	2	1	3	-	1	-	
Punch-press operators, class A	481	3.32	-	-	-	-	-	22	3	6	15	12	8	35	118	57	52	20	12	26	15	19	10	8	3	3	3	34	
Punch-press operators, class B	915	2.72	8	14	58	42	98	35	174	80	49	63	43	16	56	49	18	12	5	11	1	8	2	24	11	36	2	-	
Setup men, machine tools	371	3.71	-	-	-	-	-	-	-	-	-	-	11	16	16	7	6	16	41	12	62	22	25	118	13	6	-	-	
Tool and die makers (jobbing)	2,420	4.58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	3	9	20	20	45	67	262	563	855	4555	
Tool and die makers (other than jobbing)	1,213	4.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	12	26	20	65	123	408	315	98	5140	
Tool clerks	405	3.19	-	-	-	-	3	1	1	-	8	27	47	61	38	21	30	19	61	17	55	3	13	-	-	-	-	-	
Welders, hand, class A	2,227	3.75	-	-	-	-	-	-	-	-	-	-	2	6	75	28	175	104	157	257	132	623	203	95	279	47	23	21	
Welders, hand, class B	652	3.81	-	-	-	-	-	-	-	18	43	8	10	9	93	24	22	5	15	2	59	68	26	102	36	38	6	68	
Welders, machine, class A	201	3.49	-	-	-	-	-	-	-	-	-	1	8	3	36	23	1	4	8	21	47	10	20	4	7	6	1	1	
Welders, machine, class B	232	2.85	-	-	-	8	29	56	13	21	14	11	7	-	3	14	2	1	-	4	11	9	4	6	4	15	-	-	
Women																													
Assemblers, class B	488	2.72	-	-	-	7	22	42	23	80	86	66	81	31	4	1	14	7	4	7	-	3	7	2	1	-	-	-	
Assemblers, class C	2,113	2.32	92	140	299	323	550	95	123	83	132	74	50	29	26	16	23	16	19	4	6	4	9	-	-	-	-	-	
Inspectors, class A	27	3.40	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	5	6	3	5	1	4	-	-	-	-	-	
Inspectors, class B	193	2.96	-	-	-	-	14	-	2	17	1	12	54	11	3	51	2	-	1	1	19	-	1	4	-	-	-	-	
Inspectors, class C	289	2.81	-	-	-	3	14	37	48	13	45	17	14	16	2	-	1	-	1	73	-	2	3	-	-	-	-	-	
Janitors, porters, and cleaners	103	2.52	-	-	6	8	19	2	11	28	9	3	4	-	-	4	9	-	-	-	-	-	-	-	-	-	-	-	
Laborers, material handling	33	2.31	-	14	-	-	-	6	-	-	11	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class A	40	3.63	-	-	-	-	-	-	-	-	-	-	-	6	1	1	-	2	9	7	-	1	2	5	4	-	-	2	
Machine-tool operators, production, class B	313	2.77	-	66	-	-	7	-	1	16	13	58	50	17	7	8	6	22	19	4	3	1	10	4	-	-	-	1	
Machine-tool operators, production, class C	685	2.30	792	8	83	70	159	106	55	20	28	6	13	6	1	3	2	1	7	1	2	3	14	3	1	-	1	-	
Punch-press operators, class B	663	2.24	64	81	73	104	109	76	41	12	32	26	15	8	15	2	1	-	-	-	-	-	1	3	-	-	-	-	
Tool clerks	6	3.02	-	-	-	-	-	-	-	-	3	-	1	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	
Welders, machine, class B	201	2.43	8	8	8	-	31	40	36	39	9	6	6	1	-	-	1	2	-	1	-	2	3	-	-	-	-	-	

¹ The Chicago Standard Metropolitan Statistical Area consists of Cook, DuPage, Kane, Lake, McHenry, and Will Counties.² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.³ Workers were distributed as follows: 22 at \$4.80 to \$5; 7 at \$5 to \$5.20; and 43 at \$5.40 to \$5.60.⁴ Workers were distributed as follows: 262 at \$4.80 to \$5; 204 at \$5 to \$5.20; 65 at \$5.20 to \$5.40; and 24 at \$5.40 to \$5.60.⁵ Workers were distributed as follows: 133 at \$4.80 to \$5 and 7 at \$5 to \$5.20.⁶ Workers were distributed as follows: 4 at \$5 to \$5.40; 4 at \$5.40 to \$5.60; 30 at \$5.80 to \$6; 15 at \$6 to \$6.20; and 15 at \$6.20 to \$6.40.⁷ Workers were distributed as follows: 68 at \$1.70 to \$1.80 and 24 at \$1.80 to \$1.90.

20 Table 8. Occupational Earnings: Cleveland, Ohio¹

(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, October 1968)

Occupation and sex	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			Under \$2.00	\$2.00 and under \$2.10	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00 and over
Men																												
Assemblers, class A	1,266	\$3.75	-	-	-	-	-	-	6	-	-	4	26	169	102	70	44	215	101	75	194	22	32	18	39	122	27	
Assemblers, class B	788	3.32	-	-	-	12	12	10	15	4	10	47	31	245	45	71	55	48	22	16	17	17	17	18	23	29	14	10
Assemblers, class C	256	3.07	-	6	-	25	-	4	-	25	12	46	35	12	8	17	7	8	8	5	6	5	8	9	4	1	5	-
Carpenters, maintenance	38	3.61	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	5	2	1	13	1	-	1	-	-	-
Electricians, maintenance	194	3.87	-	-	-	-	-	-	-	-	-	-	4	3	14	5	23	6	17	9	25	45	18	20	-	5	-	
Inspectors, class A	411	3.65	-	-	-	-	-	-	-	-	-	1	1	-	8	34	12	92	48	50	37	81	36	5	1	-	5	-
Inspectors, class B	375	3.56	-	-	-	-	-	-	-	-	1	1	14	12	4	67	30	59	25	6	52	66	18	17	3	-	-	-
Inspectors, class C	77	3.38	-	-	-	-	-	-	-	-	-	4	1	14	1	3	16	8	11	8	5	6	-	-	-	-	-	-
Janitors, porters, and cleaners	399	2.75	17	38	8	14	24	7	31	37	32	29	30	62	13	2	16	-	3	-	34	2	-	-	-	-	-	-
Laborers, material handling	461	2.99	-	25	-	-	12	2	19	5	42	36	97	104	52	3	4	6	1	-	41	1	7	3	1	-	-	-
Machine-tool operators, production, class A	4,388	3.73	-	-	-	-	-	2	-	1	7	32	41	169	185	207	434	209	653	402	400	717	220	157	167	195	138	52
Machine-tool operators, production, class B	2,030	3.44	-	-	-	-	1	3	3	6	163	35	106	194	171	274	93	192	225	84	102	96	67	61	67	56	18	13
Machine-tool operators, production, class C	1,152	2.57	-	100	4	155	24	25	536	51	31	21	19	52	50	15	22	16	10	9	1	3	8	-	-	-	-	-
Machine-tool operators, toolroom (operate 1 type of machine)	413	4.12	-	-	-	-	-	-	-	-	-	-	-	2	-	4	6	12	20	14	21	86	90	43	63	17	29	6
Machine-tool operators, toolroom (operate more than 1 type of machine)	186	3.64	-	-	-	-	-	-	-	-	-	-	7	12	1	13	29	10	39	6	14	27	11	4	1	4	3	5
Machinists, maintenance	86	3.90	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	6	12	10	-	-	46	10	-	-	-	-
Machinists, production	83	3.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	19	7	17	30	-	4	-	2	1	-
Mechanics, maintenance	149	3.87	-	-	-	-	-	-	-	-	-	-	-	-	1	5	-	17	26	14	-	22	32	19	8	5	-	-
Polishers and buffers, metal	64	3.40	-	-	-	-	-	-	8	-	-	-	-	1	-	35	-	1	1	2	1	3	3	5	4	-	-	-
Polishing- and buffing-machine operators	212	3.28	-	-	-	-	-	-	-	-	26	4	48	28	21	21	12	2	18	-	14	-	-	-	-	9	3	6
Punch-press operators, class A	82	3.13	-	-	-	-	-	-	-	11	-	-	11	17	11	3	1	23	3	-	2	-	-	-	-	-	-	-
Punch-press operators, class B	185	2.81	-	-	16	16	-	11	22	4	25	11	5	18	29	5	5	6	8	2	-	-	1	1	-	-	-	-
Setup men, machine tools	173	3.58	-	-	-	-	-	-	-	-	-	-	-	-	6	42	-	4	57	2	12	45	-	-	2	3	-	-
Tool and die makers (jobbing)	1,266	4.11	-	-	-	-	-	-	-	-	-	-	-	-	9	10	4	26	13	39	57	357	229	227	186	79	30	-
Tool and die makers (other than jobbing)	367	4.00	-	-	-	-	-	-	-	-	-	-	-	-	-	5	4	9	26	103	8	17	86	53	15	6	3	32
Tool clerks	178	3.30	-	-	-	2	-	1	1	5	5	7	18	16	49	15	15	13	6	6	17	2	-	-	-	-	-	-
Welders, hand, class A	513	3.39	-	-	-	-	-	-	-	-	-	-	26	63	96	103	68	35	21	19	-	33	18	5	8	10	4	4
Welders, hand, class B	331	3.38	-	-	-	-	-	12	30	12	26	44	14	38	16	4	2	2	1	11	76	-	1	34	8	-	-	-
Welders, machine, class B	28	3.40	-	-	-	-	-	-	-	-	1	-	8	4	-	-	-	1	3	-	-	11	-	-	-	-	-	-
Women																												
Inspectors, class C	198	2.88	-	-	-	28	4	8	4	-	1	15	6	112	8	6	1	-	1	-	1	2	1	-	-	-	-	-
Janitors, porters, and cleaners	55	2.45	5	8	3	4	6	7	-	-	2	19	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A	9	3.06	-	-	-	-	-	-	1	1	2	1	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class C	281	2.59	-	1	9	18	40	24	108	8	22	4	12	28	-	7	-	-	-	-	-	-	-	-	-	-	-	-

¹ The Cleveland Standard Metropolitan Statistical Area consists of Cuyahoga, Geauga, Lake, and Medina Counties.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

Table 9. Occupational Earnings: Dallas, Tex.¹(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, September 1968)

Occupation and sex	Number workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			\$1.60 and under	\$1.70	\$1.80	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$4.00	\$4.20	\$4.40 and over
			\$1.70	\$1.80	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$4.00	\$4.20	\$4.40	
Men																												
Assemblers, class A	286	\$2.92	-	-	-	4	-	2	12	10	4	32	11	25	13	17	94	10	4	22	6	10	6	2	2	-	-	-
Assemblers, class B	203	2.41	-	4	2	6	30	21	33	17	7	9	13	15	46	-	-	-	-	-	-	-	-	-	-	-	-	-
Assemblers, class C	274	1.93	7	43	42	83	73	12	11	-	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electricians, maintenance	31	3.12	-	-	-	-	-	-	-	-	-	-	3	6	4	-	5	3	1	2	-	2	-	2	1	2	-	-
Inspectors, class A	98	3.34	-	-	-	-	-	-	-	-	-	2	2	2	1	13	7	5	15	10	14	3	4	10	3	7	-	-
Inspectors, class B	86	2.72	-	-	-	-	-	2	2	14	13	8	13	19	2	2	8	1	2	-	-	-	-	-	-	-	-	-
Inspectors, class C	68	2.00	-	-	21	22	9	6	2	1	2	2	-	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners	166	2.00	3	32	37	13	26	18	18	5	8	3	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling	116	2.16	3	8	14	9	2	21	17	19	15	4	1	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A	665	3.14	-	-	-	-	-	-	-	-	-	-	37	72	35	57	139	98	31	23	36	75	48	7	-	7	-	-
Machine-tool operators, production, class B	461	2.65	-	-	-	-	7	6	36	25	45	87	66	45	23	21	82	14	4	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class C	278	2.19	-	9	10	24	42	61	46	42	18	15	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine)	40	3.39	-	-	-	-	-	-	-	-	-	-	4	-	-	5	2	5	-	-	-	10	1	2	11	-	-	-
Machinists, production	152	3.49	-	-	-	-	-	-	-	-	-	-	-	3	7	-	16	7	7	12	-	35	7	37	21	-	-	-
Mechanics, maintenance	40	3.12	-	-	-	-	-	-	-	-	-	-	4	8	1	-	7	2	1	5	4	7	-	1	-	-	-	-
Punch-press operators, class A	72	2.79	-	-	-	-	-	-	-	3	10	25	3	2	7	8	3	-	-	-	2	-	-	9	-	-	-	-
Punch-press operators, class B	135	2.12	-	28	14	1	25	5	13	20	7	14	-	7	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Tool and die makers (jobbing)	212	3.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	3	8	12	-	36	75	57	3
Tool and die makers (other than jobbing)	57	3.58	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	3	3	9	11	1	8	-	8	11	-	-
Tool clerks	67	2.52	2	-	-	-	4	8	7	11	7	8	9	-	-	8	3	-	-	-	-	-	-	-	-	-	-	-
Welders, hand, class A	307	2.98	-	-	-	-	-	-	-	6	5	9	61	32	11	134	11	15	11	1	9	-	-	-	2	-	-	-
Welders, hand, class B	140	2.59	-	-	-	3	-	11	13	12	6	11	28	1	53	1	1	-	-	-	-	-	-	-	-	-	-	-
Welders, machine, class A	29	2.82	-	-	-	-	-	-	-	1	2	8	2	1	6	4	-	-	3	-	-	-	-	-	2	-	-	-
Welders, machine, class B	31	2.29	-	-	2	2	8	-	-	7	7	-	-	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Women																												
Assemblers, class C	124	1.93	3	7	45	31	29	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ The Dallas Standard Metropolitan Statistical Area consists of Collin, Dallas, Denton, Ellis, Kaufman, and Rockwell Counties.² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Virtually all workers covered by the study were paid on a time basis.

8 Table 10. Occupational Earnings: Denver, Colo.¹

(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, October 1968)

Occupation and sex	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																									
			\$1.70 and under \$1.80	\$1.80	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00 and over
			\$1.80	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	over
<u>Men</u>																												
Assemblers, class A -----	240	\$3.20	-	-	-	-	-	-	-	-	1	-	10	16	27	30	41	13	54	47	-	-	1	-	-	-	-	-
Assemblers, class B -----	75	2.95	-	-	-	-	-	-	8	2	1	3	4	9	11	4	23	10	-	-	-	-	-	-	-	-	-	-
Electricians, maintenance ---	15	3.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	2	5	-	-	-	-	-	-	
Inspectors, class A -----	69	3.50	-	-	-	-	-	-	-	-	-	-	-	7	-	7	-	-	4	6	44	1	-	-	-	-	-	
Inspectors, class B -----	41	2.97	-	-	-	-	-	7	-	-	3	1	3	1	-	3	2	17	4	-	-	-	-	-	-	-	-	
Inspectors, class C -----	6	2.95	-	-	-	-	-	-	-	-	-	1	-	1	1	3	-	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners -----	80	2.46	15	-	-	-	-	1	1	11	14	8	24	-	4	-	1	1	-	-	-	-	-	-	-	-	-	
Laborers, material handling -----	50	2.56	-	-	-	-	-	-	-	35	2	3	1	1	-	8	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class A -----	352	3.92	-	-	-	-	-	-	-	-	-	-	-	-	3	-	2	15	87	73	48	12	10	9	14	17	16	46
Machine-tool operators, production, class B -----	176	3.18	-	-	-	-	-	-	3	-	2	2	10	33	5	13	39	36	11	7	2	2	2	-	5	1	1	2
Machine-tool operators, production, class C -----	18	2.77	-	-	-	-	-	-	-	-	1	7	2	6	-	-	2	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, toolroom (operate 1 type of machine)-----	9	3.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2	-	-	1	2	2	-	-	
Machine-tool operators, toolroom (operate more than 1 type of machine) ----	45	3.56	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	9	7	11	10	1	1	-	-	-	
Machinists, maintenance -----	22	3.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	6	1	1	12	-	-	-	-	
Machinists, production -----	54	3.25	-	-	-	-	-	-	-	-	-	-	-	-	-	7	14	-	31	-	-	2	-	-	-	-	-	
Mechanics, maintenance -----	22	3.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	17	2	1	-	-	-	-	-	
Punch-press operators, class B -----	70	2.35	-	27	-	-	11	-	2	1	-	5	2	12	-	-	2	8	-	-	-	-	-	-	-	-	-	
Tool and die makers (other than jobbing)-----	96	4.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	5	17	5	8	32	11	8
Tool clerks -----	26	2.97	-	-	-	-	-	-	-	-	1	1	7	-	-	12	2	2	1	-	-	-	-	-	-	-	-	
Welders, hand, class A -----	141	3.43	-	-	-	-	-	-	-	-	-	-	-	1	-	4	2	14	72	42	1	-	-	-	-	1	3	1
Welders, hand, class B-----	55	3.11	-	-	-	-	-	3	-	-	5	-	-	-	8	-	6	33	-	-	-	-	-	-	-	-	-	
<u>Women</u>																												
Assemblers, class A -----	111	2.95	-	-	-	-	-	-	-	-	7	-	34	4	15	13	15	12	9	1	1	-	-	-	-	-	-	
Assemblers, class C -----	200	1.92	71	22	7	88	2	2	4	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

¹ The Denver Standard Metropolitan Statistical Area consists of Adams, Arapahoe, Boulder, Denver, and Jefferson Counties.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

³ Includes 12 workers at \$1.60 to \$1.70.

⁴ Workers were distributed as follows: 19 at \$5 to \$5.20; 12 at \$5.20 to \$5.40; 10 at \$5.40 to \$5.60; and 5 at \$5.60 and over.

⁵ Includes 40 workers at \$1.60 to \$1.70.

Table 11. Occupational Earnings: Detroit, Mich.¹(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, October 1968)

Occupation and sex	Number workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																											
			Under \$2.20	\$2.20 and under \$2.30	\$2.30 and under \$2.40	\$2.40 and under \$2.50	\$2.50 and under \$2.60	\$2.60 and under \$2.70	\$2.70 and under \$2.80	\$2.80 and under \$2.90	\$2.90 and under \$3.00	\$3.00 and under \$3.10	\$3.10 and under \$3.20	\$3.20 and under \$3.30	\$3.30 and under \$3.40	\$3.40 and under \$3.50	\$3.50 and under \$3.60	\$3.60 and under \$3.70	\$3.70 and under \$3.80	\$3.80 and under \$3.90	\$3.90 and under \$4.00	\$4.00 and under \$4.20	\$4.20 and under \$4.40	\$4.40 and under \$4.60	\$4.60 and under \$4.80	\$4.80 and under \$5.00	\$5.00 and over			
Men																														
Assemblers, class A -----	1,224	\$4.39	-	-	-	-	-	-	-	-	-	-	6	25	60	6	54	7	82	39	105	20	221	384	166	38	11	-	-	
Assemblers, class B -----	1,734	3.59	-	-	-	-	-	-	-	-	88	4	41	124	222	63	888	101	130	9	9	54	-	1	-	-	-	-	-	
Assemblers, class C -----	1,298	3.37	-	-	-	-	-	17	82	14	163	1	12	2	585	394	28	-	-	-	-	-	-	-	-	-	-	-	-	
Carpenters, maintenance -----	30	4.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	1	-	11	4	-	8	-	-	-	-	
Electricians, maintenance -----	241	4.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	6	19	117	40	42	3	2	-	-	
Inspectors, class A -----	514	4.09	-	-	-	-	-	-	-	-	-	-	-	34	13	47	21	36	91	48	18	57	35	47	40	23	4	-	-	
Inspectors, class B -----	720	3.57	-	-	-	-	-	-	-	-	57	-	22	25	53	177	281	74	10	-	12	2	6	1	-	-	-	-	-	
Inspectors, class C -----	228	3.35	-	-	-	6	-	-	-	10	90	4	1	23	3	7	58	1	3	3	10	8	1	-	-	-	-	-	-	
Janitors, porters, and cleaners -----	1,253	3.07	126	-	1	-	54	48	51	24	56	86	139	228	195	30	144	32	15	24	-	-	-	-	-	-	-	-	-	
Laborers, material handling -----	894	3.28	-	2	-	-	-	90	5	15	3	27	17	279	39	242	74	67	3	27	1	-	3	-	-	-	-	-	-	
Machine-tool operators, production, class A -----	5,485	4.20	-	-	-	-	-	-	-	-	-	-	144	146	170	183	73	263	408	797	1000	329	452	524	616	336	44	-	-	
Machine-tool operators, production, class B -----	6,144	3.53	-	-	-	-	27	-	-	271	184	347	408	685	352	915	1514	739	392	16	51	113	103	27	-	-	-	-	-	
Machine-tool operators, production, class C -----	2,353	3.07	-	56	96	4	121	149	177	129	427	390	62	30	80	166	79	69	60	132	27	70	29	-	-	-	-	-	-	
Machine-tool operators, toolroom (operate 1 type of machine) -----	4,859	4.81	-	-	-	-	-	-	-	-	-	-	-	-	38	52	43	18	10	45	289	124	408	958	1044	1096	³ 734	-	-	
Machine-tool operators, toolroom (operate more than 1 type of machine) -----	417	4.64	-	-	-	-	-	-	-	-	-	17	-	-	-	-	-	4	2	-	11	32	59	179	66	9	38	-	-	
Machinists, maintenance -----	102	4.65	-	-	-	-	-	-	-	-	-	-	-	-	-	6	1	2	-	-	2	5	16	38	21	8	3	-	-	
Mechanics, maintenance -----	372	4.59	-	-	-	-	-	-	-	-	-	-	-	6	-	8	-	2	3	2	9	44	137	40	115	6	-	-	-	
Polishers and buffers, metal -----	147	4.36	-	-	-	-	-	-	-	1	1	-	1	-	16	-	-	2	-	35	1	9	18	1	41	21	-	-	-	
Polishing- and buffing-machine operators -----	37	3.34	-	-	-	-	-	-	-	-	-	-	28	4	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	
Punch-press operators, class B -----	485	3.55	-	-	-	-	-	-	-	1	6	3	7	42	9	321	1	95	-	-	-	-	-	-	-	-	-	-	-	
Setup men, machine tools -----	864	3.77	-	-	-	-	-	-	-	-	-	-	1	3	85	21	269	169	103	21	141	51	-	-	-	-	-	-	-	
Tool and die makers (jobbing) -----	4,936	4.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	115	30	409	290	1494	1691	⁴ 907	-	-	
Tool and die makers (other than jobbing) -----	457	4.82	-	-	-	-	-	-	-	-	1	22	19	21	52	34	68	19	17	3	9	8	-	-	-	-	-	-	-	
Tool clerks -----	297	3.58	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-	16	-	2	-	14	21	143	100	158	3	-	-	
Welders, hand, class A -----	399	3.92	-	-	-	-	-	-	-	-	-	-	-	112	6	26	28	66	21	9	23	4	16	48	29	1	10	-	-	
Welders, hand, class B -----	480	3.43	-	-	-	-	-	-	-	-	-	-	-	35	173	210	12	19	14	17	-	-	-	-	-	-	-	-	-	
Welders, machine, class A -----	37	4.09	-	-	-	-	-	-	-	-	-	-	2	-	11	-	-	2	1	-	-	-	21	-	-	-	-	-	-	
Women																														
Assemblers, class B -----	32	3.26	-	-	-	-	-	-	-	-	18	-	1	2	3	2	6	-	-	-	-	-	-	-	-	-	-	-	-	-
Assemblers, class C -----	454	2.85	-	-	2	-	199	18	8	6	58	5	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Inspectors, class B -----	72	3.22	-	-	-	-	-	-	-	-	34	-	27	1	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners -----	68	2.46	⁵ 27	6	-	-	-	-	-	21	2	4	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class A -----	7	3.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	3	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class B -----	168	3.55	-	-	-	-	-	-	-	13	-	-	3	9	27	27	42	41	6	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class C -----	323	2.60	-	91	-	-	98	51	26	2	-	10	6	8	10	13	3	5	-	-	-	-	-	-	-	-	-	-	-	

¹ The Detroit Standard Metropolitan Statistical Area consists of Macomb, Oakland, and Wayne Counties.² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.³ Workers were distributed as follows: 572 at \$5.20 to \$5.40; 137 at \$5.40 to \$5.60; and 25 at \$5.60 and over.⁴ Workers were distributed as follows: 692 at \$5.20 to \$5.40; 149 at \$5.40 to \$5.60; and 66 at \$5.60 and over.⁵ All workers were at \$1.80 to \$1.90.

2 Table 12. Occupational Earnings: Hartford—New Britain—Bristol, Conn.¹

(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, November 1968)

Occupation and sex	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			\$1.80 and under	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00 and over
			\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	over
Men																												
Assemblers, class A -----	258	\$3.63	-	-	-	-	-	-	-	-	-	2	3	5	6	3	4	19	29	49	82	37	8	1	2	-	4	4
Assemblers, class B -----	476	3.00	-	-	-	1	-	3	2	20	79	62	79	25	50	16	26	34	12	49	9	-	4	5	-	-	-	-
Assemblers, class C -----	250	3.01	-	1	-	1	1	7	19	9	74	-	9	8	7	9	11	13	54	8	11	5	1	-	1	1	-	-
Carpenters, maintenance -----	15	3.49	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	11	1	-	-	-	-	-	-	2	-	-
Electricians, maintenance -----	93	4.06	-	-	-	-	-	-	-	-	-	2	-	-	6	2	3	1	7	2	8	20	3	-	-	39	-	-
Inspectors, class A -----	204	3.40	-	-	-	-	-	-	-	-	-	1	2	2	44	8	24	28	8	29	32	17	9	-	-	-	-	-
Inspectors, class B -----	206	3.26	-	-	-	-	-	-	-	1	-	4	4	53	30	6	2	-	33	65	8	-	-	-	-	-	-	-
Janitors, porters, and cleaners -----	210	2.63	³ 5	-	-	15	8	50	8	29	35	9	9	5	-	-	-	37	-	-	-	-	-	-	-	-	-	-
Laborers, material handling -----	222	2.67	-	-	-	16	20	45	10	31	18	22	3	12	10	-	1	-	33	1	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A -----	1,418	3.53	-	-	1	-	2	-	-	1	8	8	21	60	98	72	81	73	161	218	339	131	53	27	33	19	12	-
Machine-tool operators, production, class B -----	1,591	3.26	-	-	4	7	14	16	20	31	55	77	91	86	85	94	181	149	173	154	263	74	5	9	1	-	-	2
Machine-tool operators, production, class C -----	1,171	3.30	-	-	5	9	8	20	33	49	28	70	17	52	56	43	46	39	197	313	95	61	17	10	3	-	-	-
Machine-tool operators, toolroom (operate 1 type of machine) -----	347	4.22	-	-	-	-	-	-	-	-	-	-	2	2	-	2	12	12	7	22	18	61	15	25	25	144	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine) -----	166	3.41	-	-	-	-	-	-	-	-	-	4	-	3	2	6	74	11	12	17	20	11	1	5	-	-	-	-
Machinists, maintenance -----	115	3.57	-	-	-	-	-	-	-	-	-	-	-	-	-	11	8	12	20	16	22	16	10	-	-	-	-	-
Machinists, production -----	75	3.53	-	-	-	-	-	-	-	-	4	4	-	-	5	-	-	5	-	23	11	23	-	-	-	-	-	-
Polishers and buffers, metal -----	29	3.16	-	-	-	-	-	-	-	10	-	-	-	-	-	-	6	3	-	5	-	-	5	-	-	-	-	-
Polishing- and buffing-machine operators -----	90	3.14	-	-	-	-	-	-	8	3	7	7	16	4	1	8	-	2	13	3	7	7	3	-	-	1	-	-
Punch-press operators, class B -----	92	2.94	8	2	4	4	6	9	1	5	2	2	1	1	2	3	2	2	17	3	10	3	1	1	1	1	1	-
Setup men, machine tools -----	693	3.48	-	-	-	-	-	-	-	-	-	4	8	2	17	48	14	194	41	126	199	23	16	1	-	-	-	-
Tool and die makers (jobbing) -----	436	3.71	-	-	-	-	11	-	-	-	22	-	2	12	14	22	2	47	4	29	43	63	82	40	13	30	-	-
Tool and die makers (other than jobbing) -----	376	4.03	-	-	-	-	-	-	-	-	-	-	-	-	-	5	13	7	3	24	78	112	37	-	20	3	74	-
Tool clerks -----	114	2.83	-	-	-	10	-	8	5	3	13	32	9	3	1	3	-	3	12	12	-	-	-	-	-	-	-	-
Welders, hand, class A -----	91	3.74	-	-	-	-	-	-	-	-	-	-	-	-	3	-	19	1	12	1	34	7	-	-	-	10	-	4
Welders, hand, class B -----	33	2.88	-	-	-	-	2	-	2	3	4	2	4	9	1	-	-	3	-	1	1	-	1	-	-	-	-	-
Welders, machine, class B -----	29	2.76	-	-	-	-	-	1	1	12	3	3	3	2	-	-	-	-	1	3	-	-	-	-	-	-	-	-
Women																												
Assemblers, class C -----	753	2.89	-	1	2	1	10	17	83	209	49	31	28	32	24	40	31	33	117	21	10	5	7	2	-	-	-	-
Inspectors, class C -----	428	2.48	-	15	50	9	23	49	35	193	3	1	1	12	-	-	5	-	32	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners -----	11	2.42	-	-	-	-	-	7	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class B -----	39	2.93	-	-	-	-	-	-	5	5	4	1	3	3	5	1	5	3	1	-	3	-	-	-	-	-	-	-
Machine-tool operators, production, class C -----	162	2.71	-	6	1	8	4	9	20	7	14	23	22	25	9	5	4	2	1	-	-	1	1	-	-	-	-	-
Punch-press operators, class B -----	316	3.15	⁴ 10	2	-	-	2	11	5	8	15	14	18	14	17	11	9	4	149	10	12	3	-	-	1	1	-	-

¹ The area consists of Andover, Avon, Berlin, Bloomfield, Bolton, Bristol, Canton, Coventry, Cromwell, East Granby, East Hartford, East Windsor, Ellington, Enfield, Farmington, Glastonbury, Granby, Hartford, Manchester, New Britain, Newington, Plainville, Rocky Hill, Simsbury, Southington, South Windsor, Suffield, Vernon, West Hartford, Wethersfield, Windsor, and Windsor Locks.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

³ All workers were at \$1.70 to \$1.80.

⁴ Includes 8 workers at \$1.70 to \$1.80.

Table 13. Occupational Earnings: Houston, Tex.¹(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, October 1968)

Occupation ³	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																								
			\$1.80 and under \$1.90	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60 and over
Assemblers, class A	482	\$3.39	-	-	-	-	-	-	-	-	-	-	5	7	35	10	19	147	120	100	1	10	28	-	-	-	-
Assemblers, class B	286	2.89	-	-	12	12	-	-	12	39	1	28	31	19	17	74	6	4	12	11	8	-	-	-	-	-	-
Assemblers, class C	103	2.73	-	-	4	1	2	2	4	35	5	2	29	4	2	3	-	3	4	1	1	-	1	-	-	-	-
Carpenters, maintenance	14	3.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	6	1	5	-	-	-	-	-	-
Electricians, maintenance	159	3.85	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	15	14	34	23	68	-	-	-
Inspectors, class A	328	3.59	-	-	-	-	-	-	-	-	-	-	-	5	5	6	18	60	28	40	50	26	74	12	2	2	-
Inspectors, class B	151	3.34	-	-	-	-	-	-	-	2	2	1	2	7	11	12	8	7	28	69	-	1	-	1	-	-	-
Janitors, porters, and cleaners	291	2.31	⁴ 35	24	34	19	14	23	23	67	27	2	9	14	-	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling	223	2.46	10	10	34	25	-	10	28	13	8	10	7	68	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A	1,646	3.45	-	-	-	-	-	-	-	1	2	1	12	29	55	86	130	385	201	292	302	68	51	26	4	1	-
Machine-tool operators, production, class B	781	3.08	-	-	-	3	-	-	1	16	31	42	106	51	115	159	140	63	33	6	8	-	3	4	-	-	-
Machine-tool operators, production, class C	284	2.63	-	6	6	12	20	16	10	44	79	23	20	20	9	5	6	1	1	2	-	1	-	3	-	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine)	180	3.58	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	9	6	37	106	2	10	-	-	-	
Machinists, maintenance	131	3.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	5	31	15	73	5	-	-	
Machinists, production	879	3.71	-	-	-	-	-	-	-	-	-	-	-	-	5	2	6	8	22	238	93	136	369	-	-	-	
Mechanics, maintenance	205	3.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	4	30	8	91	69	1	-	-
Punch-press operators, class B	11	2.65	-	-	-	-	-	-	4	2	-	2	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Setup men, machine tools	52	3.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	27	4	-	-	-	-	-
Tool and die makers (other than jobbing)	106	3.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	30	71	4	-	-	-
Tool clerks	131	2.99	-	-	6	5	-	8	1	5	-	12	9	5	22	5	17	-	29	3	2	-	1	1	-	-	-
Welders, hand, class A	642	3.54	-	-	-	-	-	-	-	-	-	-	13	17	31	10	22	102	130	99	49	27	119	2	-	6	15
Welders, hand, class B	371	3.04	-	-	-	-	-	24	10	15	60	51	7	8	77	16	69	16	2	1	1	4	2	2	1	5	-
Welders, machine, class A	14	3.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	8	3	-	-	-	-	-	-

¹ The Houston Standard Metropolitan Statistical Area consists of Brazoria, Fort Bend, Harris, Liberty, and Montgomery Counties.² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.³ Data limited to men workers.⁴ Includes 8 workers at \$1.60 to \$1.70, and 16 at \$1.70 to \$1.80.

Table 14. Occupational Earnings: Los Angeles—Long Beach and Anaheim—Santa Ana—Garden Grove, Calif.¹

(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, October 1968)

Occupation and sex	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																			
			\$1.60 and under	\$1.70	\$1.80	\$1.90	\$2.00	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00 and over
			\$1.70	\$1.80	\$1.90	\$2.00	\$2.20	\$2.40	\$2.60	\$2.80	\$3.00	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	over
Men																						
Assemblers, class A	1,136	\$3.32	-	-	-	-	-	-	10	104	112	218	201	162	148	179	2	-	-	-	-	-
Assemblers, class B	1,184	2.76	-	-	-	2	10	151	158	321	251	150	113	28	-	-	-	-	-	-	-	-
Assemblers, class C	600	2.37	-	10	6	5	173	164	134	19	31	58	-	-	-	-	-	-	-	-	-	-
Carpenters, maintenance	34	3.72	-	-	-	-	-	-	-	-	-	1	-	10	10	11	2	-	-	-	-	-
Electricians, maintenance	83	3.95	-	-	-	-	-	-	-	-	-	-	-	7	8	33	21	7	7	-	-	-
Inspectors, class A	712	3.76	-	-	-	-	-	-	-	-	-	11	54	171	177	100	127	31	35	6	-	-
Inspectors, class B	273	3.15	-	-	-	-	-	-	12	26	33	86	40	43	33	-	-	-	-	-	-	-
Inspectors, class C	107	2.65	-	-	-	-	1	15	42	15	16	15	3	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners	644	2.37	10	61	2	12	107	126	142	116	32	24	12	-	-	-	-	-	-	-	-	-
Laborers, material handling	228	2.55	-	-	-	-	9	76	74	43	9	6	3	8	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A	3,703	3.82	-	-	-	-	-	-	-	-	9	85	396	631	644	642	719	326	93	139	3	16
Machine-tool operators, production, class B	1,726	3.25	-	-	-	-	-	4	67	123	78	512	353	254	188	146	-	-	-	1	-	-
Machine-tool operators, production, class C	1,038	2.69	-	36	-	-	67	64	110	306	301	112	42	-	-	-	-	-	-	-	-	-
Machine-tool operators, toolroom (operate 1 type of machine)	678	4.29	-	-	-	-	-	-	-	-	-	3	2	23	45	46	119	139	140	147	-	14
Machine-tool operators, toolroom (operate more than 1 type of machine)	483	3.98	-	-	-	-	-	-	-	-	-	-	-	42	44	209	103	49	12	24	-	-
Machinists, maintenance	53	3.90	-	-	-	-	-	-	-	-	-	-	-	-	22	21	4	1	3	2	-	-
Machinists, production	1,117	4.04	-	-	-	-	-	-	-	-	-	-	9	112	108	209	250	163	229	33	2	2
Mechanics, maintenance	193	3.60	-	-	-	-	-	-	-	-	-	20	37	39	39	36	15	5	-	2	-	-
Polishers and buffers, metal	38	3.37	-	-	-	-	-	-	-	12	1	9	1	-	-	-	15	-	-	-	-	-
Punch-press operators, class A	63	3.16	-	-	-	-	-	-	1	-	8	31	20	-	3	-	-	-	-	-	-	-
Punch-press operators, class B	100	2.51	-	-	-	1	38	11	2	7	21	20	-	-	-	-	-	-	-	-	-	-
Setup men, machine tools	48	4.04	-	-	-	-	-	-	-	-	2	-	1	4	4	-	31	-	-	6	-	-
Tool and die makers (jobbing)	988	4.52	-	-	-	-	-	-	-	-	-	-	-	-	29	4	205	140	156	279	36	139
Tool and die makers (other than jobbing)	339	4.34	-	-	-	-	-	-	-	-	-	-	-	3	5	30	102	23	73	70	18	15
Tool clerks	183	2.89	-	-	-	-	-	16	27	19	39	49	16	17	-	-	-	-	-	-	-	-
Welders, hand, class A	1,176	3.63	-	-	-	-	-	-	-	2	-	30	305	239	280	114	172	20	-	6	2	6
Welders, hand, class B	217	3.08	-	-	-	-	-	2	26	46	-	46	50	43	2	-	2	-	-	-	-	-
Welders, machine, class A	21	3.52	-	-	-	-	-	-	-	-	-	3	6	3	6	3	-	-	-	-	-	-
Women																						
Assemblers, class A	641	2.88	-	-	-	-	-	10	26	137	366	49	29	24	-	-	-	-	-	-	-	-
Assemblers, class B	1,328	2.44	16	68	40	49	46	199	422	414	74	-	-	-	-	-	-	-	-	-	-	-
Assemblers, class C	2,524	2.18	180	4	66	156	794	761	561	-	2	-	-	-	-	-	-	-	-	-	-	-
Inspectors, class A	81	3.39	-	-	-	-	-	-	-	-	4	19	23	18	6	-	11	-	-	-	-	-
Inspectors, class B	143	2.90	-	-	-	-	-	1	8	48	31	33	22	-	-	-	-	-	-	-	-	-
Inspectors, class C	319	2.57	-	-	1	1	7	19	190	47	54	-	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners	13	2.53	-	-	-	-	2	-	8	3	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class B	30	2.78	-	-	-	-	1	-	1	17	4	6	1	-	-	-	-	-	-	-	-	-
Punch-press operators, class B	39	2.39	-	-	-	-	4	11	21	-	3	-	-	-	-	-	-	-	-	-	-	-
Tool clerks	10	2.86	-	-	-	-	-	-	-	5	1	4	-	-	-	-	-	-	-	-	-	-

¹ The Los Angeles—Long Beach and Anaheim—Santa Ana—Garden Grove Standard Metropolitan Statistical Areas consists of Los Angeles and Orange Counties.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Virtually all workers were paid on a time basis.

³ Workers were distributed as follows: 67 at \$5 to \$5.20; 36 at \$5.20 to \$5.40; and 36 at \$5.40 to \$5.60.

Table 15. Occupational Earnings: Milwaukee, Wis.¹(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, October 1968)

Occupation and sex	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																								
			\$1.70 and under	\$1.80	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00 and over
			\$1.80	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	over
Men																											
Assemblers, class A	1,096	\$3.88	-	-	-	-	-	-	-	-	-	-	-	-	-	25	28	216	166	88	191	124	92	43	37	25	61
Assemblers, class B	1,855	3.57	-	-	-	-	-	-	-	-	-	1	34	6	30	159	183	545	105	91	527	49	50	31	26	12	6
Assemblers, class C	823	3.24	-	-	-	-	-	15	12	18	6	24	39	28	124	172	57	56	76	50	99	15	18	6	2	4	2
Carpenters, maintenance	26	4.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	2	9	3	9	-	-	-	-
Electricians, maintenance	237	4.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	17	55	43	28	11	24	-	45	-
Inspectors, class A	645	3.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37	133	146	243	63	16	2	4	1	-
Inspectors, class B	474	3.44	-	-	-	-	-	-	-	-	-	-	1	2	17	22	31	85	184	109	23	-	-	-	-	-	-
Inspectors, class C	129	3.12	-	-	-	-	-	-	-	-	-	-	-	16	-	22	33	22	14	18	4	-	-	-	-	-	-
Janitors, porters, and cleaners	570	2.89	-	-	-	7	5	3	7	30	18	59	30	65	134	117	54	37	4	-	-	-	-	-	-	-	-
Laborers, material handling	922	2.81	75	-	-	-	-	-	-	15	-	238	46	45	243	86	75	96	3	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A	2,951	3.89	-	-	-	-	-	-	-	-	-	-	-	-	-	37	57	247	474	498	484	630	184	140	110	62	28
Machine-tool operators, production, class B	2,578	3.53	-	-	-	-	-	-	2	2	9	80	38	79	187	187	485	520	315	316	149	104	64	24	10	7	
Machine-tool operators, production, class C	588	2.93	-	-	-	-	32	12	32	46	49	29	110	34	110	34	22	27	16	19	10	4	1	1	-	-	
Machine-tool operators, toolroom (operate 1 type of machine)	323	3.88	-	-	-	-	-	-	-	-	-	-	-	-	-	6	60	43	41	23	53	54	16	14	6	7	
Machine-tool operators, toolroom (operate more than 1 type of machine)	320	3.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	57	38	63	41	63	30	18	-	-	
Machinists, maintenance	139	3.81	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	7	26	43	23	13	17	8	-	-	
Machinists, production	26	3.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	7	-	4	-	-	-	-	
Mechanics, maintenance	151	4.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	17	19	23	-	4	20	37	19	-
Polishers and buffers, metal	78	3.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	38	34	3	-	1	-	-	-	-
Polishing- and buffing-machine operators	48	3.20	-	-	-	-	-	-	-	-	-	-	2	8	3	-	30	3	2	-	-	-	-	-	-	-	-
Punch-press operators, class A	173	3.45	-	-	-	-	-	-	-	-	1	1	-	-	15	36	23	66	3	12	6	3	3	1	-	3	-
Punch-press operators, class B	192	3.29	-	-	-	-	2	-	11	4	-	12	21	18	2	21	14	30	21	20	11	3	1	1	-	-	-
Tool and die makers (jobbing)	605	4.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	21	30	37	150	203	110	15	15	-
Tool and die makers (other than jobbing)	327	4.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	38	29	26	56	60	75	39	2	-
Tool clerks	144	3.19	-	-	-	-	-	1	-	-	5	9	12	29	13	4	34	22	1	10	4	-	-	-	-	-	-
Welders, hand, class A	820	3.70	-	-	-	-	-	-	-	-	-	-	-	-	14	-	191	210	138	96	61	52	34	10	9	5	-
Welders, hand, class B	1,185	3.51	-	-	-	-	-	-	-	-	-	-	16	76	32	379	205	103	64	65	60	74	62	25	15	9	-
Welders, machine, class A	119	3.67	-	-	-	-	-	-	-	-	-	-	-	-	1	-	42	36	10	3	10	4	8	2	1	2	-
Welders, machine, class B	81	3.13	-	-	-	-	-	-	-	-	-	-	-	31	1	40	5	1	-	1	1	1	-	-	-	-	-
Women																											
Assemblers, class B	29	3.22	-	-	-	-	-	-	-	-	-	-	-	-	1	18	10	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners	64	3.00	-	-	-	-	-	1	-	-	-	5	11	2	16	3	3	23	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class B	31	3.61	-	-	-	-	-	-	-	-	-	1	-	-	1	3	13	-	1	1	3	5	3	-	-	-	-
Tool clerks	37	3.15	-	-	-	-	-	-	-	-	-	-	3	3	11	-	6	2	12	-	-	-	-	-	-	-	-

¹ The Milwaukee Standard Metropolitan Statistical Area consists of Milwaukee, Ozaukee, Washington, and Waukesha Counties.² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

82 Table 16. Occupational Earnings: Minneapolis—St. Paul, Minn.¹

(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, November 1968)

	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																								
			Under \$2.00	\$2.00 and under \$2.10	\$2.10 to \$2.20	\$2.20 to \$2.30	\$2.30 to \$2.40	\$2.40 to \$2.50	\$2.50 to \$2.60	\$2.60 to \$2.70	\$2.70 to \$2.80	\$2.80 to \$2.90	\$2.90 to \$3.00	\$3.00 to \$3.10	\$3.10 to \$3.20	\$3.20 to \$3.30	\$3.30 to \$3.40	\$3.40 to \$3.50	\$3.50 to \$3.60	\$3.60 to \$3.70	\$3.70 to \$3.80	\$3.80 to \$3.90	\$3.90 to \$4.00	\$4.00 to \$4.20	\$4.20 to \$4.40	\$4.40 to \$4.60	
Men																											
Assemblers, class A	1,229	\$3.31	-	-	-	-	-	-	1	4	5	69	24	80	129	260	367	56	71	18	121	-	24	-	-	-	-
Assemblers, class B	1,153	2.91	-	-	69	67	87	103	18	64	50	257	151	74	60	11	99	10	2	5	6	3	9	4	3	1	
Assemblers, class C	498	2.81	-	-	55	29	14	41	38	17	16	146	90	-	4	48	-	-	-	-	-	-	-	-	-	-	
Electricians, maintenance	58	4.16	-	-	-	-	-	-	-	-	-	-	-	-	8	-	2	12	1	1	2	2	9	4	-	17	
Inspectors, class A	378	3.54	-	-	-	-	-	-	-	-	-	-	-	17	17	74	44	73	58	32	57	5	1	-	-	-	
Inspectors, class B	307	3.20	-	-	-	-	-	-	8	-	7	7	11	53	202	18	-	1	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners	431	2.56	27	16	-	15	37	11	181	17	75	23	1	13	13	2	-	-	-	-	-	-	-	-	-	-	
Laborers, material handling	476	2.87	-	-	7	-	31	31	78	80	59	49	44	17	7	72	1	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class A	1,965	3.54	-	-	-	-	-	-	-	-	-	-	13	122	105	137	233	232	256	256	284	140	116	28	32	8	3
Machine-tool operators, production, class B	1,351	3.14	-	-	-	-	-	12	4	80	125	180	150	259	131	120	167	85	24	4	4	1	2	1	2	-	
Machine-tool operators, production, class C	572	2.88	-	-	-	23	10	31	38	78	63	44	68	46	9	162	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, toolroom (operate 1 type of machine)	107	3.55	-	-	-	-	-	-	-	5	-	5	1	15	10	4	9	6	8	14	2	11	15	1	1	-	
Machine-tool operators, toolroom (operate more than 1 type of machine)	210	3.63	-	-	-	-	-	-	-	-	-	-	-	-	1	10	51	14	29	62	37	2	4	-	-	-	
Machinists, maintenance	42	3.58	-	-	-	-	-	-	-	-	-	-	-	6	-	10	-	4	10	1	2	4	5	-	-	-	
Machinists, production	154	3.57	-	-	-	-	-	-	-	-	-	-	1	4	-	46	2	38	14	2	29	18	-	-	-	-	
Mechanics, maintenance	55	3.74	-	-	-	-	-	-	-	-	-	-	-	4	-	3	2	2	3	14	19	1	7	-	-	-	
Punch-press operators, class A	126	3.24	-	-	-	-	-	-	-	-	-	-	27	42	15	5	22	2	9	1	1	2	-	-	-	-	
Punch-press operators, class B	225	2.95	-	-	3	3	3	-	3	3	6	19	105	43	9	25	1	-	1	-	1	-	-	-	-	-	
Setup men, machine tools	45	3.51	-	-	-	-	-	-	-	-	2	-	-	-	12	1	4	8	8	6	-	-	-	4	-	-	
Tool and die makers (jobbing)	382	4.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	9	1	24	7	7	38	96	173	24	
Tool and die makers (other than jobbing)	265	4.08	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	26	14	53	54	103	6	1	
Tool clerks	76	3.10	-	-	-	3	-	1	1	1	1	22	15	4	10	5	10	1	-	2	-	-	-	-	-	-	
Welders, hand, class A	798	3.44	-	-	-	-	-	-	-	-	-	-	59	83	67	89	206	103	42	133	3	6	5	2	-	-	
Welders, hand, class B	585	3.01	-	-	-	-	-	-	-	110	58	89	147	68	20	59	14	20	-	-	-	-	-	-	-	-	
Welders, machine, class B	32	2.96	-	-	-	-	-	-	-	-	-	6	17	-	9	-	-	-	-	-	-	-	-	-	-	-	
Women																											
Assemblers, class C	1,116	2.43	16	20	24	250	136	145	430	78	1	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners	16	2.64	-	-	1	-	-	4	1	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class B	27	2.76	-	-	6	-	-	-	-	5	6	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ The Minneapolis—St. Paul Standard Metropolitan Statistical Area consists of Anoka, Dakota, Hennepin, Ramsey, and Washington Counties.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

Table 17. Occupational Earnings: Newark and Jersey City, N.J.¹(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, November 1968)

Occupation and sex	Number workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																											
			Under \$1.80	\$1.80 and under \$1.90	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80 and over		
Men																														
Assemblers, class A -----	666	\$3.55	-	-	-	-	-	-	-	-	-	-	-	1	13	22	15	39	46	167	97	144	97	-	23	-	-	-	2	
Assemblers, class B -----	674	3.30	-	-	-	-	4	4	6	7	22	88	51	41	89	38	21	49	7	56	61	12	84	34	-	-	-	-	-	
Assemblers, class C -----	440	2.77	-	20	25	5	34	8	9	21	60	20	26	29	33	21	-	31	66	4	9	9	7	-	3	-	-	-	-	
Carpenters, maintenance ----	25	3.46	-	-	-	-	-	-	-	-	-	-	1	-	-	-	4	2	10	-	-	6	-	1	-	1	-	-	-	
Electricians, maintenance ----	132	4.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	6	20	16	16	2	4	-	62	-	-	-	
Inspectors, class A -----	255	3.48	-	-	-	-	-	-	-	-	-	-	2	13	-	9	16	96	3	32	58	20	6	-	-	-	-	-	-	
Inspectors, class B -----	270	3.37	-	-	-	-	-	-	5	5	5	1	9	25	3	12	23	8	4	152	18	-	-	-	-	-	-	-	-	
Inspectors, class C -----	130	3.19	-	-	-	-	-	-	4	-	-	-	29	2	10	28	-	-	57	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners -----	231	250	-	-	32	18	5	15	8	7	34	37	7	51	6	-	11	-	-	-	-	-	-	-	-	-	-	-	-	
Laborers, material handling -----	307	2.77	-	-	-	-	-	-	24	36	12	10	14	175	9	9	13	5	-	-	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class A -----	1,397	3.57	-	-	-	-	2	2	2	4	3	5	6	30	30	63	32	104	94	199	127	348	176	122	38	2	-	8		
Machine-tool operators, production, class B -----	1,964	3.55	-	-	-	-	-	26	4	19	19	61	50	60	57	110	64	94	97	52	83	118	720	328	2	-	-	-	-	
Machine-tool operators, production, class C -----	461	2.64	-	-	18	20	48	25	24	20	87	17	34	33	52	11	21	17	8	8	5	1	12	-	-	-	-	-	-	
Machine-tool operators, toolroom (operate 1 type of machine) -----	373	4.12	-	-	-	-	-	-	-	-	-	-	-	-	-	12	4	14	1	34	43	42	17	36	1	-	169	-	-	
Machine-tool operators, toolroom (operate more than 1 type of machine) ----	303	3.52	-	-	-	-	-	-	-	-	-	-	-	-	32	6	15	14	29	6	47	98	43	6	6	-	1	-	-	
Machinists, production -----	130	3.32	-	-	-	-	-	-	-	-	-	-	-	-	32	1	16	24	3	6	20	6	21	-	1	-	-	-	-	
Mechanics, maintenance ----	29	3.58	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	3	1	2	1	20	-	-	-	-	-	-	-	
Polishers and buffers, metal -----	50	3.17	-	-	-	-	-	-	-	-	-	2	12	2	3	6	4	2	6	5	2	-	3	3	-	-	-	-	-	
Polishing- and buffing- machine operators -----	116	2.96	-	-	-	-	12	4	16	1	-	-	11	-	-	-	19	4	17	32	-	-	-	-	-	-	-	-	-	
Punch-press operators, class B -----	433	2.75	-	6	-	-	38	77	62	65	10	3	20	12	17	14	8	10	6	13	4	23	15	17	10	3	-	-	-	
Tool and die makers (jobbing) -----	705	3.95	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	6	26	15	49	72	85	199	147	76	6	-	-	
Tool and die makers (other than jobbing) -----	316	4.11	-	-	-	-	-	-	-	-	-	-	4	5	-	1	11	11	1	11	1	61	74	44	13	-	6	380	-	
Tool clerks -----	121	3.03	-	-	-	-	-	24	-	7	-	-	-	4	5	-	5	3	24	2	38	-	-	-	-	-	-	-	-	
Welders, hand, class A ----	336	3.72	-	-	-	-	-	-	-	-	-	1	-	-	-	-	54	14	3	25	47	75	17	68	2	-	30	-	-	
Welders, hand, class B ----	128	3.34	-	-	-	-	-	-	-	10	3	-	4	36	13	8	8	15	1	-	3	3	6	3	3	3	6	6	6	6
Women																														
Assemblers, class A -----	9	2.86	-	-	-	-	-	-	2	-	-	4	1	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
Assemblers, class B -----	498	2.60	-	-	4	5	12	94	34	93	33	31	56	17	66	21	5	12	9	-	4	2	-	-	-	-	-	-	-	
Assemblers, class C -----	455	2.27	24	76	77	45	52	75	7	6	6	-	12	2	2	-	-	-	1	70	-	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class B -----	12	3.19	-	-	-	-	-	-	-	4	-	-	-	-	1	-	1	-	-	-	3	3	-	-	-	-	-	-	-	-

¹ The Newark and Jersey City Standard Metropolitan Statistical Areas consist of Essex, Hudson, Morris, and Union Counties.² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.³ All workers were at \$4.80 to \$5.

9 Table 18. Occupational Earnings: New York, N.Y.¹

(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, September 1968)

Occupation and sex	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			\$1.60 and under	\$1.70	\$1.80	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00 and over
			\$1.70	\$1.80	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.40	\$3.60	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	over
<u>Men</u>																												
Assemblers, class A -----	851	\$3.51	-	-	-	-	-	-	-	-	1	25	-	1	7	6	30	20	126	307	201	101	6	14	2	4	-	-
Assemblers, class B -----	758	2.79	-	-	-	-	28	56	36	35	60	43	60	33	24	146	46	31	118	37	-	2	2	-	-	1	-	-
Assemblers, class C -----	994	2.32	6	14	19	39	248	128	124	91	90	33	20	54	43	19	17	11	29	4	4	1	-	-	-	-	-	
Electricians, maintenance--	48	3.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	11	17	4	13	2	-	-	-	-	
Inspectors, class A -----	174	3.52	-	-	-	-	-	-	-	-	-	2	2	1	6	2	20	9	23	26	39	26	11	5	-	-	2	
Inspectors, class B -----	178	3.10	-	-	-	-	-	-	2	6	-	25	9	23	1	8	4	24	23	16	28	9	-	-	-	-	-	
Inspectors, class C -----	138	2.16	-	6	47	5	1	-	34	22	2	4	5	7	3	-	2	-	-	-	-	-	-	-	-	-	-	
Janitors, porters, and cleaners -----	291	2.22	16	40	8	12	53	19	23	6	30	21	37	7	-	19	-	-	-	-	-	-	-	-	-	-	-	
Laborers, material handling -----	474	2.38	30	19	37	15	20	50	38	15	51	21	53	6	57	41	15	2	4	-	-	-	-	-	-	-	-	
Machine-tool operators, production, class A -----	1,869	3.55	-	-	-	-	-	-	-	-	-	8	4	12	22	32	13	70	276	676	414	168	144	11	16	2	-	
Machine-tool operators, production, class B -----	1,513	2.92	-	-	-	-	2	28	71	39	79	140	113	123	83	109	154	220	156	131	55	10	-	-	-	-	-	
Machine-tool operators, production, class C -----	1,286	2.28	44	42	115	104	121	171	206	39	62	149	70	36	9	27	32	10	41	6	-	-	2	-	-	-	-	
Machine-tool operators, toolroom (operate more than 1 type of machine) ----	136	3.57	-	-	-	-	-	-	-	-	-	-	-	-	3	8	3	5	28	18	31	3	34	3	-	-	-	
Machinists, maintenance -----	46	3.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	2	13	2	18	8	-	-	-	-	
Machinists, production -----	196	3.61	-	-	-	-	-	-	-	-	-	-	-	-	2	2	27	-	16	59	3	48	18	10	7	4	-	
Mechanics, maintenance -----	60	3.26	-	-	-	-	-	-	-	-	-	2	1	3	1	8	3	5	14	6	16	1	-	-	-	-	-	
Polishing- and buffing-machine operators -----	27	2.29	-	-	7	-	2	-	-	5	6	6	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
Punch-press operators, class B -----	124	2.24	-	-	-	40	3	27	15	8	10	1	4	-	5	5	4	-	-	-	1	1	-	-	-	-	-	
Setup men, machine tools-----	107	3.74	-	-	-	-	-	-	-	-	-	2	1	1	2	-	2	6	12	12	19	10	26	2	12	-	-	
Tool and die makers (jobbing) -----	243	3.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	2	29	74	40	29	-	14	-	
Tool and die makers (other than jobbing) -----	251	4.03	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	15	22	29	33	87	35	-	-	7	
Tool clerks -----	82	2.80	-	-	-	-	-	-	17	-	4	-	-	15	3	5	30	4	2	2	-	-	-	-	-	-	-	
Welders, hand, class A ----	223	3.69	-	-	-	-	-	-	-	-	-	-	-	-	11	-	6	-	47	33	37	28	37	10	6	4	4	
Welders, hand, class B ----	332	2.74	-	-	-	-	2	12	14	17	16	29	49	47	30	52	27	6	29	2	-	-	-	-	-	-	-	
Welders, machine, class B -----	30	2.93	-	-	-	-	-	-	-	-	-	3	12	-	-	-	5	-	10	-	-	-	-	-	-	-	-	
<u>Women</u>																												
Assemblers, class A -----	35	2.94	-	-	-	-	-	-	-	-	4	6	5	-	-	1	1	2	13	3	-	-	-	-	-	-	-	
Assemblers, class B -----	92	2.34	-	-	-	4	13	23	10	19	2	2	2	1	1	5	5	5	-	-	-	-	-	-	-	-	-	
Assemblers, class C -----	307	2.11	28	31	34	8	27	106	11	9	6	5	7	9	8	6	10	2	-	-	-	-	-	-	-	-	-	
Inspectors, class B -----	19	2.87	-	-	-	-	-	-	-	-	6	2	2	2	-	-	-	2	1	2	2	-	-	-	-	-	-	
Inspectors, class C -----	80	2.26	-	-	-	8	6	7	32	19	2	1	-	-	2	-	1	-	-	2	-	-	-	-	-	-	-	
Punch-press operators, class B -----	12	2.11	-	-	-	1	7	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

¹ The New York Standard Metropolitan Statistical Area consists of New York City (5 boroughs), and Nassau, Rockland, Suffolk, and Westchester Counties.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

Table 19. Occupational Earnings: Philadelphia, Pa.—N.J.¹(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, October 1968)

Occupation and sex	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																											
			Under \$1.80	\$1.80 and under \$1.90	\$1.90	\$2.00	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$4.00	\$4.20	\$4.40	\$4.60		
																														and over
Men																														
Assemblers, class A -----	1,385	\$3.24	2	-	-	2	4	2	2	50	35	31	123	29	102	133	99	73	125	331	73	17	48	22	41	16	20	5		
Assemblers, class B -----	868	2.76	-	-	4	41	18	107	38	77	50	81	44	55	74	47	54	106	16	34	5	-	1	6	1	2	-	7		
Assemblers, class C -----	535	2.28	21	19	43	27	48	60	211	29	25	2	25	9	2	3	1	3	-	1	-	1	-	1	2	1	-	1		
Carpenters, maintenance ---	28	3.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	1	12	4	-	2	-	-	-		
Electricians, maintenance --	102	3.63	-	-	-	-	-	-	-	-	-	-	-	5	2	-	8	-	11	34	7	8	11	6	10	-	-	-		
Inspectors, class A -----	427	3.42	-	-	-	-	-	-	-	2	2	6	4	6	6	79	51	76	37	19	46	3	14	35	10	3	30	-		
Inspectors, class B -----	380	3.27	-	-	-	-	-	-	2	12	2	6	8	9	8	152	13	24	13	-	31	1	6	93	-	-	-	-		
Inspectors, class C -----	55	2.88	-	-	-	-	2	2	2	-	4	-	7	27	4	1	1	-	1	-	-	-	-	2	1	1	-	-		
Janitors, porters, and cleaners -----	366	2.59	4	6	4	26	20	1	14	14	23	80	130	9	35	-	-	-	-	-	-	-	-	-	-	-	-	-		
Laborers, material handling -----	367	2.53	8	12	9	16	22	25	27	18	37	64	37	59	17	4	-	12	-	-	-	-	-	-	-	-	-	-		
Machine-tool operators, production, class A -----	2,658	3.51	-	-	-	-	-	-	21	9	1	1	52	154	67	103	246	239	272	199	302	158	111	392	147	80	46	58		
Machine-tool operators, production, class B -----	2,012	3.28	-	-	-	10	2	16	10	47	97	146	55	142	74	217	62	254	181	154	104	47	69	83	58	69	66	49		
Machine-tool operators, production, class C -----	902	2.40	4	44	41	34	133	118	158	60	92	34	38	24	44	32	14	10	4	8	3	2	-	4	1	-	-	-		
Machine-tool operators, toolroom (operate 1 type of machine) -----	121	3.72	-	-	-	-	-	-	-	-	-	-	-	-	-	21	-	1	5	-	3	7	23	43	9	3	3	3		
Machine-tool operators, toolroom (operate more than 1 type of machine) -----	136	3.55	-	-	-	-	-	-	-	-	-	-	-	-	9	-	22	18	14	-	27	9	5	12	5	7	5	3		
Machinists, maintenance ---	181	3.73	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	5	-	29	16	59	2	31	34	-	1	-		
Machinists, production -----	494	3.76	-	-	-	-	-	-	-	-	-	-	-	-	-	36	9	-	12	18	17	35	182	22	147	13	-	3		
Mechanics, maintenance -----	125	3.58	-	-	-	-	-	-	-	-	3	-	-	-	-	10	8	3	12	9	39	1	6	7	27	-	-	-		
Polishers and buffers, metal -----	81	3.27	-	-	-	-	8	-	7	-	-	-	-	-	11	2	8	-	2	36	-	-	-	-	-	-	-	7		
Polishing- and buffing-machine operators -----	71	3.70	-	-	-	-	-	8	-	-	3	-	13	-	4	2	1	1	2	-	1	-	-	1	7	8	2	318		
Punch-press operators, class A -----	116	2.80	-	-	-	-	-	-	-	-	34	2	21	26	4	4	16	4	-	3	2	-	-	-	-	-	-	-		
Punch-press operators, class B -----	239	2.58	-	-	8	16	26	59	9	2	6	40	2	10	9	31	1	4	1	1	1	-	1	5	2	3	1	1		
Setup men, machine tools ---	141	3.29	-	-	-	-	-	-	-	-	-	-	-	8	24	2	7	23	21	29	2	13	10	2	-	-	-	-		
Tool and die makers (jobbing) -----	595	3.94	-	-	-	-	-	-	-	-	-	-	-	-	-	22	-	15	10	12	49	7	63	182	82	92	28	33		
Tool and die makers (other than jobbing) -----	339	4.00	-	-	-	-	-	-	-	-	-	-	-	-	-	4	2	10	8	13	11	9	48	64	43	87	16	24		
Tool clerks -----	194	2.93	-	-	-	-	3	9	6	7	7	3	35	18	25	3	1	59	11	4	3	-	-	-	-	-	-	-		
Welders, hand, class A -----	544	3.55	-	-	-	-	-	-	-	-	-	-	8	4	6	35	9	32	32	30	206	17	110	21	11	6	6	11		
Welders, hand, class B -----	241	3.15	-	-	-	-	3	-	20	6	31	9	-	9	25	5	25	-	-	-	108	-	-	-	-	-	-	-		
Welders, machine, class B -----	119	2.73	-	-	-	16	-	-	8	16	-	10	10	13	9	6	24	-	-	1	6	-	-	-	-	-	-	-		
Women																														
Assemblers, class B -----	125	2.42	2	2	8	20	6	18	44	-	2	5	4	-	-	-	-	1	1	1	-	-	5	2	2	2	-	-		
Assemblers, class C -----	446	2.25	20	26	78	16	14	8	233	9	8	-	10	2	1	2	1	8	1	2	1	2	1	1	1	1	-	-		
Inspectors, class A -----	15	3.03	-	-	-	-	-	-	-	-	4	-	1	-	-	-	2	4	4	-	-	-	-	-	-	-	-	-		
Inspectors, class C -----	87	2.43	-	-	2	12	23	4	8	-	-	-	12	13	3	6	1	-	-	1	-	-	2	-	-	-	-	-		
Janitors, porters, and cleaners -----	28	2.20	-	1	14	4	-	-	-	-	2	2	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Tool clerks -----	24	2.50	-	4	-	4	3	-	-	3	-	-	-	-	6	-	-	4	-	-	-	-	-	-	-	-	-	-		

¹ The Philadelphia Standard Metropolitan Statistical Area consists of Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, Pa.; and Burlington, Camden, and Gloucester Counties, N.J.² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.³ Workers were distributed as follows: 4 at \$4.60 to \$4.80; 8 at \$4.80 to \$5; and 6 at \$5 and over.

32 Table 20. Occupational Earnings: Pittsburgh, Pa.¹

(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, November 1968)

Occupation ³	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																									
			\$ 2.00 and under \$2.10	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00 and over
			\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	over
Assemblers, class A -----	442	\$3.67	-	-	-	6	-	-	-	-	-	1	2	50	18	33	76	44	82	6	1	6	53	8	-	38	18	-
Assemblers, class B -----	189	3.27	-	-	-	-	-	1	3	9	12	67	8	23	15	11	3	-	-	-	8	-	-	12	6	2	-	-
Assemblers, class C -----	69	2.92	-	-	-	-	3	3	-	1	39	4	1	6	12	-	-	-	-	-	-	-	-	-	-	-	-	-
Carpenters, maintenance -----	32	3.88	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	1	-	11	4	-	-	-	-	-	-	-
Electricians, maintenance -----	133	3.83	-	-	-	-	-	-	-	-	3	-	-	-	2	2	6	5	33	22	19	27	2	4	-	-	-	8
Inspectors, class A -----	191	3.78	-	-	-	-	-	-	-	-	-	-	12	10	41	13	3	8	10	10	12	1	6	45	8	-	12	-
Inspectors, class B -----	82	3.18	-	-	-	-	3	10	2	6	9	6	9	-	1	21	-	13	-	1	-	1	-	-	-	-	-	-
Inspectors, class C -----	43	2.85	-	-	-	-	-	-	-	22	3	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners -----	165	2.65	9	3	-	10	-	23	56	47	-	-	4	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling -----	163	2.73	-	-	-	3	12	12	64	25	20	18	4	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A -----	1,764	3.61	-	-	-	-	-	-	-	2	11	45	124	203	247	103	155	190	97	23	75	137	109	29	90	74	38	12
Machine-tool operators, production, class B -----	585	3.21	-	-	-	6	12	-	12	58	28	26	110	89	83	40	-	20	15	50	-	13	8	7	5	2	1	-
Machine-tool operators, production, class C -----	148	2.71	-	9	27	-	9	-	35	21	7	3	-	21	-	-	16	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, toolroom (operate 1 type of machine) -----	23	3.65	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	2	8	9	-	-	-	-	-	-	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine) -----	80	3.63	-	-	-	-	-	-	-	-	-	-	-	13	11	14	3	1	2	5	-	2	14	15	-	-	-	-
Mechanics, maintenance -----	98	3.60	-	-	-	-	-	-	-	-	-	-	6	-	-	14	10	-	44	11	13	-	-	-	-	-	-	-
Polishing- and buffing-machine operators -----	22	2.83	-	-	-	-	-	-	-	9	10	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tool and die makers (jobbing) -----	319	3.75	-	-	-	-	-	-	-	-	-	-	-	-	-	80	-	5	66	-	6	3	156	3	-	-	-	-
Tool and die makers (other than jobbing) -----	48	3.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5	4	23	-	3	2	9	-	-	-	-
Tool clerks -----	66	2.93	-	-	-	-	-	2	2	10	13	29	3	2	-	-	-	5	-	-	-	-	-	-	-	-	-	-
Welders, hand, class A -----	346	3.57	-	-	-	-	-	-	-	-	-	-	22	64	27	57	44	35	24	3	2	-	7	9	-	52	-	-
Welders, hand, class B -----	100	2.97	-	-	-	-	-	-	-	30	-	42	15	1	5	-	-	-	-	-	7	-	-	-	-	-	-	-
Welders, machine, class A -----	46	3.41	-	-	-	-	-	-	-	-	-	-	-	18	7	-	-	-	21	-	-	-	-	-	-	-	-	-
Welders, machine, class B -----	17	2.93	-	-	-	-	-	2	-	-	-	12	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ The Pittsburgh Standard Metropolitan Statistical Area consists of Allegheny, Beaver, Washington, and Westmoreland Counties.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

³ Data limited to men workers.

Table 21. Occupational Earnings: Portland, Oreg.—Wash.¹(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, November 1968)

Occupation ¹	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																	
			Under \$2.90	\$2.90 and under \$3.00	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	\$4.40	\$4.50
Assemblers, class A -----	360	\$3.97	-	-	-	-	-	-	-	-	8	2	84	30	223	10	3	-	-	-
Assemblers, class B -----	165	3.49	-	-	-	1	1	13	50	73	25	2	-	-	-	-	-	-	-	-
Inspectors, class A -----	59	4.03	-	-	-	-	-	-	-	-	-	-	-	13	38	6	2	-	-	-
Janitors, porters, and cleaners-----	76	2.88	⁴ 16	43	-	5	9	-	3	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling -----	61	3.30	-	3	13	4	12	8	-	21	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A -----	582	4.02	-	-	-	-	-	-	-	8	9	20	14	43	397	88	3	-	-	-
Machine-tool operators, production, class B -----	270	3.46	-	-	2	2	56	22	24	122	22	-	20	-	-	-	-	-	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine)-----	26	4.10	-	-	-	-	-	-	-	-	-	-	-	-	13	10	3	-	-	-
Machinists, maintenance -----	17	4.07	-	-	-	-	-	-	-	-	-	-	-	-	13	4	-	-	-	-
Punch-press operators, class A -----	14	3.78	-	-	-	-	-	-	-	-	6	-	5	1	2	-	-	-	-	-
Tool and die makers (other than jobbing) -----	12	4.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	3	8
Tool clerks -----	13	3.50	-	-	-	3	1	1	-	6	-	-	-	-	2	-	-	-	-	-
Welders, hand, class A -----	566	3.99	-	-	-	-	-	-	-	-	-	46	5	95	404	16	-	-	-	-
Welders, hand, class B -----	41	3.50	-	-	1	-	1	-	10	21	5	3	-	-	-	-	-	-	-	-

¹ The Portland Standard Metropolitan Statistical area consists of Clackamas, Multnomah, and Washington Counties, Oreg.; and Clark County, Wash.² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. All workers were paid on a time basis.³ Data limited to men workers.⁴ Workers were distributed as follows: 5 at \$2 to \$2.10; 2 at \$2.30 to \$2.40; 3 at \$2.50 to \$2.60; 1 at \$2.60 to \$2.70; and 5 at \$2.70 to \$2.80.

34 Table 22. Occupational Earnings: St. Louis, Mo.—III.¹(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, November 1968)

Occupation and sex	Number workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF—																											
			\$2.10 and under	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40 and over	
			\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00	\$5.20	\$5.40	\$5.60	\$5.80
Men																														
Assemblers, class A	434	\$3.85	-	-	3	6	-	-	3	-	-	4	3	6	3	7	3	23	163	-	84	89	14	1	15	-	4	3		
Assemblers, class B	563	3.52	-	-	6	1	19	10	14	90	41	6	5	91	60	13	24	1	12	32	1	34	11	16	19	22	21	14		
Assemblers, class C	467	2.82	-	-	-	-	7	80	71	268	-	32	-	6	-	-	-	1	-	-	-	1	-	-	-	1	-	-		
Electricians, maintenance	92	4.29	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	1	7	-	-	16	33	8	20	-	1	-		
Inspectors, class A	88	4.28	-	-	-	-	-	-	-	2	1	7	5	5	5	1	1	-	1	-	-	1	10	-	10	32	6	1		
Inspectors, class B	188	3.46	-	-	-	-	-	3	10	9	-	-	11	21	12	6	95	5	1	-	-	-	9	1	2	2	-	1		
Janitors, porters, and cleaners	209	2.74	³ 29	7	11	12	26	26	15	3	12	8	4	44	12	-	-	-	-	-	-	-	-	-	-	-	-	-		
Laborers, material handling	420	2.82	5	8	15	15	7	30	195	11	20	42	22	20	28	2	-	-	-	-	-	-	-	-	-	-	-	-		
Machine-tool operators, production, class A	1,056	4.33	1	-	-	-	-	-	-	-	1	-	2	15	6	10	97	12	19	44	62	217	108	173	62	105	45	77		
Machine-tool operators, production, class B	734	3.68	-	-	-	3	15	12	19	29	12	20	125	41	54	31	27	27	31	16	28	25	105	49	26	5	9	25		
Machine-tool operators, production, class C	129	2.98	-	-	-	5	4	3	27	25	39	5	-	2	-	-	12	-	3	-	-	1	-	-	-	1	2	-		
Machine-tool operators, toolroom (operate 1 type of machine)	57	4.08	-	-	-	-	-	-	-	-	-	-	-	11	-	-	1	4	6	-	2	1	8	17	6	-	1	-		
Machine-tool operators, toolroom (operate more than 1 type of machine)	218	4.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	2	14	9	131	25	29	-	1		
Machinists, maintenance	57	4.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	6	11	-	-	2	5	12	14	1	-	-		
Machinists, production	402	4.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72	130	21	68	111	-	-	-		
Mechanics, maintenance	67	4.24	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	2	-	-	17	4	5	36	1	-	-	-		
Punch-press operators, class A	226	3.75	-	-	-	-	-	-	-	-	4	30	10	10	18	18	3	23	2	46	14	5	17	-	9	7	-	10		
Punch-press operators, class B	125	3.19	-	-	-	-	-	1	22	6	12	3	20	-	-	58	3	-	-	-	-	-	-	-	-	-	-	-		
Setup men, machine tools	91	4.03	-	-	-	-	-	-	-	-	-	-	-	-	-	13	3	-	3	-	1	46	9	16	-	-	-	-		
Tool and die makers (jobbing)	352	5.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	249	⁴ 97		
Tool and die makers (other than jobbing)	240	4.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	4	5	12	24	128	35	26	3		
Tool clerks	45	3.10	-	-	1	-	3	1	2	5	4	10	1	4	2	11	-	-	-	1	-	-	-	-	-	-	-	-		
Welders, hand, class A	395	3.98	-	-	-	-	6	3	-	-	-	-	9	-	3	1	3	49	10	11	71	154	48	14	1	12	-	-		
Welders, hand, class B	61	3.24	-	-	-	-	-	-	-	3	4	18	2	25	-	-	-	-	9	-	-	-	-	-	-	-	-	-		
Welders, machine, class B	41	2.86	-	-	-	-	-	-	15	-	25	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Women																														
Assemblers, class B	17	3.21	-	-	-	-	-	-	-	3	4	2	2	1	1	-	-	2	1	-	-	1	-	-	-	-	-	-		
Assemblers, class C	680	3.27	9	-	126	-	10	150	73	-	-	5	4	14	5	10	14	14	15	42	20	37	25	62	32	4	-	9		
Inspectors, class B	23	3.23	-	-	-	-	1	-	-	-	1	1	6	4	5	3	2	-	-	-	-	-	-	-	-	-	-	-		
Inspectors, class C	283	2.86	-	34	2	3	42	89	11	1	-	-	1	69	7	4	3	-	-	3	-	6	-	-	1	5	-	2		

¹ The St. Louis Standard Metropolitan Statistical Area consists of the city of St. Louis; the counties of Franklin, Jefferson, St. Charles, and St. Louis, Mo; and the counties of Madison and St. Clair, Ill.² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.³ Includes 6 workers at \$1.80 to \$1.90.⁴ Workers were distributed as follows: 71 at \$5.20 to \$5.40 and 26 at \$5.60 to \$5.80.

Table 23. Occupational Earnings: San Francisco—Oakland, Calif.¹(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, September 1968)

Occupation and sex	Number of workers	Average hourly earnings ²	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																									
			Under \$2.70	\$2.70 and under \$2.80	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.10	\$4.20	\$4.30	\$4.40	\$4.50	\$4.60	\$4.70	\$4.80	\$4.90	\$5.00	
Men																												
Assemblers, class A -----	165	\$4.21	-	-	-	-	-	-	-	-	-	-	-	-	4	28	-	9	96	16	6	3	3	-	-	-	-	-
Assemblers, class B -----	309	3.39	-	-	-	-	78	-	-	36	7	169	15	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Assemblers, class C -----	392	3.01	-	-	226	-	20	-	146	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carpenters, maintenance -----	8	4.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	2	-	-	-	-	-	-	-	-	32
Electricians, maintenance -----	24	4.62	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	6	-	-	-	2	-	-	-	-	-	46
Inspectors, class A -----	138	4.54	-	-	-	-	-	-	-	-	-	-	-	4	-	14	1	1	48	28	-	6	2	-	-	11	-	523
Janitors, porters, and cleaners-----	85	3.06	1	1	30	-	30	11	4	-	-	-	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling -----	128	3.21	-	-	4	1	27	10	52	22	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, pro- duction, class A -----	848	4.40	-	-	-	-	-	-	-	-	-	-	1	2	6	42	24	34	403	121	-	19	18	75	11	12	80	-
Machine-tool operators, pro- duction, class B -----	473	3.52	4	1	2	-	41	3	-	23	107	190	24	38	-	-	-	-	40	-	-	-	-	-	-	-	-	-
Machinists, maintenance -----	48	4.39	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	17	-	-	-	-	26	2	-	-	-	-
Machinists, production -----	581	4.36	-	-	-	-	-	-	-	-	-	-	-	-	-	74	1	3	266	41	19	40	40	29	32	26	10	-
Punch-press operators, class B -----	113	3.21	-	-	-	-	20	-	87	3	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tool and die makers (jobbing) -----	147	5.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6147
Tool and die makers (other than jobbing)-----	200	5.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	40	7154	
Tool clerks -----	56	3.55	-	-	-	-	5	-	1	19	2	7	11	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-
Welders, hand, class A -----	332	4.17	-	-	-	-	-	-	-	-	-	-	-	-	67	20	12	4	196	5	10	-	13	-	5	-	-	-
Women																												
Assemblers, class B -----	147	2.89	7	51	8	5	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, pro- duction, class C -----	54	3.06	-	-	25	-	10	-	4	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ The San Francisco—Oakland Standard Metropolitan Statistical Area consists of Alameda, Contra Costa, Marin, San Francisco, and San Mateo Counties.² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Virtually all workers covered by the study were paid on a time basis.³ All workers were at \$5.20 to \$5.30.⁴ All workers were at \$6 to \$6.10.⁵ Workers were distributed as follows: 12 at \$5.10 to \$5.20 and 11 at \$6.50 to \$6.60.⁶ Workers were distributed as follows: 24 at \$5.10 to \$5.20; 88 at \$5.20 to \$5.30; 11 at \$5.40 to \$5.50; 12 at \$5.50 to \$5.60; and 12 at \$5.60 to \$5.70.⁷ Workers were distributed as follows: 23 at \$5 to \$5.10; 97 at \$5.10 to \$5.20; 4 at \$5.20 to \$5.30; 4 at \$5.30 to \$5.40; 8 at \$5.40 to \$5.50; 2 at \$5.50 to \$5.60; 10 at \$5.60 to \$5.70; 4 at \$5.70 to \$5.80; and 2 at \$5.90 to \$6.

Table 24. Occupational Earnings: Worcester, Mass.¹

(Number and average straight-time hourly earnings² of workers in selected occupations in machinery manufacturing establishments, October 1968)

Occupation ³	Number of workers	Average hourly earnings	NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS OF--																									
			\$2.00 and under \$2.10	\$2.10	\$2.20	\$2.30	\$2.40	\$2.50	\$2.60	\$2.70	\$2.80	\$2.90	\$3.00	\$3.10	\$3.20	\$3.30	\$3.40	\$3.50	\$3.60	\$3.70	\$3.80	\$3.90	\$4.00	\$4.20	\$4.40	\$4.60	\$4.80	\$5.00 and over
Assemblers, class A -----	304	\$3.47	-	-	-	-	-	-	-	1	5	9	34	13	27	38	43	41	23	33	13	11	4	1	2	2	1	3
Assemblers, class B -----	196	3.06	-	1	-	-	-	17	9	29	5	26	25	22	19	15	3	7	9	2	1	2	2	-	2	-	-	-
Assemblers, class C -----	46	2.92	-	-	-	-	-	5	2	3	17	7	4	1	4	1	1	-	1	-	-	-	-	-	-	-	-	-
Carpenters, maintenance----	7	3.43	-	-	-	-	-	-	-	-	-	-	-	1	2	1	-	2	-	1	-	-	-	-	-	-	-	-
Electricians, maintenance----	36	3.45	-	-	-	-	-	-	-	-	-	-	-	-	3	13	11	2	2	3	1	-	1	-	-	-	-	-
Inspectors, class A -----	109	3.27	-	-	-	-	1	3	4	16	-	7	3	11	8	12	19	7	5	5	1	-	4	2	-	1	-	-
Inspectors, class B -----	59	3.07	-	-	-	-	1	3	-	2	10	23	9	-	2	-	-	-	-	-	-	8	1	-	-	-	-	-
Janitors, porters, and cleaners -----	91	2.46	4	6	3	19	11	23	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laborers, material handling -----	75	2.53	-	4	2	25	5	14	10	2	-	9	-	3	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, production, class A -----	1,003	3.35	-	-	-	-	4	5	13	24	52	96	56	86	152	97	140	75	37	62	15	33	20	15	9	5	2	5
Machine-tool operators, production, class B -----	462	3.01	-	-	-	7	15	27	27	88	42	74	62	18	18	22	12	11	8	5	7	7	3	4	1	-	2	2
Machine-tool operators, production, class C -----	115	2.59	-	4	14	10	14	12	14	23	16	6	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machine-tool operators, toolroom (operate more than 1 type of machine)----	11	3.52	-	-	-	-	-	-	-	-	-	-	2	-	-	-	1	5	1	1	1	-	-	-	-	-	-	-
Machinists, production -----	84	3.35	-	-	-	-	-	-	-	-	-	-	2	6	26	30	3	14	1	1	-	-	1	-	-	-	-	-
Mechanics, maintenance----	30	3.38	-	-	-	-	-	-	-	-	-	-	-	6	2	11	6	3	-	1	1	-	-	-	-	-	-	-
Punch-press operators, class A -----	14	3.26	-	-	-	-	-	2	2	-	3	1	-	-	-	-	-	-	-	2	2	1	-	-	1	-	-	-
Setup men, machine tools-----	33	3.49	-	-	-	-	-	-	1	-	1	-	-	2	3	6	3	6	4	2	1	3	-	-	1	-	-	-
Tool and die makers (jobbing) -----	111	3.39	-	-	-	-	-	-	-	-	7	4	13	-	13	9	12	29	10	4	-	5	5	-	-	-	-	-
Tool and die makers (other than jobbing)-----	68	3.53	-	-	-	-	-	-	-	-	-	-	-	-	4	40	3	6	1	-	1	1	5	7	-	-	-	-
Tool clerks -----	39	2.62	-	-	5	4	6	2	3	12	2	3	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Welders, hand, class A ----	43	3.55	-	-	-	-	-	-	-	-	-	-	-	3	3	6	6	7	1	4	1	-	9	-	-	-	-	-

¹ The Worcester Standard Metropolitan Statistical Area consists of the city of Worcester, and the towns of Auburn, Berlin, Boylston, Brookfield, East Brookfield, Grafton, Holden, Leicester, Millbury, Northborough, Northbridge, North Brookfield, Oxford, Paxton, Shrewsbury, Spencer, Sterling, Sutton, Upton, Westborough, and West Boylston in Worcester County.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

³ Data limited to men workers.

Table 25. Method of Wage Payment in 21 Areas: Plant Workers

(Percent of production workers in machinery manufacturing by method of wage payment, September–November 1968)

Method of wage payment ¹	Northeast								South			North Central						West			
	Boston	Buf-falo	Hartford-New Britain-Bristol	Newark and Jersey City	New York	Phila-delphia	Pitts-burgh	Worces-ter	Balti-more	Dallas	Hous-ton	Chi-cago	Cleve-land	Detroit	Mil-waukee	Minne-apolis-St. Paul	St. Louis	Den-ver	Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove	Port-land	San Fran-cisco-Oakland
All workers -----	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Time-rated workers -----	91	78	73	83	90	87	79	81	83	96	95	85	81	97	70	97	82	93	98	100	99
Formal plan -----	67	63	56	56	42	65	62	74	68	74	80	62	61	78	66	86	81	82	62	94	86
Single rate -----	16	23	13	17	8	15	36	18	5	6	8	10	10	36	12	25	28	25	6	78	79
Range of rates -----	51	40	43	39	33	50	26	55	63	68	71	52	51	42	54	61	53	56	56	16	6
Individual rates -----	25	16	18	28	48	22	17	8	15	22	15	23	20	19	4	12	1	11	35	6	14
Incentive workers -----	9	22	27	17	10	13	21	19	17	4	5	15	19	3	30	3	18	7	2	-	(²)
Individual piecework -----	-	5	12	(²)	5	1	3	4	1	4	-	8	7	(²)	9	3	(²)	7	-	-	-
Group piecework -----	-	-	(²)	-	-	2	-	-	-	-	-	1	2	(²)	4	-	1	-	(²)	-	-
Individual bonus -----	8	16	11	13	3	9	7	12	14	-	5	5	8	2	11	-	12	-	1	-	(²)
Group bonus -----	1	1	3	3	3	(²)	11	3	3	-	(²)	2	3	1	6	-	5	-	1	-	-

¹ For definitions of methods of wage payment, see appendix A.² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

68 Table 26. Scheduled Weekly Hours in 21 Areas: Plant Workers

(Percent of production workers in machinery manufacturing establishments by scheduled weekly hours, ¹ September–November 1968)

Weekly hours	Northeast								South			North Central							West			
	Boston	Buf- falo	Hartford- New Britain- Bristol	Newark and Jersey City	New York	Phila- delphia	Pitts- burgh	Worce- ster	Balti- more	Dallas	Hous- ton	Chi- cago	Cleve- land	Detroit	Mil- waukee	Minne- apolis- St. Paul	St. Louis	Den- ver	Los Angeles- Long Beach and Anaheim- Santa Ana- Garden Grove	Port- land	San Fran- cisco- Oakland	
All workers -----	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Under 37½ hours-----	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
37½ and under 40 hours-----	-	-	-	-	1	18	-	9	37	-	-	-	-	-	4	-	-	-	-	4	-	
40 hours-----	66	70	65	76	77	52	84	54	51	52	77	59	52	66	61	81	92	91	75	96	98	
Over 40 and under 45 hours-----	-	-	3	2	-	4	-	-	3	6	-	4	4	-	9	1	-	-	1	-	-	
45 hours-----	19	13	8	7	7	14	2	25	1	-	8	6	12	4	10	13	-	9	10	-	-	
Over 45 and under 48 hours-----	1	2	4	2	2	(²)	3	2	2	-	-	2	3	2	(²)	-	-	-	-	-	-	
48 hours and over-----	14	15	19	13	12	12	12	12	7	42	³ 15	29	29	28	16	5	8	1	14	-	-	

¹ Data relate to the predominant work schedule for full-time day-shift workers in each establishment.

² Less than 0.5 percent.

³ About one-third were in plants which had a 50-hour schedule.

NOTE: Because of rounding, sums of individual items may not equal 100.

Table 27. Scheduled Weekly Hours in 21 Areas: Office Workers

(Percent of office workers in machinery manufacturing establishments by scheduled weekly hours, ¹ September–November 1968)

Weekly hours	Northeast								South			North Central							West			
	Boston	Buf- falo	Hartford- New Britain- Bristol	Newark and Jersey City	New York	Phila- delphia	Pitts- burgh	Worce- ster	Balti- more	Dallas	Hous- ton	Chi- cago	Cleve- land	Detroit	Mil- waukee	Minne- apolis- St. Paul	St. Louis	Den- ver	Los Angeles- Long Beach and Anaheim- Santa Ana- Garden Grove	Port- land	San Fran- cisco- Oakland	
All workers -----	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Under 37½ hours-----	10	1	(²)	10	28	2	3	-	-	-	2	2	(²)	-	(²)	-	-	-	(²)	-	4	
37½ and under 40 hours-----	15	-	1	13	47	7	5	6	4	6	-	16	5	3	8	-	20	-	1	1	1	
40 hours-----	75	99	91	77	25	87	91	94	96	86	97	81	94	92	91	98	80	99	98	99	95	
Over 40 and under 45 hours-----	(²)	-	7	(²)	-	3	-	-	-	-	2	(²)	1	2	-	1	-	-	-	-	-	
45 hours-----	(²)	-	(²)	-	-	-	-	-	-	8	-	-	-	1	(²)	(²)	-	-	-	-	-	
Over 45 and under 48 hours-----	-	-	-	-	-	(²)	-	-	-	-	-	-	-	-	(²)	(²)	-	1	-	-	-	
48 hours and over-----	-	-	-	-	-	-	-	-	-	-	-	1	(²)	1	1	(²)	-	-	(²)	-	-	

¹ Data relate to the predominant work schedule for full-time day-shift workers in each establishment.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal 100.

Table 28. Shift Differential Provisions in 21 Areas: Plant Workers

(Percent of production workers in machinery manufacturing establishments by shift differential provisions, ¹ September–November 1968)

Shift differential	Northeast							South			North Central							West			
	Boston	Buffalo	Hartford-New Britain-Bristol	Newark and Jersey City	New York	Philadelphia	Pittsburgh	Worcester	Baltimore	Dallas	Houston	Chicago	Cleveland	Detroit	Milwaukee	Minneapolis-St. Paul	St. Louis	Denver	Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove	Portland	San Francisco-Oakland
Second shift																					
Workers in establishments having second-shift provisions	77.4	87.6	82.5	77.7	57.9	84.1	92.1	91.7	88.9	77.0	88.4	82.5	86.4	89.2	94.9	92.4	86.1	89.2	78.9	94.8	90.3
With shift differential	76.7	82.5	82.5	76.2	57.9	84.1	88.8	91.7	85.2	77.0	88.4	82.5	86.4	87.8	94.6	92.4	86.1	88.5	75.7	94.8	90.3
Uniform cents per hour	23.4	62.1	34.2	20.7	10.6	24.8	79.1	50.5	6.8	75.4	80.1	40.1	65.6	52.4	82.9	78.8	27.1	49.0	61.2	4.9	11.8
Under 8	-	-	-	-	3.3	-	-	-	-	-	-	-	1.0	.9	-	-	4.0	1.0	.3	-	-
8	-	-	-	-	-	.4	44.6	-	-	9.5	17.2	-	1.0	1.8	.5	-	-	-	-	-	-
Over 8 and under 10	-	-	-	-	-	-	-	-	-	-	1.4	-	1.5	-	-	-	-	-	-	-	-
10	10.8	13.4	2.8	7.5	4.2	8.4	25.8	16.1	6.8	42.6	16.1	8.2	14.4	8.3	32.8	36.8	10.4	19.2	17.3	-	-
11	-	2.6	-	-	-	-	.8	-	-	-	6.1	-	-	-	-	1.5	-	-	-	-	-
12 or 12 1/2	-	2.5	1.7	-	.8	-	4.0	6.0	-	2.2	33.7	2.5	-	1.4	2.5	18.3	-	3.1	14.4	-	-
Over 12 1/2 and under 15	-	-	-	.7	-	-	-	-	-	-	-	6.4	1.0	-	9.7	.5	1.2	-	1.1	-	-
15	2.3	35.9	14.2	10.1	.9	4.7	3.8	-	-	4.1	3.7	6.9	15.6	8.2	20.0	14.1	6.9	22.9	15.7	-	-
Over 15 and under 20	-	-	3.0	.4	-	4.6	-	-	-	-	-	8.7	12.0	-	15.1	1.5	-	-	-	-	-
20	3.0	4.5	-	-	-	2.9	-	6.6	-	11.3	1.9	2.9	15.0	9.4	2.4	6.1	2.7	2.7	5.7	-	9.6
Over 20 and under 25	2.7	-	1.4	-	1.4	-	-	5.2	-	-	-	1.8	1.4	-	-	-	-	-	3.1	4.9	2.2
25	4.6	3.2	5.7	-	-	1.1	-	16.8	-	5.8	-	2.6	.6	22.3	-	-	1.9	-	3.6	-	-
Over 25	-	-	5.5	1.9	-	2.7	-	-	-	-	-	-	2.2	-	-	-	-	-	3.6	-	-
Uniform percentage	42.6	20.3	45.9	53.8	46.2	59.3	9.8	41.2	78.5	-	8.3	32.1	13.5	35.4	11.7	11.6	59.0	36.6	6.4	19.9	6.8
Under 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-
5	-	1.5	15.9	14.6	1.0	-	2.1	6.1	36.8	-	-	.9	1.2	21.6	7.0	-	20.4	-	1.7	-	-
Over 5 and under 10	-	13.4	28.1	-	-	3.6	-	1.7	5.2	-	8.3	3.0	2.6	12.1	4.4	4.4	3.4	-	.6	-	1.9
10	37.0	5.4	1.9	39.2	27.3	54.2	7.7	33.4	36.5	-	-	25.7	9.7	1.7	-	7.2	30.8	36.6	2.6	14.9	4.9
Over 10	5.5	-	-	-	17.9	1.5	-	-	-	-	-	2.5	-	-	.2	-	4.4	-	-	5.0	-
Other formal pay differential ²	10.7	-	2.4	1.8	1.2	-	-	-	-	1.6	-	10.3	7.2	-	-	2.0	-	2.9	8.1	70.0	71.7
With no shift differential	.6	5.1	-	1.5	-	-	3.3	-	3.7	-	-	-	(³)	1.4	.3	-	-	.7	3.1	-	-
Third or other late shift																					
Workers in establishments having third- or other late-shift provisions	60.0	62.6	74.3	67.8	47.1	63.1	82.7	82.5	81.3	31.6	70.4	69.1	74.3	74.8	84.4	72.6	81.7	79.8	46.3	72.7	83.9
With shift differential	60.0	62.6	74.3	67.1	47.1	63.1	82.7	82.5	81.3	31.6	70.4	69.1	74.3	74.8	84.4	72.6	81.7	79.8	45.2	72.7	83.9
Uniform cents per hour	12.3	37.7	27.6	19.5	7.3	15.5	71.7	48.0	8.5	31.6	63.7	33.9	51.6	41.3	61.2	62.0	13.9	21.3	14.5	-	-
Under 10	-	-	-	-	-	-	-	-	-	-	-	-	-	.6	-	-	-	-	-	-	-
10	2.3	-	1.0	1.0	2.5	1.8	-	-	-	2.1	-	2.3	6.3	3.9	1.5	4.4	-	4.3	.3	-	-
Over 10 and under 15	1.5	2.6	-	-	.8	-	46.4	-	1.4	12.9	-	2.0	1.5	2.6	19.6	4.2	1.2	-	-	-	-
15	2.8	5.7	12.2	14.5	1.6	-	18.1	13.5	3.1	4.1	1.4	6.1	16.3	8.0	9.2	39.6	8.1	4.9	8.4	-	-
Over 15 and under 18	-	-	3.2	-	-	-	-	3.5	-	2.2	15.7	3.7	-	-	-	-	-	-	-	-	-
18	-	-	1.0	.7	-	4.6	7.2	-	-	-	43.3	4.5	2.7	.4	3.7	2.0	-	-	1.6	-	-
Over 18 and under 20	-	-	-	-	-	-	-	-	-	-	-	5.9	3.0	-	2.5	4.4	-	-	-	-	-
20	3.0	29.4	2.0	1.0	-	5.2	-	-	2.3	4.4	1.4	4.3	6.9	3.7	17.7	1.5	2.7	12.0	2.6	-	-
Over 20 and under 25	2.7	-	1.4	-	-	-	-	2.4	-	-	-	1.8	8.9	-	-	-	-	-	-	-	-
25	-	-	1.4	.4	.9	1.1	-	6.6	-	5.8	-	2.7	4.4	21.7	.8	-	1.9	-	-	-	-
Over 25	-	-	5.5	1.9	1.4	2.7	-	22.0	1.7	-	1.9	.8	1.7	.4	6.4	5.9	-	-	1.7	-	-
Uniform percentage	37.0	15.1	44.3	46.3	39.8	46.2	9.8	34.5	72.8	-	2.2	23.5	12.2	32.9	10.6	10.6	54.6	36.6	-	5.0	6.8
Under 7	-	-	-	-	-	-	2.1	-	-	-	-	.9	-	.6	.2	-	.9	-	-	-	-
7	-	-	6.3	-	-	-	-	-	2.5	-	-	-	1.2	4.6	-	-	3.4	-	-	-	-
Over 7 and under 10	-	-	-	-	-	-	-	-	-	-	-	-	-	.6	3.7	-	-	-	-	-	1.0
10	18.9	15.1	37.9	46.3	19.1	41.8	7.7	34.5	70.3	-	-	18.9	9.3	27.1	6.7	10.6	50.2	-	-	-	-
Over 10 and under 15	4.7	-	-	-	4.8	1.5	-	-	-	-	2.2	1.4	-	-	-	-	-	36.6	-	-	.8
15	13.4	-	-	-	15.9	2.9	-	-	-	-	-	2.3	1.7	-	-	-	-	-	-	-	4.9
Over 15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0	-
Other formal pay differential ²	10.7	9.9	2.4	1.2	-	1.5	1.3	-	-	-	4.4	11.7	10.6	.6	12.6	-	13.2	21.9	30.7	67.7	77.2
With no shift differential	-	-	-	.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	-	-

¹ Refers to policies of establishments either currently operating late shifts or having provisions covering late shifts.² Includes combination plans such as full day's pay for reduced hours, plus cents or percent differential.³ Less than 0.05 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 29. Shift Differential Practices in 21 Areas: Plant Workers

(Percent of production workers in machinery manufacturing establishments employed on late shifts by amount of pay differential, September–November 1968)

Shift differential	Northeast								South			North Central						West			
	Boston	Buf- falo	Hartford- New Britain- Bristol	Newark and Jersey City	New York	Phila- delphia	Pitts- burgh	Worce- ster	Balti- more	Dallas	Hous- ton	Chi- cago	Cleve- land	Detroit	Mil- waukee	Minne- apolis- St. Paul	St. Louis	Den- ver	Los Angeles- Long Beach and Anaheim- Santa Ana- Garden Grove	Port- land	San Fran- cisco- Oakland
<u>Second shift</u>																					
Workers employed on second shift	8.5	17.6	13.4	9.9	5.5	14.8	20.7	14.7	19.6	12.5	25.3	16.4	18.8	18.0	20.9	18.8	15.3	24.9	13.4	19.1	12.7
Receiving shift differential	8.4	17.4	13.4	9.5	5.5	14.8	19.8	14.7	18.9	12.5	25.3	16.4	18.8	17.6	20.8	18.8	15.3	24.8	12.9	19.1	12.7
Uniform cents per hour	2.5	13.0	5.7	2.2	1.3	3.5	17.4	6.8	4	12.4	23.6	8.4	14.8	10.7	18.3	15.9	6.3	10.8	10.4	.9	1.7
Under 8	-	-	-	-	.2	-	-	-	-	-	-	-	-	-	-	-	1.2	-	.1	-	-
8	-	-	-	-	-	-	7.9	-	-	1.9	5.1	-	-	.4	-	-	-	-	-	-	-
Over 8 and under 10	-	-	-	-	-	-	-	-	-	-	.5	-	.4	-	-	-	-	-	-	-	-
10	.6	2.8	.5	.5	.5	.3	7.2	1.4	.4	8.4	4.2	1.4	2.3	1.4	6.5	7.3	1.5	4.1	2.9	-	-
11	-	.2	-	-	-	-	-	-	-	-	1.7	-	-	-	-	.4	-	-	-	-	-
12 or 12 1/2	-	-	.4	-	.1	-	1.1	1.1	-	.4	10.7	.3	-	.2	.5	3.7	-	.6	2.5	-	-
Over 12 1/2 and under 15	-	-	-	.2	-	-	-	-	-	-	-	1.8	.2	-	1.7	.1	.4	-	.5	-	-
15	.3	7.8	1.8	1.2	.2	.9	1.2	-	-	-	.8	1.0	3.5	1.8	4.9	2.3	2.5	5.4	.2	-	-
Over 15 and under 20	-	-	.4	.1	-	1.2	-	-	-	-	-	2.4	3.4	-	4.2	.3	-	-	-	-	-
20	.8	1.3	-	-	-	.5	-	1.3	-	1.2	.6	.6	4.0	2.0	.5	1.8	.3	.7	-	.9	.9
Over 20 and under 25	.4	-	.3	-	.3	-	-	1.2	-	-	-	.3	.5	-	-	-	-	-	-	.9	.8
25	.5	.8	1.4	-	-	.2	-	1.8	-	.6	-	.5	.1	4.9	-	-	.4	-	.9	-	-
Over 25	-	-	.8	.1	-	.4	-	-	-	-	-	-	.3	-	-	-	-	-	-	-	-
Uniform percentage	4.8	4.4	7.5	6.9	4.2	11.3	2.4	7.8	18.5	-	1.7	5.7	2.8	6.9	2.6	2.4	8.9	13.9	1.2	5.1	.6
Under 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.3	-	-
5	-	.2	-	2.9	(¹)	-	.6	.9	12.3	-	-	.1	.4	4.5	1.5	-	5.4	-	.5	-	-
Over 5 and under 10	-	2.8	7.4	-	-	.1	-	.3	.2	-	1.7	.4	.8	1.9	1.1	1.2	-	-	.2	-	.2
10	3.8	1.4	.1	3.9	2.0	10.9	1.8	6.7	6.0	-	-	4.9	1.6	.4	-	1.2	3.5	13.9	.2	4.1	.5
Over 10	1.1	-	-	-	2.1	.3	-	-	-	-	-	.3	-	-	(¹)	-	-	-	-	1.0	-
Other formal pay differential ²	1.0	-	.2	.4	(¹)	-	-	-	-	.1	-	2.3	1.2	-	-	.5	-	-	1.3	13.1	10.2
Receiving no pay differential	.1	.3	-	.4	-	-	.8	-	.7	-	-	-	(¹)	.3	.1	-	-	.2	.6	-	-
<u>Third or other late shift</u>																					
Workers employed on third or other late shift	.4	2.2	2.0	1.1	.1	5.3	8.1	.8	13.1	1.1	7.3	5.2	2.4	1.8	6.1	2.9	2.6	3.1	1.1	5.5	1.2
Receiving shift differential	.4	2.2	2.0	.9	.1	5.3	8.1	.8	13.1	1.1	7.3	5.2	2.4	1.8	6.1	2.9	2.6	3.1	1.0	5.5	1.2
Uniform cents per hour	.2	.9	.4	.1	(¹)	.4	7.2	.8	-	1.1	7.2	2.6	1.6	.6	4.2	2.6	.3	1.1	.2	-	-
Under 10	-	-	-	-	-	-	-	-	-	-	-	.1	(¹)	(¹)	-	(¹)	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	(¹)	(¹)	-	-	-	-	-	-	-
Over 10 and under 15	-	-	-	-	-	-	3.0	-	-	1.1	-	-	.1	.1	1.0	-	.1	-	-	-	-
15	.2	-	.4	(¹)	-	-	3.2	.2	-	-	.2	-	.7	.1	.7	1.4	-	.3	.1	-	-
Over 15 and under 18	-	-	(¹)	-	-	-	-	-	-	-	3.1	.1	-	-	-	-	-	-	-	-	-
18	-	-	-	.1	-	.1	1.1	-	-	-	3.8	.8	-	(¹)	-	.1	-	-	.1	-	-
Over 18 and under 20	-	-	-	-	-	-	-	-	-	-	-	1.3	.2	-	.4	.3	-	-	-	-	-
20	-	.9	-	-	-	.2	-	-	-	-	.1	(¹)	(¹)	.1	1.1	(¹)	-	.8	-	-	-
Over 20 and under 25	-	-	-	-	-	-	-	-	-	-	-	-	.5	-	-	-	-	-	-	-	-
25	-	-	-	(¹)	(¹)	-	-	.5	-	-	-	.3	-	.3	(²)	-	.2	-	-	-	-
Over 25	-	-	-	-	-	.2	-	.2	-	-	-	(¹)	-	(¹)	1.0	.8	-	(¹)	-	-	-
Uniform percentage	.1	1.1	1.5	.6	(¹)	4.8	.8	-	13.1	-	-	1.0	.1	1.1	.8	.2	1.4	1.1	-	.2	.3
Under 7	-	-	-	-	-	-	.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 percent	-	-	.2	-	-	-	-	-	-	-	-	-	-	-	.1	-	-	-	-	-	-
Over 7 and under 10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(¹)	.7	-	-	-	-	-
10	.1	1.1	1.3	.6	(¹)	4.5	.6	-	13.1	-	-	.9	.1	1.0	.2	.2	1.4	-	-	-	-
Over 10 and under 15	-	-	-	-	-	.2	-	-	-	-	-	.1	-	-	-	-	-	1.1	-	-	-
15	(¹)	-	-	-	-	.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.3
Over 15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.2	-
Other formal pay differential ²	.2	.2	-	.1	-	-	-	-	-	-	.2	1.5	.8	-	1.1	-	.9	1.0	.8	5.3	1.0
Receiving no shift differential	-	-	-	.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.1	-	-

¹ Less than 0.05 percent.

² Includes combination plans such as full-day's pay for reduced hours, plus cents or percent differential.

Table 30. Paid Holidays in 21 Areas: Plant Workers

(Percent of production workers in machinery manufacturing establishments with formal provisions for paid holidays, September–November 1968)

Number of paid holidays	Northeast								South			North Central							West			
	Boston	Bu- falo	Hartford- New Britain- Bristol	Newark and Jersey City	New York	Phila- delphia	Pitts- burgh	Worces- ter	Balti- more	Dallas	Hous- ton	Chi- cago	Cleve- land	Detroit	Mil- waukee	Minne- apolis- St. Paul	St. Louis	Den- ver	Los Angeles- Long Beach and Anaheim- Santa Ana- Garden Grove	Port- land	San Fran- cisco- Oakland	
All workers -----	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Workers in establishments providing paid holidays -----	100	100	100	100	100	100	100	100	100	100	100	100	97	96	100	100	100	100	100	95	100	
5 days -----	-	-	-	-	-	-	3	-	-	28	6	-	-	1	-	-	-	-	1	-	-	
6 days -----	(¹)	5	1	1	1	3	3	2	7	13	13	20	13	7	3	10	(¹)	4	26	4	4	
6 days plus 1, 2, or 3 half days--	-	-	-	1	1	5	-	-	-	8	-	6	4	5	5	10	4	-	4	-	-	
7 days -----	2	-	10	5	4	12	37	-	7	12	11	7	3	3	2	7	2	21	12	7	1	
7 days plus 1, 2, or 3 half days--	2	7	2	6	3	3	5	-	-	-	3	3	6	3	2	9	3	9	7	5	-	
8 days -----	6	4	6	3	15	15	19	26	55	33	44	18	18	11	25	7	27	17	27	79	11	
8 days plus 1, 2, or 3 half days--	1	2	18	6	2	5	3	33	2	-	-	5	10	1	5	10	4	-	1	-	-	
9 days -----	16	49	36	34	24	27	31	29	30	7	23	31	36	29	39	46	32	12	18	-	73	
9 days plus 1, 2, or 3 half days--	26	-	2	6	10	9	-	10	-	-	-	2	-	-	-	-	-	-	-	-	-	
10 days -----	24	33	25	23	12	20	-	-	-	-	-	7	7	32	19	-	27	37	4	-	11	
10 days plus 1 or 2 half days ---	15	-	-	3	5	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	
11 days -----	6	-	-	9	14	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	
11 days plus 1 or 2 half days ----	1	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12 days or more -----	-	-	-	3	5	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	
Workers in establishments providing no paid holidays -----	-	-	-	-	-	-	-	-	-	-	-	-	3	4	-	-	-	-	-	5	-	

¹ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal 100.

Table 31. Paid Holidays in 21 Areas: Office Workers

(Percent of office workers in machinery manufacturing establishments with formal provisions for paid holidays, September–November 1968)

Number of paid holidays	Northeast								South			North Central							West			
	Boston	Bu-falo	Hartford-New Britain-Bristol	Newark and Jersey City	New York	Phila-delphia	Pitts-burgh	Worces-ter	Balti-more	Dallas	Hous-ton	Chi-cago	Cleve-land	Detroit	Mil-waukee	Minne-apolis-St. Paul	St. Louis	Den-ver	Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove	Port-land	San Fran-cisco-Oakland	
All workers-----	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Workers in establishments providing paid holidays-----	100	100	100	100	100	100	100	100	100	100	100	99	99	98	100	100	100	100	100	99	100	
5 days-----	-	3	-	-	-	-	1	-	-	22	3	-	-	(1)	-	-	-	-	1	-	-	
6 days-----	(1)	-	(1)	(1)	(1)	2	2	1	5	6	6	12	11	5	5	5	(1)	4	19	10	2	
6 days plus 1, 2, or 3 half days--	-	2	-	(1)	-	5	1	-	-	7	-	7	4	3	2	6	3	-	3	-	-	
7 days-----	1	-	7	2	2	6	21	-	6	10	9	7	2	2	(1)	3	1	13	9	2	1	
7 days plus 1, 2, or 3 half days--	2	4	1	3	2	5	5	-	-	-	2	5	8	2	3	15	2	5	7	6	-	
8 days-----	2	2	2	7	13	16	11	14	46	48	59	16	14	14	11	12	46	13	39	81	12	
8 days plus 1, 2, or 3 half days--	2	1	31	4	2	1	1	55	1	-	-	6	4	(1)	5	25	5	-	2	-	2	
9 days-----	15	66	36	33	30	36	57	22	42	8	20	35	37	23	46	34	22	10	17	-	78	
9 days plus 1 or 2 half days----	27	-	7	10	11	7	-	8	-	-	-	4	4	-	-	-	-	-	-	-	-	
10 days-----	23	22	16	24	9	17	-	-	-	-	-	7	14	45	29	-	21	57	3	-	6	
10 days plus 1 or 2 half days----	20	-	-	1	8	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	
11 days-----	8	-	-	12	15	5	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	
11 days plus 1 or 2 half days----	1	-	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12 days or more-----	-	-	-	2	4	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	
Workers in establishments providing no paid holidays-----	-	-	-	-	-	-	-	-	-	-	-	(1)	1	2	-	-	-	-	-	1	-	

¹ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal 100.

34 Table 32. Paid Vacations in 21 Areas: Plant Workers

(Percent of production workers in machinery manufacturing establishments with formal provisions for paid vacations, September–November 1968)

Vacation policy	Northeast								South			North Central							West			
	Boston	Bu-falo	Hartford-New Britain-Bristol	Newark and Jersey City	New York	Phila-delphia	Pitts-burgh	Worces-ter	Balti-more	Dallas	Hous-ton	Chi-cago	Cleve-land	Detroit	Mil-waukee	Minne-apolis-St. Paul	St. Louis	Den-ver	Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove	Port-land	San Fran-cisco-Oakland	
All workers-----	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Method of payment																						
Workers in establishments providing paid vacations-----	100	100	100	100	100	100	98	100	100	100	100	100	100	99	100	100	100	100	100	100	100	
Length-of-time payment-----	99	75	91	86	96	93	69	81	100	94	89	85	96	64	87	96	92	93	99	95	68	
Percentage payment-----	1	25	9	8	3	7	29	19	-	6	11	15	1	35	13	4	8	7	1	5	32	
Other-----	-	-	-	7	1	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-	
Amount of vacation pay ¹																						
After 1 year of service																						
Under 1 week-----	-	-	-	1	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	
1 week-----	75	90	62	87	84	82	89	84	96	84	92	82	76	70	88	82	91	54	66	95	21	
Over 1 and under 2 weeks-----	1	10	29	8	4	3	2	-	-	-	-	2	7	6	8	3	7	-	5	-	60	
2 weeks-----	23	-	9	3	10	15	7	16	4	16	8	10	13	16	-	15	2	46	28	5	19	
Over 2 and under 3 weeks-----	-	-	-	-	-	-	-	-	-	-	-	6	4	2	3	-	-	-	2	-	-	
3 weeks-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	
Over 3 and under 4 weeks-----	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	
After 2 years of service																						
Under 1 week-----	-	-	-	-	-	-	-	-	-	-	-	(²)	-	-	-	-	-	-	-	-	-	
1 week-----	40	71	35	39	25	31	70	73	22	35	17	53	42	36	49	36	73	31	24	77	1	
Over 1 and under 2 weeks-----	15	10	54	32	9	26	5	2	30	-	-	7	30	7	31	12	2	13	6	4	8	
2 weeks-----	45	19	11	29	64	43	22	25	47	65	83	34	23	44	17	52	25	56	66	20	91	
Over 2 and under 3 weeks-----	-	-	-	-	1	-	-	-	-	-	-	6	4	6	3	-	-	-	4	-	-	
3 weeks-----	-	-	-	-	1	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-	
Over 3 and under 4 weeks-----	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	
After 3 years of service																						
1 week-----	13	8	15	6	6	14	12	7	17	7	(²)	6	10	5	25	2	9	-	9	4	-	
Over 1 and under 2 weeks-----	10	6	46	34	2	29	13	2	7	-	-	16	40	23	29	4	-	13	4	-	-	
2 weeks-----	75	86	38	60	87	56	73	90	75	93	99	72	46	52	42	90	91	87	82	96	98	
Over 2 and under 3 weeks-----	1	-	-	-	4	2	-	-	-	-	-	7	4	11	3	4	-	-	5	-	-	
3 weeks or more-----	-	-	-	-	2	-	-	-	-	-	-	-	-	8	1	-	-	-	-	-	2	
After 5 years of service																						
1 week-----	-	-	2	1	1	4	-	-	1	(²)	(²)	2	3	-	-	-	-	-	4	-	-	
Over 1 and under 2 weeks-----	-	-	-	-	-	3	-	2	-	-	-	-	7	-	-	-	-	1	4	-	-	
2 weeks-----	98	81	72	89	78	87	87	98	99	94	99	88	81	49	82	91	74	62	81	98	90	
Over 2 and under 3 weeks-----	(²)	10	27	8	11	2	4	-	-	6	-	8	9	28	17	5	26	-	7	-	4	
3 weeks-----	1	10	-	1	8	4	7	-	-	-	-	1	-	13	1	4	-	37	4	2	6	
Over 3 and under 4 weeks-----	-	-	-	-	1	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	
After 10 years of service																						
Under 2 weeks-----	-	-	-	1	-	1	-	-	1	(²)	(²)	-	4	-	-	-	-	-	4	-	-	
2 weeks-----	35	9	38	30	27	22	15	51	18	60	47	22	18	6	4	8	28	28	38	40	3	
Over 2 and under 3 weeks-----	6	7	26	23	9	6	11	4	4	6	-	14	16	47	10	5	(²)	1	3	-	4	
3 weeks-----	57	74	36	45	62	72	64	45	76	34	52	63	58	32	85	83	71	71	50	60	92	
Over 3 and under 4 weeks-----	1	-	-	-	-	-	-	-	-	-	-	1	5	13	1	4	-	-	5	-	-	
4 weeks-----	-	10	-	1	2	-	9	-	-	-	-	1	-	2	-	-	-	-	(²)	-	-	

See footnotes at end of table.

Table 32. Paid Vacations in 21 Areas: Plant Workers—Continued

(Percent of production workers in machinery manufacturing establishments with formal provisions for paid vacations, September–November 1968)

Vacation policy	Northeast								South			North Central							West			
	Boston	Buf- falo	Hartford- New Britain- Bristol	Newark and Jersey City	New York	Phila- delphia	Pitts- burgh	Worce- ster	Balti- more	Dallas	Hous- ton	Chi- cago	Cleve- land	Detroit	Mil- waukee	Minne- apolis- St. Paul	St. Louis	Den- ver	Los Angeles- Long Beach and Anaheim- Santa Ana- Garden Grove	Port- land	San Fran- cisco- Oakland	
<u>Amount of vacation pay¹—Continued</u>																						
<u>After 15 years of service</u>																						
Under 2 weeks -----	-	-	-	1	-	1	-	-	1	(²)	(²)	-	3	-	-	-	-	-	4	-	-	
2 weeks -----	8	4	6	11	13	12	3	1	16	32	15	13	7	3	2	7	-	6	30	5	3	
Over 2 and under 3 weeks -----	-	-	-	-	-	1	-	3	-	-	-	-	2	24	-	-	-	-	1	-	4	
3 weeks -----	78	30	66	70	81	77	72	96	76	68	84	70	50	54	67	85	69	35	53	93	75	
Over 3 and under 4 weeks -----	14	51	27	16	2	8	12	-	-	-	-	3	24	7	10	3	19	15	9	-	-	
4 weeks -----	(²)	15	(²)	2	5	2	2	-	7	-	-	13	14	10	22	4	12	44	3	3	17	
Over 4 weeks -----	-	-	-	-	-	-	9	-	-	-	-	-	-	2	(²)	-	-	-	(²)	-	-	
<u>After 20 years of service</u>																						
Under 2 weeks -----	-	-	-	1	-	1	-	-	1	(²)	(²)	-	3	-	-	-	-	-	4	-	-	
2 weeks -----	8	4	6	11	12	10	3	1	16	32	12	13	6	3	2	7	-	6	28	5	3	
Over 2 and under 3 weeks -----	-	-	-	-	-	1	-	-	-	-	-	-	1	23	-	-	-	-	1	-	4	
3 weeks -----	37	15	57	48	63	30	34	41	12	55	22	24	22	39	8	23	30	31	48	68	56	
Over 3 and under 4 weeks -----	4	3	4	8	1	5	8	2	-	-	-	4	5	8	4	-	-	-	5	-	-	
4 weeks -----	51	64	33	32	23	52	44	56	72	12	66	48	56	25	69	70	70	64	13	27	25	
Over 4 and under 5 weeks -----	-	5	-	-	1	1	-	-	-	-	-	6	5	2	10	-	-	-	(²)	-	12	
5 weeks or more -----	1	10	-	1	-	-	9	-	-	-	-	5	2	-	7	-	-	-	(²)	-	-	
<u>After 25 years of service</u>																						
Under 2 weeks -----	-	-	-	1	-	1	-	-	1	(²)	(²)	-	3	-	-	-	-	-	4	-	-	
2 weeks -----	8	4	6	11	12	9	3	1	16	32	12	13	6	3	2	7	-	6	28	5	3	
Over 2 and under 3 weeks -----	-	-	-	-	-	1	-	-	-	-	-	-	(²)	23	-	-	-	-	1	-	4	
3 weeks -----	17	11	34	34	59	31	8	5	12	53	22	15	18	36	6	21	18	31	33	68	56	
Over 3 and under 4 weeks -----	1	3	-	-	1	1	-	-	-	-	-	2	4	6	-	-	-	-	5	-	-	
4 weeks -----	74	62	38	46	28	48	74	90	72	15	66	52	55	29	31	67	82	11	29	14	25	
Over 4 and under 5 weeks -----	-	5	22	8	1	-	-	-	-	-	-	8	5	1	11	-	-	12	(²)	13	12	
5 weeks -----	-	15	-	-	-	10	6	4	-	-	-	6	8	1	51	4	-	41	-	-	-	
5 weeks or more -----	-	-	-	-	-	-	7	-	-	-	-	4	-	-	-	-	-	-	(²)	-	-	

¹ Vacation payments such as percent of annual earnings were converted to an equivalent time basis. Periods of service were chosen arbitrarily and do not necessarily reflect individual establishment provisions for progression. For example, the changes in proportions indicated at 5 years may include changes which occurred after 4 years.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

4 Table 33. Paid Vacations in 21 Areas: Office Workers

(Percent of office workers in machinery manufacturing establishments with formal provisions for paid vacations, September–November, 1968)

Vacation policy	Northeast								South			North Central							West			
	Boston	Buf- falo	Hartford- New Britain- Bristol	Newark and Jersey City	New York	Phila- delphia	Pitts- burgh	Worces- ter	Balti- more	Dallas	Hous- ton	Chi- cago	Cleve- land	Detroit	Mil- waukee	Minne- apolis- St. Paul	St. Louis	Den- ver	Los Angeles- Long Beach and Anaheim- Santa Ana- Garden Grove	Port- land	San Fran- cisco- Oakland	
All workers	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
<u>Method of payment</u>																						
Workers in establishments providing paid vacations.....	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Length-of-time payment	100	100	100	100	100	100	100	74	100	100	100	97	100	97	98	98	100	98	100	100	92	
Percentage payment	-	-	-	-	-	-	-	26	-	-	-	3	-	2	2	2	-	2	-	-	8	
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	(²)	-	-	-	-	-	-	-	
<u>Amount of vacation pay ¹</u>																						
<u>After 1 year of service</u>																						
Under 1 week	-	-	-	(²)	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	
1 week	8	60	11	9	23	24	13	5	42	45	54	24	9	19	53	18	38	11	37	76	16	
Over 1 and under 2 weeks	-	-	-	-	3	1	-	-	-	-	-	-	5	4	(²)	-	-	-	3	-	2	
2 weeks	92	40	72	87	74	74	87	95	58	55	46	72	78	72	47	82	62	89	57	24	82	
Over 2 and under 3 weeks	-	-	17	-	-	-	-	-	-	-	-	3	7	3	-	-	-	-	2	-	-	
3 weeks or more	-	-	-	-	(²)	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	
<u>After 2 years of service</u>																						
Under 1 week	-	-	-	-	-	-	-	-	-	-	-	(²)	-	-	-	-	-	-	-	-	-	
1 week	4	51	3	5	5	12	7	5	15	10	2	9	4	8	4	4	26	4	16	46	1	
Over 1 and under 2 weeks	2	2	-	1	1	7	(²)	-	1	-	-	1	1	1	7	(²)	(²)	2	4	1	-	
2 weeks	94	47	80	94	87	81	92	95	84	90	98	87	88	87	88	95	74	94	75	53	99	
Over 2 and under 3 weeks	-	-	17	-	2	-	-	-	-	-	-	3	7	3	-	-	-	-	5	-	-	
3 weeks or more	-	-	-	-	5	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	
<u>After 3 years of service</u>																						
1 week	2	1	3	2	2	10	(²)	1	11	1	(²)	2	2	2	4	(²)	3	-	4	1	-	
Over 1 and under 2 weeks	2	1	-	1	-	6	-	-	1	-	-	1	1	1	2	-	-	2	3	-	-	
2 weeks	96	98	73	91	90	78	99	99	87	99	99	85	84	73	95	98	97	98	88	99	100	
Over 2 and under 3 weeks	-	-	24	5	3	5	-	-	-	-	-	13	12	17	-	2	(²)	-	6	-	-	
3 weeks or more	-	-	-	-	5	-	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-	
<u>After 5 years of service</u>																						
Under 2 weeks	-	-	(²)	2	1	7	-	-	1	(²)	(²)	(²)	1	2	-	-	-	1	4	-	-	
2 weeks	99	64	76	86	77	85	71	100	99	90	99	84	84	59	94	98	90	43	79	99	98	
Over 2 and under 3 weeks	-	18	14	5	9	5	7	-	-	6	-	5	8	5	6	-	10	-	8	-	2	
3 weeks	1	17	10	8	11	3	22	-	-	4	-	11	6	31	-	2	-	57	9	1	(²)	
Over 3 and under 4 weeks	-	-	-	-	2	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	
<u>After 10 years of service</u>																						
Under 2 weeks	-	-	(²)	2	-	1	-	-	1	(²)	(²)	(²)	1	-	-	-	-	-	1	-	-	
2 weeks	33	7	38	18	27	24	9	49	27	35	39	17	20	15	8	4	26	12	34	46	7	
Over 2 and under 3 weeks	2	3	8	(²)	7	4	68	2	-	6	-	2	5	8	7	-	(²)	1	2	-	-	
3 weeks	65	73	44	73	59	71	-	49	72	59	60	70	60	54	85	94	74	87	55	54	90	
Over 3 and under 4 weeks	-	-	10	5	-	-	-	-	-	-	-	10	13	16	(²)	2	-	-	6	-	-	
4 weeks or more	-	17	-	2	7	-	23	-	-	-	-	1	1	8	-	-	-	-	1	-	3	

See footnotes at end of table.

Table 33. Paid Vacations in 21 Areas: Office Workers—Continued

(Percent of office workers in machinery manufacturing establishments with formal provisions for paid vacations, September–November, 1968)

Vacation policy	Northeast								South			North Central							West			
	Boston	Buf- falo	Hartford- New Britain- Bristol	Newark and Jersey City	New York	Phila- delphia	Pitts- burgh	Worces- ter	Balti- more	Dallas	Hous- ton	Chi- cago	Cleve- land	Detroit	Mil- waukee	Minne- apolis- St. Paul	St. Louis	Den- ver	Los Angeles- Long Beach and Anaheim- Santa Ana- Garden Grove	Port- land	San Fran- cisco- Oakland	
<u>Amount of vacation pay¹—Continued</u>																						
<u>After 15 years of service</u>																						
Under 2 weeks	-	-	(²)	2	-	1	-	-	-	(²)	(²)	-	1	-	-	-	-	-	1	-	-	
2 weeks	6	2	3	3	12	8	9	1	24	14	9	10	5	9	1	2	-	2	24	1	7	
Over 2 and under 3 weeks	-	-	-	-	-	(²)	-	-	-	-	-	-	-	2	-	-	(²)	-	2	-	-	
3 weeks	81	18	72	72	78	75	51	99	76	82	90	68	57	57	75	70	77	30	60	90	81	
Over 3 and under 4 weeks	13	52	18	15	1	10	16	-	-	-	-	2	20	3	7	26	10	4	7	-	-	
4 weeks	(²)	28	7	9	9	7	1	-	-	4	-	20	18	28	16	2	13	63	5	9	12	
Over 4 weeks	-	-	-	-	-	-	23	-	-	-	-	-	-	2	(²)	-	-	-	(²)	-	-	
<u>After 20 years of service</u>																						
Under 2 weeks	-	-	(²)	2	-	1	-	-	-	(²)	(²)	-	1	-	-	-	-	-	1	-	-	
2 weeks	6	2	3	3	11	7	9	1	24	14	7	10	5	9	1	2	-	2	23	1	7	
Over 2 and under 3 weeks	-	-	-	-	-	(²)	-	-	-	-	-	-	-	2	-	-	(²)	-	(²)	-	-	
3 weeks	42	9	53	21	55	19	13	34	6	52	29	20	21	34	8	17	26	13	55	57	37	
Over 3 and under 4 weeks	-	-	8	-	-	9	-	2	-	-	-	2	(²)	(²)	5	26	-	-	5	-	-	
4 weeks	52	64	36	72	34	63	55	63	70	33	64	61	62	51	72	55	74	84	17	42	56	
Over 4 and under 5 weeks	-	8	-	-	-	1	-	-	-	-	-	3	9	1	5	-	-	-	(²)	-	-	
5 weeks or more	-	17	-	2	-	-	23	-	-	-	-	5	1	2	8	-	-	-	(²)	-	-	
<u>After 25 years of service</u>																						
Under 2 weeks	-	-	(²)	2	-	1	-	-	-	(²)	-	-	1	-	-	-	-	-	1	-	-	
2 weeks	6	2	3	3	11	6	7	1	24	14	-	10	5	9	1	2	-	2	23	1	-	
Over 2 and under 3 weeks	-	-	-	-	-	(²)	-	-	-	-	-	-	-	2	-	-	(²)	-	(²)	-	-	
3 weeks	19	7	10	14	44	20	3	-	6	52	-	13	17	33	5	17	14	13	40	57	-	
Over 3 and under 4 weeks	-	-	-	-	-	3	-	-	-	-	-	-	-	(²)	-	26	-	-	4	-	-	
4 weeks	76	61	72	79	46	55	66	98	69	33	-	56	55	52	43	53	86	24	31	21	-	
Over 4 and under 5 weeks	-	8	14	-	-	-	2	-	-	-	-	3	7	1	6	-	-	-	1	21	-	
5 weeks	-	22	-	2	-	15	1	2	1	-	-	16	16	1	45	2	-	60	-	-	-	
Over 5 weeks	-	-	-	-	-	-	22	-	-	-	-	3	-	2	-	-	-	-	(²)	-	-	

¹ Vacation payments such as percent of annual earnings were converted to an equivalent time basis. Periods of service were chosen arbitrarily and do not necessarily reflect individual establishment provisions for progression. For example, the changes in proportions indicated at 5 years may include changes which occurred after 4 years.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

4 Table 34. Health, Insurance, and Retirement Plans in 21 Areas: Plant Workers

(Percent of production workers in machinery manufacturing establishments with specified health, insurance, and retirement plans, ¹ September–November 1968)

Type of plan	Northeast								South			North Central						West			
	Boston	Buffalo	Hartford-New Britain-Bristol	Newark and Jersey City	New York	Philadelphia	Pittsburgh	Worcester	Baltimore	Dallas	Houston	Chicago	Cleveland	Detroit	Milwaukee	Minneapolis-St. Paul	St. Louis	Denver	Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove	Portland	San Francisco-Oakland
All workers	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Workers in establishments providing:																					
Life insurance	99	98	99	94	86	93	98	99	94	98	98	94	92	98	98	99	94	95	91	98	100
Employer financed	66	88	73	87	75	88	78	69	27	60	32	68	80	96	90	89	83	85	76	96	94
Jointly financed	32	10	27	5	11	5	17	30	67	39	66	27	13	2	8	10	12	10	15	3	6
Accidental death and dismemberment insurance	87	57	84	68	55	74	54	99	70	78	74	72	73	92	79	67	94	42	83	95	97
Employer financed	59	57	62	67	53	70	46	55	25	39	20	56	66	90	73	55	83	33	71	92	90
Jointly financed	26	-	22	2	2	5	6	44	44	39	54	16	7	2	6	11	11	9	12	3	6
Sickness and accident insurance or sick leave or both ²	95	82	93	61	74	87	92	99	95	75	84	90	87	93	96	95	97	93	54	95	86
Sickness and accident insurance	89	82	90	53	42	87	92	99	95	64	78	86	87	93	96	61	90	49	20	88	4
Employer financed	69	73	68	51	40	82	75	68	84	22	19	60	70	91	84	49	80	40	20	85	4
Jointly financed	20	10	22	2	2	5	14	31	11	42	59	25	17	2	12	12	10	9	1	3	-
Sick leave (full pay, no waiting period)	13	-	1	5	56	4	-	13	-	11	2	3	3	11	15	38	4	48	40	8	2
Sick leave (partial pay or waiting period)	7	3	1	4	5	1	-	-	-	-	32	4	(⁴)	(⁴)	-	4	7	4	10	7	81
Hospitalization insurance	99	100	99	99	98	98	99	100	90	90	99	99	96	99	100	100	100	95	98	100	100
Employer financed	51	99	69	97	92	89	80	45	83	37	29	70	81	96	86	81	90	77	79	92	98
Jointly financed	47	1	30	2	6	9	19	55	7	54	71	30	15	3	14	19	10	18	19	8	2
Surgical insurance	99	100	99	99	97	98	99	100	87	90	99	99	94	99	100	100	98	95	98	100	100
Employer financed	51	99	71	95	88	89	80	45	80	37	29	70	80	96	86	82	87	77	79	92	98
Jointly financed	48	1	28	3	9	9	19	55	7	54	71	30	14	3	14	18	10	18	19	8	2
Medical insurance	95	62	94	71	65	86	71	100	77	80	92	97	79	99	99	98	98	95	97	100	100
Employer financed	47	61	66	71	59	79	59	45	70	34	29	68	68	96	84	81	87	77	78	92	98
Jointly financed	48	1	28	-	6	8	12	55	7	46	64	28	12	3	14	18	10	18	19	8	2
Catastrophe insurance	93	39	47	41	29	68	26	100	52	70	83	70	33	44	68	47	32	84	87	95	74
Employer financed	40	25	24	37	24	59	22	45	46	22	24	41	26	47	55	32	20	70	71	92	71
Jointly financed	53	14	23	4	5	8	4	55	6	48	60	29	8	2	12	16	12	15	16	3	2
Retirement plans ³	82	88	91	69	73	81	91	98	95	70	78	79	80	86	96	64	87	77	55	88	94
Pension plans	80	88	91	64	69	78	91	98	93	70	76	78	76	83	86	58	87	77	54	78	94
Employer financed	71	78	80	61	65	74	91	95	53	59	70	74	72	81	81	58	87	77	42	78	88
Jointly financed	9	10	11	4	4	5	-	3	39	11	6	4	5	2	5	-	-	-	12	-	6
Lump-sum payments	11	6	-	5	6	10	25	13	25	11	11	7	14	7	11	15	-	40	1	28	2
No plans	-	-	-	1	2	2	-	-	1	2	(⁴)	-	-	(⁴)	-	-	-	(⁴)	2	-	-

¹ Includes only those plans for which the employer pays at least part of the cost and excludes legally required plans such as workmen's compensation and social security. However, plans required by State temporary disability insurance laws are included if the employer contributes more than is required or the employees receive benefits over the legal requirements.

² Unduplicated total of workers in plants having sick leave or sickness and accident insurance shown separately.

³ Unduplicated total of workers in plants having pension plans or lump-sum payments shown separately.

⁴ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals.

Table 35. Health, Insurance, and Retirement Plans in 21 Areas: Office Workers

(Percent of office workers in machinery manufacturing establishments with specified health, insurance, and retirement plans, ¹ September–November 1968)

Type of plan	Northeast								South			North Central							West			
	Boston	Buf- falo	Hartford- New Britain- Bristol	Newark and Jersey City	New York	Phila- delphia	Pitts- burgh	Worce- ster	Balti- more	Dallas	Hous- ton	Chi- cago	Cleve- land	Detroit	Mil- waukee	Minne- apolis- St. Paul	St. Louis	Den- ver	Los Angeles- Long Beach and Anaheim- Santa Ana- Garden Grove	Port- land	San Fran- cisco- Oakland	
All workers -----	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Workers in establishments providing:																						
Life insurance -----	99	99	99	95	91	93	97	100	96	99	98	96	97	97	99	99	92	98	96	99	100	
Employer financed -----	62	73	57	79	65	79	75	78	26	37	28	71	80	93	93	69	59	80	69	91	95	
Jointly financed -----	37	26	42	16	26	14	22	22	70	62	69	25	17	5	6	31	33	18	27	6	5	
Accidental death and dis- memberment insurance -----	91	41	77	78	51	77	73	100	64	77	74	78	77	90	83	71	82	39	87	91	96	
Employer financed -----	57	32	47	68	41	70	65	55	26	21	12	61	69	85	79	62	58	21	63	90	91	
Jointly financed -----	33	9	31	7	10	7	8	45	38	56	62	17	7	5	4	9	24	18	24	1	5	
Sickness and accident in- surance or sick leave or both ² -----	89	91	89	80	75	83	93	100	96	89	95	89	93	95	98	96	73	98	74	92	78	
Sickness and accident in- surance -----	76	87	50	61	43	80	89	96	64	71	60	72	74	95	90	44	56	33	26	87	3	
Employer financed -----	64	65	35	58	39	73	72	59	53	15	7	51	50	90	83	35	35	15	21	81	3	
Jointly financed -----	12	22	15	2	4	8	17	37	11	55	53	21	24	5	6	9	21	18	5	6	(³)	
Sick leave (full pay, no waiting period) -----	57	59	70	46	57	60	57	71	52	41	62	47	55	62	74	72	47	87	66	8	69	
Sick leave (partial pay or waiting period) -----	4	-	-	3	(³)	-	-	-	-	-	23	4	(³)	11	1	(³)	1	3	6	1	6	
Hospitalization insurance -----	98	98	99	98	96	98	97	100	87	91	99	99	99	99	100	100	96	99	99	100	100	
Employer financed -----	49	94	58	92	89	81	78	41	76	27	24	73	86	85	84	59	72	87	70	91	95	
Jointly financed -----	50	5	42	7	7	16	19	59	11	63	75	26	13	14	16	41	24	13	28	9	5	
Surgical insurance -----	99	98	99	98	95	98	97	100	86	91	99	99	98	99	100	100	92	99	99	100	100	
Employer financed -----	49	94	61	91	86	81	78	41	75	27	24	73	85	85	84	59	68	87	70	91	95	
Jointly financed -----	50	5	38	7	9	16	19	59	11	63	75	26	13	14	16	41	24	13	28	9	5	
Medical insurance -----	95	53	88	71	74	83	84	100	78	81	99	97	85	99	99	99	92	99	99	100	100	
Employer financed -----	45	48	53	64	65	68	68	41	68	22	24	73	73	84	83	59	68	87	70	91	95	
Jointly financed -----	50	5	35	6	9	15	16	59	10	59	75	24	12	14	16	41	24	13	28	9	5	
Catastrophe insurance -----	97	49	89	67	60	72	59	100	89	81	96	78	36	85	65	70	62	93	93	94	64	
Employer financed -----	45	25	35	41	47	55	54	41	45	22	23	48	26	55	38	56	35	82	65	88	57	
Jointly financed -----	52	24	53	26	13	17	4	59	44	60	73	30	10	30	27	14	28	11	27	6	7	
Retirement plans ⁴ -----	91	92	94	89	75	87	90	99	90	72	87	82	84	83	98	77	93	84	65	85	81	
Pension plans -----	90	92	94	86	73	86	90	99	88	72	86	81	80	82	86	66	93	83	65	65	79	
Employer financed -----	74	71	74	82	65	81	65	97	30	37	60	77	73	68	78	39	76	83	37	53	72	
Jointly financed -----	16	22	21	4	8	5	25	2	58	35	26	4	7	14	9	27	18	-	28	12	7	
Lump-sum payments -----	12	-	-	4	3	12	17	23	(³)	8	8	12	13	(³)	19	28	2	62	(³)	45	3	
No plans -----	-	-	-	2	2	2	2	-	1	1	(³)	1	-	1	-	-	2	-	1	-	-	

¹ Includes only those plans for which the employer pay at least part of the cost and excludes legally required plans such as workmen's compensation and social security. However, plans required by State temporary disability insurance laws are included if the employer contributes more than is required or the employees receive benefits over the legal requirements.² Unduplicated total of workers in plants having sick leave or sickness and accident insurance shown separately.³ Less than 0.5 percent.⁴ Unduplicated total of workers in plants having pension plans for lump-sum payments shown separately.

NOTE: Because of rounding, sums of individual items may not equal totals.

Appendix A. Scope and Method of Survey

Scope of Survey

The survey included establishments engaged primarily in manufacturing machinery, except electrical (major group 35 as defined in the 1967 edition of the Standard Industrial Classification Manual, prepared by the U.S. Bureau of the Budget). This major group includes establishments engaged in manufacturing machinery and equipment, other than electrical equipment (major group 36) and transportation equipment (major group 37). Machines powered by built-in or detachable motors ordinarily are included in major group 35, with the exception of electrical household appliances (major group 36). Portable tools, both electric and pneumatic powered, are included in major group 35, but handtools are classified in major group 34. Separate auxiliary units such as central offices of the firms studied were excluded.

The study covered establishments with 20 workers or more at the time of reference of the data used in compiling the universe lists. Also included were establishments which employed 8 to 19 workers and primarily manufactured special dies and tools, die sets, jigs and fixtures, or machine-tool accessories and measuring devices (industries 3544 and 3545).

The number of establishments and workers actually studied by the Bureau, as well as the number estimated to be in the industries during the payroll period studied, is shown in the table on the next page.

Method of Study

Data were obtained by personal visits of the Bureau's field staff. The survey was conducted on a sample basis. To obtain appropriate accuracy at minimum cost, a greater proportion of large rather than small establishments was studied. In combining the data, however, all establishments were given their appropriate weight. All estimates are presented, therefore, as relating to all establishments in the industry in the selected areas, excluding only those below the minimum size at the time of reference of the universe data.

Establishment Definition

An establishment, for purposes of this study, is defined as a single physical location where industrial operations are performed. An establishment is not necessarily identical with the company, which may consist of one or more establishments.

Employment

Estimates of the number of workers within scope of the study are intended as a general guide to the size and composition of the labor force included in the survey. The advance planning necessary to make a wage survey requires the use of the lists of establishments assembled considerably in advance of the payroll period studied.

Production and Office Workers

The term "production workers," as used in this bulletin, includes working foremen and all nonsupervisory workers engaged in nonoffice functions. Administrative, executive, professional, and technical personnel and force-account construction employees, who were utilized as a separate work force on the firm's own properties, were excluded.

The term "office workers," includes all nonsupervisory office workers and excludes administrative, executive, professional, and technical employees.

Estimated number of establishments and workers within scope of survey and number studied, machinery manufacturing industries, 21 areas, September–November 1968

Area ¹	Payroll period	Number of establishments ²		Workers in establishments			
		Within scope of study	Studied	Within scope of study			Studied
				Total ³	Production workers	Office workers	
Total, 21 areas -----	-	6,227	1,044	723,171	505,902	95,147	437,745
Northeast:							
Boston -----	October	209	48	24,354	15,650	3,110	15,002
Buffalo -----	October	101	23	13,798	8,811	2,618	8,629
Hartford-New Britain-Bristol -----	November	192	46	27,832	21,124	3,148	21,626
Newark and Jersey City -----	November	296	53	31,240	22,297	4,371	17,895
New York -----	September	485	81	31,637	23,013	3,673	15,428
Philadelphia -----	October	360	60	49,595	34,268	6,096	31,206
Pittsburgh -----	November	121	31	16,714	11,741	2,068	12,023
Worcester -----	October	51	20	9,474	6,500	1,135	8,071
South:							
Baltimore -----	October	59	21	11,086	8,775	1,140	9,023
Dallas -----	September	88	27	10,821	8,018	1,306	6,244
Houston -----	October	128	28	21,201	15,577	2,262	14,324
North Central:							
Chicago -----	October	939	123	117,626	84,912	16,681	62,471
Cleveland -----	October	417	76	48,153	33,665	6,389	30,130
Detroit -----	October	1,074	104	84,277	62,336	9,810	43,066
Milwaukee -----	October	245	51	63,264	42,385	10,629	46,343
Minneapolis-St. Paul -----	November	222	43	45,527	27,162	6,462	32,166
St. Louis -----	November	158	39	19,595	14,118	2,440	13,572
West:							
Denver -----	October	47	19	9,524	5,938	1,367	7,845
Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove -----	October	832	101	68,691	46,465	7,762	30,774
Portland -----	November	51	18	4,996	3,836	493	3,420
San Francisco-Oakland -----	September	152	32	13,766	9,311	2,187	8,487

1 For definition of areas, see footnote 1 in tables 4-24.

2 Includes only establishments manufacturing dies and tools, die sets, jigs and fixtures, or machine-tool accessories and measuring devices which employed 8 workers or more, and other machinery establishments with 20 workers or more at the time of reference of the universe data.

3 Includes executive, professional, and other workers excluded from the separate production and office workers categories.

Occupations Selected for Study

Occupational classification was based on a uniform set of job descriptions designed to take account of interestablishment and interarea variations in duties within the same job. (See appendix B for these descriptions.) The occupations were chosen for their numerical importance, their usefulness in collective bargaining, or their representativeness of the entire job scale in the industry. Working supervisors, apprentices, learners, beginners, trainees, and handicapped, part-time, temporary, and probationary workers were not reported in the data for selected occupations.

Wage Data

Information on wages relates to straight-time hourly earnings, excluding premium pay for overtime and for work on weekends, holidays, and late shifts. Incentive payments, such as those resulting from piecework or production bonus systems and cost-of-living bonuses, were included as part of the worker's regular pay; but nonproduction bonus payments, such as Christmas or yearend bonuses, were excluded.

Average (mean) hourly rates (or earnings) for each occupation were calculated by weighting each rate by the number of workers receiving the rate, totaling, and dividing by the number of individuals. The hourly earnings of salaried workers were obtained by dividing their straight-time salary by normal rather than actual hours.

Wage Trends

The machinery index series has been developed from data obtained in the Bureau's program of occupational wage surveys in the 21 selected areas studied separately and is based on straight-time hourly earnings of men production workers in the following occupations: Assemblers (classes A, B, and C); electricians, maintenance; inspectors (classes A, B, and C); janitors, porters, and cleaners; laborers, material handling; machine-tool operators, production (classes A, B, and C); machinists, production; tool and die makers (other than jobbing); and welders, hand, class A.

Area indexes reflect changes in average hourly earnings but not changes in the proportion of workers in the separate occupations. For each area, an aggregate of earnings was obtained by weighting the average straight-time hourly earnings for the respective occupations by a set of weights, based on average employments in the occupations in that area for 1964 and 1965. The percent of change was determined by comparing this aggregate with the aggregate for the previous year; the current index was computed by applying this percent of change to the previous index (in this case, 1966) for the area.

The index for all areas combined is constructed so as to minimize the effect of employment changes among the areas studied. The composite index was obtained by following techniques similar to those used to determine area indexes. An aggregate of earnings was obtained by weighting the average straight-time hourly earnings for the selected occupations in the areas by a set of weights, based on average employments in the machinery industries in these areas for the years 1964 and 1965. The percent of change was determined by comparing this aggregate with the aggregate for the previous year, and the current index was computed by applying this percent of change to the previous index (1966) for all areas combined.

From time to time, the index procedure is revised to bring the weighting pattern up to date by changing the set of occupational weights and the area weights. The new indexes are linked to the existing ones to form a continuous series.

Method of Wage Payment

Tabulations by method of wage payment relate to the number of workers paid under the various time and incentive wage systems. Formal rate structures for time-rated workers provide single rates or a range of rates for individual job categories. In the absence of a formal rate structure, pay rates are determined primarily by the qualifications of the individual worker. A single rate structure is one in which the same rate is paid to all experienced workers in the same job classification. Learners, apprentices, or probationary workers may be paid according to rate schedules which start below the single rate and permit the workers to achieve the full job rate over a period of time. Individual experienced workers occasionally may be paid above or below the single rate for special reasons, but such payments are exceptions. Range of rate plans are those in which the minimum and/or maximum rates paid experienced workers for the same job are specified. Specific rates of individual workers within the range may be determined by merit, length of service, or a combination of various concepts of merit and length of service. Incentive workers are classified under piecework or bonus plans. Piecework is work for which a predetermined rate is paid for each unit of output. Production bonuses are based on production over a quota or for completion of a task in less than standard time.

Scheduled Weekly Hours

Data on weekly hours refer to the predominant work schedule for full-time production (or office) workers employed on the day shift, regardless of sex.

Shift Provisions and Practices

Shift provisions relate to the policies of establishments either currently operating late shifts or having formal provisions covering late shift work. Practices relate to workers employed on late shifts at the time of the survey.

Supplementary Wage Provisions

Supplementary benefits were treated statistically on the basis that if formal provisions were applicable to half or more of the production workers (or office workers) in an establishment, the benefits were considered applicable to all such workers. Similarly, if fewer than half of the workers were covered, the benefit was considered nonexistent in the establishment. Because of length-of-service and other eligibility requirements, the proportion of workers receiving the benefits may be smaller than estimated.

Paid Holidays. Paid holiday provisions relate to full-day and half-day holidays provided annually.

Paid Vacations. The summaries of vacation plans are limited to formal arrangements, excluding informal plans, whereby time off with pay is granted at the discretion of the employer or supervisor. Payments not on a time basis were converted; for example, a payment of 2 percent of annual earnings was considered the equivalent of 1 week's pay. The periods of service for which data are presented represent the most common practices, but they do not necessarily reflect individual establishment provisions for progression. For example, the changes in proportions indicated at 10 years of service may include changes which occurred between 5 and 10 years.

Health, Insurance, and Retirement Plans. Data are presented for health, insurance, pension, and lump-sum retirement plans for which all or part of the cost is borne by the employer, excluding programs required by law, such as workmen's compensation and social security. Among the plans included are those underwritten by a commercial insurance company, and those paid directly by the employer from his current operating funds or from a fund set aside for this purpose.

Death benefits are included as a form of life insurance. Sickness and accident insurance is limited to that type of insurance under which predetermined cash payments are made directly to the insured on a weekly or monthly basis during illness or accident disability. Information is presented for all such plans to which the employer contributes at least a part of the cost. However, in New York and New Jersey, where temporary disability insurance laws require employer contributions,¹ plans are included only if the employer (1) contributes more than is legally required or (2) provides the employees with benefits which exceed the requirements of the law.

Tabulations of paid sick leave plans are limited to formal plans which provide full pay or a proportion of the worker's pay during absence from work because of illness; informal arrangements have been omitted. Separate tabulations are provided according to (1) plans which provide full pay and no waiting period, and (2) plans providing either partial pay or a waiting period.

Medical insurance refers to plans providing for complete or partial payment of doctors' fees. These plans may be underwritten by a commercial insurance company or a nonprofit organization, or they may be a form of self-insurance.

Catastrophe insurance, sometimes referred to as extended medical insurance, includes the plans designed to cover employees for sickness or injury involving an expense which exceeds the normal coverage of hospitalization, medical, and surgical plans.

Tabulations of retirement pensions are limited to plans which provide regular payments for the remainder of the retiree's life. Data are presented separately for lump-sum retirement pay (one payment or several over a specified period of time) made to employees on retirement. Establishments providing both lump-sum retirement pay and retirement pensions to employees were considered as having both retirement pension and lump-sum retirement plans. Establishments having optional plans providing employees a choice of either lump-sum retirement pay or pensions were considered as having only retirement pension benefits.

¹ The temporary disability insurance laws in California and Rhode Island do not require employer contributions.

Appendix B. 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 inter-area 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, handicapped, part-time, temporary, and probationary workers.

ASSEMBLER

(Bench assembler; floor assembler; jig assembler; line assembler; subassembler)

Assembles and/or fits together parts to form complete units or subassemblies at a bench, conveyor line, or on the floor, depending on the size of the units and the organization of the production process. Work may include processing operations requiring the use of handtools in scraping, chipping, and filing of parts to obtain a desired fit as well as power tools and special equipment when punching, riveting, soldering, or welding of parts is necessary. Workers who perform any of these processing operations exclusively as part of specialized assembling operations are excluded.

Class A. Assembles parts into complete units or subassemblies that require fitting of parts and decisions regarding proper performance of any component part or the assembled unit. Work involves any combination of the following: Assembling from drawings, blueprints, or other written specifications; assembling units composed of a variety of parts and/or subassemblies; assembling large units requiring careful fitting and adjusting of parts to obtain specified clearances; and using a variety of hand and powered tools, and precision measuring instruments.

Class B. Assembles parts into units or subassemblies in accordance with standard and prescribed procedures. Work involves any combination of the following: Assembling a limited range of standard and familiar products composed of a number of small- or medium-size parts requiring some fitting or adjusting; assembling large units that require little or no fitting of component parts; working under conditions where accurate performance and completion of work within set time limits are essential for subsequent assembling operations; and using a limited variety of hand or powered tools.

Class C. Performs short-cycle repetitive assembling operations. Work does not involve any fitting or making decisions regarding proper performance of the component parts or assembling procedures.

AUTOMATIC-LATHE OPERATOR

(Automatic-between-centers-lathe operator; automatic-chucking-machine operator; automatic-turret-lathe operator)

Operates one or more lathes equipped with automatic feed mechanisms for actuating the cutting tools over the complete work cycle. Automatic lathes may differ as to type of construction (horizontal or vertical); number of spindles (single or multiple); method of feed (hand-feed, automatic-chucking, or hopper-feed); method of holding the work (in chucks or between centers); and method of presenting the tools to the stock in sequence (turrets, slides, revolving work stations). (For description of class of work see machine-tool operator, production.)

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 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.

DRILL-PRESS OPERATOR, RADIAL

Operates one or more types of radial-drilling machines designed primarily for the purpose of drilling, reaming, countersinking, counterboring, spot-facing, or tapping holes in large heavy metal parts. Several types of radial drills are in use, the most common type being designed so that the tool head and saddle are movable along a projecting arm which can be rotated about a vertical column and adjusted vertically on that column. (For description of class of work see machine-tool operator, production.)

DRILL-PRESS OPERATOR, SINGLE- OR MULTIPLE-SPINDLE

Operates one or more types of single- or multiple-spindle drill-presses, to perform such operations as drilling, reaming, countersinking, counterboring, spot-facing, and tapping. Drill-press operators, radial, and operators of portable drilling equipment are excluded. (For description of class of work see machine-tool operator, production.)

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, layout, 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.

ENGINE-LATHE OPERATOR

Operates an engine lathe for shaping external and internal cylindrical surfaces of metal objects. The engine lathe, basically characterized by a headstock, tailstock, and power-fed tool carriage, is a general-purpose machine tool used primarily for turning. It is also commonly used in performing such operations as facing, boring, drilling and threading, and equipped with appropriate attachments, may be used for a very wide variety of special machining operations. The stock may be held in position by the lathe "centers" or by various types of chucks and fixtures. Bench-lathe operators, automatic-lathe operators, screw-machine operators, automatic, and turret-lathe operators, hand (including hand screw machine) are excluded. (For description of class of work see machine-tool operator, production.)

GRINDING-MACHINE OPERATOR

(Centerless-grinder operator; cylindrical-grinder operator; external-grinder operator; internal-grinder operator; surface-grinder operator; Universal-grinder operator)

Operates one of several types of precision grinding machines to grind internal and external surfaces of metal parts to a smooth and even finish and to required dimensions. Precision grinding is used primarily as a finishing operation on previously machined parts, and consists of applying abrasive wheels rotating at high speed to the surfaces to be ground.

GRINDING-MACHINE OPERATOR—Continued

In addition to the types of grinding machines indicated above, this classification includes operators of other production grinding machines, such as single-purpose grinders (drill-grinders, broach grinders, saw grinders, gearcutter grinders, thread grinders, etc.) and automatic and semiautomatic general purpose grinding machines. Operators of portable grinders are excluded. (For description of class of work see machine-tool operator, production.)

INSPECTOR

Inspects parts, products, and/or processes of the establishment. Performs such operations as examining parts of products for flaws and defects, checking their dimensions and appearance to determine whether they meet the required standards and specifications. Does not include inspectors in toolrooms or inspectors of purchased parts.

Class A. Responsible for decisions regarding the quality of the product and/or operations. Work involves any combination of the following: Thorough knowledge of the processing operations in the branch of work to which he is assigned, including the use of a variety of precision measuring instruments; interpreting drawings and specifications in inspection work on units composed of a large number of component parts; examining a variety of products or processing operations; determining causes of flaws in products and/or processes and suggesting necessary changes to correct work methods; and devising inspection procedures for new products.

Class B. Work involves any combination of the following: Knowledge of processing operations in the branch of work to which he is assigned, limited to familiar products and processes or where performance is dependent on past experience; performing inspection operations on products and/or processes having rigid specifications, but where the inspection procedures involve a sequence of inspection operations, including decisions regarding proper fit or performance of some parts; and using precision measuring instruments.

Class C. Work involves any combination of the following: Short-cycle repetitive inspection operations; using a standardized, special-purpose measuring instrument repetitively; and visual examination of parts or products, rejecting units having obvious deformities or flaws.

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.

MACHINE-TOOL OPERATOR (MISCELLANEOUS)

Includes certain specialists operators, as well as all operators who are required alternately to operate more than one type of machine tool (for definition of machine tool see machine-tool operator, production). For wage study purposes, specialists operators are limited to those on boring machines, gear cutter, gear finisher, planer, shaper, or metal-cutting type machine tools not specially listed in the general definition of machine-tool operator, production. (For description of class of work see machine-tool operator, production.)

MACHINE-TOOL OPERATOR, PRODUCTION

Operates or tends one or more nonportable, power-driven machine tools (including numerically controlled machine tools) in order to shape metal by progressively removing portions of the stock in the form of chips or shavings, or by abrasion, such as:

Automatic lathes
Boring machines
Drill presses, radial
Drill presses, single- or multiple-spindle
Engine lathes
Gear-cutting machines
Gear-finishing machines
Grinding machines

Machine tools, miscellaneous²
Milling machine
Planers
Screw machines, automatic
Screw machines, hand
Shapers
Turret lathes, automatic
Turret lathes, hand

Class A. Sets up machines, by determining proper feeds, speeds, tooling and operation sequence or by selecting those prescribed in drawings, blueprints, or layouts; and makes necessary adjustments during operations where changes in work and setup are relatively frequent, and where care is essential to achieve requisite dimensions of very close tolerances.

Class B. Sets up machines on standard or roughing operations where feeds, speeds, tooling and operation sequence are prescribed or maintains operation setup made by others; and makes all necessary adjustments during operation where care is essential to achieve very close tolerances or where changes in product are relatively frequent.

Class C. Operates machine on routine and repetitive operations; makes only minor adjustments during operations; and when trouble occurs stops machine and calls foreman, leadman, or setup man to correct the operation.

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 wage survey purposes, workers are classified according to the number of types of machine tools they normally are required to operate, as follows:

Operates only one type of machine tool.

Operates more than one type of machine tool.

² Includes operators of machine tools not specifically listed above but within the general definition of operators of machine tools of the metal-cutting type, as well as operators required alternately to operate more than one type of machine tool.

MACHINIST, MAINTENANCE

Produces replacement parts and new parts in making repairs of metal parts in 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; 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.

MACHINIST, PRODUCTION

Fabricates metal parts involving a series of progressive operations. Work involves most of the following: Interpreting written instructions and specifications; planning and laying out work; using a variety of machinist's handtools and precision measuring instruments; setting up and operating standard machine tools; shaping 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 needed for his work; fitting and assembling parts. 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, MAINTENANCE

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

MILLING-MACHINE OPERATOR

(Milling-machine operator, automatic; milling-machine operator, hand)

Performs a variety of work such as grooving, planning, and shaping metal objects on a milling machine, which removes material from metal surfaces by the cutting action of multitoothed rotating cutters of various sizes and shapes. Milling-machine types vary from the manually controlled machines employed in unit production to fully automatic (conveyor-fed) machines found in plants engaged in mass production. For wage study purposes, operators of single-purpose millers such as thread millers, duplicators, diesinkers, pantograph millers and engraving millers are excluded. (For description of class of work see machine-tool operator, production.)

POLISHER AND BUFFER, METAL

Polishes various metal objects in order to produce a smooth surface or a high luster by holding against rapidly rotating wheels made of materials such as muslin, paper, leather, sheepskin, felt, and/or block-wheels made of wood, and/or straps and belts made of canvas, leather, rubber, etc., and/or reflexible shafts and disc wheels. Work involves any combination of the following: The attainment of a smooth surface and the removal of flaws and machine marks on a variety of objects involving the maintenance of contours, radii, and uniformity of shape; polishing to close tolerances; selection of proper wheels, shafts, belts, abrasives, and polishing compounds; setting up the equipment and maintaining of wheels. In general, polishers and buffers included in this classification are required to perform operations which involve a rounded knowledge of the trade such as is usually acquired through a formal apprenticeship or equivalent training and experience.

POLISHING- AND BUFFING-MACHINE OPERATOR

Polishes metal objects to produce a smooth surface and/or high luster by holding against rapidly rotating wheels, belts or straps on a machine set up to achieve a specialized phase of polishing on a repetitive basis. Work involves one of the following: Setting up and operating machine where wheels and abrasives and polishing compounds are prescribed; polishing involving the maintenance of contours, radii, and uniformity of shape on machines set up by others; selection of polishing compounds and abrasives on machines set up by others.

PUNCH-PRESS OPERATOR

Feeds and operates a power press equipped with special production dies that perform one or a combination of cutting and shaping operations on the stock. Individual pieces of stock or partly fabricated units may be positioned in the machine by the operator, or the machine may be equipped with a feeding device that automatically positions single pieces of stock or repetitively positions strip or sheet stock for successive operations.

Punch presses are commonly designated by functional names derived from the operation they perform, such as blanking press or forming press; by names descriptive of the frame, such as arch press; or by names that indicate how the power is transmitted, such as crank press or toggle press.

Class A. Work involves any combination of the following: Difficult positioning of work units because of size or shape, or type of operation to be performed; processing unusually large work that is positioned in the press with the aid of other workers; processing work units that must be steadied while operations are being performed; deep drawing or forming operations requiring careful positioning of work and prompt recognition of faulty operation; short-run work requiring ability to perform a variety of punch-press operations or to operate several types of presses; examining output and making adjustments as necessary to maintain production within standards; setting, alining and adjusting dies and fixtures in the press.

Class B. Required mainly to feed, control, and examine operation of the press, and when trouble occurs to call on foreman, leadman, or die maker to correct the situation. Work involves one or more of the following: Performing single operations, such as punching, blanking, or piercing on small or medium size stock easily positioned by hand; feeding small units into the press from a feed race or chute; loading and tending a press equipped with a feeding device for handling a strip or sheet stock, or a dial drum, magazine, or hopper feed for handling individual stock blanks.

SCREW-MACHINE OPERATOR, AUTOMATIC

Operates one or more multiple- or single-spindle automatic screw machines. Automatic screw machines are production turning machines with automatic-feed cycle designed to produce parts from bar or tube stock fed automatically through spindles or the head stock. These machines, equipped with from 1 to 8 spindles or a turret, automatically perform and repeat a cycle of operations on each length of stock fed into the machine. (For description of class of work, see machine-tool operator, production.)

SETUP MAN, MACHINE TOOLS

Sets up machine tools so that metal-fabricating operations can be maintained by operators of these machines. Work involves most of the following: Working from drawings, blueprints, job lay-outs, or other written specifications; determining feeds, speeds, tooling and operation sequence; installing cutting tools and adjusting guides, stops, working tables, and other controls to handle the size of stock to be machined; operating and adjusting machines until parts produced conform with specifications; and, after turning over machines to regular operators, making necessary adjustments to setups during course of operation to maintain accurate production.

TOOL AND DIE MAKER

(Die maker; mold 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 or plastics-forming work. Work involves most of the following: Planning and laying out of work from models, blueprints, drawings, or other oral and written specifications; using a variety of tool and die maker's handtools and precision measuring instruments; understanding of the working properties of common metals and alloys; setting up and operating of machine tools and related equipment; making necessary shop computations relating to dimensions of work, speeds, feeds, and tooling of machines; heattreating 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; 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. Excludes die sinkers.

For wage study purposes, tool and die makers are classified as follows:

Tool and die makers (jobbing). Workers making dies and tools, die sets, jigs and fixtures, etc., as the end product of the establishment.

Tool and die makers (other than jobbing). Workers making and/or maintaining dies and tools, die sets, jigs and fixtures, etc., for use within the establishment.

TOOL CLERK

(Stores clerk; tool checker; tool crib attendant; tool handler; tool keeper; toolman)

Receives, stores, and issues handtools, machine tools, dies, and equipment, such as measuring devices and materials, in industrial establishments. Work consists of most of the following: Keeps records of loaned tools; searches for lost or misplaced tools; prepares periodic inventory and requisitions stock as needed; unpacks and stores new equipment; and reports damaged and worn-out equipment to superiors. May carry tools or move them on trucks to workers, and may make minor tool repairs.

TURRET-LATHE OPERATOR, HAND (INCLUDING HAND SCREW MACHINE)

Operates a lathe equipped with a turret used to present a number of cutting tools, required for a cycle of machining operations, to the work in sequence. Operations commonly performed on a turret lathe include turning, facing, boring, drilling, and threading. The operator rotates or indexes the turret to bring the tools toward the work for each operation. Individual workpieces, such as forgings and castings, are held in a chuck or the lathe may be equipped with a bar stock feeding device to present the correct length of stock to the tools at the beginning of each cycle of operations. (For description of class of work, see machine-tool operator, production.)

WELDER, HAND

Fuses (welds) metal objects by means of an oxyacetylene torch or arc welding apparatus in the fabrication of metal shapes and in repairing broken or cracked metal objects. In addition to performing hand welding or brazing operation, the welder may also lay out guide lines or marks on metal parts and may cut metal with cutting torch.

Class A. Performs welding operations requiring most of the following: Planning and laying out of work from drawings, blueprints, or other written specifications; knowledge of welding properties of a variety of metals and alloys, setting up work and determining operation sequence; welding high pressure vessels or other objects involving critical safety and load requirements; and working from a variety of positions.

Class B. Performs welding operations on repetitive work, where no critical safety and load requirements are involved; where the work calls mainly for one-position welding; and where the layout and planning of the work are performed by others.

WELDER, MACHINE

(Butt welder; flash welder; seam welder; spot welder)

Operates one or more types of resistance welding apparatus to weld (bond) together metal objects such as bars, pipes, and plates. Resistance welding is a process wherein an electric current is passed through the parts to be welded at the point of contact, and mechanical pressure is applied forcing the contact surfaces together at the points to be joined. Welding machines are generally designed according to type of weld performed and arrangement of welding surfaces of parts to be joined. Welds may be made on overlapping units in the form of one spot or more (spot welding) or lineally by using a rolling electrode (seam welding). Machine welding of units where the edges are brought together without lapping is referred to as butt welding.

Class A. Work involves most of the following: Working from layout or other specifications; knowledge of welding properties of a variety of metals and alloys; selecting and setting up work-holding fixtures and electrodes; determination of proper pressures, temperatures, timing, and flow of current; determination of number and spacing of welds; positioning and welding units with or without fixtures; and using such handtools as hammers, pliers, files, and wrenches.

Class B. Work involves: Performing repetitive welding operations on standard units where current settings and electrodes are prescribed or set by others; and using fixtures for positioning work or positioning by hand small parts requiring simple welding operations.

Industry Wage Studies

The most recent reports for industries included in the Bureau's program of industry wage surveys since January 1950 are listed below. Those for which a price is shown are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C., 20402, or any of its regional sales offices. Those for which a price is not shown may be obtained free as long as a supply is available, from the Bureau of Labor Statistics, Washington, D. C., 20212, or from any of the regional offices shown on the inside back cover.

I. Occupational Wage Studies

Manufacturing

- Basic Iron and Steel, 1967. BLS Bulletin 1602 (55 cents).
- Candy and Other Confectionery Products, 1965. BLS Bulletin 1520 (30 cents).
- *Canning and Freezing, 1957. BLS Report 136.
- Cigar Manufacturing, 1967. BLS Bulletin 1581 (25 cents).
- Cigarette Manufacturing, 1965. BLS Bulletin 1472 (20 cents).
- Cotton and Man-Made Fiber Textiles, 1968. BLS Bulletin 1637 (\$1).
- Distilled Liquors, 1952. Series 2, No. 88.

- Fabricated Structural Steel, 1964. BLS Bulletin 1463 (30 cents).
- Fertilizer Manufacturing, 1966. BLS Bulletin 1531 (30 cents).
- Flour and Other Grain Mill Products, 1967. BLS Bulletin 1576 (25 cents).
- Fluid Milk Industry, 1964. BLS Bulletin 1464 (30 cents).
- Footwear, 1968. BLS Bulletin 1634 (75 cents).
- Hosiery, 1967. BLS Bulletin 1562 (70 cents).

- Industrial Chemicals, 1965. BLS Bulletin 1529 (40 cents).
- Iron and Steel Foundries, 1967. BLS Bulletin 1626 (\$1).
- Leather Tanning and Finishing, 1968. BLS Bulletin 1618 (55 cents).
- Machinery Manufacturing, 1966. BLS Bulletin 1563 (70 cents).
- Meat Products, 1963. BLS Bulletin 1415 (75 cents).
- Men's and Boys' Shirts (Except Work Shirts) and Nightwear, 1968. BLS Bulletin 1659 (65 cents).
- Men's and Boys' Suits and Coats, 1967. BLS Bulletin 1594 (75 cents).
- Miscellaneous Plastics Products, 1964. BLS Bulletin 1439 (35 cents).
- Miscellaneous Textiles, 1953. BLS Report 56.
- Motor Vehicles and Motor Vehicle Parts, 1963. BLS Bulletin 1393 (45 cents).

- Nonferrous Foundries, 1965. BLS Bulletin 1498 (40 cents).
- Paints and Varnishes, 1965. BLS Bulletin 1524 (40 cents).
- Paperboard Containers and Boxes, 1964. BLS Bulletin 1478 (70 cents).
- Petroleum Refining, 1965. BLS Bulletin 1526 (30 cents).
- Pressed or Blown Glass and Glassware, 1964. BLS Bulletin 1424 (30 cents).
- *Processed Waste, 1957. BLS Report 124.
- Pulp, Paper, and Paperboard Mills, 1967. BLS Bulletin 1608 (60 cents).
- Radio, Television, and Related Products, 1951. Series 2, No. 84.
- Railroad Cars, 1952. Series 2, No. 86.
- *Raw Sugar, 1957. BLS Report 136.

- Southern Sawmills and Planing Mills, 1965. BLS Bulletin 1519 (30 cents).
- Structural Clay Products, 1964. BLS Bulletin 1459 (45 cents).
- Synthetic Fibers, 1966. BLS Bulletin 1540 (30 cents).
- Textile Dyeing and Finishing, 1965-66. BLS Bulletin 1527 (45 cents).
- *Tobacco Stemming and Redrying, 1957. BLS Report 136.

* Studies of the effects of the \$1 minimum wage.

I. Occupational Wage Studies—Continued

Manufacturing—Continued

West Coast Sawmilling, 1964. BLS Bulletin 1455 (30 cents).
Women's and Misses' Coats and Suits, 1965. BLS Bulletin 1508 (25 cents).
Women's and Misses' Dresses, 1968. BLS Bulletin 1649 (45 cents).
Wood Household Furniture, Except Upholstered, 1965. BLS Bulletin 1496 (40 cents).
*Wooden Containers, 1957. BLS Report 126.
Wool Textiles, 1966. BLS Bulletin 1551 (45 cents).
Work Clothing, 1968. BLS Bulletin 1624 (50 cents).

Nonmanufacturing

Auto Dealer Repair Shops, 1964. BLS Bulletin 1452 (30 cents).
Banking, 1964. BLS Bulletin 1466 (30 cents).
Bituminous Coal Mining, 1967. BLS Bulletin 1583 (50 cents).
Communications, 1967. BLS Bulletin 1615 (30 cents).
Contract Cleaning Services, 1968. BLS Bulletin 1644 (55 cents).
Crude Petroleum and Natural Gas Production, 1967. BLS Bulletin 1566 (30 cents).
Department and Women's Ready-to-Wear Stores, 1950. Series 2, No. 78.
Eating and Drinking Places, 1966-67. BLS Bulletin 1588 (40 cents).
Electric and Gas Utilities, 1967. BLS Bulletin 1614 (70 cents).
Hospitals, 1966. BLS Bulletin 1553 (70 cents).
Hotels and Motels, 1966-67. BLS Bulletin 1587 (40 cents).
Laundry and Cleaning Services, 1968. BLS Bulletin 1645 (75 cents).
Life Insurance, 1966. BLS Bulletin 1569 (30 cents).
Motion Picture Theaters, 1966. BLS Bulletin 1542 (35 cents).
Nursing Homes and Related Facilities, 1967-68. BLS Bulletin 1638 (75 cents).

II. Other Industry Wage Studies

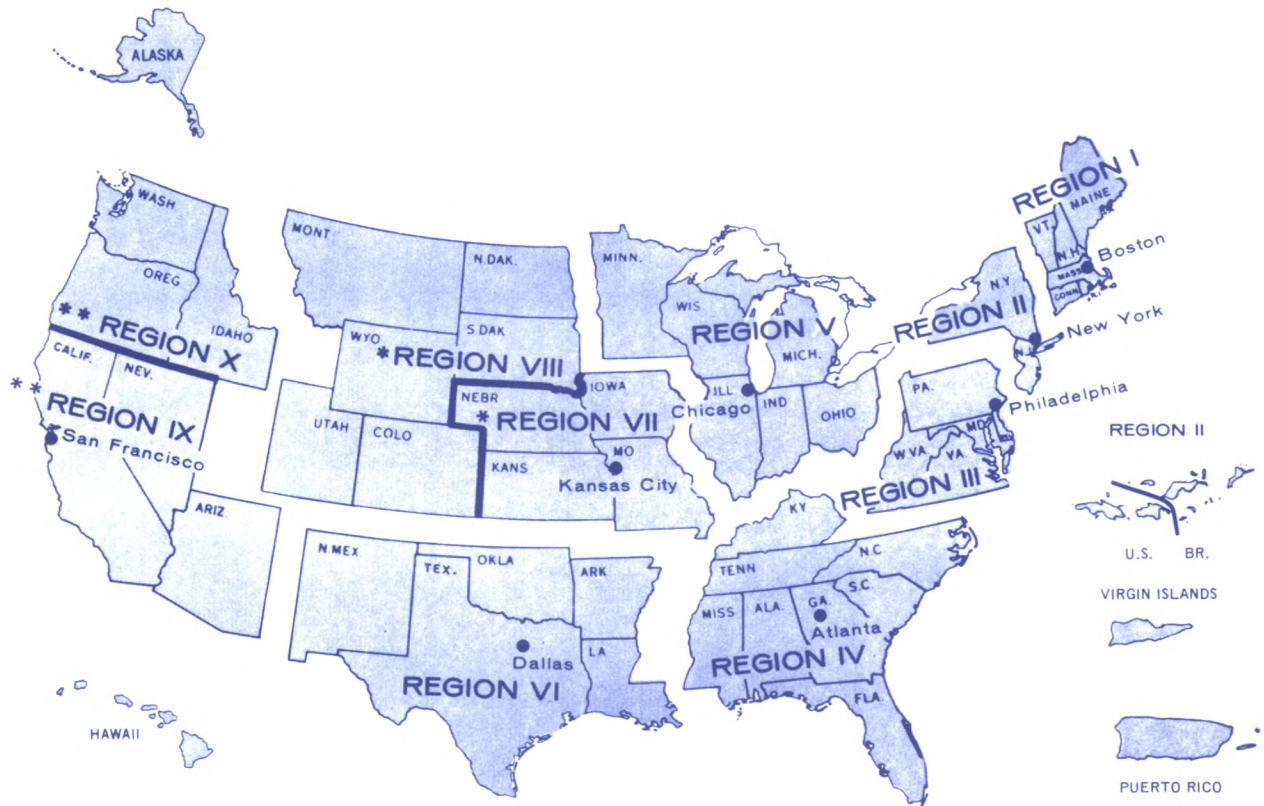
Factory Workers' Earnings—Distribution by Straight-Time Hourly Earnings, 1958.
BLS Bulletin 1252 (40 cents).
Factory Workers' Earnings—Selected Manufacturing Industries, 1959.
BLS Bulletin 1275 (35 cents).

Employee Earnings and Hours in Nonmetropolitan Areas of the South and North Central Regions, 1965. BLS Bulletin 1552 (50 cents).
Employee Earnings and Hours in Eight Metropolitan Areas of the South, 1965.
BLS Bulletin 1533 (40 cents).

Employee Earnings and Hours in Retail Trade, June 1966—
Retail Trade (Overall Summary). BLS Bulletin 1584 (\$1).
Building Materials, Hardware, and Farm Equipment Dealers. BLS Bulletin 1584-1 (30 cents).
General Merchandise Stores. BLS Bulletin 1584-2 (55 cents).
Food Stores. BLS Bulletin 1584-3 (60 cents).
Automotive Dealers and Gasoline Service Stations. BLS Bulletin 1584-4 (50 cents).
Apparel and Accessory Stores. BLS Bulletin 1584-5 (55 cents).
Furniture, Home Furnishings, and Household Appliance Stores. BLS Bulletin 1584-6 (50 cents).
Miscellaneous Retail Stores. BLS Bulletin 1584-7 (65 cents).

* Studies of the effects of the \$1 minimum wage.

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