# INDUSTRY WAGE SURVEY

## Machinery Manufacturing

MARCH—JUNE 1962

Bulletin No. 1352

UNITED STATES DEPARTMENT OF LABOR
W. Willard Wirtz, Secretary

BUREAU OF LABOR STATISTICS
Ewan Clague, Commissioner

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# Preface

The present study is the 16th in a series of surveys of occupational wages in machinery (nonelectrical) manufacturing industries, conducted by the Bureau of Labor Statistics. Wage data for selected occupations in 21 labor markets were collected between March and June 1962. Separate releases issued at the completion of the survey in each area, usually within a few weeks after the payroll period studied, are available on request. Most of the occupational data relate to men workers, but data for women in a few jobs are shown in some areas.

This bulletin brings together and analyzes data for all 21 areas. Occupational data are presented for the machinery industries as a whole in each of the areas, and separately for special dies and tools, die sets, jigs and fixtures, and machine-tool accessories and measuring devices in selected areas. The distributions of workers by occupational earnings contained in the separate area releases are included here for six jobs. Data on wage practices and supplementary benefits are presented for the industry as a whole in each of the areas.

An analysis of occupational wage relationships in machinery manufacturing, based on individual plant data for March–May 1961, also is included.

This bulletin was prepared by Fred W. Mohr in the Bureau's Division of Occupational Pay, under the general direction of H. M. Douty, Assistant Commissioner for Wages and Industrial Relations. Appendix A, Occupational Wage Relationships, was prepared by Jon B. Guyton. Field work for the survey was directed by the Assistant Regional Directors for Wages and Industrial Relations.

# Contents

Industry Wage Survey—

# Machinery Manufacturing, March—June 1962

## Summary

Average straight-time hourly earnings of production and related workers in the nonelectrical machinery manufacturing industries increased by 2.8 percent during the past year in 21 metropolitan areas surveyed by the Bureau of Labor Statistics in March–June 1962.[1]

Detroit, San Francisco–Oakland, Milwaukee, and Pittsburgh most often ranked among the upper one-fourth of the areas in occupational average hourly earnings. Tool and die makers, averaging more than $3 an hour in a majority of the areas, were the highest paid workers studied in most areas.

Although provisions for paid holidays, paid vacations, various types of health insurance, and retirement pensions have been widespread in the machinery industries for a number of years, some liberalization of provisions has occurred since the Bureau's study of these benefits in 1959–60.

## Characteristics of the Machinery Industries

Machinery (nonelectrical) manufacturing, as defined for purposes of this study, includes a group of metalworking industries which manufacture products that differ greatly in size, complexity, and use. Some establishments, for example, are primarily producers of farm machinery and equipment; others manufacture such items as special dies and tools, typewriters, and air-conditioning units.

A wide variety of machinery products was manufactured in each area studied. However, in some areas, one product group was predominant. In Detroit, Pittsburgh, and Worcester, a majority of the workers were employed in plants primarily manufacturing metalworking machinery and equipment; in Denver and Houston, construction, mining, and materials handling machinery plants employed a majority of the workers.

The areas studied accounted for slightly more than a third of the nearly 1.5 million workers[2] in the Nation's machinery manufacturing industries. Total employment in the survey areas increased 6 percent during the past year, compared with a nationwide increase of 4 percent. The rate of increase was somewhat greater in Boston, Detroit, Los Angeles–Long Beach, Minneapolis–St. Paul, Philadelphia, and Portland (Oreg.) than in the remaining areas studied.

Total industry employment in the respective areas, at the time of the survey, ranged from fewer than 4,000 in Denver and Portland to almost 76,000 in Chicago. Other major areas of employment included Detroit (67,000), Milwaukee (47,000), and Los Angeles–Long Beach (44,000). Employment exceeded 30,000 in Cleveland, Newark and Jersey City, and Philadelphia; was between 20,000 and 30,000 in Boston, Hartford, Minneapolis–St. Paul, and New York City; between 10,000 and 20,000 in Buffalo, Houston, Pittsburgh, St. Louis, and San Francisco–Oakland; and between 5,000 and 10,000 in Baltimore, Dallas, and Worcester.

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[1] See appendix C for scope and method of survey. For definition of areas and the payroll period studied in the respective areas, see table in appendix C.

[2] Nationwide employment as reported in the Bureau's employment series.

Approximately two-fifths of the workers in the machinery industries in the areas studied were employed in establishments with fewer than 250 workers, a slightly larger proportion in establishments with 250 to 2,499 workers, and one-sixth in establishments employing 2,500 or more. Establishments in the largest size group were found in 11 areas. However, Hartford and Milwaukee were the only areas in which half or more of the workers were employed in such establishments; in Philadelphia, one-third were in this establishment-size group. A majority of the workers in Denver, Los Angeles–Long Beach, New York City, and Portland, and more than two-fifths in six additional areas were in establishments employing fewer than 250 workers.

Establishments with labor-management contracts covering a majority of their workers accounted for seven-tenths of the production workers in the 21 areas combined. Among the areas, contract coverage ranged from more than nine-tenths in Pittsburgh and San Francisco–Oakland and more than three-fourths in nine additional areas to about one-fourth in Dallas (table C-1).

Most production workers in each of the areas surveyed were paid time rates. However, in six areas, a fifth or more were paid on an incentive basis. Bonus payments were more prevalent than piecework in five of these areas.

Women accounted for fewer than one-tenth of the plant workers in the machinery industries in the areas surveyed. Baltimore, Hartford, San Francisco–Oakland, and St. Louis were the only areas in which this proportion was exceeded at the time of the study.

## Trends in Earnings

Average straight-time hourly earnings of production workers in the 21 areas studied rose 2.8 percent between March–May 1961 and March–June 1962, compared with an increase of 3.1 percent between the winter of 1959–60 and March–May 1961. (See table on following page and chart on page 4.) In 14 areas, increases in pay levels between the 1961 and 1962 survey periods ranged from 2 to 3.5 percent. The increase was greatest in St. Louis (5.1 percent) and least in Denver (1.1 percent).

General wage changes usually account for most of the year-to-year movement in earnings, although other factors such as labor turnover, changes in incentive earnings, and changes in employment in establishments with different pay levels, may also affect the trend. Thus, during a period of declining economic activity, an increase in the overall level of wages may reflect a reduction in the proportion of workers with the least seniority and the lowest level of earnings, rather than an adjustment in individual rates. During periods of expansion, the reverse may be true.

The movement of wages varied between the skilled and unskilled jobs studied, as well as among areas. For the 21 areas combined, average straight-time hourly earnings of tool and die makers (other than jobbing) rose 2.7 percent (an average of about 9 cents), while earnings of material handling laborers rose 2.3 percent (about 5 cents). Since 1945, when the first occupational wage relationship study was conducted for the machinery industries,[3] there has been a

[3] See appendix B for tabulation of indexes for selected periods since 1945.

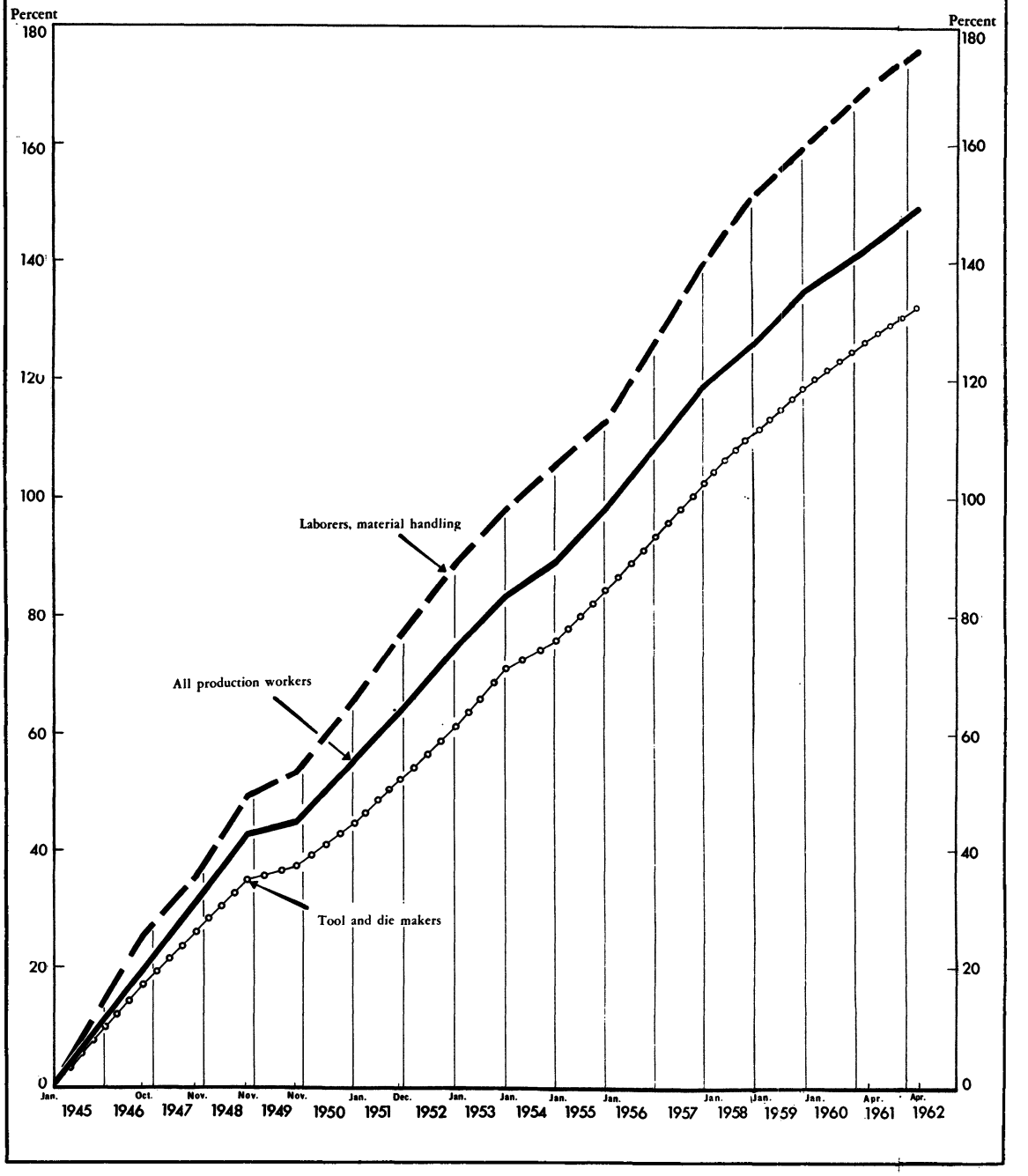
Indexes of average straight-time hourly earnings[1] of production workers in machinery manufacturing in selected areas and occupations, March–June 1962 and March–May 1961,[2] and percent increases for selected periods[3]

| Area and occupation | Indexes (1958–59=100) | | Percent increases from— | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Mar.–June 1962 | Mar.–May 1961 | Mar.–May 1961 to Mar.–June 1962 | Jan. 1960 to Mar.–May 1961 | Jan. 1959 to Jan. 1960 | Jan. 1958 to Jan. 1959 | Jan. 1956 to Jan. 1958 | Jan. 1945 to Mar.–June 1962 |
| **Area** | | | | | | | | |
| All areas combined | 112.1 | 109.0 | 2.8 | 3.1 | 4.1 | 3.3 | 10.2 | 149.2 |
| Baltimore | 112.5 | 110.4 | 1.9 | 4.3 | 2.8 | 6.1 | 10.6 | 155.9 |
| Boston | 115.4 | 112.1 | 3.0 | 4.3 | 5.1 | 4.6 | 9.7 | 154.3 |
| Buffalo | 111.1 | 109.0 | 1.9 | 4.0 | 3.4 | 2.7 | 11.5 | 136.6 |
| Chicago | 111.1 | 107.8 | 3.0 | 1.5 | 4.3 | 3.8 | 9.0 | 151.0 |
| Cleveland | 114.5 | 110.3 | 3.8 | 2.1 | 6.8 | 2.1 | 9.5 | 138.3 |
| Dallas | 110.9 | 108.0 | 2.6 | 3.1 | 3.0 | 3.5 | 9.5 | 115.6 |
| Denver | 109.4 | 108.2 | 1.1 | 3.2 | 3.6 | 2.3 | 16.7 | 154.7 |
| Detroit | 110.4 | 108.2 | 2.0 | 2.8 | 4.1 | 2.3 | 11.5 | 127.1 |
| Hartford | 114.0 | 111.3 | 2.4 | 4.7 | 4.7 | 3.1 | 11.3 | 156.2 |
| Houston | 109.9 | 107.6 | 2.1 | [4]-.2 | 7.4 | .9 | 11.6 | 133.8 |
| Los Angeles–Long Beach | 111.8 | 108.4 | 3.2 | 3.0 | 4.0 | 2.5 | 10.8 | 129.6 |
| Milwaukee | 112.5 | 109.2 | 3.0 | 3.5 | 3.9 | 3.3 | 11.4 | 172.2 |
| Minneapolis–St. Paul | 113.6 | 111.4 | 2.0 | 5.9 | 3.9 | 2.7 | 8.9 | 150.9 |
| Newark and Jersey City | 111.1 | 107.9 | 3.0 | 4.1 | 1.4 | 4.4 | 8.7 | 133.7 |
| New York City | 111.8 | 107.8 | 3.7 | 4.0 | 2.9 | 1.3 | 8.7 | 139.2 |
| Philadelphia | 112.7 | 110.0 | 2.4 | 3.2 | 4.2 | 5.0 | 7.1 | 152.4 |
| Pittsburgh | 110.3 | 108.5 | 1.6 | 2.9 | 2.8 | 5.5 | 11.7 | 175.0 |
| Portland | 117.0 | 113.1 | 3.5 | 2.1 | 9.1 | 3.2 | 11.1 | 141.4 |
| St. Louis | 115.7 | 110.1 | 5.1 | 4.4 | 3.7 | 3.5 | 9.8 | 184.5 |
| San Francisco–Oakland | 112.6 | 109.9 | 2.5 | 3.0 | 2.5 | 8.5 | 18.5 | 143.0 |
| Worcester | 111.8 | 108.9 | 2.7 | 5.2 | 1.8 | 3.4 | 8.7 | 164.3 |
| **Occupation** | | | | | | | | |
| Laborers, material handling | 112.5 | 109.9 | 2.3 | 4.0 | 3.4 | 4.7 | 12.6 | 176.0 |
| Tool and die makers (other than jobbing) | 112.7 | 109.7 | 2.7 | 3.6 | 3.9 | 4.1 | 9.8 | 132.9 |

[1] Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
[2] For indexes for earlier years, see appendix B.
[3] Data for the periods shown as January cover various months of the winter.
[4] This decrease was due to changes in incentive earnings and in the proportions of workers in some job classifications in establishments of different pay levels.

substantial reduction in the percent differentials between the wages of these two groups. During this period average earnings of material handling laborers increased by 176 percent, compared with an increase of 132.9 percent for tool and die makers. Most of the narrowing occurred before 1955, largely because of cents-per-hour increases granted "across the board." Twice during the past 3 years (between 1959 and 1960 and between 1961 and 1962), the percent increase was slightly greater for tool and die makers than for laborers.

Percent increase in average straight-time hourly earnings for all production workers and two selected occupations in machinery industries, January 1945 to specified dates



The following tabulation shows the percent increase in wages of material handling laborers and tool and die makers for selected periods since 1945. Of the two groups, the rate of increase between 1945 and 1950 was two-fifths greater for material handling laborers; between 1950 and 1955, one-fifth greater; and between 1955 and 1960, less than a tenth greater.

| | Percent of increase between— | | | |
|---|---|---|---|---|
| | 1945–50 | 1950–55 | 1955–60 | 1960–62 |
| Laborers, material handling | 53.6 | 33.9 | 26.3 | 6.4 |
| Tool and die makers (other than jobbing) | 37.4 | 28.0 | 24.4 | 6.4 |

## Occupational Earnings, 1962

Tool and die makers, in most areas, had the highest level of hourly earnings among the occupational groups studied in March–June 1962. (See table A-1.) Men engaged in the production or maintenance of tools and dies used in the establishments in which they were employed (other than jobbing) had average earnings ranging from $2.77 an hour in Dallas and $2.79 in Worcester to $3.66 in Portland and San Francisco–Oakland. In all except six of the areas studied, their hourly earnings averaged $3 or more. Among the 14 areas for which data are shown for jobbing tool and die makers (producing tools and dies for sale), their average hourly earnings ranged from $2.73 in Baltimore to $3.63 in Detroit, and $3.64 in Chicago.

Average hourly earnings of men machine-tool operators, who set up their own machines and perform a variety of machining operations to close tolerances (class A), ranged from $2.43 in Dallas to $3.24 in Detroit and $3.26 in St. Louis; their averages exceeded $3 an hour in six areas. For the intermediate group of machine-tool operators (class B), average earnings in a majority of the areas, were at least 30 cents an hour below those of class A operators.[4] Similarly, area average earnings of machine-tool operators performing more routine repetitive operations (class C) were at least 30 cents below the level of the intermediate group of operators in a majority of the areas.

Janitors and cleaners, the lowest paid of the men's jobs studied in most areas, averaged from $1.48 an hour in Dallas to $2.38 in Detroit and $2.41 in Portland. Average hourly earnings of material handling laborers ranged from $1.52 in Dallas to $2.53 in Detroit and San Francisco–Oakland and $2.61 in Portland.

Data are presented in table A-4 for selected occupations in establishments primarily engaged in manufacturing special dies and tools, die sets, jigs and fixtures, and/or machine-tool accessories and measuring devices in nine areas.[5]

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[4] Occupational wage relationships based on a comparison of area averages are influenced by interestablishment variations in general pay level and occupational composition. In order to eliminate these factors, a detailed analysis of relative wage differentials among jobs studied was made for individual plants included in the 1961 survey; the results of the study are reported in appendix A.

[5] The separate area releases also provide occupational data for oilfield machinery in Los Angeles–Long Beach, paper and printing machinery in New York City, and textile machinery in Philadelphia.

Women were most commonly employed in routine-type jobs, such as light assembling, inspecting, and repetitive machine operations. In the eight areas for which data are presented in table A-2 for those performing routine assembly operations (class C), their average earnings ranged from $1.56 an hour in Minneapolis–St. Paul to $2.48 in Detroit. Average hourly earnings of women class C machine-tool operators ranged from $1.90 in Hartford to $2.65 in Detroit.

In nearly all instances where comparisons by method of wage payment were possible, workers paid on an incentive basis had higher average earnings than workers in the same occupation who were paid on a time basis (table A-3).

Occupational averages were generally higher in Detroit, Milwaukee, Pittsburgh, and San Francisco–Oakland than in other areas. For most occupations, average earnings were lowest in Dallas, although Baltimore and Worcester also had comparatively low earnings levels for several jobs. Differences between the highest and lowest area average hourly earnings amounted to more than $1 an hour for several jobs.

In the following tabulation, area averages for all production workers[6] and for four separate occupational classifications have been expressed as percentages

Relative pay levels for production workers in 21 labor markets

(Chicago=100)

| | All production workers | Assemblers, class A | Janitors, porters, and cleaners | Machine-tool operators, production, class B | Tool and die makers (other than jobbing) |
|---|---|---|---|---|---|
| Detroit | 109 | 113 | 116 | 105 | 104 |
| San Francisco–Oakland | 108 | 108 | 113 | 105 | 110 |
| Pittsburgh | 106 | 108 | 111 | 105 | 97 |
| Milwaukee | 105 | 106 | 107 | 105 | 100 |
| Portland | 105 | 103 | 117 | 101 | 110 |
| St. Louis | 104 | 97 | 101 | 103 | 105 |
| Cleveland | 102 | 102 | 103 | 103 | 96 |
| Chicago | 100 | 100 | 100 | 100 | 100 |
| Philadelphia | 98 | 92 | 98 | 108 | 96 |
| Los Angeles–Long Beach | 97 | 95 | 99 | 92 | 97 |
| Newark and Jersey City | 97 | 98 | 91 | 100 | 95 |
| Denver | 96 | 92 | 94 | 92 | 89 |
| Hartford | 96 | 93 | 96 | 97 | 90 |
| Buffalo | 95 | 95 | 102 | 94 | 89 |
| Houston | 94 | 88 | 92 | 97 | 95 |
| New York City | 93 | 95 | 89 | 88 | 93 |
| Baltimore | 92 | 104 | 81 | 91 | 88 |
| Minneapolis–St. Paul | 92 | 90 | 97 | 93 | 92 |
| Boston | 91 | 94 | 86 | 88 | 90 |
| Worcester | 90 | 91 | 92 | 90 | 84 |
| Dallas | 78 | 77 | 72 | 77 | 83 |

[6] The pay index for production workers was based on 10 men's jobs common to all areas (assemblers, classes A and B; inspectors, class A; janitors, porters, and cleaners; laborers, material handling; machine-tool operators, production, classes A, B, and C; tool and die makers (other than jobbing); and welders, hand, class A). To minimize interarea differences in occupational composition, constant employment relationships, based on total employment in the respective jobs in all 21 areas, were used. Aggregates were computed for each area by multiplying the straight-time hourly earnings for the jobs by these weights and totaling.

of the corresponding averages for Chicago. Average hourly earnings of production workers in seven of the areas were above the Chicago level, with pay relatives ranging from 102 in Cleveland to 109 in Detroit. Pay relatives in 12 areas were from 90 to 98 percent of the Chicago average. Dallas (78 percent) was the only area below 90 percent. Although the interarea relationships for the four individual jobs shown were somewhat similar to those for the combination of jobs, significant variations may be noted. In Philadelphia, for example, where the overall average was 2 percent below the Chicago level, class A assemblers averaged 8 percent less and class B machine-tool operators, 8 percent more than the Chicago workers in these occupations.

Establishment Practices and Supplementary Wage Provisions

Data were also obtained on certain establishment practices such as job evaluation systems, late-shift work and work schedules, and selected supplementary wage benefits, including paid holidays and vacations and health, insurance, and pension plans.

Job Evaluation Systems. Formal job evaluation procedures were in effect in establishments employing nearly nine-tenths of the production workers in Milwaukee and Worcester; two-thirds or more in Baltimore, Boston, Hartford, and Pittsburgh; and approximately half of the workers in Cleveland and Philadelphia (table C-1). In contrast, establishments with such plans accounted for less than one-fourth of the workers in six areas. The type of system most commonly reported was the point method, whereby point values are assigned to various job factors (such as required experience and training, mental and physical effort, and responsibility) and the sum of these points ultimately converted into a wage rate for each job.

Employee representatives did not usually participate in the job evaluation process. The establishment of labor grades and formal rate ranges for time-rated jobs were typically incorporated in the job evaluation systems. The predominant provisions for increases within rate ranges differed among the areas. For example, in Baltimore and Boston, the most prevalent procedure was periodic merit review, whereas in Hartford and Philadelphia, automatic periodic increases followed by merit increases were most common.

In most areas there was comparatively little change in the proportion of workers covered by formal job evaluation procedures since the previous study of this item in 1955–56.[7] The point method was also the most common system of evaluation used at that time.

Shift 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 C-2). Slightly more than a sixth of the workers in the 21 areas combined were employed on late shifts in March–June 1961, approximately the same proportion as at the time of the 1959–60 study.[8] Late-shift workers accounted for more than a fourth of all production workers in Baltimore, Houston, and Pittsburgh, and at least a sixth in six additional areas (table C-3). Total employment on second shifts was slightly more than six times as great as employment on third-shift operations. Extra pay above day-shift rates was almost universally provided but the provisions differed considerably among the areas.

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[7] See Wage Structure: Machinery Manufacturing, Winter 1955–56 (BLS Report 107).

[8] See Wage Structure: Machinery Manufacturing, Winter 1959–60 (BLS Report 170). The 1961 study, Industry Wage Survey: Machinery Manufacturing, March–May 1961 (BLS Bulletin 1309), did not include data on supplementary wage provisions.

Scheduled Weekly Hours. Work schedules of 40 hours a week applied to a majority of the production and office workers in all areas except New York City where most office workers had weekly schedules of 35 or 37½ hours (tables C-4 and C-5). Buffalo, Dallas, Detroit, and Philadelphia were the only areas in which as many as one-third of the plant workers were scheduled to work more than 40 hours a week.

Paid Holidays. Paid holidays were almost universally provided (tables C-6 and C-7). A majority of both production and office workers in Boston, New York City, Philadelphia, San Francisco–Oakland, and Worcester were employed in establishments which granted 8 or more days annually. In each of the other areas, most workers received at least 6 holidays a year. Half days in addition to full-day holidays were common in most areas.

Paid Vacations. Paid vacations of at least 1 week after 1 year and 2 weeks after 5 years of service were provided in establishments employing nearly all production and office workers in the areas studied (tables C-8 and C-9).

At least three-fourths of the workers in most areas received vacations of 3 weeks or more after 15 years' service. Provisions for 4 weeks after 25 years were reported for some production and office workers in all areas.

Health, Insurance, and Pension Plans. Life, hospitalization, and surgical insurance, for which employers paid at least part of the cost, were available to more than four-fifths of the production and office workers in each of the areas studied (tables C-10 and C-11). Sickness and accident insurance and medical insurance also were provided to a large majority of the workers in most areas.

Retirement pension benefits (other than those available under Federal old-age, survivors, and disability insurance) were provided by establishments accounting for a majority of the production workers in all except four areas and 50 percent or more of the office employees in all areas.

## Table A-1. Machinery Manufacturing—Men Workers

(Number and average straight-time hourly earnings [1] of men in selected production occupations, 21 selected areas, March–June 1962 [2])

| Occupation | New England | | | | | | Middle Atlantic | | | | | | | | South | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | | Hartford | | Worcester | | Buffalo | | Newark and Jersey City | | New York City | | Philadelphia | | Pittsburgh | | Baltimore | | Dallas | | Houston | |
| | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings |
| Assemblers, class A | 469 | $2.74 | 246 | $2.73 | 254 | $2.68 | 325 | $2.79 | 663 | $2.87 | 861 | $2.78 | 674 | $2.71 | 395 | $3.17 | 99 | $3.05 | 150 | $2.25 | 344 | $2.57 |
| Assemblers, class B | 475 | 2.41 | 684 | 2.28 | 201 | 2.39 | 146 | 2.52 | 1,011 | 2.33 | 611 | 2.29 | 469 | 2.42 | 187 | 2.88 | 62 | 2.39 | 164 | 1.82 | 160 | 2.30 |
| Assemblers, class C | 228 | 2.01 | 709 | 2.03 | 56 | 2.20 | 85 | 2.31 | 304 | 2.09 | 919 | 1.95 | 312 | 1.82 | 82 | 2.48 | - | - | 96 | 1.38 | 77 | 2.17 |
| Electricians, maintenance | 58 | 2.83 | 91 | 2.92 | 44 | 2.74 | 59 | 2.82 | 145 | 3.00 | 45 | 2.95 | 104 | 3.00 | 111 | 3.09 | 28 | 2.75 | 27 | 2.50 | 93 | 3.03 |
| Inspectors, class A | 165 | 2.73 | 166 | 2.54 | 93 | 2.57 | 101 | 2.91 | 238 | 2.79 | 140 | 2.95 | 333 | 2.80 | 151 | 3.27 | 74 | 2.86 | 45 | 2.51 | 157 | 2.87 |
| Inspectors, class B | 128 | 2.44 | 293 | 2.38 | 72 | 2.52 | 72 | 2.68 | 192 | 2.51 | 64 | 2.44 | 235 | 2.89 | 73 | 2.70 | 28 | 2.64 | 38 | 2.05 | 163 | 2.79 |
| Inspectors, class C | 66 | 2.19 | 555 | 2.31 | - | - | - | - | 120 | 2.38 | 95 | 1.78 | 39 | 2.54 | - | - | - | - | 10 | 1.72 | - | - |
| Janitors, porters, and cleaners | 183 | 1.78 | 251 | 1.98 | 124 | 1.90 | 191 | 2.11 | 385 | 1.88 | 196 | 1.83 | 279 | 2.01 | 153 | 2.29 | 86 | 1.66 | 145 | 1.48 | 246 | 1.89 |
| Laborers, material handling | 206 | 2.03 | 305 | 2.03 | 119 | 2.00 | 78 | 2.23 | 421 | 2.10 | 208 | 2.03 | 204 | 2.20 | 168 | 2.37 | 41 | 1.92 | 129 | 1.52 | 263 | 1.92 |
| Machine-tool operators, production, class A [3] | 1,623 | 2.72 | 1,315 | 2.79 | 809 | 2.59 | 786 | 2.69 | 1,840 | 2.83 | 1,866 | 2.78 | 2,430 | 2.82 | 1,710 | 3.03 | 626 | 2.70 | 611 | 2.43 | 1,320 | 2.77 |
| Automatic-lathe operators, class A | 29 | 2.85 | - | - | - | - | - | - | - | - | 38 | 3.01 | 40 | 2.85 | - | - | - | - | 49 | 2.47 | 102 | 2.79 |
| Drill-press operators, radial, class A | 99 | 2.79 | 50 | 2.71 | 76 | 2.43 | - | - | 142 | 2.91 | 62 | 2.83 | 225 | 2.76 | 129 | 2.77 | 31 | 2.85 | 14 | 2.24 | 89 | 2.62 |
| Drill-press operators, single- or multiple-spindle, class A | 82 | 2.87 | 25 | 2.62 | 29 | 2.56 | 19 | 2.44 | 56 | 2.49 | - | - | 84 | 2.57 | - | - | - | - | - | - | 50 | 2.63 |
| Engine-lathe operators, class A | 182 | 2.73 | 136 | 2.71 | 102 | 2.54 | 149 | 2.68 | 379 | 2.78 | 218 | 2.79 | 296 | 2.86 | 286 | 3.11 | 94 | 2.49 | 110 | 2.50 | 158 | 2.88 |
| Grinding-machine operators, class A | 217 | 2.73 | 369 | 2.88 | 152 | 2.62 | 55 | 2.74 | 148 | 2.74 | 157 | 2.84 | 354 | 2.63 | 226 | 2.97 | 25 | 3.01 | 67 | 2.49 | 123 | 2.75 |
| Milling-machine operators, class A | 170 | 2.80 | 149 | 2.80 | 129 | 2.61 | 111 | 2.76 | 347 | 2.81 | 427 | 2.82 | 263 | 2.78 | 231 | 3.02 | 59 | 3.03 | 100 | 2.43 | 188 | 2.77 |
| Screw-machine operators, automatic, class A | 70 | 2.81 | 109 | 2.68 | 16 | 2.66 | - | - | 28 | 3.18 | 35 | 2.83 | - | - | - | - | - | - | 30 | 2.33 | - | - |
| Turret-lathe operators, hand (including hand screw machine), class A | 244 | 2.62 | 248 | 2.77 | 132 | 2.57 | 209 | 2.66 | 293 | 2.85 | 268 | 2.74 | 365 | 2.78 | 216 | 2.87 | 77 | 2.87 | 154 | 2.43 | 361 | 2.77 |
| Machine-tool operators, production, class B [3] | 904 | 2.34 | 1,680 | 2.58 | 461 | 2.39 | 604 | 2.48 | 1,422 | 2.66 | 1,106 | 2.34 | 1,327 | 2.87 | 557 | 2.77 | 420 | 2.41 | 320 | 2.04 | 482 | 2.57 |
| Automatic-lathe operators, class B | - | - | - | - | 18 | 2.72 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 11 | 2.58 |
| Drill-press operators, radial, class B | 41 | 2.28 | 36 | 2.37 | 39 | 2.33 | 34 | 2.68 | 70 | 2.47 | - | - | 45 | 2.43 | 22 | 2.77 | - | - | 41 | 1.92 | 72 | 2.44 |
| Drill-press operators, single- or multiple-spindle, class B | 92 | 2.32 | 159 | 2.55 | 49 | 2.34 | 34 | 2.30 | 111 | 2.41 | 108 | 2.08 | 52 | 2.50 | - | - | 22 | 2.46 | - | - | - | - |
| Engine-lathe operators, class B | 74 | 2.41 | 33 | 2.05 | 43 | 2.23 | 149 | 2.39 | 119 | 2.49 | 178 | 2.54 | 91 | 2.66 | 110 | 3.06 | 50 | 2.18 | 46 | 2.25 | 25 | 2.59 |
| Grinding-machine operators, class B | 92 | 2.35 | 756 | 2.60 | 142 | 2.38 | 93 | 2.58 | - | - | 83 | 2.37 | - | - | - | - | 58 | 2.46 | 19 | 1.92 | 51 | 2.79 |
| Milling-machine operators, class B | 94 | 2.56 | 134 | 2.53 | 65 | 2.46 | 24 | 2.72 | 128 | 2.40 | 141 | 2.43 | 221 | 2.58 | 47 | 2.79 | - | - | 45 | 2.11 | 85 | 2.67 |
| Screw-machine operators, automatic, class B | 21 | 2.25 | 249 | 2.79 | 12 | 2.54 | 11 | 2.61 | - | - | - | - | - | - | - | - | - | - | 11 | 2.02 | - | - |
| Turret-lathe operators, hand (including hand screw machine), class B | 165 | 2.33 | 103 | 2.57 | 41 | 2.34 | 132 | 2.50 | 63 | 2.57 | - | - | 215 | 2.96 | 56 | 2.75 | 26 | 2.30 | 78 | 2.00 | 120 | 2.58 |
| Machine-tool operators, production, class C [3] | 358 | 1.92 | 1,001 | 2.53 | 68 | 2.06 | 133 | 2.39 | 427 | 2.22 | 757 | 1.94 | 381 | 2.34 | 53 | 2.63 | 364 | 1.91 | 182 | 1.62 | 177 | 2.19 |
| Drill-press operators, radial, class C | - | - | - | - | - | - | 8 | 2.31 | 34 | 2.03 | - | - | - | - | - | - | - | - | 8 | 1.65 | 20 | 2.09 |
| Drill-press operators, single- or multiple-spindle, class C | 49 | 1.88 | 214 | 2.51 | - | - | 49 | 2.22 | 161 | 2.30 | 171 | 1.72 | 46 | 1.95 | - | - | - | - | 54 | 1.53 | - | - |
| Engine-lathe operators, class C | - | - | - | - | 9 | 1.74 | - | - | 55 | 2.19 | 50 | 1.95 | - | - | - | - | - | - | - | - | 8 | 2.10 |
| Grinding-machine operators, class C | - | - | 480 | 2.64 | 24 | 2.05 | 29 | 2.61 | 39 | 2.28 | - | - | - | - | - | - | - | - | - | - | 25 | 2.14 |
| Milling-machine operators, class C | 48 | 2.05 | 179 | 2.33 | - | - | - | - | 22 | 2.17 | 71 | 2.05 | - | - | - | - | - | - | 7 | 1.65 | - | - |
| Turret-lathe operators, hand (including hand screw machine), class C | - | - | 44 | 2.24 | - | - | - | - | 47 | 2.40 | 43 | 1.93 | - | - | - | - | - | - | - | - | 32 | 2.21 |
| Machine-tool operators, toolroom | 78 | 2.65 | 304 | 2.85 | 33 | 2.51 | 132 | 2.86 | 872 | 2.86 | 184 | 2.68 | 295 | 3.00 | - | - | 110 | 2.71 | 73 | 2.57 | 169 | 2.88 |
| Machinists, production | 258 | 2.70 | - | - | 23 | 2.66 | - | - | 219 | 2.86 | 142 | 2.86 | 195 | 2.72 | 123 | 3.33 | - | - | 67 | 2.45 | 401 | 2.93 |
| Tool and die makers (jobbing) | 200 | 2.98 | 291 | 2.83 | - | - | 160 | 3.00 | 743 | 3.05 | 290 | 2.99 | 577 | 3.18 | - | - | 87 | 2.73 | - | - | - | - |
| Tool and die makers (other than jobbing) | 123 | 2.99 | 495 | 3.00 | 65 | 2.79 | 109 | 2.97 | 379 | 3.15 | 146 | 3.09 | 376 | 3.20 | 68 | 3.22 | 47 | 2.92 | 72 | 2.77 | 111 | 3.14 |
| Welders, hand, class A | 290 | 2.57 | 26 | 3.01 | 34 | 2.71 | 265 | 2.76 | 216 | 2.96 | 55 | 3.15 | 414 | 2.76 | 211 | 2.96 | 79 | 2.74 | 254 | 2.27 | 461 | 2.77 |
| Welders, hand, class B | - | - | - | - | 16 | 2.35 | 50 | 2.43 | 170 | 2.60 | 147 | 2.45 | - | - | 76 | 2.72 | 38 | 2.44 | 122 | 1.84 | 559 | 2.62 |

See footnotes at end of table.

## Table A-1. Machinery Manufacturing—Men Workers—Continued

(Number and average straight-time hourly earnings[1] of men in selected production occupations, 21 selected areas, March–June 1962[2])

| Occupation | Middle West | | | | | | | | | | | | Far West | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | | Cleveland | | Detroit | | Milwaukee | | Minneapolis–St. Paul | | St. Louis | | Denver | | Los Angeles–Long Beach | | Portland | | San Francisco–Oakland | |
| | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings | No. of workers | Avg. hourly earnings |
| Assemblers, class A | 2,323 | $2.93 | 1,087 | $3.00 | 695 | $3.31 | 468 | $3.12 | 578 | $2.63 | 256 | $2.85 | 100 | $2.71 | 1,215 | $2.77 | 234 | $3.01 | 84 | $3.16 |
| Assemblers, class B | 2,079 | 2.61 | 692 | 2.79 | 1,316 | 2.73 | 912 | 2.82 | 1,071 | 2.37 | 708 | 2.55 | 67 | 2.43 | 791 | 2.35 | 91 | 2.74 | 208 | 2.73 |
| Assemblers, class C | 782 | 2.14 | 187 | 2.54 | 450 | 2.51 | 655 | 2.61 | 363 | 2.06 | 745 | 2.17 | 43 | 2.18 | 255 | 1.95 | - | - | 405 | 2.44 |
| Electricians, maintenance | 383 | 3.23 | 145 | 3.08 | 232 | 3.38 | 214 | 3.15 | 46 | 2.98 | 72 | 3.19 | - | - | 83 | 3.03 | - | - | 25 | 3.31 |
| Inspectors, class A | 613 | 2.91 | 271 | 2.88 | 510 | 3.22 | 394 | 2.97 | 140 | 2.69 | 105 | 3.01 | 33 | 2.84 | 523 | 2.98 | 30 | 3.02 | 167 | 3.13 |
| Inspectors, class B | 434 | 2.62 | 237 | 2.78 | 412 | 2.81 | 449 | 2.87 | 161 | 2.41 | 61 | 2.58 | 10 | 2.39 | 152 | 2.51 | - | - | - | - |
| Inspectors, class C | 150 | 2.19 | 74 | 2.45 | 67 | 2.73 | 103 | 2.58 | - | - | - | - | - | - | 22 | 2.23 | - | - | - | - |
| Janitors, porters, and cleaners | 767 | 2.06 | 444 | 2.13 | 984 | 2.38 | 412 | 2.20 | 249 | 1.99 | 163 | 2.08 | 63 | 1.93 | 501 | 2.03 | 28 | 2.41 | 105 | 2.33 |
| Laborers, material handling | 1,453 | 2.08 | 368 | 2.33 | 740 | 2.53 | 737 | 2.34 | 348 | 2.15 | 358 | 2.16 | - | - | 250 | 2.32 | 50 | 2.61 | 50 | 2.53 |
| Machine-tool operators, production, class A[3] | 6,677 | 2.97 | 3,986 | 2.94 | 4,945 | 3.24 | 2,183 | 3.07 | 1,043 | 2.71 | 642 | 3.26 | 242 | 2.98 | 5,236 | 2.93 | 543 | 3.01 | 1,159 | 3.20 |
| Automatic-lathe operators, class A | 192 | 3.06 | 39 | 2.88 | 31 | 2.97 | 128 | 3.01 | 36 | 2.67 | 51 | 3.03 | - | - | 109 | 2.87 | - | - | 16 | 3.19 |
| Drill-press operators, radial, class A | 599 | 2.93 | 218 | 2.94 | 84 | 3.23 | 173 | 3.04 | 63 | 2.71 | 41 | 2.85 | 11 | 2.93 | 141 | 2.80 | 48 | 2.95 | 22 | 3.19 |
| Drill-press operators, single- or multiple-spindle, class A | 212 | 2.78 | 117 | 3.09 | 82 | 2.94 | 45 | 2.99 | 100 | 2.66 | 9 | 3.00 | - | - | 231 | 2.60 | - | - | - | - |
| Engine-lathe operators, class A | 1,013 | 2.98 | 372 | 2.83 | 518 | 3.30 | 240 | 2.92 | 84 | 2.71 | - | - | - | - | 900 | 2.91 | 121 | 3.01 | 92 | 3.14 |
| Grinding-machine operators, class A | 819 | 2.97 | 568 | 3.04 | 1,927 | 3.27 | 272 | 3.10 | 79 | 2.71 | 41 | 3.33 | - | - | 1,572 | 3.09 | 20 | 2.95 | - | - |
| Milling-machine operators, class A | 946 | 2.96 | 468 | 3.02 | 571 | 3.29 | 229 | 3.06 | 56 | 2.78 | - | - | 26 | 3.21 | 538 | 2.82 | 75 | 3.01 | - | - |
| Screw-machine operators, automatic, class A | 85 | 3.11 | 216 | 3.01 | - | - | 83 | 3.23 | 75 | 2.65 | 43 | 3.00 | - | - | 103 | 2.93 | - | - | 144 | 3.08 |
| Turret-lathe operators, hand (including hand screw machine), class A | 982 | 3.09 | 676 | 2.89 | 588 | 3.05 | 504 | 3.06 | 260 | 2.73 | 33 | 2.86 | - | - | 744 | 2.86 | 58 | 3.01 | 135 | 3.11 |
| Machine-tool operators, production, class B[3] | 2,600 | 2.65 | 1,559 | 2.74 | 3,952 | 2.79 | 1,696 | 2.77 | 619 | 2.47 | 614 | 2.73 | 105 | 2.43 | 1,336 | 2.44 | 73 | 2.67 | 426 | 2.77 |
| Automatic-lathe operators, class B | 98 | 2.85 | 60 | 2.56 | 109 | 2.71 | - | - | 17 | 2.47 | 170 | 2.77 | - | - | - | - | - | - | - | - |
| Drill-press operators, radial, class B | 289 | 2.77 | 106 | 2.73 | 263 | 2.71 | 316 | 2.73 | 107 | 2.50 | - | - | 37 | 2.49 | 90 | 2.47 | 24 | 2.66 | 79 | 2.77 |
| Drill-press operators, single- or multiple-spindle, class B | 282 | 2.57 | 230 | 2.77 | 397 | 2.64 | 266 | 2.77 | 105 | 2.48 | - | - | 7 | 2.40 | 247 | 2.32 | 16 | 2.63 | 76 | 2.84 |
| Engine-lathe operators, class B | 285 | 2.62 | 163 | 2.97 | 229 | 2.99 | 194 | 2.66 | 59 | 2.52 | 75 | 2.60 | - | - | 141 | 2.41 | - | - | - | - |
| Grinding-machine operators, class B | 364 | 2.58 | 236 | 2.77 | 1,525 | 2.80 | 160 | 2.88 | 34 | 2.36 | 34 | 2.71 | - | - | 171 | 2.46 | - | - | 82 | 2.72 |
| Milling-machine operators, class B | 442 | 2.70 | 135 | 2.72 | 428 | 2.78 | 246 | 2.86 | 42 | 2.57 | 53 | 2.71 | 8 | 2.35 | 129 | 2.43 | - | - | - | - |
| Screw-machine operators, automatic, class B | 50 | 2.82 | 49 | 2.79 | 186 | 2.92 | 19 | 2.98 | - | - | 50 | 2.91 | - | - | 14 | 2.77 | - | - | - | - |
| Turret-lathe operators, hand (including hand screw machine), class B | 365 | 2.65 | 250 | 2.62 | 413 | 2.82 | 251 | 2.75 | 46 | 2.55 | 81 | 2.57 | 8 | 2.49 | 231 | 2.60 | 12 | 2.71 | 77 | 2.77 |
| Machine-tool operators, production, class C[3] | 1,265 | 2.16 | 531 | 2.38 | 847 | 2.54 | 341 | 2.55 | 330 | 1.91 | 125 | 2.35 | 32 | 2.14 | 328 | 2.18 | 6 | 2.51 | 191 | 2.51 |
| Drill-press operators, radial, class C | 62 | 2.65 | 13 | 2.44 | 8 | 2.49 | 27 | 2.66 | - | - | - | - | - | - | - | - | - | - | - | - |
| Drill-press operators, single- or multiple-spindle, class C | 459 | 2.03 | 111 | 2.27 | 147 | 2.51 | 117 | 2.55 | 184 | 1.74 | 71 | 2.20 | - | - | 35 | 2.11 | - | - | 82 | 2.49 |
| Engine-lathe operators, class C | - | - | - | - | - | - | - | - | - | - | 11 | 2.82 | - | - | 13 | 2.22 | - | - | - | - |
| Grinding-machine operators, class C | 125 | 2.34 | 104 | 2.42 | 268 | 2.45 | 16 | 2.67 | - | - | 14 | 2.33 | - | - | 57 | 2.01 | - | - | - | - |
| Milling-machine operators, class C | 144 | 2.30 | 72 | 2.56 | 194 | 2.49 | - | - | - | - | 19 | 2.50 | - | - | 20 | 2.36 | - | - | - | - |
| Turret-lathe operators, hand (including hand screw machine), class C | 95 | 2.39 | 95 | 2.34 | - | - | - | - | - | - | - | - | - | - | 17 | 2.22 | - | - | - | - |
| Machine-tool operators, toolroom | 1,351 | 3.20 | 786 | 2.99 | 4,276 | 3.57 | 524 | 3.12 | 204 | 2.86 | 228 | 3.26 | 33 | 2.79 | 367 | 3.07 | 20 | 3.12 | 66 | 3.29 |
| Machinists, production | 244 | 3.02 | - | - | - | - | - | - | 132 | 2.78 | 290 | 3.31 | - | - | 654 | 2.99 | 97 | 3.00 | 330 | 3.16 |
| Tool and die makers (jobbing) | 1,261 | 3.64 | 835 | 3.14 | 4,038 | 3.63 | 272 | 3.40 | 181 | 3.26 | 330 | 3.61 | - | - | 834 | 3.29 | - | - | - | - |
| Tool and die makers (other than jobbing) | 579 | 3.32 | 216 | 3.20 | 540 | 3.45 | 377 | 3.32 | 171 | 3.06 | 261 | 3.48 | 28 | 2.94 | 408 | 3.21 | 8 | 3.66 | 199 | 3.66 |
| Welders, hand, class A | 1,469 | 2.93 | 613 | 2.86 | 380 | 3.03 | 553 | 2.98 | 606 | 2.67 | 199 | 2.83 | 201 | 2.67 | 1,308 | 2.92 | 273 | 2.99 | 361 | 3.15 |
| Welders, hand, class B | 605 | 2.46 | 240 | 2.57 | 323 | 2.69 | 494 | 2.74 | 201 | 2.51 | 98 | 2.43 | 25 | 2.46 | 209 | 2.57 | - | - | - | - |

[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 table in appendix C.
[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 A-2. Machinery Manufacturing—Women Workers

(Number and average straight-time hourly earnings [1] of women in selected production occupations, 10 selected areas, March–June 1962)

| Occupation | New England | | Middle Atlantic | | | | Middle West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Hartford | | New York City | | Philadelphia | | Chicago | | Cleveland | |
| | 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 B | 140 | $2.13 | 22 | $2.17 | 87 | $2.22 | - | - | - | - |
| Assemblers, class C | 951 | 2.20 | 199 | 1.80 | - | - | 760 | $1.78 | 83 | $2.36 |
| Inspectors, class B | - | - | 15 | 2.10 | - | - | 30 | 2.31 | - | - |
| Inspectors, class C | 531 | 2.03 | 34 | 2.09 | 268 | 2.12 | 53 | 1.87 | 129 | 2.35 |
| Machine-tool operators, production, class B | - | - | - | - | - | - | - | - | - | - |
| Machine-tool operators, production, class C [2] | 404 | 1.90 | 35 | 2.08 | 152 | 2.36 | 202 | 1.96 | 146 | 2.19 |
| Drill-press operators, single- or multiple-spindle, class C | 334 | 1.90 | - | - | - | - | 64 | 2.22 | - | - |

| Occupation | Middle West—Continued | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Detroit | | Minneapolis–St. Paul | | St. Louis | | Los Angeles–Long Beach | | San Francisco–Oakland | |
| | 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 B | - | - | - | - | - | - | 137 | $2.10 | - | - |
| Assemblers, class C | 734 | $2.48 | 208 | $1.56 | 496 | $2.28 | 1,037 | 1.71 | - | - |
| Inspectors, class B | 92 | 2.78 | - | - | - | - | 34 | 2.37 | - | - |
| Inspectors, class C | 510 | 2.50 | - | - | 278 | 2.19 | - | - | 97 | $2.32 |
| Machine-tool operators, production, class B | 59 | 2.68 | - | - | | | 44 | 2.31 | - | - |
| Machine-tool operators, production, class C [2] | 227 | 2.65 | 84 | 1.98 | | | 21 | 2.00 | 51 | 2.39 |
| Drill-press operators, single- or multiple-spindle, class C | 87 | 2.59 | - | - | - | - | - | - | 43 | 2.37 |

[1] Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
[2] 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 A-3. Machinery Manufacturing—By Method of Wage Payment

(Number and average straight-time hourly earnings[1] of men in selected production occupations, 12 selected areas, March–June 1962)

| Occupation[2] | New England | | | | | | Middle Atlantic | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | | Hartford | | Worcester | | Buffalo | | Newark and Jersey City | | New York City | | Philadelphia | |
| | 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: | | | | | | | | | | | | | | |
| Timeworkers | 298 | $2.47 | 144 | $2.65 | - | - | - | - | 540 | $2.82 | - | - | 525 | $2.69 |
| Incentive workers | 171 | 3.20 | 102 | 2.83 | - | - | - | - | 123 | 3.10 | - | - | 149 | 2.77 |
| Assemblers, class B: | | | | | | | | | | | | | | |
| Timeworkers | 355 | 2.28 | 191 | 2.22 | 131 | $2.36 | - | - | 860 | 2.24 | 590 | $2.28 | 448 | 2.38 |
| Incentive workers | 120 | 2.79 | 493 | 2.31 | 70 | 2.44 | - | - | 151 | 2.86 | 21 | 2.38 | 21 | 3.33 |
| Assemblers, class C: | | | | | | | | | | | | | | |
| Timeworkers | - | - | - | - | - | - | - | - | - | - | 516 | 1.71 | 293 | 1.77 |
| Incentive workers | - | | - | - | - | | - | - | - | - | 403 | 2.26 | 19 | 2.54 |
| Machine-tool operators, production, class A: | | | | | | | | | | | | | | |
| Timeworkers | 1,178 | 2.57 | 683 | 2.66 | 674 | 2.55 | 444 | $2.63 | 1,471 | 2.82 | 1,658 | 2.75 | 1,941 | 2.73 |
| Incentive workers | 445 | 3.13 | 632 | 2.93 | 135 | 2.82 | 342 | 2.77 | 369 | 2.90 | 208 | 3.04 | 489 | 3.19 |
| Machine-tool operators, production, class B: | | | | | | | | | | | | | | |
| Timeworkers | 786 | 2.27 | 682 | 2.33 | 317 | 2.31 | 529 | 2.43 | 1,237 | 2.67 | 1,032 | 2.33 | 744 | 2.60 |
| Incentive workers | 118 | 2.79 | 998 | 2.75 | 144 | 2.57 | 75 | 2.80 | 185 | 2.58 | 74 | 2.50 | 583 | 3.21 |
| Machine-tool operators, production, class C: | | | | | | | | | | | | | | |
| Timeworkers | 346 | 1.91 | 430 | 2.39 | 37 | 1.97 | 117 | 2.37 | 282 | 2.10 | 540 | 1.91 | - | - |
| Incentive workers | 12 | 2.29 | 571 | 2.64 | 31 | 2.18 | 16 | 2.52 | 145 | 2.46 | 217 | 2.01 | - | - |

| Occupation[2] | Middle West | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | | Cleveland | | Detroit | | Milwaukee | | St. Louis | |
| | 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 | 1,993 | $2.93 | 806 | $2.82 | - | - | 208 | $2.84 | - | - |
| Incentive workers | 330 | 2.91 | 281 | 3.53 | - | - | 260 | 3.35 | - | - |
| Assemblers, class B: | | | | | | | | | | |
| Timeworkers | 1,577 | 2.54 | 503 | 2.55 | 1,168 | $2.71 | 457 | 2.52 | | |
| Incentive workers | 502 | 2.80 | 189 | 3.45 | 148 | 2.90 | 455 | 3.11 | | |
| Assemblers, class C: | | | | | | | | | | |
| Timeworkers | 611 | 2.10 | 78 | 2.33 | - | - | 303 | 2.30 | | |
| Incentive workers | 171 | 2.31 | 109 | 2.68 | - | | 352 | 2.87 | | |
| Machine-tool operators, production, class A: | | | | | | | | | | |
| Timeworkers | 4,715 | 2.94 | 3,133 | 2.81 | 4,893 | 3.24 | 692 | 2.83 | 242 | $3.00 |
| Incentive workers | 1,962 | 3.04 | 853 | 3.42 | 52 | 3.47 | 1,491 | 3.18 | 400 | 3.42 |
| Machine-tool operators, production, class B: | | | | | | | | | | |
| Timeworkers | 1,680 | 2.54 | 1,090 | 2.55 | 3,655 | 2.78 | 676 | 2.54 | 359 | 2.72 |
| Incentive workers | 920 | 2.84 | 469 | 3.18 | 297 | 2.97 | 1,020 | 2.92 | 255 | 2.75 |
| Machine-tool operators, production, class C: | | | | | | | | | | |
| Timeworkers | 871 | 1.99 | - | - | 695 | 2.48 | 148 | 2.26 | 93 | 2.18 |
| Incentive workers | 394 | 2.53 | - | - | 152 | 2.83 | 193 | 2.77 | 32 | 2.83 |

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

[2] In presenting separate estimates for time and incentive workers, the criteria were: (1) Each method of pay group was reported in at least 3 establishments; (2) at least 6 workers were reported at each method of pay; and (3) no company represented more than 60 percent of the total employment in the job.

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

## Table A-4. Machinery Manufacturing—Special Dies and Tools and Machine-Tool Accessories

(Number and average straight-time hourly earnings [1] of men in selected production occupations, 9 selected areas, March–June 1962)

| Occupation | Chicago | | | | Cleveland | | Detroit | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Special dies and tools [2] | | Machine-tool accessories [3] | | Special dies and tools [2] | | Special dies and tools [2] | | Machine-tool accessories [3] | |
| | 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 | 8 | $2.98 | 40 | $2.81 | 15 | $2.96 | - | - | 82 | $3.15 |
| Janitors, porters, and cleaners | 50 | 1.93 | 58 | 2.05 | 46 | 1.84 | 298 | $2.33 | 119 | 2.27 |
| Laborers, material handling | 96 | 3.02 | 33 | 2.30 | - | - | 147 | 2.61 | - | - |
| Machine-tool operators, production, class A [4] | - | - | 403 | 3.03 | - | - | - | - | 1,277 | 3.17 |
| Engine-lathe operators, class A | - | - | 40 | 2.87 | - | - | - | - | 127 | 3.16 |
| Grinding-machine operators, class A | - | - | 207 | 3.07 | - | - | - | - | 745 | 3.17 |
| Milling-machine operators, class A | - | - | 75 | 3.05 | - | - | - | - | 207 | 3.22 |
| Turret-lathe operators, hand (including hand screw machine), class A | - | - | 36 | 2.89 | - | - | - | - | 77 | 3.01 |
| Machine-tool operators, production, class B [4] | 75 | 2.70 | 342 | 2.57 | 150 | 2.46 | 250 | 2.82 | 912 | 2.78 |
| Engine-lathe operators, class B | - | - | 47 | 2.60 | 11 | 2.60 | - | - | 14 | 2.64 |
| Grinding-machine operators, class B | - | - | 153 | 2.55 | 6 | 2.63 | 117 | 2.79 | 586 | 2.78 |
| Milling-machine operators, class B | - | - | 65 | 2.61 | - | - | - | - | 241 | 2.80 |
| Turret-lathe operators, hand (including hand screw machine), class B | - | - | 33 | 2.54 | - | - | - | - | 48 | 2.57 |
| Machine-tool operators, production, class C [4] | 58 | 2.06 | 120 | 2.14 | 33 | 2.12 | 76 | 2.40 | 344 | 2.44 |
| Grinding-machine operators, class C | - | - | 44 | 2.22 | - | - | - | - | 221 | 2.48 |
| Machine-tool operators, toolroom | 601 | 3.36 | 45 | 2.96 | 422 | 2.95 | 3,721 | 3.60 | 70 | 3.47 |
| Tool and die makers (jobbing) | 1,237 | 3.65 | - | - | 800 | 3.15 | 4,024 | 3.63 | - | - |
| Welders, hand, class A | - | - | 7 | 2.93 | 12 | 2.96 | 26 | 3.51 | 15 | 3.11 |

| Occupation | Boston | | Hartford | | Los Angeles–Long Beach | | Milwaukee | | Newark and Jersey City | | New York City | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Special dies and tools [2] and machine-tool accessories [3] | | | | | | | | | | | |
| | 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 | 19 | $2.61 | 47 | $2.52 | 72 | $3.31 | - | - | 19 | $2.96 | - | - |
| Janitors, porters, and cleaners | 11 | 1.70 | 24 | 1.84 | 58 | 1.84 | 12 | $2.00 | 56 | 1.62 | 17 | $1.69 |
| Laborers, material handling | - | - | 19 | 1.89 | - | - | - | - | 22 | 1.70 | - | - |
| Machine-tool operators, production, class A [4] | 97 | 2.66 | 418 | 2.90 | 493 | 3.11 | - | - | - | - | 53 | 2.73 |
| Engine-lathe operators, class A | - | - | 50 | 2.83 | 107 | 3.11 | - | - | - | - | - | - |
| Grinding-machine operators, class A | 66 | 2.63 | 238 | 2.98 | 167 | 3.15 | - | - | - | - | - | - |
| Milling-machine operators, class A | - | - | 53 | 2.65 | 50 | 2.98 | - | - | - | - | - | - |
| Turret-lathe operators, hand (including hand screw machine), class A | - | - | 26 | 2.75 | 19 | 2.67 | - | - | - | - | - | - |
| Machine-tool operators, production, class B [4] | 121 | 2.32 | 500 | 2.34 | 150 | 2.46 | 70 | 2.57 | 75 | 2.47 | 190 | 2.18 |
| Engine-lathe operators, class B | - | - | 22 | 2.18 | - | - | - | - | - | - | 22 | 2.44 |
| Grinding-machine operators, class B | - | - | 355 | 2.37 | 77 | 2.50 | - | - | 15 | 2.53 | - | - |
| Milling-machine operators, class B | - | - | 44 | 2.31 | 28 | 2.41 | - | - | - | - | - | - |
| Turret-lathe operators, hand (including hand screw machine), class B | - | - | 11 | 2.21 | 15 | 2.32 | - | - | - | - | - | - |
| Machine-tool operators, production, class C [4] | 89 | 1.88 | 81 | 2.03 | 56 | 1.96 | - | - | 76 | 2.08 | 79 | 1.75 |
| Grinding-machine operators, class C | - | - | - | - | 41 | 1.95 | - | - | 22 | 1.96 | - | - |
| Machine-tool operators, toolroom | - | - | 114 | 2.59 | - | - | 164 | 3.10 | 588 | 2.73 | 134 | 2.59 |
| Tool and die makers (jobbing) | 155 | 2.97 | 291 | 2.83 | 815 | 3.29 | 269 | 3.41 | 743 | 3.05 | 290 | 2.99 |
| Welders, hand, class A | - | - | - | - | 44 | 3.05 | - | - | - | - | - | - |

[1] Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
[2] Includes die sets, jigs and fixtures, also.
[3] Includes measuring devices, also.
[4] 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.

## B: Distribution of Workers by Hourly Earnings

### Table B-1. Tool and Die Makers (Other Than Jobbing)

(Percent distribution of men workers by straight-time hourly earnings[1] in machinery manufacturing, 21 selected areas, March–June 1962)

| Average hourly earnings[1] | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| $2.20 and under $2.30 | - | 0.2 | 4.6 | . | . | | . | | - | 5.6 | |
| $2.30 and under $2.40 | - | .6 | - | - | - | - | - | | - | 5.6 | |
| $2.40 and under $2.50 | 8.1 | 1.4 | 3.1 | - | - | - | - | . | 6.4 | 15.3 | |
| $2.50 and under $2.60 | .8 | 1.8 | 4.6 | 3.7 | 0.5 | 4.1 | 0.5 | - | 4.3 | 4.2 | - |
| $2.60 and under $2.70 | 10.6 | 6.9 | 12.3 | 3.7 | 4.2 | 2.7 | 2.7 | - | 4.3 | 4.2 | - |
| $2.70 and under $2.80 | 12.2 | 7.5 | 30.8 | 3.7 | .5 | 5.5 | .8 | 14.7 | 21.3 | 6.9 | - |
| $2.80 and under $2.90 | 2.4 | 25.5 | 15.4 | 30.3 | 12.4 | 8.9 | 1.9 | 8.8 | 4.3 | 18.1 | 5.4 |
| $2.90 and under $3.00 | 16.3 | 16.4 | 15.4 | 15.6 | 9.0 | 9.6 | 26.1 | - | 10.6 | 16.7 | 3.6 |
| $3.00 and under $3.10 | .8 | 5.7 | - | 28.4 | 22.2 | 18.5 | 19.7 | 14.7 | 14.9 | 16.7 | 17.1 |
| $3.10 and under $3.20 | 23.6 | 4.4 | 13.8 | .9 | 16.6 | 6.8 | 6.1 | 4.4 | 27.7 | - | 67.6 |
| $3.20 and under $3.30 | 3.3 | 15.8 | - | 1.8 | 1.8 | 21.2 | 9.0 | 36.8 | 6.4 | 4.2 | - |
| $3.30 and under $3.40 | 21.1 | .4 | - | - | 5.0 | 13.7 | 3.2 | - | - | - | 4.5 |
| $3.40 and under $3.50 | - | 13.5 | - | - | 25.3 | 4.8 | 10.6 | - | - | - | - |
| $3.50 and under $3.60 | .8 | - | - | 11.9 | 2.4 | 4.1 | .5 | 14.7 | - | - | - |
| $3.60 and under $3.70 | - | - | - | - | - | - | 13.0 | - | - | 2.8 | - |
| $3.70 and under $3.80 | - | - | - | - | - | - | .5 | - | - | - | - |
| $3.80 and under $3.90 | - | - | - | - | - | - | - | - | - | - | 1.8 |
| $3.90 and under $4.00 | - | - | - | - | - | - | 4.8 | - | - | - | - |
| $4.00 and over | - | - | - | - | - | - | .5 | 5.9 | - | - | - |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of workers | 123 | 495 | 65 | 109 | 379 | 146 | 376 | 68 | 47 | 72 | 111 |
| Average hourly earnings[1] | $2.99 | $3.00 | $2.79 | $2.97 | $3.15 | $3.09 | $3.20 | $3.22 | $2.92 | $2.77 | $3.14 |

See footnote at end of table.

## Table B-1. Tool and Die Makers (Other Than Jobbing)—Continued

(Percent distribution of men workers by straight-time hourly earnings[1] in machinery manufacturing, 21 selected areas, March–June 1962)

| Average hourly earnings[1] | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| $2.20 and under $2.30 | - | | | - | . | | | . | - | |
| $2.30 and under $2.40 | 1.2 | . | | - | . | | | . | - | |
| $2.40 and under $2.50 | - | - | . | - | - | . | . | . | - | |
| $2.50 and under $2.60 | - | - | - | - | - | - | - | - | - | |
| $2.60 and under $2.70 | 5.4 | 8.3 | - | 2.1 | 0.6 | - | - | - | - | |
| $2.70 and under $2.80 | .7 | 2.8 | - | .8 | 5.3 | - | 14.3 | 0.2 | - | |
| $2.80 and under $2.90 | 2.4 | 4.6 | 3.1 | 2.7 | 11.1 | - | 14.3 | 3.4 | - | |
| $2.90 and under $3.00 | 3.3 | 8.3 | 3.0 | 3.2 | 4.7 | 2.3 | 42.9 | 2.7 | - | |
| $3.00 and under $3.10 | 5.4 | 9.3 | 4.4 | 3.7 | 43.3 | - | 17.9 | 7.4 | - | |
| $3.10 and under $3.20 | 7.6 | 5.6 | - | 15.1 | 18.7 | - | 10.7 | 21.1 | - | |
| $3.20 and under $3.30 | 9.8 | 13.4 | 4.6 | 14.1 | 10.5 | 3.8 | - | 35.0 | - | . |
| $3.30 and under $3.40 | 9.2 | 29.6 | 10.6 | 22.8 | 4.1 | 3.1 | - | 27.9 | - | - |
| $3.40 and under $3.50 | 15.4 | 10.6 | 9.3 | 5.3 | - | 42.5 | - | 2.2 | 25.0 | - |
| $3.50 and under $3.60 | 27.3 | 3.2 | 56.3 | 13.5 | 1.8 | 42.5 | - | - | - | 44.2 |
| $3.60 and under $3.70 | 8.1 | .9 | 3.7 | 12.5 | - | 1.9 | - | - | 25.0 | 49.2 |
| $3.70 and under $3.80 | 2.6 | 1.9 | 1.9 | 4.0 | - | 1.1 | - | - | 50.0 | .5 |
| $3.80 and under $3.90 | .7 | - | 1.5 | .3 | - | 1.1 | - | - | - | 6.0 |
| $3.90 and under $4.00 | 1.0 | - | 1.7 | - | - | .8 | - | - | - | - |
| $4.00 and over | - | 1.4 | - | - | - | .8 | - | - | - | - |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of workers | 579 | 216 | 540 | 377 | 171 | 261 | 28 | 408 | 8 | 199 |
| Average hourly earnings[1] | $3.32 | $3.20 | $3.45 | $3.32 | $3.06 | $3.48 | $2.94 | $3.21 | $3.66 | $3.66 |

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

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

## Table B-2. Machine-Tool Operators, Production, Class A

(Percent distribution of men workers by straight-time hourly earnings[1] in machinery manufacturing, 21 selected areas, March–June 1962)

| Average hourly earnings[1] | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| $1.70 and under $1.80 | - | - | - | 0.3 | - | - | . | - | - | - | |
| $1.80 and under $1.90 | - | - | 0.7 | .8 | - | 0.1 | - | - | - | - | |
| $1.90 and under $2.00 | 0.2 | 0.5 | 3.0 | .5 | 0.1 | - | - | - | - | 0.8 | |
| $2.00 and under $2.10 | 1.0 | - | 1.6 | 1.7 | - | .8 | 0.1 | - | - | 3.3 | - |
| $2.10 and under $2.20 | 1.9 | 1.7 | 1.4 | 3.3 | - | .7 | .5 | - | 0.3 | 5.1 | - |
| $2.20 and under $2.30 | 8.4 | 1.0 | 3.5 | .5 | .5 | 1.1 | 5.1 | - | 9.4 | 16.5 | 0.8 |
| $2.30 and under $2.40 | 6.8 | 3.3 | 9.4 | 5.1 | 3.5 | 2.9 | 2.1 | 0.1 | 3.4 | 9.2 | .8 |
| $2.40 and under $2.50 | 16.5 | 5.5 | 10.3 | 6.6 | 13.2 | 7.1 | 6.3 | 2.2 | 4.8 | 20.5 | 1.9 |
| $2.50 and under $2.60 | 15.5 | 19.1 | 15.7 | 16.4 | 9.7 | 12.6 | 9.2 | 1.4 | 25.1 | 21.4 | 5.8 |
| $2.60 and under $2.70 | 8.9 | 16.0 | 24.6 | 7.5 | 8.2 | 13.7 | 17.2 | 10.9 | 19.6 | 17.3 | 17.7 |
| $2.70 and under $2.80 | 8.1 | 12.5 | 14.5 | 12.8 | 7.3 | 12.6 | 17.5 | 15.1 | 12.5 | 4.9 | 33.9 |
| $2.80 and under $2.90 | 7.9 | 9.0 | 5.1 | 24.0 | 7.4 | 14.1 | 15.3 | 19.8 | 8.9 | .3 | 21.4 |
| $2.90 and under $3.00 | 3.4 | 10.1 | 4.7 | 14.1 | 9.8 | 12.1 | 4.2 | 7.4 | 2.6 | .7 | 12.1 |
| $3.00 and under $3.10 | 2.3 | 4.0 | 2.0 | 2.9 | 30.7 | 6.2 | 4.7 | 13.7 | 2.6 | - | 3.9 |
| $3.10 and under $3.20 | 6.0 | 4.0 | 1.7 | 1.8 | 3.9 | 11.4 | 6.2 | 4.9 | .5 | - | .7 |
| $3.20 and under $3.30 | 1.1 | 6.7 | 1.2 | .1 | 2.5 | 2.0 | 1.2 | 1.5 | 1.8 | - | .2 |
| $3.30 and under $3.40 | 2.0 | 1.3 | .2 | 1.0 | .9 | .8 | 3.0 | 8.7 | 2.6 | - | .4 |
| $3.40 and under $3.50 | 1.2 | .8 | .1 | .3 | 1.0 | .4 | .9 | .1 | .8 | - | .3 |
| $3.50 and under $3.60 | .8 | .9 | .1 | .3 | 1.0 | .6 | .9 | 2.0 | 1.6 | - | .1 |
| $3.60 and under $3.70 | 2.0 | .6 | .1 | - | .3 | .2 | 1.1 | 3.8 | 1.4 | - | - |
| $3.70 and under $3.80 | 1.5 | .5 | - | - | - | .3 | .3 | 3.6 | .8 | - | - |
| $3.80 and under $3.90 | 2.0 | .5 | - | - | - | .1 | .8 | 2.5 | .5 | - | - |
| $3.90 and under $4.00 | .7 | .5 | .1 | - | - | .1 | .6 | 1.2 | .8 | - | - |
| $4.00 and over | 1.4 | 1.4 | - | - | - | .3 | 2.8 | 1.2 | .2 | - | - |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of workers | 1,623 | 1,315 | 809 | 786 | 1,840 | 1,866 | 2,430 | 1,710 | 626 | 611 | 1,320 |
| Average hourly earnings[1] | $2.72 | $2.79 | $2.59 | $2.69 | $2.83 | $2.78 | $2.82 | $3.03 | $2.70 | $2.43 | $2.77 |

See footnote at end of table.

## Table B-2. Machine-Tool Operators, Production, Class A—Continued

(Percent distribution of men workers by straight-time hourly earnings[1] in machinery manufacturing, 21 selected areas, March–June 1962)

| Average hourly earnings[1] | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| $1.70 and under $1.80 | - | | | - | | - | - | - | - | |
| $1.80 and under $1.90 | - | | | - | - | - | - | ([2]) | - | |
| $1.90 and under $2.00 | - | . | | - | - | - | - | - | - | |
| $2.00 and under $2.10 | 0.1 | - | . | - | 0.1 | - | - | ([2]) | - | |
| $2.10 and under $2.20 | .1 | - | - | - | .7 | 0.3 | - | - | - | |
| $2.20 and under $2.30 | .3 | - | - | 0.3 | 2.7 | .5 | - | 0.2 | - | |
| $2.30 and under $2.40 | .1 | ([2]) | - | .2 | 4.2 | 1.6 | 0.8 | .8 | - | |
| $2.40 and under $2.50 | 4.9 | 1.8 | 0.6 | .9 | 6.5 | .9 | 2.1 | 1.4 | - | |
| $2.50 and under $2.60 | 6.8 | 6.5 | 1.0 | 2.9 | 10.8 | 1.6 | .8 | 3.8 | - | - |
| $2.60 and under $2.70 | 7.5 | 18.9 | 3.8 | 9.5 | 22.1 | 2.5 | 2.9 | 8.3 | 0.9 | - |
| $2.70 and under $2.80 | 9.2 | 12.1 | 3.9 | 13.3 | 32.2 | 1.4 | 37.6 | 15.6 | 1.3 | - |
| $2.80 and under $2.90 | 13.2 | 16.5 | 6.7 | 10.0 | 5.2 | 3.4 | 23.6 | 12.9 | 3.5 | 0.9 |
| $2.90 and under $3.00 | 8.1 | 11.8 | 10.7 | 7.1 | 4.1 | 10.3 | 2.1 | 21.6 | 1.1 | 1.9 |
| $3.00 and under $3.10 | 7.5 | 8.5 | 9.9 | 9.3 | 5.5 | 7.3 | 2.5 | 11.8 | 83.8 | 8.4 |
| $3.10 and under $3.20 | 14.7 | 3.9 | 6.4 | 11.1 | 1.5 | 19.9 | 1.7 | 9.9 | 9.4 | 46.3 |
| $3.20 and under $3.30 | 18.7 | 3.5 | 12.2 | 13.3 | 1.8 | 8.4 | 3.7 | 3.6 | - | 24.3 |
| $3.30 and under $3.40 | 4.3 | 3.5 | 10.8 | 8.5 | 1.0 | 5.6 | 6.2 | 3.4 | - | 6.0 |
| $3.40 and under $3.50 | 1.2 | 3.5 | 8.3 | 4.0 | 1.2 | 6.9 | 3.7 | 6.2 | - | 8.5 |
| $3.50 and under $3.60 | 1.4 | 2.1 | 10.1 | 2.9 | .2 | 10.1 | 2.5 | .4 | - | .8 |
| $3.60 and under $3.70 | .7 | 2.3 | 5.1 | 2.7 | .1 | 8.1 | 3.7 | .1 | - | 2.8 |
| $3.70 and under $3.80 | .9 | 1.6 | 4.0 | .9 | .1 | 5.6 | 1.2 | - | - | - |
| $3.80 and under $3.90 | .2 | 1.6 | 1.6 | 1.1 | - | 2.3 | 2.5 | - | - | - |
| $3.90 and under $4.00 | .1 | 1.0 | 1.7 | .6 | - | 1.4 | .8 | - | - | - |
| $4.00 and over | .1 | .7 | 3.4 | 1.5 | - | 1.9 | 1.7 | - | - | - |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of workers | 6,677 | 3,986 | 4,945 | 2,183 | 1,043 | 642 | 242 | 5,236 | 543 | 1,159 |
| Average hourly earnings[1] | $2.97 | $2.94 | $3.24 | $3.07 | $2.71 | $3.26 | $2.98 | $2.93 | $3.01 | $3.20 |

[1] Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
[2] Less than 0.05 percent.

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

## Table B-3. Machine-Tool Operators, Production, Class B

(Percent distribution of men workers by straight-time hourly earnings[1] in machinery manufacturing, 21 selected areas, March–June 1962)

| Average hourly earnings[1] | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| Under $1.50 | | 0.1 | | | | 2.0 | - | | 1.0 | - | |
| $1.50 and under $1.60 | - | .1 | - | - | - | 1.0 | 0.3 | - | 1.0 | 0.3 | - |
| $1.60 and under $1.70 | - | .6 | - | - | - | .2 | .2 | - | 1.0 | 3.1 | - |
| $1.70 and under $1.80 | 0.2 | .5 | 1.3 | - | 0.1 | 2.9 | .2 | - | 2.4 | 7.8 | 1.7 |
| $1.80 and under $1.90 | 2.8 | 2.2 | 2.2 | 4.3 | .4 | 3.0 | .2 | - | 4.0 | 14.1 | - |
| $1.90 and under $2.00 | 5.3 | 1.1 | 1.7 | 2.3 | 1.5 | 4.7 | 3.1 | - | .5 | 16.3 | 2.1 |
| $2.00 and under $2.10 | 7.7 | 3.3 | 3.9 | - | 2.0 | 3.7 | 1.9 | - | 2.6 | 19.1 | 1.7 |
| $2.10 and under $2.20 | 12.9 | 4.8 | 10.0 | - | 5.1 | 3.3 | 1.3 | - | 6.7 | 16.3 | 2.7 |
| $2.20 and under $2.30 | 21.1 | 7.5 | 16.9 | 2.8 | 5.8 | 11.5 | 2.0 | 1.3 | 21.4 | 12.5 | 5.6 |
| $2.30 and under $2.40 | 17.8 | 9.7 | 21.3 | 28.0 | 9.7 | 21.7 | 9.6 | 1.3 | 17.6 | .6 | 10.4 |
| $2.40 and under $2.50 | 14.4 | 11.3 | 17.1 | 26.5 | 4.1 | 14.4 | 9.9 | 12.2 | 8.1 | 5.9 | 8.3 |
| $2.50 and under $2.60 | 4.6 | 8.9 | 8.9 | 3.5 | 7.2 | 10.5 | 2.8 | 9.2 | 6.2 | 2.2 | 10.0 |
| $2.60 and under $2.70 | 1.3 | 10.7 | 5.0 | 8.6 | 9.1 | 5.9 | 4.7 | 26.2 | 8.3 | 1.9 | 22.6 |
| $2.70 and under $2.80 | 2.9 | 8.3 | 2.6 | 11.9 | 6.1 | 3.8 | 22.0 | 26.6 | 9.5 | - | 24.1 |
| $2.80 and under $2.90 | 1.8 | 11.8 | 2.2 | 6.5 | 18.8 | 11.1 | 3.7 | 3.6 | 1.4 | - | 3.5 |
| $2.90 and under $3.00 | 3.7 | 8.0 | 2.2 | 3.3 | 13.9 | .3 | 8.1 | 3.6 | 2.1 | - | 2.1 |
| $3.00 and under $3.10 | .6 | 5.6 | .7 | .8 | 15.3 | .1 | 5.6 | 4.5 | 1.2 | - | 1.2 |
| $3.10 and under $3.20 | .8 | 2.9 | 2.0 | .3 | .1 | - | 3.5 | 1.1 | 1.9 | - | 1.9 |
| $3.20 and under $3.30 | .3 | 1.5 | .4 | .5 | .5 | - | 1.1 | 2.7 | 1.2 | - | .6 |
| $3.30 and under $3.40 | .6 | .7 | 1.3 | .3 | - | - | 2.0 | .7 | - | - | .6 |
| $3.40 and under $3.50 | .6 | .2 | - | - | - | - | 2.2 | .4 | .2 | - | .8 |
| $3.50 and under $3.60 | .1 | .2 | .2 | - | - | - | 2.5 | 2.5 | .5 | - | - |
| $3.60 and under $3.70 | .3 | - | .2 | .3 | - | - | 2.7 | 1.3 | .5 | - | .2 |
| $3.70 and under $3.80 | .1 | - | - | - | - | - | 2.6 | 1.1 | .2 | - | - |
| $3.80 and over | .1 | .1 | - | - | - | - | 8.1 | 2.0 | .5 | - | - |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of workers | 904 | 1,680 | 461 | 604 | 1,422 | 1,106 | 1,327 | 557 | 420 | 320 | 482 |
| Average hourly earnings[1] | $2.34 | $2.58 | $2.39 | $2.48 | $2.66 | $2.34 | $2.87 | $2.77 | $2.41 | $2.04 | $2.57 |

See footnote at end of table.

## Table B-3. Machine-Tool Operators, Production, Class B—Continued

(Percent distribution of men workers by straight-time hourly earnings[1] in machinery manufacturing, 21 selected areas, March–June 1962)

| Average hourly earnings[1] | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| Under $1.50 | | | | | | | | | | |
| $1.50 and under $1.60 | - | - | - | | | | - | | | |
| $1.60 and under $1.70 | - | - | - | - | - | - | - | - | - | |
| $1.70 and under $1.80 | (2) | - | - | - | - | - | 1.0 | - | - | |
| $1.80 and under $1.90 | 0.3 | 0.5 | - | - | - | - | 1.0 | - | - | |
| $1.90 and under $2.00 | 1.1 | .3 | - | - | 2.6 | 0.5 | 1.9 | 1.6 | - | |
| $2.00 and under $2.10 | 2.1 | - | 0.4 | 0.3 | .8 | .5 | 2.9 | 2.4 | - | |
| $2.10 and under $2.20 | 2.6 | - | .6 | .3 | 3.7 | 1.0 | 2.9 | 14.1 | - | - |
| $2.20 and under $2.30 | 7.6 | 4.1 | 1.9 | 3.7 | 7.6 | 3.1 | 7.6 | 4.6 | - | - |
| $2.30 and under $2.40 | 6.9 | 10.8 | 2.3 | 7.1 | 17.9 | 6.4 | 12.4 | 15.6 | 1.4 | - |
| $2.40 and under $2.50 | 10.8 | 8.5 | 1.7 | 8.7 | 28.1 | 11.2 | 29.5 | 22.5 | 8.2 | 4.7 |
| $2.50 and under $2.60 | 8.8 | 16.2 | 5.8 | 12.4 | 22.0 | 10.6 | 13.3 | 12.4 | 16.4 | .9 |
| $2.60 and under $2.70 | 16.0 | 19.6 | 18.0 | 15.7 | 7.6 | 13.2 | 25.7 | 13.5 | 15.1 | 4.9 |
| $2.70 and under $2.80 | 13.8 | 12.6 | 21.7 | 14.1 | 4.5 | 9.3 | - | 6.9 | 46.6 | 69.2 |
| $2.80 and under $2.90 | 10.3 | 4.3 | 13.4 | 6.2 | 1.6 | 17.9 | - | 4.0 | 12.3 | 9.6 |
| $2.90 and under $3.00 | 6.9 | 3.8 | 18.4 | 5.2 | 1.3 | 16.6 | - | 2.2 | - | 6.8 |
| $3.00 and under $3.10 | 4.2 | 2.2 | 9.1 | 6.8 | 1.5 | 1.5 | - | .1 | - | 3.8 |
| $3.10 and under $3.20 | 4.3 | 2.0 | 5.8 | 7.1 | .3 | 3.3 | - | - | - | - |
| $3.20 and under $3.30 | 2.1 | 2.3 | 1.0 | 6.0 | .3 | 1.6 | 1.9 | - | - | - |
| $3.30 and under $3.40 | 1.2 | 1.9 | - | 2.7 | .2 | .3 | - | - | - | - |
| $3.40 and under $3.50 | .4 | 1.9 | - | 1.5 | - | 1.5 | - | - | - | - |
| $3.50 and under $3.60 | .1 | 2.3 | .1 | .4 | - | .3 | - | - | - | - |
| $3.60 and under $3.70 | - | 2.1 | - | .8 | - | .7 | - | - | - | - |
| $3.70 and under $3.80 | .1 | 1.8 | - | .6 | - | .5 | - | - | - | - |
| $3.80 and over | .4 | 2.7 | - | .5 | - | .2 | - | - | - | - |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of workers | 2,600 | 1,559 | 3,952 | 1,696 | 619 | 614 | 105 | 1,336 | 73 | 426 |
| Average hourly earnings[1] | $2.65 | $2.74 | $2.79 | $2.77 | $2.47 | $2.73 | $2.43 | $2.44 | $2.67 | $2.77 |

[1] Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
[2] Less than 0.05 percent.

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

## Table B-4. Machine-Tool Operators, Production, Class C

(Percent distribution of men workers by straight-time hourly earnings[1] in machinery manufacturing, 21 selected areas, March–June 1962)

| Average hourly earnings[1] | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| $1.20 and under $1.30 | - | - | - | - | - | - | - | - | 1.1 | 5.5 | - |
| $1.30 and under $1.40 | - | - | - | - | - | 2.0 | - | - | 6.6 | 9.9 | - |
| $1.40 and under $1.50 | 0.8 | - | - | - | - | 5.8 | - | - | 3.3 | 11.0 | 2.3 |
| $1.50 and under $1.60 | 5.6 | - | - | - | - | 7.5 | 6.3 | - | 3.3 | 12.1 | 2.3 |
| $1.60 and under $1.70 | 7.0 | 0.2 | 4.4 | - | 8.2 | 11.2 | - | - | 1.4 | 20.3 | 1.1 |
| $1.70 and under $1.80 | 20.4 | 1.9 | 17.6 | - | 5.6 | 10.6 | 6.3 | - | 20.9 | 18.1 | 3.4 |
| $1.80 and under $1.90 | 13.1 | 2.5 | 7.4 | - | 2.6 | 7.9 | - | 1.9 | 11.8 | 14.3 | 7.3 |
| $1.90 and under $2.00 | 20.7 | 2.5 | 7.4 | - | 7.3 | 11.5 | .3 | - | 10.4 | 8.8 | 13.0 |
| $2.00 and under $2.10 | 11.5 | 5.5 | 13.2 | 0.8 | 12.9 | 11.9 | .3 | 5.7 | 14.8 | - | 11.3 |
| $2.10 and under $2.20 | 8.7 | 5.9 | 22.1 | 21.8 | 11.7 | 11.6 | 5.5 | - | 11.0 | - | 9.6 |
| $2.20 and under $2.30 | 3.4 | 3.5 | 11.8 | 25.6 | 10.8 | 10.7 | .5 | - | 4.1 | - | 16.4 |
| $2.30 and under $2.40 | 5.6 | 3.2 | 8.8 | 6.8 | 8.4 | 1.5 | 1.6 | 18.9 | 6.9 | - | 15.8 |
| $2.40 and under $2.50 | .3 | 4.7 | 4.4 | 4.5 | 11.5 | .4 | 70.1 | - | .8 | - | 5.1 |
| $2.50 and under $2.60 | - | 27.7 | 1.5 | 18.0 | 4.7 | .3 | 1.3 | 32.1 | .5 | - | 2.3 |
| $2.60 and under $2.70 | .6 | 22.4 | - | 17.3 | 6.6 | 6.2 | 1.6 | - | .8 | - | 2.3 |
| $2.70 and under $2.80 | 2.2 | 3.4 | - | - | 9.1 | .1 | .3 | 7.5 | 1.4 | - | 1.1 |
| $2.80 and under $2.90 | - | 3.2 | 1.5 | 5.3 | .5 | .1 | .5 | - | - | - | 2.8 |
| $2.90 and under $3.00 | .3 | 5.6 | - | - | - | - | 2.6 | - | .5 | - | .6 |
| $3.00 and under $3.10 | - | 3.1 | - | - | - | - | .4 | .8 | 34.0 | - | - | .6 |
| $3.10 and under $3.20 | - | 2.7 | - | - | .2 | .1 | .3 | - | - | - | - |
| $3.20 and under $3.30 | - | 1.0 | - | - | - | .1 | 1.3 | - | - | - | 1.7 |
| $3.30 and under $3.40 | - | .6 | - | - | - | - | - | - | .3 | - | .6 |
| $3.40 and under $3.50 | - | .5 | - | - | - | - | .3 | - | - | - | - |
| $3.50 and over | - | - | - | - | - | - | .3 | - | - | - | .6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of workers | 358 | 1,001 | 68 | 133 | 427 | 757 | 381 | 53 | 364 | 182 | 177 |
| Average hourly earnings[1] | $1.92 | $2.53 | $2.06 | $2.39 | $2.22 | $1.94 | $2.34 | $2.63 | $1.91 | $1.62 | $2.19 |

See footnote at end of table.

## Table B-4. Machine-Tool Operators, Production, Class C—Continued

(Percent distribution of men workers by straight-time hourly earnings[1] in machinery manufacturing, 21 selected areas, March–June 1962)

| Average hourly earnings[1] | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| $1.20 and under $1.30 | . | . | . | . | - | . | - | - | . | |
| $1.30 and under $1.40 | - | . | . | . | 16.4 | - | - | - | . | |
| $1.40 and under $1.50 | - | - | - | - | 5.5 | - | - | - | - | |
| $1.50 and under $1.60 | 2.1 | - | - | - | 11.2 | - | - | 0.6 | - | |
| $1.60 and under $1.70 | 4.3 | - | - | - | - | - | - | - | - | |
| $1.70 and under $1.80 | 14.2 | - | - | - | .6 | - | 3.1 | .6 | - | |
| $1.80 and under $1.90 | 6.2 | 1.3 | 1.9 | 4.4 | 7.9 | - | - | 4.9 | - | |
| $1.90 and under $2.00 | 14.5 | 5.3 | - | 5.9 | 3.6 | 12.0 | 6.3 | 6.4 | - | |
| $2.00 and under $2.10 | 7.9 | 4.1 | 3.4 | 5.3 | 5.8 | 2.4 | 28.1 | 14.9 | - | - |
| $2.10 and under $2.20 | 7.0 | 9.2 | 14.4 | .6 | 14.8 | 20.0 | 25.0 | 4.9 | - | - |
| $2.20 and under $2.30 | 10.9 | 10.9 | 3.4 | 15.2 | 30.0 | 39.2 | 9.4 | 50.6 | - | - |
| $2.30 and under $2.40 | 5.8 | 10.0 | 9.0 | 10.3 | 2.7 | 3.2 | 28.1 | 12.8 | - | 10.5 |
| $2.40 and under $2.50 | 6.6 | 36.0 | 11.1 | 10.9 | .6 | .8 | - | 3.7 | 33.3 | 36.6 |
| $2.50 and under $2.60 | 5.6 | 10.5 | 7.4 | 2.9 | .9 | 4.8 | - | .6 | 50.0 | 46.1 |
| $2.60 and under $2.70 | 5.2 | 6.0 | 13.2 | 9.7 | - | 3.2 | - | - | - | 6.8 |
| $2.70 and under $2.80 | 2.3 | 2.3 | 6.8 | 5.9 | - | 2.4 | - | - | 16.7 | - |
| $2.80 and under $2.90 | 1.6 | 1.7 | 16.6 | 5.3 | - | .8 | - | - | - | - |
| $2.90 and under $3.00 | 1.3 | .9 | 12.5 | 4.7 | - | .8 | - | - | - | - |
| $3.00 and under $3.10 | 2.7 | - | - | 7.3 | - | 4.0 | - | - | - | |
| $3.10 and under $3.20 | 1.1 | .4 | .1 | 2.1 | - | 1.6 | - | - | - | |
| $3.20 and under $3.30 | .3 | .8 | - | 5.0 | - | 2.4 | - | - | - | |
| $3.30 and under $3.40 | .2 | - | - | 1.2 | - | .8 | - | - | - | - |
| $3.40 and under $3.50 | .1 | - | - | 2.6 | - | .8 | - | - | - | - |
| $3.50 and over | .2 | .6 | - | .9 | - | .8 | - | - | - | - |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of workers | 1,265 | 531 | 847 | 341 | 330 | 125 | 32 | 328 | 6 | 191 |
| Average hourly earnings[1] | $2.16 | $2.38 | $2.54 | $2.55 | $1.91 | $2.35 | $2.14 | $2.18 | $2.51 | $2.51 |

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

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

## Table B-5. Assemblers, Class B

(Percent distribution of men workers by straight-time hourly earnings [1] in machinery manufacturing, 21 selected areas, March–June 1962)

| Average hourly earnings [1] | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| $1.40 and under $1.50 | | | | | | 0.7 | 0.4 | | | 6.7 | - |
| $1.50 and under $1.60 | - | - | - | - | - | 1.0 | .9 | - | - | 6.7 | 0.6 |
| $1.60 and under $1.70 | - | - | - | - | - | 2.0 | .2 | - | - | 11.6 | 1.3 |
| $1.70 and under $1.80 | 1.1 | 0.3 | - | - | 2.4 | 1.0 | .4 | - | - | 21.3 | 5.0 |
| $1.80 and under $1.90 | .6 | .3 | 2.5 | - | 2.4 | 1.0 | .9 | - | 4.8 | 12.8 | - |
| $1.90 and under $2.00 | .6 | 7.2 | 4.5 | 4.8 | 3.7 | 12.3 | 2.1 | - | 1.6 | 21.3 | - |
| $2.00 and under $2.10 | 2.7 | 21.6 | 3.5 | - | 1.5 | 10.0 | 3.2 | - | 1.6 | 6.7 | 11.9 |
| $2.10 and under $2.20 | 22.1 | 2.9 | 3.0 | - | 42.3 | 8.5 | 7.0 | - | 1.6 | 6.1 | 9.4 |
| $2.20 and under $2.30 | 16.6 | 32.3 | 15.4 | 3.4 | 15.8 | 15.4 | 5.8 | - | 9.7 | 4.9 | 16.3 |
| $2.30 and under $2.40 | 18.1 | 10.4 | 18.4 | 13.0 | 2.8 | 7.4 | 32.2 | 9.1 | 25.8 | 1.8 | 23.1 |
| $2.40 and under $2.50 | 14.1 | 10.7 | 18.9 | 26.0 | 1.8 | 17.2 | 11.1 | 10.7 | 21.0 | - | 2.5 |
| $2.50 and under $2.60 | 7.8 | 4.8 | 10.0 | 17.8 | 1.3 | 12.3 | 14.3 | 13.9 | 32.3 | - | 16.3 |
| $2.60 and under $2.70 | 4.6 | 1.3 | 19.9 | 13.7 | 5.3 | 3.4 | 15.8 | 4.3 | 1.6 | - | 12.5 |
| $2.70 and under $2.80 | 3.2 | 3.8 | 3.0 | 8.2 | 9.9 | 1.6 | - | 11.2 | - | - | .6 |
| $2.80 and under $2.90 | 1.1 | 1.5 | - | 11.0 | 2.7 | 1.3 | - | 18.2 | - | - | .6 |
| $2.90 and under $3.00 | 1.5 | .6 | 1.0 | 1.4 | 5.7 | .5 | 2.1 | .5 | - | - | - |
| $3.00 and under $3.10 | .8 | .1 | - | - | 2.3 | 3.6 | .2 | 2.1 | - | - | - |
| $3.10 and under $3.20 | 1.3 | .6 | - | - | .2 | .8 | .4 | 3.7 | - | - | - |
| $3.20 and under $3.30 | .2 | .7 | - | - | - | - | .2 | 13.9 | - | - | - |
| $3.30 and under $3.40 | .4 | .7 | - | .7 | - | .2 | .6 | - | - | - | - |
| $3.40 and under $3.50 | .2 | - | - | - | - | - | .4 | 4.3 | - | - | - |
| $3.50 and under $3.60 | .6 | - | - | - | - | - | .4 | .5 | - | - | - |
| $3.60 and under $3.70 | .4 | - | - | - | - | - | - | - | - | - | - |
| $3.70 and under $3.80 | .8 | - | - | - | - | - | .2 | - | - | - | - |
| $3.80 and over | 1.1 | .1 | - | - | - | - | 1.1 | 7.5 | - | - | - |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of workers | 475 | 684 | 201 | 146 | 1,011 | 611 | 469 | 187 | 62 | 164 | 160 |
| Average hourly earnings [1] | $2.41 | $2.28 | $2.39 | $2.52 | $2.33 | $2.29 | $2.42 | $2.88 | $2.39 | $1.82 | $2.30 |

See footnote at end of table.

## Table B-5. Assemblers, Class B—Continued

(Percent distribution of men workers by straight-time hourly earnings [1] in machinery manufacturing, 21 selected areas, March–June 1962)

| Average hourly earnings [1] | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| $1.40 and under $1.50 | | | | | | | | | | |
| $1.50 and under $1.60 | - | - | - | - | - | - | | - | - | |
| $1.60 and under $1.70 | - | - | - | - | - | - | - | - | - | |
| $1.70 and under $1.80 | 0.4 | - | - | - | 2.6 | - | - | - | - | |
| $1.80 and under $1.90 | 1.7 | - | - | - | 2.0 | 0.6 | - | 2.7 | - | - |
| $1.90 and under $2.00 | 3.9 | - | - | - | 1.4 | 4.5 | - | 1.6 | - | - |
| $2.00 and under $2.10 | 2.6 | 1.0 | - | 0.1 | 3.9 | 1.3 | - | 3.7 | - | - |
| $2.10 and under $2.20 | 2.0 | 2.6 | - | - | 24.0 | 4.9 | 13.4 | 16.9 | - | 4.8 |
| $2.20 and under $2.30 | 3.5 | 1.7 | 0.5 | 4.9 | 7.4 | 21.6 | 1.5 | 14.8 | - | - |
| $2.30 and under $2.40 | 10.8 | 4.6 | .2 | 3.5 | 15.6 | 17.7 | 10.4 | 20.6 | - | - |
| $2.40 and under $2.50 | 7.6 | 11.8 | 5.3 | 13.9 | 18.9 | 9.6 | 43.3 | 12.6 | - | - |
| $2.50 and under $2.60 | 8.2 | 10.1 | 3.5 | 13.7 | 7.8 | 5.4 | 20.9 | 8.6 | - | - |
| $2.60 and under $2.70 | 21.0 | 33.5 | 47.2 | 13.8 | 5.9 | 3.4 | 10.4 | 8.5 | 39.6 | 2.4 |
| $2.70 and under $2.80 | 8.9 | 7.7 | 16.9 | 3.7 | 3.0 | .8 | - | 1.8 | 7.7 | 79.8 |
| $2.80 and under $2.90 | 8.8 | 2.0 | 1.9 | 5.6 | 3.4 | 2.8 | - | 6.1 | 44.0 | 13.0 |
| $2.90 and under $3.00 | 10.4 | 2.6 | 20.2 | 2.4 | .7 | 11.6 | - | 2.1 | 8.8 | - |
| $3.00 and under $3.10 | 5.1 | 1.9 | 4.4 | 3.3 | 2.0 | 2.1 | - | - | - | - |
| $3.10 and under $3.20 | 3.7 | .9 | - | 24.3 | .7 | 4.2 | - | - | - | - |
| $3.20 and under $3.30 | 1.1 | 1.2 | - | 3.8 | .5 | 4.4 | - | - | - | - |
| $3.30 and under $3.40 | (2) | 1.7 | - | 1.1 | .1 | 1.4 | - | - | - | - |
| $3.40 and under $3.50 | .1 | 4.6 | - | 1.8 | .2 | .1 | - | - | - | - |
| $3.50 and under $3.60 | (2) | 2.0 | - | .8 | .1 | 3.2 | - | - | - | - |
| $3.60 and under $3.70 | - | 1.9 | - | 1.0 | - | .3 | - | - | - | - |
| $3.70 and under $3.80 | - | 1.9 | - | .8 | - | - | - | - | - | - |
| $3.80 and over | - | 6.2 | - | 1.4 | - | - | - | - | - | - |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of workers | 2,079 | 692 | 1,316 | 912 | 1,071 | 708 | 67 | 791 | 91 | 208 |
| Average hourly earnings [1] | $2.61 | $2.79 | $2.73 | $2.82 | $2.37 | $2.55 | $2.43 | $2.35 | $2.74 | $2.73 |

[1] Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
[2] Less than 0.05 percent.

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

## Table B-6. Laborers, Material Handling

(Percent distribution of men workers by straight-time hourly earnings [1] in machinery manufacturing, 20 selected areas, March–June 1962)

| Average hourly earnings [1] | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| $1.10 and under $1.20 | - | - | - | - | - | - | - | - | - | 0.8 | - |
| $1.20 and under $1.30 | - | - | - | - | - | 1.9 | - | - | - | 27.9 | - |
| $1.30 and under $1.40 | - | - | - | - | - | 6.7 | 1.5 | - | - | 10.9 | 3.4 |
| $1.40 and under $1.50 | - | - | - | - | 0.5 | 2.9 | .5 | - | - | 11.6 | 17.1 |
| $1.50 and under $1.60 | 3.9 | 3.0 | - | - | 1.4 | 6.3 | 1.0 | - | - | 5.4 | 4.9 |
| $1.60 and under $1.70 | - | 1.3 | 0.8 | - | 1.0 | 3.8 | - | - | 12.2 | 11.6 | 8.4 |
| $1.70 and under $1.80 | 9.7 | 6.6 | 27.7 | - | 3.8 | 5.3 | - | - | 2.4 | 20.9 | 2.3 |
| $1.80 and under $1.90 | 7.8 | 12.8 | 28.6 | - | 29.0 | 6.7 | 5.9 | 0.6 | 19.5 | 1.6 | 1.5 |
| $1.90 and under $2.00 | 19.9 | 28.9 | 2.5 | - | 2.6 | 6.7 | 4.4 | - | 7.3 | 8.5 | 13.3 |
| $2.00 and under $2.10 | 16.0 | 15.4 | 7.6 | 2.6 | 3.3 | 14.4 | 3.4 | - | 53.7 | .8 | 22.1 |
| $2.10 and under $2.20 | 16.0 | 7.2 | 16.0 | 7.7 | 32.3 | 15.9 | 6.9 | 8.3 | 4.9 | - | 2.7 |
| $2.20 and under $2.30 | 14.6 | 12.1 | 9.2 | 88.5 | 4.5 | 6.7 | 41.7 | 31.5 | - | - | 1.1 |
| $2.30 and under $2.40 | 12.1 | 4.9 | 1.7 | 1.3 | 2.9 | 1.9 | 33.8 | 25.6 | - | - | 16.3 |
| $2.40 and under $2.50 | - | 7.2 | .8 | - | 8.1 | 1.0 | 1.0 | 17.3 | - | - | 2.7 |
| $2.50 and under $2.60 | - | .7 | - | - | .2 | 15.4 | - | 1.2 | - | - | - |
| $2.60 and under $2.70 | - | - | - | - | 10.5 | 1.0 | - | - | - | - | 3.8 |
| $2.70 and under $2.80 | - | - | - | - | - | 2.4 | - | 10.7 | - | - | - |
| $2.80 and under $2.90 | - | - | - | - | - | .5 | - | 3.6 | - | - | - |
| $2.90 and under $3.00 | - | - | - | - | - | - | - | - | - | - | - |
| $3.00 and under $3.10 | - | - | - | - | - | - | - | 1.2 | - | - | .4 |
| $3.10 and under $3.20 | - | - | 5.0 | - | - | - | - | - | - | - | - |
| $3.20 and under $3.30 | - | - | - | - | - | .5 | - | - | - | - | - |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of workers | 206 | 305 | 119 | 78 | 421 | 208 | 204 | 168 | 41 | 129 | 263 |
| Average hourly earnings [1] | $2.03 | $2.03 | $2.00 | $2.23 | $2.10 | $2.03 | $2.20 | $2.37 | $1.92 | $1.52 | $1.92 |

See footnote at end of table.

## Table B-6. Laborers, Material Handling—Continued

(Percent distribution of men workers by straight-time hourly earnings [1] in machinery manufacturing, 20 selected areas, March–June 1962)

| Average hourly earnings [1] | Middle West | | | | | | Far West | | |
|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| $1.10 and under $1.20 | - | - | - | - | - | - | - | - | - |
| $1.20 and under $1.30 | - | - | - | - | - | - | - | - | |
| $1.30 and under $1.40 | - | - | - | - | - | - | - | - | |
| $1.40 and under $1.50 | 0.1 | - | - | - | - | - | - | - | |
| $1.50 and under $1.60 | .6 | - | - | - | 3.4 | - | - | - | |
| $1.60 and under $1.70 | 7.6 | - | - | - | 1.1 | - | - | - | |
| $1.70 and under $1.80 | 19.6 | - | - | - | 1.1 | 0.6 | 2.4 | - | |
| $1.80 and under $1.90 | 9.8 | 0.3 | - | 0.7 | 2.3 | 1.4 | 3.2 | - | |
| $1.90 and under $2.00 | 6.9 | 3.5 | 0.1 | 2.2 | 7.5 | 9.5 | 3.2 | - | |
| $2.00 and under $2.10 | 5.2 | 9.2 | 2.3 | 9.4 | 8.6 | 7.3 | 21.6 | - | - |
| $2.10 and under $2.20 | 9.6 | 15.2 | - | 12.8 | 52.0 | 49.7 | 2.8 | - | - |
| $2.20 and under $2.30 | 6.0 | 10.3 | 7.0 | 26.1 | 6.9 | 8.1 | 11.2 | - | - |
| $2.30 and under $2.40 | 6.7 | 39.7 | 4.1 | 15.1 | 3.7 | 17.9 | 7.6 | 4.0 | 26.0 |
| $2.40 and under $2.50 | 25.1 | 3.8 | 36.2 | 6.8 | 12.4 | 3.1 | 15.6 | 2.0 | 30.0 |
| $2.50 and under $2.60 | 2.5 | 1.4 | 19.2 | 22.9 | .9 | 2.5 | 2.8 | 22.0 | 8.0 |
| $2.60 and under $2.70 | .2 | 7.3 | 18.2 | 1.8 | - | - | 29.6 | 68.0 | 10.0 |
| $2.70 and under $2.80 | .1 | 5.7 | 6.6 | .4 | - | - | - | 4.0 | 26.0 |
| $2.80 and under $2.90 | .1 | .5 | 5.4 | .1 | - | - | - | - | - |
| $2.90 and under $3.00 | - | 1.6 | .8 | .8 | - | - | - | - | - |
| $3.00 and under $3.10 | - | .3 | - | .4 | - | - | - | - | - |
| $3.10 and under $3.20 | - | .8 | - | .7 | - | - | - | - | - |
| $3.20 and under $3.30 | - | .3 | - | - | - | - | - | - | - |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of workers | 1,453 | 368 | 740 | 737 | 348 | 358 | 250 | 50 | 50 |
| Average hourly earnings [1] | $2.08 | $2.33 | $2.53 | $2.34 | $2.15 | $2.16 | $2.32 | $2.61 | $2.53 |

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

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

## C: Establishment Practices and Supplementary Wage Provisions

### Table C-1. Method of Wage Payment, Job Evaluation Plans, and Labor-Management Agreements

(Percent of production workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Item | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Method of payment** | | | | | | | | | | | |
| Timeworkers | 83 | 66 | 81 | 77 | 81 | 89 | 81 | 78 | 80 | 100 | 93 |
| Incentive workers | 17 | 34 | 19 | 23 | 19 | 11 | 19 | 22 | 20 | - | 7 |
| Piecework | ([1]) | 24 | 8 | - | 2 | 2 | 1 | - | - | - | - |
| Bonus | 17 | 10 | 11 | 23 | 17 | 9 | 18 | 22 | 20 | - | 7 |
| **Job evaluation plans[2]** | | | | | | | | | | | |
| Workers in establishments with formal job evaluation procedures | 66 | 73 | 86 | 27 | 34 | 19 | 52 | 71 | 74 | 34 | 43 |
| Ranking method | 1 | 10 | 2 | - | 1 | 4 | 30 | 5 | 8 | 5 | 7 |
| Classification method | - | - | 2 | - | 4 | - | - | 3 | 6 | 12 | - |
| Point method | 51 | 62 | 82 | 27 | 29 | 15 | 22 | 57 | 60 | 8 | - |
| Factor comparison method | 14 | - | - | - | - | - | - | 6 | - | - | 36 |
| Combination point and factor method | - | 1 | - | - | - | - | - | - | - | 9 | - |
| Other | - | - | - | - | - | - | - | - | - | - | - |
| With employee representatives participating in job evaluation | 13 | 9 | 32 | 18 | 14 | 13 | 11 | 31 | 26 | 6 | 24 |
| With labor grades established in connection with job evaluation | 49 | 73 | 84 | 22 | 32 | 19 | 52 | 67 | 72 | 13 | 37 |
| With formal rate ranges for time-rated jobs established in connection with job evaluation | 53 | 68 | 76 | 27 | 26 | 15 | 51 | 28 | 74 | 34 | 34 |
| Provisions for increases within rate ranges: | | | | | | | | | | | |
| Automatic periodic increases on basis of seniority only | 14 | 4 | - | 13 | 1 | 10 | 11 | 11 | | 2 | - |
| Seniority qualified by periodic merit evaluation | - | - | 19 | - | 5 | - | 4 | - | - | - | 25 |
| Periodic formal merit evaluation only | 27 | 5 | 20 | 8 | 5 | 2 | 4 | 17 | 48 | 11 | 2 |
| Merit, but no formal merit review | ([1]) | - | 21 | - | 3 | 1 | - | | - | - | 6 |
| Automatic periodic increases and then merit | 12 | 59 | 16 | 6 | 8 | 2 | 33 | | 26 | 21 | - |
| Other[3] | - | - | - | - | 3 | - | - | - | - | - | - |
| Workers in establishments with no formal job evaluation procedures | 34 | 27 | 14 | 73 | 66 | 81 | 48 | 29 | 26 | 66 | 57 |
| **Labor-management agreements[4]** | | | | | | | | | | | |
| Workers in establishments with agreements covering a majority of production workers | 62 | 86 | 40 | 82 | 79 | 67 | 82 | 95 | 45 | 22 | 62 |

See footnotes at end of table.

## Table C-1. Method of Wage Payment, Job Evaluation Plans, and Labor-Management Agreements—Continued

(Percent of production workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Item | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Method of payment** | | | | | | | | | | |
| Timeworkers | 81 | 80 | 93 | 58 | 90 | 81 | 93 | 98 | 100 | 100 |
| Incentive workers | 19 | 20 | 7 | 42 | 10 | 19 | 7 | 2 | - | - |
| Piecework | 9 | 6 | 1 | 21 | 8 | 10 | 5 | 1 | - | - |
| Bonus | 10 | 14 | 6 | 22 | 1 | 8 | 2 | 2 | - | - |
| **Job evaluation plans[2]** | | | | | | | | | | |
| Workers in establishments with formal job evaluation procedures | 46 | 49 | 19 | 89 | 29 | 15 | 24 | 41 | 22 | |
| Ranking method | ([1]) | - | - | 1 | - | - | 5 | 2 | 6 | |
| Classification method | 14 | 1 | 1 | 23 | - | 2 | - | 3 | - | |
| Point method | 29 | 25 | 1 | 54 | 27 | 11 | - | 28 | 15 | |
| Factor comparison method | - | 8 | - | - | 2 | - | 19 | 4 | - | |
| Combination point and factor method | 2 | 15 | 17 | 10 | - | - | - | 2 | - | |
| Other | - | - | - | - | - | 2 | - | 2 | - | |
| With employee representatives participating in job evaluation | 4 | 10 | 14 | 38 | 10 | 8 | 17 | 7 | 22 | |
| With labor grades established in connection with job evaluation | 42 | 33 | 14 | 80 | 21 | 5 | 24 | 34 | - | |
| With formal rate ranges for time-rated jobs established in connection with job evaluation | 42 | 45 | 4 | 75 | 29 | 15 | 7 | 34 | 22 | |
| Provisions for increases within rate ranges: | | | | | | | | | | |
| Automatic periodic increases on basis of seniority only | 5 | 2 | ([1]) | 6 | 8 | 4 | | 9 | - | |
| Seniority qualified by periodic merit evaluation | 3 | 1 | 1 | - | - | 9 | - | - | 6 | |
| Periodic formal merit evaluation only | 9 | 25 | 2 | 10 | 2 | 2 | 5 | 10 | 15 | |
| Merit, but no formal merit review | 3 | 9 | - | 7 | - | - | 2 | 1 | - | |
| Automatic periodic increases and then merit | 10 | 7 | - | 27 | 17 | - | - | 9 | - | - |
| Other[3] | 12 | - | - | 26 | 2 | - | - | 6 | - | - |
| Workers in establishments with no formal job evaluation procedures | 54 | 51 | 81 | 11 | 71 | 85 | 76 | 59 | 78 | 100 |
| **Labor-management agreements[4]** | | | | | | | | | | |
| Workers in establishments with agreements covering a majority of production workers | 59 | 79 | 70 | 89 | 81 | 88 | 61 | 45 | 88 | 97 |

[1] Less than 0.5 percent.
[2] See appendix C, scope and method, for descriptions of methods of evaluation.
[3] Includes plans which provide for increases in the lower labor grades, by one of the above methods and in the higher grades, by another method.
[4] Estimates relate to all production workers employed in an establishment having a contract in effect covering a majority of the production workers. Because of the exclusion of smaller size establishments, the estimates so obtained are not necessarily representative of the extent to which all workers in the area are covered by labor-management agreement provisions.

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

## Table C-2. Shift Differential Provisions

(Percent of production workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Shift differential[1] | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| **Second shift** | | | | | | | | | | | |
| Workers in establishments having second-shift provisions | 77.2 | 92.0 | 92.7 | 89.7 | 77.0 | 58.6 | 88.9 | 95.4 | 92.4 | 66.0 | 90.1 |
| With shift differential | 77.2 | 90.4 | 92.7 | 89.7 | 77.0 | 58.6 | 88.9 | 95.4 | 91.4 | 61.5 | 87.2 |
| Uniform cents per hour | 18.4 | 35.0 | 56.5 | 73.4 | 23.3 | 6.8 | 20.2 | 83.4 | 10.0 | 58.7 | 86.3 |
| Under 5 cents | - | - | - | - | - | - | 2.0 | - | - | - | - |
| 5 cents | - | - | 16.2 | 2.5 | 2.6 | 3.7 | 3.5 | - | 5.1 | - | 3.0 |
| Over 5 and under 10 cents | 1.9 | - | 6.4 | 1.0 | - | - | 1.6 | 71.2 | - | 26.4 | 76.8 |
| 10 cents | 9.3 | 23.0 | 28.8 | 47.6 | 17.8 | 3.1 | 6.9 | 12.2 | 5.0 | 30.3 | 6.4 |
| Over 10 and under 15 cents | 3.1 | 1.2 | 5.1 | 10.7 | .4 | - | 5.5 | - | - | 1.9 | - |
| 15 cents | 2.2 | 10.8 | - | 5.7 | - | - | .7 | - | - | - | - |
| Over 15 and under 20 cents | - | - | - | - | - | - | - | - | - | - | - |
| 20 cents | 1.8 | - | - | 2.7 | - | - | - | - | - | - | - |
| Over 20 cents | - | - | - | 3.1 | 2.5 | - | - | - | - | - | - |
| Uniform percentage | 54.7 | 54.8 | 33.8 | 16.3 | 53.6 | 51.8 | 68.7 | 9.3 | 76.6 | 2.8 | - |
| Under 5 percent | - | - | - | - | - | - | - | - | - | - | - |
| 5 percent | - | 16.0 | 5.8 | - | 12.9 | - | - | 2.4 | 29.9 | - | - |
| Over 5 and under 10 percent | - | 20.2 | - | 11.1 | 4.2 | 1.6 | 2.2 | - | 13.1 | - | - |
| 10 percent | 47.3 | 18.6 | 28.0 | 5.2 | 35.8 | 21.7 | 66.5 | 7.0 | 33.6 | 2.8 | - |
| Over 10 and under 15 percent | 6.9 | - | - | - | - | 5.8 | - | - | - | - | - |
| 15 percent | .5 | - | - | - | .8 | 22.7 | - | - | - | - | - |
| 20 percent | - | - | - | - | - | - | - | - | - | - | - |
| Full day's pay for reduced hours | 4.0 | - | - | - | - | - | - | 2.7 | - | - | - |
| Other[2] | - | .6 | 2.4 | - | - | - | - | - | 4.7 | - | .9 |
| With no shift differential | - | 1.6 | - | - | - | - | - | - | 1.0 | 4.6 | 2.9 |
| **Third shift** | | | | | | | | | | | |
| Workers in establishments having third-shift provisions | 65.0 | 80.9 | 73.4 | 72.1 | 74.7 | 44.9 | 82.0 | 89.7 | 81.5 | 45.2 | 74.8 |
| With shift differential | 65.0 | 80.9 | 73.4 | 72.1 | 74.7 | 44.9 | 82.0 | 89.7 | 81.5 | 45.2 | 74.8 |
| Uniform cents per hour | 8.7 | 29.4 | 39.6 | 55.9 | 23.3 | 3.1 | 14.5 | 80.3 | 3.2 | 45.2 | 72.3 |
| Under 5 cents | - | - | - | - | - | - | 2.0 | - | - | - | - |
| 5 cents | - | - | - | - | 2.6 | - | - | - | - | - | - |
| Over 5 and under 10 cents | - | - | - | 2.5 | - | - | - | 2.9 | - | - | - |
| 10 cents | 1.7 | 16.9 | 18.3 | 4.6 | 7.5 | 3.1 | 6.2 | 3.3 | 3.2 | 15.9 | 4.0 |
| Over 10 and under 15 cents | 5.2 | - | - | 7.5 | - | - | 4.2 | 74.1 | - | 22.9 | 46.0 |
| 15 cents | - | 12.5 | 16.1 | 38.5 | 10.3 | - | 2.0 | - | - | - | - |
| Over 15 and under 20 cents | - | - | - | - | .4 | - | - | - | - | - | 22.4 |
| 20 cents | 1.8 | - | 5.1 | 2.7 | - | - | - | - | - | 6.3 | - |
| Over 20 cents | - | - | - | - | 2.5 | - | - | - | - | - | - |
| Uniform percentage | 32.3 | 51.5 | 33.8 | 16.3 | 51.3 | 41.8 | 67.5 | 9.0 | 73.5 | - | - |
| 5 percent | - | 4.5 | - | - | - | - | - | 2.4 | - | - | - |
| Over 5 and under 10 percent | - | .5 | - | 1.3 | 3.9 | - | 2.2 | - | 10.3 | - | - |
| 10 percent | 36.4 | 46.5 | 33.8 | 15.0 | 46.4 | 16.7 | 57.2 | 6.6 | 63.2 | - | - |
| Over 10 and under 15 percent | - | - | - | - | .2 | 3.3 | 6.3 | - | - | - | - |
| 15 percent | 15.9 | - | - | - | .8 | 20.8 | 1.8 | - | - | - | - |
| 20 percent | - | - | - | - | - | 1.0 | - | - | - | - | - |
| Full day's pay for reduced hours | 4.0 | - | - | - | - | - | - | .3 | - | - | - |
| Other[2] | - | - | - | - | - | - | - | - | 4.7 | - | 2.5 |

See footnotes at end of table.

## Table C-2. Shift Differential Provisions—Continued

(Percent of production workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Shift differential[1] | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| **Second shift** | | | | | | | | | | |
| Workers in establishments having second-shift provisions | 91.6 | 88.1 | 96.0 | 95.4 | 92.1 | 84.9 | 77.2 | 89.1 | 97.7 | 92.7 |
| With shift differential | 90.3 | 85.8 | 95.7 | 95.4 | 92.1 | 84.9 | 77.2 | 89.1 | 97.7 | 92.7 |
| Uniform cents per hour | 23.5 | 60.1 | 61.9 | 71.6 | 80.1 | 24.3 | 73.4 | 66.3 | 3.3 | 3.5 |
| Under 5 cents | - | - | - | - | - | - | - | - | - | - |
| 5 cents | - | - | 5.6 | 1.2 | 3.7 | - | - | .4 | - | - |
| Over 5 and under 10 cents | 3.8 | 10.7 | 4.5 | 18.9 | 4.7 | 2.4 | 43.8 | 7.4 | - | - |
| 10 cents | 7.5 | 23.4 | 6.9 | 4.6 | 56.8 | 19.6 | 27.7 | 30.0 | 3.3 | - |
| Over 10 and under 15 cents | 4.7 | 15.7 | 6.0 | 27.3 | 6.1 | - | - | 13.0 | - | - |
| 15 cents | 5.1 | 10.3 | 32.6 | 14.2 | 3.8 | - | - | 12.7 | - | - |
| Over 15 and under 20 cents | - | - | .9 | - | - | - | - | - | - | - |
| 20 cents | 1.5 | - | 4.4 | - | 5.0 | 2.3 | 1.9 | .8 | - | - |
| Over 20 cents | 1.0 | - | 1.0 | 5.5 | - | - | - | 2.0 | - | 3.5 |
| Uniform percentage | 53.5 | 21.6 | 31.6 | 23.7 | 12.0 | 50.0 | 2.5 | 4.6 | - | 1.2 |
| Under 5 percent | - | - | - | - | - | - | - | 1.8 | - | - |
| 5 percent | - | 3.6 | 15.6 | 22.3 | - | 15.5 | 2.5 | .9 | - | - |
| Over 5 and under 10 percent | 2.1 | 2.4 | - | .4 | 7.3 | - | - | - | - | - |
| 10 percent | 49.2 | 15.6 | 16.0 | 1.0 | 4.7 | 34.5 | - | 1.9 | - | 1.2 |
| Over 10 and under 15 percent | - | - | - | - | - | - | - | - | - | - |
| 15 percent | 2.1 | - | - | - | - | - | - | - | - | - |
| 20 percent | .1 | - | - | - | - | - | - | - | - | - |
| Full day's pay for reduced hours | 1.4 | - | - | - | | - | - | .6 | - | - |
| Other[2] | 11.9 | 4.1 | 2.1 | - | | 10.5 | 1.2 | 17.6 | 94.4 | 88.0 |
| With no shift differential | 1.2 | 2.3 | .3 | - | | - | - | - | - | - |
| **Third shift** | | | | | | | | | | |
| Workers in establishments having third-shift provisions | 58.7 | 74.4 | 80.9 | 92.0 | 75.4 | 81.2 | 57.5 | 63.1 | 94.4 | 89.2 |
| With shift differential | 58.7 | 74.4 | 80.9 | 92.0 | 75.4 | 81.2 | 57.5 | 63.1 | 94.4 | 89.2 |
| Uniform cents per hour | 15.1 | 45.9 | 46.8 | 49.3 | 64.8 | 15.3 | 26.9 | 12.5 | - | - |
| Under 5 cents | - | - | - | - | - | - | - | - | - | - |
| 5 cents | - | - | .5 | - | 2.1 | - | - | - | - | - |
| Over 5 and under 10 cents | 1.8 | 5.1 | 1.6 | 1.8 | - | - | - | - | - | - |
| 10 cents | 2.8 | 11.4 | 3.3 | 14.9 | 5.5 | 8.9 | 2.0 | 1.3 | - | - |
| Over 10 and under 15 cents | 3.8 | 8.2 | 1.8 | 4.8 | 11.0 | 2.4 | 16.9 | - | - | - |
| 15 cents | 4.3 | 13.1 | 7.2 | 7.9 | 41.9 | 1.8 | 7.9 | 6.9 | - | - |
| Over 15 and under 20 cents | - | 6.9 | 5.0 | 3.3 | - | - | - | .2 | - | - |
| 20 cents | 1.5 | - | 23.0 | 11.1 | 1.7 | - | - | 2.2 | - | - |
| Over 20 cents | 1.0 | 1.1 | 4.3 | 5.5 | 2.6 | 2.3 | - | 2.0 | - | - |
| Uniform percentage | 29.6 | 19.2 | 30.0 | 22.2 | 10.6 | 48.2 | - | 1.9 | - | 1.2 |
| 5 percent | - | - | .3 | - | - | 1.4 | - | - | - | - |
| Over 5 and under 10 percent | - | 1.2 | - | 3.2 | - | - | - | - | - | - |
| 10 percent | 27.5 | 16.7 | 29.6 | 19.0 | 4.7 | 46.9 | - | 1.9 | - | - |
| Over 10 and under 15 percent | 1.6 | - | - | - | 5.9 | - | - | - | - | - |
| 15 percent | .6 | 1.3 | - | - | - | - | - | - | - | 1.2 |
| 20 percent | - | - | - | - | - | - | - | - | - | - |
| Full day's pay for reduced hours | - | - | .7 | - | - | - | - | .6 | - | - |
| Other[2] | 13.9 | 9.3 | 3.4 | 20.4 | - | 17.6 | 30.6 | 48.1 | 94.4 | 88.0 |

[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.

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

## Table C-3. Shift Differential Practices

(Percent of production workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Shift differential | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| **Second shift** | | | | | | | | | | | |
| Workers employed on second shift | 7.5 | 13.6 | 13.2 | 15.2 | 9.6 | 4.6 | 17.2 | 22.2 | 17.5 | 12.2 | 24.4 |
| Receiving shift differential | 7.5 | 13.2 | 13.2 | 15.2 | 9.6 | 4.6 | 17.2 | 22.2 | 17.2 | 11.5 | 24.2 |
| Uniform cents per hour | - | - | - | - | - | - | .6 | - | - | - | - |
| Under 5 cents | - | - | .4 | .4 | .2 | .3 | .2 | - | - | - | .2 |
| Over 5 and under 10 cents | .4 | - | .5 | - | - | - | .2 | 15.9 | - | 6.3 | 21.9 |
| 10 cents | .6 | 2.5 | 4.6 | 7.4 | 1.5 | - | .4 | 3.8 | .3 | 4.2 | 2.0 |
| Over 10 and under 15 cents | .7 | .4 | .9 | 1.8 | .1 | - | .8 | - | - | .4 | - |
| 15 cents | - | 1.1 | - | 1.1 | - | - | - | - | - | - | - |
| Over 15 and under 20 cents | - | - | - | - | - | - | - | - | - | - | - |
| 20 cents | .2 | - | - | .7 | - | - | - | - | - | - | - |
| Over 20 cents | - | - | - | .3 | .2 | - | - | - | - | - | - |
| Uniform percentage | 5.7 | 9.0 | 6.5 | 3.7 | 7.5 | 4.3 | 15.0 | 2.2 | 16.1 | .6 | - |
| Under 5 percent | - | - | - | - | - | - | - | - | - | - | - |
| 5 percent | - | 1.4 | .9 | - | 2.9 | - | - | .6 | 9.9 | - | - |
| Over 5 and under 10 percent | - | 5.7 | - | 2.6 | .9 | .4 | .7 | - | 1.8 | - | - |
| 10 percent | 4.1 | 1.9 | 5.7 | 1.0 | 3.6 | .7 | 14.2 | 1.6 | 4.4 | .6 | - |
| Over 10 and under 15 percent | 1.5 | - | - | - | - | .4 | - | - | - | - | - |
| 15 percent | - | - | - | - | .1 | 2.9 | - | - | - | - | - |
| Full day's pay for reduced hours | - | - | - | - | - | - | - | .2 | - | - | - |
| Other [1] | - | .1 | .3 | - | - | - | - | - | .8 | - | - |
| Receiving no shift differential | - | .4 | - | - | - | - | - | - | .3 | .6 | - |
| **Third shift** | | | | | | | | | | | |
| Workers employed on third or other late shifts | .2 | 1.2 | .9 | 2.4 | .3 | .2 | 4.3 | 7.5 | 9.6 | 1.8 | 5.4 |
| Receiving shift differential | .2 | 1.2 | .9 | 2.4 | .3 | .2 | 4.3 | 8.5 | 9.6 | 1.8 | 5.4 |
| Uniform cents per hour | - | .4 | .6 | 1.7 | .2 | - | [2] | 6.5 | - | 1.8 | 5.3 |
| Over 5 and under 10 cents | - | - | - | - | - | - | - | - | - | - | - |
| 10 cents | - | .3 | - | - | .2 | - | [2] | .2 | - | - | - |
| Over 10 and under 15 cents | - | - | - | .1 | - | - | - | 6.3 | - | 1.8 | 4.0 |
| 15 cents | - | .1 | .4 | 1.6 | [2] | - | - | - | - | - | - |
| Over 15 and under 20 cents | - | - | - | - | [2] | - | - | - | - | - | 1.3 |
| 20 cents | - | - | .3 | - | - | - | - | - | - | - | - |
| Over 20 cents | - | - | - | - | - | - | - | - | - | - | - |
| Uniform percentage | .2 | .8 | .3 | .7 | .1 | .2 | 4.2 | .9 | 9.1 | - | - |
| 5 percent | - | .1 | - | - | - | - | - | .1 | - | - | - |
| Over 5 and under 10 percent | - | - | - | - | - | - | - | - | - | - | - |
| 10 percent | .1 | .7 | .3 | .7 | .1 | .1 | 3.8 | .8 | 9.1 | - | - |
| Over 10 and under 15 percent | - | - | - | - | - | - | .3 | - | - | - | - |
| 15 percent | .1 | - | - | - | [2] | - | .1 | - | - | - | - |
| 20 percent | - | - | - | - | - | .1 | - | - | - | - | - |
| Full day's pay for reduced hours | - | - | - | - | - | - | - | - | - | - | - |
| Other [1] | - | - | - | - | - | - | - | - | .5 | - | .1 |

See footnotes at end of table.

## Table C-3. Shift Differential Practices—Continued

(Percent of production workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Shift differential | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| **Second shift** | | | | | | | | | | |
| Workers employed on second shift | 14.0 | 16.1 | 18.6 | 18.8 | 13.7 | 11.1 | 11.0 | 14.0 | 16.1 | 10.0 |
| Receiving shift differential | 13.9 | 15.2 | 18.6 | 18.8 | 13.7 | 11.1 | 11.0 | 14.0 | 16.1 | 10.0 |
| Uniform cents per hour | 3.1 | 10.0 | 11.0 | 13.6 | 10.7 | 4.5 | 11.0 | 10.3 | - | - |
| Under 5 cents | - | - | - | - | - | - | - | - | - | - |
| 5 cents | - | - | 1.3 | .2 | - | - | - | .2 | - | - |
| Over 5 and under 10 cents | .3 | .9 | .4 | 3.4 | .7 | - | 7.1 | 1.3 | - | - |
| 10 cents | 1.3 | 3.7 | .3 | .8 | 8.6 | 3.6 | 3.3 | 3.8 | - | - |
| Over 10 and under 15 cents | 1.0 | 3.9 | 1.5 | 5.3 | .7 | - | - | 1.8 | - | - |
| 15 cents | .4 | 1.4 | 6.4 | 2.6 | .4 | - | - | 2.5 | - | - |
| Over 15 and under 20 cents | - | - | .1 | - | - | - | - | - | - | - |
| 20 cents | .1 | - | .8 | - | .3 | .9 | .5 | .1 | - | - |
| Over 20 cents | - | - | .3 | 1.3 | - | - | - | .6 | - | - |
| Uniform percentage | 8.2 | 4.2 | 7.5 | 5.2 | 3.0 | 4.7 | - | .5 | - | - |
| Under 5 percent | - | - | - | - | - | - | - | .5 | - | - |
| 5 percent | - | .9 | 3.6 | 5.2 | - | 2.4 | - | - | - | - |
| Over 5 and under 10 percent | .5 | .1 | - | (2) | 1.8 | - | - | - | - | - |
| 10 percent | 7.2 | 3.1 | 3.9 | - | 1.2 | 2.3 | - | - | - | - |
| Over 10 and under 15 percent | - | - | - | - | - | - | - | - | - | - |
| 15 percent | .4 | - | - | - | - | - | - | - | - | - |
| Full day's pay for reduced hours | .1 | - | - | - | - | - | - | .1 | - | - |
| Other [1] | 2.5 | 1.0 | .1 | - | - | 1.9 | - | 3.1 | 16.1 | 10.0 |
| Receiving no shift differential | .2 | .9 | .1 | - | - | - | - | - | - | - |
| **Third shift** | | | | | | | | | | |
| Workers employed on third or other late shifts | 1.7 | 2.5 | 1.5 | 5.5 | 1.5 | 1.8 | 1.7 | 1.0 | 3.8 | .5 |
| Receiving shift differential | 1.7 | 2.5 | 1.5 | 5.5 | 1.5 | 1.8 | 1.7 | 1.0 | 3.8 | .5 |
| Uniform cents per hour | (2) | 1.9 | .5 | 1.5 | .9 | - | .4 | (2) | - | - |
| Over 5 and under 10 cents | - | (2) | - | - | - | - | - | - | - | - |
| 10 cents | - | .1 | (2) | .4 | - | - | - | - | - | - |
| Over 10 and under 15 cents | - | 1.8 | - | .1 | .1 | - | .4 | - | - | - |
| 15 cents | (2) | - | .1 | - | .8 | - | - | (2) | - | - |
| Over 15 and under 20 cents | - | - | .1 | - | - | - | - | (2) | - | - |
| 20 cents | (2) | - | .3 | .8 | - | - | - | - | - | - |
| Over 20 cents | - | - | (2) | .3 | - | - | - | - | - | - |
| Uniform percentage | 1.2 | .4 | 1.0 | 2.1 | .6 | .8 | - | - | - | - |
| 5 percent | - | - | - | - | - | - | - | - | - | - |
| Over 5 and under 10 percent | - | - | - | .1 | - | - | - | - | - | - |
| 10 percent | 1.2 | .4 | 1.0 | 2.0 | .4 | .8 | - | - | - | - |
| Over 10 and under 15 percent | (2) | - | - | - | .2 | - | - | - | - | - |
| 15 percent | - | - | - | - | - | - | - | - | - | - |
| 20 percent | - | - | - | - | - | - | - | - | - | - |
| Full day's pay for reduced hours | - | - | - | - | - | - | - | (2) | - | - |
| Other [1] | .5 | .2 | (2) | 1.9 | - | 1.0 | 1.4 | .9 | 3.8 | .5 |

[1] Includes combination plans such as full day's pay for reduced hours, plus "cents" or "percent" differential.
[2] Less than 0.05 percent.

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

## Table C-4. Scheduled Weekly Hours (Plant Workers)

(Percent of production workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Weekly hours [1] | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Under 37 1/2 hours | - | - | - | 2 | - | 1 | - | 3 | 3 | - | - |
| 37 1/2 hours | - | - | - | - | - | - | - | - | 30 | - | - |
| Over 37 1/2 and under 40 hours | - | - | - | - | - | 2 | - | - | - | - | - |
| 40 hours | 83 | 83 | 75 | 52 | 84 | 78 | 64 | 91 | 56 | 58 | 86 |
| Over 40 and under 45 hours | - | 2 | - | - | 1 | 1 | 2 | - | - | 16 | - |
| 45 hours | 8 | 4 | 20 | 9 | 7 | 5 | 5 | - | 1 | 10 | 8 |
| Over 45 and under 48 hours | - | - | - | - | - | 2 | 24 | - | 2 | - | - |
| 48 hours | - | - | 3 | 35 | - | 4 | 1 | 6 | 1 | 1 | 6 |
| Over 48 and under 50 hours | - | - | - | - | - | - | - | - | - | - | - |
| 50 hours | 5 | 2 | 2 | - | 4 | 2 | 1 | - | 3 | 7 | - |
| Over 50 and under 55 hours | 3 | 5 | - | 2 | 2 | 2 | 1 | - | 2 | 6 | - |
| 55 hours | - | 3 | - | - | - | 1 | 3 | - | - | 3 | - |
| Over 55 hours | 1 | 1 | - | - | 1 | 2 | - | - | 2 | - | - |

| | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Under 37 1/2 hours | - | - | - | - | - | - | - | - | - | - |
| 37 1/2 hours | - | 6 | - | 3 | - | - | - | - | - | - |
| Over 37 1/2 and under 40 hours | - | - | - | - | - | - | - | - | - | - |
| 40 hours | 77 | 68 | 64 | 84 | 94 | 96 | 96 | 79 | 100 | 97 |
| Over 40 and under 45 hours | 3 | 1 | 1 | 1 | - | - | - | 7 | - | - |
| 45 hours | 10 | 4 | 2 | 9 | 3 | 3 | - | 5 | - | 3 |
| Over 45 and under 48 hours | 2 | - | (2) | 1 | - | - | - | - | - | - |
| 48 hours | 1 | 1 | 6 | - | 1 | 2 | - | - | - | - |
| Over 48 and under 50 hours | (2) | - | 2 | - | - | - | - | - | - | - |
| 50 hours | 4 | 6 | 2 | (2) | 2 | - | 4 | 3 | - | - |
| Over 50 and under 55 hours | 3 | (2) | 5 | - | - | - | - | 1 | - | - |
| 55 hours | (2) | 2 | 2 | 1 | - | - | - | 1 | - | |
| Over 55 hours | (2) | 12 | 17 | - | - | - | - | 4 | | |

[1] Data relate to the predominant work schedule for 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 C-5. Scheduled Weekly Hours (Office Workers)

(Percent of office workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Weekly hours [1] | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Under 35 hours | - | - | - | - | ([2]) | - | 1 | - | - | - | - |
| 35 hours | 4 | ([2]) | 1 | - | 7 | 40 | 4 | 1 | - | - | - |
| Over 35 and under 37 1/2 hours | 6 | - | - | - | 2 | 3 | 1 | - | - | - | - |
| 37 1/2 hours | 14 | 2 | - | 2 | 7 | 41 | 14 | 7 | 43 | - | - |
| Over 37 1/2 and under 40 hours | 2 | 3 | - | 2 | 5 | 2 | 6 | - | - | - | - |
| 40 hours | 72 | 94 | 98 | 69 | 79 | 12 | 74 | 92 | 57 | 83 | 98 |
| Over 40 hours | 1 | ([2]) | 1 | [3] 28 | ([2]) | 1 | 1 | - | - | 17 | 2 |

| Weekly hours [1] | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Under 35 hours | - | ([2]) | - | - | - | - | - | - | - | - |
| 35 hours | - | - | ([2]) | ([2]) | - | - | - | - | - | - |
| Over 35 and under 37 1/2 hours | 1 | - | - | - | - | - | - | - | - | - |
| 37 1/2 hours | 10 | - | 1 | 4 | 2 | 1 | - | - | - | 4 |
| Over 37 1/2 and under 40 hours | 8 | - | 1 | 2 | 2 | 24 | - | - | - | 3 |
| 40 hours | 81 | 97 | 94 | 94 | 96 | 74 | 97 | 99 | 100 | 93 |
| Over 40 hours | ([2]) | 3 | 4 | ([2]) | - | - | 3 | 1 | - | - |

[1] Data relate to the predominant work schedule for day-shift workers in each establishment.
[2] Less than 0.5 percent.
[3] All workers were on a 44-hour weekly schedule.

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

## Table C-6. Paid Holidays (Plant Workers)

(Percent of production workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Number of paid holidays | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| All workers | 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 | 99 | 97 |
| Less than 5 days | - | - | - | - | - | - | - | - | - | 3 | - |
| 5 days | - | - | - | (1) | - | - | 2 | - | - | 44 | 3 |
| 6 days | 6 | 3 | 4 | 8 | 5 | 1 | 3 | 3 | 16 | 21 | 19 |
| 6 days plus 1 half day | 1 | - | - | 1 | 2 | 1 | 5 | - | 6 | - | - |
| 6 days plus 2 half days | (1) | 11 | - | 8 | 15 | 2 | 3 | 25 | 4 | 2 | 3 |
| 6 days plus 3 half days | - | - | - | 4 | 3 | - | - | - | 1 | - | - |
| 7 days | 5 | 12 | 18 | 41 | 14 | 11 | 19 | 57 | 33 | 29 | 51 |
| 7 days plus 1 half day | - | 1 | 5 | - | 1 | 1 | 3 | 5 | - | - | 2 |
| 7 days plus 2 half days | 2 | 35 | 10 | 6 | 11 | - | 8 | - | - | - | - |
| 7 days plus 3 half days | - | - | - | 4 | (1) | 1 | - | - | - | - | - |
| 8 days | 11 | 32 | 30 | 21 | 11 | 19 | 39 | 5 | 40 | - | 20 |
| 8 days plus 1 half day | 15 | - | 16 | - | 5 | 2 | 2 | - | - | - | - |
| 8 days plus 2 half days | 4 | 2 | 5 | 6 | 6 | 14 | 12 | - | - | - | - |
| 9 days | 8 | 5 | 13 | - | 15 | 15 | 2 | 5 | - | - | - |
| 9 days plus 1 half day | 9 | - | - | - | 3 | 2 | - | - | - | - | - |
| 9 days plus 2 half days | - | - | - | - | 7 | 6 | - | - | - | - | - |
| 10 days | 20 | - | - | - | - | 10 | 2 | - | - | - | - |
| 10 days plus 1 half day | 6 | - | - | - | - | - | - | - | - | - | - |
| 10 days plus 2 half days | 11 | - | - | - | 3 | 2 | - | - | - | - | - |
| 11 days or more | 4 | - | - | - | - | 13 | - | - | - | - | - |
| Workers in establishments providing no paid holidays | - | - | - | - | - | - | - | - | - | 1 | 3 |

| Number of paid holidays | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Workers in establishments providing paid holidays | 98 | 99 | 95 | 100 | 100 | 100 | 100 | 99 | 100 | 100 |
| Less than 5 days | - | (1) | (1) | - | - | - | - | - | - | - |
| 5 days | - | (1) | 2 | - | - | - | - | 4 | - | - |
| 6 days | 27 | 16 | 28 | 12 | 17 | 9 | 13 | 24 | 19 | 4 |
| 6 days plus 1 half day | 2 | 2 | 1 | - | 18 | - | - | 4 | - | - |
| 6 days plus 2 half days | 16 | 41 | 54 | 18 | 26 | 4 | 33 | 18 | - | - |
| 6 days plus 3 half days | - | - | - | - | - | - | - | - | - | - |
| 7 days | 40 | 17 | 4 | 62 | 28 | 72 | 54 | 28 | 81 | - |
| 7 days plus 1 half day | 6 | 1 | 1 | 1 | 1 | 3 | - | 6 | - | - |
| 7 days plus 2 half days | 3 | 9 | 3 | 6 | 1 | 3 | - | 4 | - | 7 |
| 7 days plus 3 half days | - | - | - | - | - | - | - | - | - | 3 |
| 8 days | 5 | 6 | 2 | 2 | 8 | 10 | - | 11 | - | 86 |
| 8 days plus 1 half day | - | - | - | - | - | - | - | - | - | - |
| 8 days plus 2 half days | - | - | - | - | - | - | - | - | - | - |
| 9 days | (1) | 6 | - | (1) | - | - | - | - | - | - |
| More than 9 days | - | - | - | - | - | - | - | - | - | |
| Workers in establishments providing no paid holidays | 2 | 1 | 5 | | | | | 1 | | |

[1] Less than 0.5 percent.

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

## Table C-7. Paid Holidays (Office Workers)

(Percent of office workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Number of paid holidays | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| All workers | 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 | 99 | 99 |
| Less than 5 days | - | - | - | - | - | - | - | - | - | 2 | - |
| 5 days | - | - | - | - | - | - | (1) | - | - | 28 | 4 |
| 6 days | 2 | 1 | 2 | 6 | 2 | - | 3 | 4 | 8 | 22 | 19 |
| 6 days plus 1 half day | (1) | - | - | - | 1 | - | 4 | 1 | 5 | - | - |
| 6 days plus 2 half days | (1) | 19 | - | 11 | 8 | 1 | 2 | 7 | 1 | 2 | 2 |
| 6 days plus 3 half days | - | - | - | 3 | - | - | - | - | 2 | - | - |
| 7 days | 1 | 7 | 8 | 32 | 11 | 13 | 26 | 56 | 47 | 46 | 44 |
| 7 days plus 1 half day | - | - | 7 | - | (1) | 1 | 3 | 13 | - | - | 1 |
| 7 days plus 2 half days | - | 38 | 6 | 7 | 6 | - | 5 | - | - | - | - |
| 7 days plus 3 half days | - | - | - | 4 | 3 | 1 | - | - | - | - | - |
| 8 days | 13 | 30 | 32 | 27 | 36 | 15 | 40 | 5 | 38 | - | 28 |
| 8 days plus 1 half day | 9 | - | 22 | - | 2 | - | 4 | - | - | - | - |
| 8 days plus 2 half days | (1) | 2 | - | 10 | 5 | 6 | 10 | - | - | - | - |
| 9 days | 10 | 4 | 12 | - | 19 | 9 | 2 | 14 | - | - | - |
| 9 days plus 1 half day | 4 | - | - | - | 2 | 3 | - | - | - | - | - |
| 9 days plus 2 half days | - | - | - | - | 1 | 14 | - | - | - | - | - |
| 10 days | 20 | - | - | - | - | 8 | 1 | - | - | - | - |
| 10 days plus 1 half day | 13 | - | - | - | - | 2 | - | - | - | - | - |
| 10 days plus 2 half days | 20 | - | - | - | 5 | 12 | - | - | - | - | - |
| 11 days or more | 8 | - | 12 | - | - | 17 | - | - | - | - | - |
| Workers in establishments providing no paid holidays | - | - | - | - | - | - | - | - | - | 1 | 1 |

| | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Workers in establishments providing paid holidays | 99 | 99 | 99 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Less than 5 days | - | - | - | - | - | - | - | - | - | - |
| 5 days | - | (1) | 1 | - | - | - | - | 2 | - | - |
| 6 days | 22 | 8 | 13 | 9 | 13 | 8 | 27 | 24 | 39 | 2 |
| 6 days plus 1 half day | 5 | 1 | 1 | - | 32 | - | - | 2 | - | - |
| 6 days plus 2 half days | 11 | 35 | 70 | 16 | 19 | 8 | 24 | 21 | 5 | - |
| 6 days plus 3 half days | - | - | - | - | - | - | - | - | - | - |
| 7 days | 45 | 24 | 8 | 67 | 24 | 71 | 49 | 34 | 56 | - |
| 7 days plus 1 half day | 6 | 1 | 1 | (1) | 3 | 2 | - | 5 | - | - |
| 7 days plus 2 half days | 4 | 9 | 1 | 6 | 1 | 1 | - | 5 | - | 5 |
| 7 days plus 3 half days | - | - | - | - | - | - | - | - | - | 2 |
| 8 days | 5 | 7 | 4 | 1 | 7 | 10 | - | 8 | - | 92 |
| 8 days plus 1 half day | - | - | - | - | - | - | - | - | - | - |
| 8 days plus 2 half days | - | - | - | - | - | - | - | - | - | - |
| 9 days | - | 15 | - | (1) | - | - | - | - | - | - |
| More than 9 days | - | - | - | - | - | - | - | - | - | |
| Workers in establishments providing no paid holidays | 1 | (1) | 1 | | | | | | | |

[1] Less than 0.5 percent.

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

## Table C-8. Paid Vacations (Plant Workers)

(Percent of production workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Vacation policy | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| All workers | 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 | 100 | 100 | 100 | 99 | 100 |
| Length-of-time payment | 100 | 94 | 76 | 60 | 92 | 93 | 84 | 75 | 100 | 93 | 90 |
| Percentage payment | - | 6 | 24 | 40 | 8 | 5 | 15 | 25 | - | 6 | 10 |
| Other | - | - | - | - | - | 2 | 1 | - | - | - | - |
| Workers in establishments providing no paid vacations | - | - | - | - | - | - | - | - | - | 1 | - |
| **Amount of vacation pay**[1] | | | | | | | | | | | |
| After 1 year of service: | | | | | | | | | | | |
| Under 1 week | - | - | - | - | 1 | (2) | 1 | 3 | - | - | - |
| 1 week | 80 | 85 | 81 | 88 | 91 | 87 | 89 | 96 | 100 | 84 | 92 |
| Over 1 and under 2 weeks | 3 | 5 | - | - | 4 | 4 | 8 | - | - | 2 | - |
| 2 weeks | 17 | 10 | 19 | 12 | 3 | 8 | 1 | - | - | 13 | 6 |
| Over 2 weeks | - | - | - | - | - | - | - | - | - | - | - |
| After 2 years of service: | | | | | | | | | | | |
| Under 1 week | - | - | - | - | (2) | - | - | 3 | - | - | - |
| 1 week | 35 | 47 | 72 | 67 | 44 | 23 | 50 | 81 | 32 | 50 | 20 |
| Over 1 and under 2 weeks | 39 | 40 | - | 10 | 40 | 23 | 45 | 8 | 58 | 2 | - |
| 2 weeks | 26 | 12 | 28 | 23 | 16 | 54 | 5 | 8 | 10 | 47 | 80 |
| Over 2 weeks | - | - | - | - | - | - | - | - | - | - | - |
| After 3 years of service: | | | | | | | | | | | |
| 1 week | 13 | 8 | 20 | 47 | 25 | 11 | 16 | 22 | 30 | 41 | 3 |
| Over 1 and under 2 weeks | 41 | 80 | - | 20 | 38 | 11 | 76 | 67 | 58 | 2 | 1 |
| 2 weeks | 44 | 12 | 80 | 33 | 37 | 78 | 9 | 11 | 12 | 56 | 96 |
| Over 2 weeks | 2 | - | - | - | - | - | - | - | - | - | - |
| After 5 years of service: | | | | | | | | | | | |
| Under 2 weeks | 1 | 3 | 2 | 2 | 11 | 7 | 1 | - | 5 | - | 3 |
| 2 weeks | 94 | 97 | 98 | 98 | 86 | 88 | 97 | 100 | 95 | 97 | 97 |
| Over 2 and under 3 weeks | 5 | - | - | - | 2 | 5 | 2 | - | - | 2 | - |
| 3 weeks | - | - | - | - | 1 | - | - | - | - | - | - |
| After 10 years of service: | | | | | | | | | | | |
| Under 2 weeks | 1 | (2) | 2 | 2 | 1 | 2 | (2) | - | 5 | - | 3 |
| 2 weeks | 75 | 42 | 98 | 52 | 65 | 69 | 63 | 25 | 54 | 93 | 74 |
| Over 2 and under 3 weeks | 10 | 56 | - | 24 | 20 | 5 | 30 | 67 | - | 2 | - |
| 3 weeks | 14 | 1 | - | 23 | 14 | 20 | 7 | 8 | 41 | 4 | 23 |
| Over 3 weeks | - | - | - | - | - | 3 | - | - | - | - | - |
| After 12 years of service: | | | | | | | | | | | |
| Under 2 weeks | 1 | (2) | 2 | 2 | 1 | 2 | (2) | - | 5 | - | 3 |
| 2 weeks | 37 | 19 | 83 | 51 | 45 | 50 | 31 | 12 | 54 | 80 | 28 |
| Over 2 and under 3 weeks | 32 | 80 | 6 | 24 | 37 | 23 | 52 | 79 | - | 2 | - |
| 3 weeks | 29 | 1 | 9 | 24 | 17 | 21 | 15 | 8 | 41 | 17 | 69 |
| Over 3 weeks | - | - | - | - | - | 3 | 3 | - | - | - | - |
| After 15 years of service: | | | | | | | | | | | |
| Under 2 weeks | 1 | (2) | 2 | 2 | 1 | 2 | (2) | - | - | - | 3 |
| 2 weeks | 18 | 8 | 4 | 4 | 18 | 33 | 10 | 3 | 22 | 67 | 19 |
| Over 2 and under 3 weeks | - | - | - | - | - | (2) | 1 | - | - | 2 | - |
| 3 weeks | 81 | 92 | 94 | 94 | 78 | 61 | 84 | 97 | 78 | 30 | 78 |
| Over 3 weeks | - | - | - | - | 3 | 3 | 4 | - | - | - | - |
| After 25 years of service: | | | | | | | | | | | |
| Under 2 weeks | 1 | (2) | 2 | 2 | 1 | 2 | (2) | - | - | - | 3 |
| 2 weeks | 18 | 8 | 2 | 4 | 18 | 30 | 10 | 3 | 21 | 67 | 19 |
| Over 2 and under 3 weeks | - | - | - | - | - | (2) | 1 | - | - | 2 | - |
| 3 weeks | 44 | 90 | 45 | 63 | 60 | 62 | 33 | 57 | 50 | 27 | 24 |
| Over 3 and under 4 weeks | - | - | - | 2 | 3 | 3 | 6 | 36 | - | - | - |
| 4 weeks | 37 | 2 | 51 | 29 | 19 | 2 | 47 | 5 | 29 | 3 | 54 |
| Over 4 weeks | - | - | - | - | - | - | 3 | - | - | - | - |

See footnotes at end of table.

## Table C-8. Paid Vacations (Plant Workers)—Continued

(Percent of production workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Vacation policy | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Method of payment** | | | | | | | | | | |
| Workers in establishments providing paid vacations | 100 | 99 | 98 | 99 | 100 | 100 | 100 | 99 | 100 | 100 |
| Length-of-time payment | 96 | 98 | 64 | 89 | 85 | 94 | 100 | 98 | 85 | 100 |
| Percentage payment | 4 | 2 | 33 | 11 | 15 | 6 | - | 2 | 15 | - |
| Other | - | - | 2 | - | - | - | - | - | - | - |
| Workers in establishments providing no paid vacations | - | (2) | 2 | (2) | - | - | - | (2) | - | - |
| **Amount of vacation pay** [1] | | | | | | | | | | |
| After 1 year of service: | | | | | | | | | | |
| Under 1 week | (2) | - | - | - | - | - | - | - | - | - |
| 1 week | 89 | 76 | 67 | 98 | 91 | 88 | 95 | 83 | 85 | 11 |
| Over 1 and under 2 weeks | (2) | 14 | 12 | (2) | 5 | 11 | - | 9 | 15 | 79 |
| 2 weeks | 10 | 11 | 16 | 1 | 4 | 2 | 5 | 8 | - | 10 |
| Over 2 weeks | - | - | 3 | - | - | - | - | - | - | - |
| After 2 years of service: | | | | | | | | | | |
| Under 1 week | - | - | - | - | - | - | - | - | - | - |
| 1 week | 67 | 50 | 26 | 75 | 51 | 72 | 60 | 34 | 82 | 9 |
| Over 1 and under 2 weeks | 9 | 30 | 20 | 21 | 16 | 11 | 22 | 14 | 2 | - |
| 2 weeks | 23 | 20 | 46 | 4 | 33 | 18 | 18 | 48 | - | 91 |
| Over 2 weeks | - | - | 7 | - | - | - | - | 4 | 15 | - |
| After 3 years of service: | | | | | | | | | | |
| 1 week | 14 | 20 | 4 | 27 | 4 | 24 | - | 11 | - | 4 |
| Over 1 and under 2 weeks | 28 | 40 | 35 | 62 | 19 | 8 | 39 | 10 | 3 | - |
| 2 weeks | 59 | 39 | 50 | 11 | 77 | 65 | 61 | 73 | 70 | 96 |
| Over 2 weeks | (2) | 1 | 9 | - | - | 2 | - | 6 | 27 | - |
| After 5 years of service: | | | | | | | | | | |
| Under 2 weeks | 2 | 3 | 1 | - | 1 | - | 4 | 11 | - | - |
| 2 weeks | 97 | 94 | 78 | 93 | 92 | 88 | 96 | 79 | 73 | 100 |
| Over 2 and under 3 weeks | (2) | 2 | 16 | 6 | 8 | 12 | - | 10 | 15 | - |
| 3 weeks | (2) | 1 | 3 | (2) | - | - | - | (2) | 11 | - |
| After 10 years of service: | | | | | | | | | | |
| Under 2 weeks | (2) | 1 | 1 | - | 1 | - | - | - | - | - |
| 2 weeks | 47 | 44 | 46 | 31 | 39 | 39 | 88 | 72 | 73 | 12 |
| Over 2 and under 3 weeks | 23 | 33 | 42 | 47 | 20 | 14 | - | 10 | 15 | 7 |
| 3 weeks | 29 | 21 | 8 | 23 | 40 | 45 | 12 | 12 | 11 | 82 |
| Over 3 weeks | - | - | 2 | - | - | 2 | - | 5 | - | - |
| After 12 years of service: | | | | | | | | | | |
| Under 2 weeks | (2) | 1 | 1 | - | 1 | - | - | 1 | - | - |
| 2 weeks | 42 | 40 | 43 | 7 | 16 | 28 | 48 | 49 | 12 | 7 |
| Over 2 and under 3 weeks | 23 | 38 | 42 | 58 | 19 | 14 | 5 | 16 | - | 7 |
| 3 weeks | 35 | 22 | 9 | 35 | 65 | 55 | 47 | 29 | 73 | 86 |
| Over 3 weeks | - | - | 3 | - | - | 2 | - | 5 | 15 | - |
| After 15 years of service: | | | | | | | | | | |
| Under 2 weeks | (2) | 1 | 1 | - | 1 | - | - | 1 | - | - |
| 2 weeks | 13 | 15 | 28 | 1 | 7 | 7 | 11 | 32 | 3 | 7 |
| Over 2 and under 3 weeks | - | - | 11 | - | - | - | - | 4 | - | - |
| 3 weeks | 83 | 75 | 54 | 88 | 87 | 89 | 89 | 58 | 81 | 93 |
| Over 3 weeks | 4 | 9 | 4 | 11 | 5 | 5 | - | 5 | 15 | - |
| After 25 years of service: | | | | | | | | | | |
| Under 2 weeks | (2) | 1 | 1 | - | 1 | - | - | 1 | - | - |
| 2 weeks | 13 | 15 | 28 | 1 | 7 | 7 | 11 | 31 | 3 | 7 |
| Over 2 and under 3 weeks | - | - | 9 | - | - | - | - | 3 | - | - |
| 3 weeks | 50 | 54 | 52 | 15 | 72 | 82 | 84 | 52 | 77 | 90 |
| Over 3 and under 4 weeks | 4 | 4 | 4 | 10 | 2 | 2 | - | 5 | 15 | - |
| 4 weeks | 34 | 27 | 3 | 68 | 17 | 9 | 5 | 8 | 5 | 3 |
| Over 4 weeks | - | - | - | 5 | 1 | - | - | - | - | - |

[1] Vacation payments, such as percent of annual earnings, were converted to an equivalent time basis. Periods of service were arbitrarily chosen and do not necessarily reflect the individual establishment provisions for progressions. For example, the changes in proportions indicated at 5 years may include changes occurring between 3 and 5 years.

[2] Less than 0.5 percent.

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

## Table C-9. Paid Vacations (Office Workers)

(Percent of office workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Vacation policy | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| All workers | 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 | 100 | 100 | 100 | 99 | 100 |
| Length-of-time payment | 100 | 100 | 74 | 100 | 99 | 98 | 98 | 100 | 100 | 99 | 100 |
| Percentage payment | - | - | 26 | - | 1 | 2 | 2 | - | - | - | - |
| Workers in establishments providing no paid vacations | - | - | - | - | - | - | - | - | - | 1 | - |
| **Amount of vacation pay**[1] | | | | | | | | | | | |
| After 1 year of service: | | | | | | | | | | | |
| 1 week | 7 | 5 | 5 | 18 | [2]14 | 15 | 18 | 14 | 53 | 58 | 59 |
| Over 1 and under 2 weeks | - | ([3]) | - | - | - | - | 3 | - | - | 1 | - |
| 2 weeks | 93 | 95 | 95 | 82 | 86 | 85 | 79 | 86 | 47 | 40 | 39 |
| Over 2 weeks | - | - | - | - | - | - | - | - | - | - | - |
| After 2 years of service: | | | | | | | | | | | |
| 1 week | 2 | 1 | 4 | 10 | [2]5 | 4 | 8 | 2 | 8 | 28 | 2 |
| Over 1 and under 2 weeks | 3 | 1 | - | - | 8 | 3 | 7 | ([3]) | 42 | - | - |
| 2 weeks | 96 | 98 | 96 | 90 | 87 | 93 | 86 | 98 | 50 | 70 | 98 |
| Over 2 weeks | - | - | - | - | - | - | - | - | - | 1 | - |
| After 5 years of service: | | | | | | | | | | | |
| Under 2 weeks | 1 | ([3]) | 1 | - | 2 | 2 | - | - | - | - | 1 |
| 2 weeks | 98 | 97 | 99 | 98 | 95 | 97 | 98 | 97 | 100 | 98 | 99 |
| Over 2 and under 3 weeks | 1 | 3 | - | 2 | 3 | 1 | 2 | 3 | - | 1 | - |
| 3 weeks | - | - | - | - | ([3]) | - | - | - | - | - | - |
| After 10 years of service: | | | | | | | | | | | |
| Under 2 weeks | 1 | - | 1 | - | 2 | - | - | - | - | - | 1 |
| 2 weeks | 77 | 43 | 98 | 50 | 48 | 68 | 53 | 58 | 48 | 95 | 73 |
| Over 2 and under 3 weeks | 7 | 26 | - | 10 | 25 | 1 | 16 | 36 | - | 1 | - |
| 3 weeks | 14 | 31 | 2 | 40 | 24 | 30 | 31 | 6 | 52 | 3 | 27 |
| Over 3 weeks | - | - | - | - | - | - | - | - | - | - | - |
| After 12 years of service: | | | | | | | | | | | |
| Under 2 weeks | 1 | - | 1 | - | 2 | - | - | - | - | - | 1 |
| 2 weeks | 35 | 39 | 89 | 46 | 29 | 48 | 30 | 41 | 48 | 80 | 30 |
| Over 2 and under 3 weeks | 31 | 29 | 3 | 8 | 41 | 20 | 30 | 39 | - | 1 | - |
| 3 weeks | 33 | 32 | 7 | 46 | 27 | 32 | 38 | 20 | 52 | 17 | 70 |
| Over 3 weeks | - | - | - | - | - | - | 2 | - | - | - | - |
| After 15 years of service: | | | | | | | | | | | |
| Under 2 weeks | 1 | - | 1 | - | 2 | - | - | - | - | - | 1 |
| 2 weeks | 14 | 4 | 2 | 3 | 7 | 36 | 9 | 7 | 7 | 59 | 16 |
| Over 2 and under 3 weeks | - | - | - | - | - | - | - | - | - | 1 | - |
| 3 weeks | 84 | 96 | 97 | 89 | 91 | 64 | 88 | 93 | 93 | 39 | 83 |
| Over 3 weeks | - | - | - | 8 | - | - | 3 | - | - | - | - |
| After 20 years of service: | | | | | | | | | | | |
| Under 2 weeks | 1 | - | 1 | - | 2 | - | - | - | - | - | 1 |
| 2 weeks | 14 | 4 | 1 | 3 | 7 | 30 | 9 | 7 | 7 | 59 | 16 |
| Over 2 and under 3 weeks | - | - | - | - | - | - | - | - | - | 1 | - |
| 3 weeks | 73 | 96 | 96 | 66 | 71 | 70 | 54 | 73 | 93 | 26 | 52 |
| Over 3 and under 4 weeks | - | - | - | 2 | - | - | 14 | 6 | - | - | - |
| 4 weeks | 11 | - | 3 | 30 | 20 | - | 23 | 14 | 1 | 13 | 30 |
| After 25 years of service: | | | | | | | | | | | |
| Under 2 weeks | 1 | - | 1 | - | 2 | - | - | - | - | - | 1 |
| 2 weeks | 14 | 4 | 1 | 3 | 7 | 30 | 9 | 7 | 7 | 59 | 16 |
| Over 2 and under 3 weeks | - | - | - | - | - | - | - | - | - | 1 | - |
| 3 weeks | 51 | 89 | 55 | 62 | 45 | 69 | 31 | 47 | 66 | 26 | 46 |
| Over 3 and under 4 weeks | - | - | - | 2 | - | - | 3 | 33 | - | - | - |
| 4 weeks | 34 | 7 | 43 | 33 | 46 | 1 | 55 | 14 | 27 | 13 | 37 |
| Over 4 weeks | - | - | - | - | - | - | 2 | - | - | - | - |

See footnotes at end of table.

## Table C-9. Paid Vacations (Office Workers)—Continued

(Percent of office workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Vacation policy | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Method of payment** | | | | | | | | | | |
| Workers in establishments providing paid vacations | 100 | 99 | 100 | 100 | 100 | 100 | 100 | 99 | 100 | 100 |
| Length-of-time payment | 98 | 99 | 99 | 99 | 93 | 100 | 100 | 99 | 100 | 90 |
| Percentage payment | 2 | - | 1 | 1 | 7 | - | - | - | - | 10 |
| Workers in establishments providing no paid vacations | - | [3] | - | - | - | - | - | [3] | - | - |
| **Amount of vacation pay**[1] | | | | | | | | | | |
| After 1 year of service: | | | | | | | | | | |
| 1 week | [2] 23 | 8 | 11 | 58 | 22 | 38 | 50 | 34 | 71 | 8 |
| Over 1 and under 2 weeks | 2 | 6 | 2 | [3] | 1 | - | - | 7 | - | 7 |
| 2 weeks | 72 | 86 | 86 | 42 | 78 | 62 | 50 | 59 | 29 | 85 |
| Over 2 weeks | 3 | - | 1 | - | - | - | - | - | - | - |
| After 2 years of service: | | | | | | | | | | |
| 1 week | 5 | 6 | 4 | 8 | 10 | 18 | 20 | 12 | 7 | - |
| Over 1 and under 2 weeks | [3] | [3] | 1 | 5 | 1 | - | - | 4 | 8 | - |
| 2 weeks | 92 | 94 | 92 | 86 | 90 | 82 | 80 | 81 | 85 | 100 |
| Over 2 weeks | 3 | - | 2 | - | - | - | - | 3 | - | - |
| After 5 years of service: | | | | | | | | | | |
| Under 2 weeks | - | [3] | [3] | [3] | - | - | - | 3 | - | - |
| 2 weeks | 97 | 96 | 95 | 94 | 100 | 98 | 100 | 93 | 98 | 97 |
| Over 2 and under 3 weeks | 3 | - | 3 | 6 | - | 2 | - | 3 | - | 3 |
| 3 weeks | [3] | 3 | 1 | [3] | - | - | - | 1 | 2 | - |
| After 10 years of service: | | | | | | | | | | |
| Under 2 weeks | - | [3] | [3] | - | - | - | - | 1 | - | - |
| 2 weeks | 49 | 45 | 50 | 43 | 53 | 39 | 92 | 72 | 98 | 11 |
| Over 2 and under 3 weeks | 11 | 18 | 17 | 44 | 7 | - | - | 11 | - | 5 |
| 3 weeks | 40 | 36 | 33 | 13 | 39 | 61 | 8 | 13 | 2 | 84 |
| Over 3 weeks | - | - | - | - | - | - | - | 3 | - | - |
| After 12 years of service: | | | | | | | | | | |
| Under 2 weeks | - | [3] | [3] | - | - | - | - | 1 | - | - |
| 2 weeks | 39 | 41 | 45 | 22 | 45 | 38 | 50 | 46 | 36 | 8 |
| Over 2 and under 3 weeks | 13 | 23 | 21 | 52 | 10 | - | 11 | 10 | - | 5 |
| 3 weeks | 48 | 36 | 34 | 26 | 45 | 67 | 39 | 40 | 64 | 87 |
| Over 3 weeks | - | - | [3] | - | - | - | - | 3 | - | - |
| After 15 years of service: | | | | | | | | | | |
| Under 2 weeks | - | [3] | [3] | - | - | - | - | 1 | - | - |
| 2 weeks | 5 | 11 | 11 | 2 | 4 | 6 | 15 | 22 | 28 | 6 |
| Over 2 and under 3 weeks | - | - | 1 | - | - | - | - | 4 | - | - |
| 3 weeks | 95 | 85 | 86 | 89 | 96 | 89 | 85 | 70 | 72 | 94 |
| Over 3 weeks | - | 3 | 2 | 9 | - | 5 | - | 3 | - | - |
| After 20 years of service: | | | | | | | | | | |
| Under 2 weeks | - | [3] | [3] | - | - | - | - | 1 | - | - |
| 2 weeks | 5 | 11 | 11 | 2 | 4 | 6 | 15 | 21 | 28 | 6 |
| Over 2 and under 3 weeks | - | - | [3] | - | - | - | - | [3] | - | - |
| 3 weeks | 89 | 85 | 85 | 79 | 79 | 83 | 85 | 74 | 67 | 94 |
| Over 3 and under 4 weeks | 2 | 3 | 1 | 5 | - | - | - | 3 | - | - |
| 4 weeks | 4 | - | 2 | 15 | 17 | 10 | - | [3] | 5 | - |
| After 25 years of service: | | | | | | | | | | |
| Under 2 weeks | - | [3] | [3] | - | - | - | - | 1 | - | - |
| 2 weeks | 5 | 11 | 11 | 2 | 4 | 6 | 15 | 21 | 28 | 6 |
| Over 2 and under 3 weeks | - | - | [3] | - | - | - | - | [3] | - | - |
| 3 weeks | 53 | 61 | 75 | 11 | 72 | 72 | 74 | 60 | 67 | 92 |
| Over 3 and under 4 weeks | - | - | 1 | 11 | - | - | - | 3 | - | - |
| 4 weeks | 42 | 28 | 12 | 71 | 23 | 22 | 11 | 15 | 5 | 2 |
| Over 4 weeks | - | - | - | 5 | - | - | - | - | - | - |

[1] Vacation payments, such as percent of annual earnings, were converted to an equivalent time basis. Periods of service were arbitrarily chosen and do not necessarily reflect the individual establishment provisions for progressions. For example, the changes in proportions indicated at 5 years may include changes occurring between 2 and 5 years.

[2] Includes less than 0.5 percent who received less than 1 week of vacation.

[3] Less than 0.5 percent.

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

## Table C-10. Health, Insurance, and Pension Plans (Plant Workers)

(Percent of production workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Type of plan | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Workers in establishments providing— | | | | | | | | | | | |
| Life insurance | 97 | 98 | 98 | 98 | 89 | 86 | 98 | 99 | 90 | 83 | 95 |
| Accidental death and dismemberment insurance | 80 | 73 | 75 | 38 | 53 | 47 | 78 | 45 | 62 | 59 | 76 |
| Sickness and accident insurance or sick leave or both [1] | 93 | 93 | 98 | 84 | 68 | 65 | 92 | 98 | 94 | 62 | 80 |
| Sickness and accident insurance | 91 | 91 | 93 | [2]84 | [2]64 | [2]45 | 92 | 95 | 94 | 56 | 77 |
| Sick leave (full pay, no waiting period) | 5 | 2 | 2 | - | 5 | 29 | - | - | - | 6 | 2 |
| Sick leave (partial pay or waiting period) | - | 1 | 5 | 10 | 2 | 2 | - | 3 | - | - | 20 |
| Hospitalization insurance | 96 | 96 | 98 | 98 | 95 | 90 | 98 | 96 | 87 | 90 | 96 |
| Surgical insurance | 96 | 95 | 98 | 98 | 95 | 89 | 95 | 96 | 82 | 90 | 96 |
| Medical insurance | 86 | 85 | 98 | 36 | 62 | 55 | 67 | 42 | 75 | 60 | 58 |
| Catastrophe insurance | 49 | 30 | 58 | 7 | 7 | 5 | 27 | 32 | 5 | 49 | 67 |
| Retirement pension | 80 | 84 | 96 | 81 | 62 | 52 | 79 | 80 | 75 | 41 | 68 |
| No health, insurance, or pension plan | - | ([3]) | - | 2 | 5 | 2 | - | 1 | 6 | 4 | 2 |

| | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Workers in establishments providing— | | | | | | | | | | |
| Life insurance | 91 | 93 | 97 | 99 | 88 | 97 | 88 | 94 | 100 | 100 |
| Accidental death and dismemberment insurance | 63 | 59 | 81 | 74 | 54 | 83 | 49 | 73 | 100 | 97 |
| Sickness and accident insurance or sick leave or both [1] | 88 | 83 | 92 | 99 | 92 | 98 | 78 | 52 | 97 | 12 |
| Sickness and accident insurance | 85 | 83 | 92 | 99 | 74 | 96 | 69 | 33 | 97 | 7 |
| Sick leave (full pay, no waiting period) | 1 | - | 17 | - | 22 | - | 13 | 28 | - | 6 |
| Sick leave (partial pay or waiting period) | 3 | - | - | - | - | 2 | - | 4 | - | - |
| Hospitalization insurance | 92 | 89 | 97 | 100 | 92 | 99 | 88 | 97 | 97 | 100 |
| Surgical insurance | 91 | 86 | 97 | 100 | 89 | 95 | 90 | 97 | 97 | 100 |
| Medical insurance | 70 | 62 | 97 | 90 | 86 | 91 | 90 | 84 | 97 | 100 |
| Catastrophe insurance | 12 | 19 | 5 | 13 | 7 | 12 | 1 | 35 | 94 | 94 |
| Retirement pension | 59 | 60 | 75 | 81 | 45 | 65 | 48 | 42 | 66 | 92 |
| No health, insurance, or pension plan | 3 | 2 | 1 | - | 8 | - | 10 | 3 | - | - |

[1] Unduplicated total of workers receiving sick leave or sickness and accident insurance shown separately.
[2] Excludes plans which met only the minimum requirements of the State law as to benefits or employer contributions.
[3] Less than 0.5 percent.

## Table C-11. Health, Insurance, and Pension Plans (Office Workers)

(Percent of office workers in machinery manufacturing, 21 selected areas, March–June 1962)

| Type of plan | New England | | | Middle Atlantic | | | | | South | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Boston | Hartford | Worcester | Buffalo | Newark and Jersey City | New York City | Philadelphia | Pittsburgh | Baltimore | Dallas | Houston |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Workers in establishments providing— | | | | | | | | | | | |
| Life insurance | 96 | 99 | 99 | 99 | 91 | 84 | 99 | 97 | 98 | 89 | 96 |
| Accidental death and dismemberment insurance | 81 | 70 | 63 | 38 | 35 | 40 | 67 | 59 | 71 | 68 | 74 |
| Sickness and accident insurance or sick leave or both [1] | 90 | 92 | 99 | 92 | 88 | 82 | 78 | 95 | 97 | 73 | 93 |
| Sickness and accident insurance | 84 | 64 | 94 | [2] 87 | [2] 70 | [2] 42 | 78 | 77 | 69 | 62 | 63 |
| Sick leave (full pay, no waiting period) | 56 | 80 | 61 | 73 | 75 | 71 | 78 | 63 | 29 | 21 | 84 |
| Sick leave (partial pay or waiting period) | - | - | - | 15 | - | - | 1 | - | - | - | 1 |
| Hospitalization insurance | 95 | 98 | 99 | 97 | 95 | 85 | 96 | 99 | 94 | 94 | 99 |
| Surgical insurance | 95 | 98 | 99 | 97 | 94 | 83 | 90 | 99 | 92 | 94 | 99 |
| Medical insurance | 88 | 79 | 99 | 44 | 39 | 50 | 71 | 66 | 84 | 76 | 70 |
| Catastrophe insurance | 60 | 68 | 77 | 31 | 18 | 21 | 17 | 29 | 5 | 52 | 85 |
| Retirement pension | 85 | 90 | 98 | 89 | 78 | 58 | 82 | 85 | 89 | 59 | 80 |
| No health, insurance, or pension plan | - | [3] | - | 1 | 5 | 1 | - | - | 1 | 1 | - |

| | Middle West | | | | | | Far West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chicago | Cleveland | Detroit | Milwaukee | Minneapolis–St. Paul | St. Louis | Denver | Los Angeles–Long Beach | Portland | San Francisco–Oakland |
| All workers | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Workers in establishments providing— | | | | | | | | | | |
| Life insurance | 97 | 95 | 97 | 100 | 94 | 91 | 87 | 95 | 100 | 99 |
| Accidental death and dismemberment insurance | 62 | 54 | 81 | 73 | 55 | 82 | 72 | 77 | 100 | 97 |
| Sickness and accident insurance or sick leave or both [1] | 91 | 86 | 96 | 95 | 93 | 73 | 80 | 74 | 94 | 23 |
| Sickness and accident insurance | 75 | 71 | 88 | 95 | 58 | 56 | 61 | 36 | 94 | 6 |
| Sick leave (full pay, no waiting period) | 47 | 31 | 68 | 5 | 64 | 36 | 56 | 60 | 7 | 20 |
| Sick leave (partial pay or waiting period) | 5 | - | 4 | - | - | 1 | - | 7 | 6 | 3 |
| Hospitalization insurance | 95 | 92 | 97 | 100 | 97 | 93 | 87 | 99 | 99 | 99 |
| Surgical insurance | 94 | 89 | 97 | 100 | 95 | 89 | 91 | 99 | 99 | 99 |
| Medical insurance | 74 | 70 | 96 | 93 | 91 | 87 | 91 | 89 | 99 | 99 |
| Catastrophe insurance | 26 | 26 | 31 | 19 | 16 | 39 | 7 | 45 | 69 | 52 |
| Retirement pension | 67 | 76 | 83 | 87 | 57 | 74 | 50 | 53 | 64 | 70 |
| No health, insurance, or pension plan | [3] | 5 | 1 | - | 1 | 1 | 6 | 1 | - | 1 |

[1] Unduplicated total of workers receiving sick leave or sickness and accident insurance shown separately.
[2] Excludes plans which met only the minimum requirements of the State law as to benefits or employer contributions.
[3] Less than 0.5 percent.

# Appendix A: Occupational Wage Relationships, March—May 1961


## Summary

The occupational relatives studied in this analysis suggest that some compression between higher and lower paid occupations took place between 1952–53 and 1961.

In addition, 1961 pay relatives indicate that incentive workers held higher positions on the wage scale than timeworkers in the same job classifications; that incentive pay generally resulted in greater wage gains over timeworkers for those in the lower paid occupations than for those in higher paid positions; and that there was a greater disparity between pay for skilled and unskilled occupations in the South than in other regions. Interindustry comparisons showed no consistent differences of wage structure among the various product groups.

Although establishments included in the machinery industries tend to have certain production-related activities in common, differences in products, in range of processes required, and in the size of the labor force result in variation in occupational composition. Establishments also differ in general pay level and in the extent to which incentive methods of pay are used. Primarily for these reasons, individual establishments included in the survey contribute differently to the average earnings (and wage distributions) for the various jobs studied.

Occupational wage relationships are examined here on an individual establishment basis, eliminating the interestablishment variation factor in contribution to the averages for jobs studied. Wage relationship measures are provided separately by region, method of wage payment, and product groupings. Comparisons of findings based on 1961 data are made with those of a similar study relating to 1952–53[9] to point up changes in wage structures.


## Method of Measurement

Average hourly earnings for men janitors paid on a time basis in each establishment were used as a base (100); and average hourly earnings for workers in other occupations, separately by sex and method of wage payment, were converted to a percentage of the janitor base. To obtain a basis of comparison for each geographic, pay method, and product grouping, the median (midpoint) in an array of establishment relatives for the same classification was selected.[10] Measures of variation in pay relatives among establishments are shown in tables 1 and 2 in the form of middle ranges within which one-half of the establishments fell.[11]

Janitors were selected to provide the earnings base because they were employed in the great majority (502 of 603) of the plants in the wage survey with 50 or more workers, the minimum plant size adopted for this analysis. Also, because of their position at or near the bottom of the wage scale, the percentage differentials between wages for these workers and workers in job classifications with higher average pay can be obtained readily by subtracting 100 from the percentages reported in the accompanying tables.

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[9] See Wages and Related Benefits in the Machinery Industries, 1953–54 (BLS Bulletin 1160), appendix A.

[10] The approximate wage relationship between any two occupations shown for the same geographic or industry grouping may be computed by using the percentages shown as absolute numbers. For example, if the median percentages for tool and die makers and production machinists are 149 and 139, respectively, the average wage of tool and die makers will be found to be 107 percent (149/139 x 100) of the machinist's rate.

[11] The middle range as used here is the central part of the array.

Nationwide Relationships

Although various forms of incentive wage systems are used in the machinery industries, recent Bureau studies indicate that Hartford and Worcester were the only areas in which as many as a third of the workers were paid according to this method. The proportion of workers paid on an incentive basis was generally lowest in the areas of the South and West, and highest in the Northeast. Nearly all of the workers in maintenance and toolroom work were paid time rates, and this method of pay was also used by most plants for the processing jobs studied. For these reasons, primary attention has been devoted to wage relationships among time-rated jobs.

Among the 30 occupational classifications studied and paid time rates, only tool and die makers averaged more than 40 percent above the janitor pay level in a majority of the plants (table 1). Those workers making tools and dies for sale by the plant (jobbing) averaged 53 percent more, while those making or repairing tools and dies for use within the plant (other than jobbing) averaged 49 percent more than time-rated men janitors.

Median pay relatives for machine-tool operators in toolrooms, maintenance electricians, and production machinists were closely grouped just under 140. Among other men workers paid time rates, median indexes ranged from 130 to 135 for fully qualified (class A) welders, inspectors, assemblers, and most machine-tool operators on production work. Assemblers, inspectors, and machine-tool operators performing routine, repetitive operations (class C) averaged about 10 percent more than janitors.

Women in the machinery industries are employed primarily as assemblers, inspectors, and machine-tool operators. Median percentages for the three women's job categories studied (all class C) were at or slightly above 100. The corresponding percentages for time-rated men workers in these three categories ranged from 106 to 109.[12] A number of factors may influence the pay position of men and women workers in the same job, including differences in length of service or experience and minor differences in specific duties performed.

In all jobs for which comparisons were possible, median percentages for incentive workers were greater than those for workers paid time rates, usually 10 to 20 points. The relative pay advantage resulting from incentive work was in nearly all instances higher for workers in jobs requiring a comparatively brief period of training than for those in the higher-skilled jobs. For example, the ratio of the incentive-worker differential (i.e., percentage over the janitor base) to the time-worker differential for class C assemblers was $2\frac{1}{2}$ to 1, whereas this ratio for class A assemblers was $1\frac{1}{3}$ to 1.

Examination of the middle ranges within which half of the establishment percentages fell indicates that the plant variation in wage differentials was usually greater for jobs requiring the most training and experience. Thus, the "spread" of the middle ranges for the large majority of the skilled jobs studied was between 15 and 20 points, whereas the spread for workers performing simple routine tasks was usually about 10 points.

Regional Comparisons

Among the four regional groupings used in this analysis,[13] percentage differences between pay levels of time-rated workers in skilled and unskilled jobs were consistently highest in the South. Median percentages for tool and die makers (other than jobbing) ranged from 166 in the South to approximately 150 in each of the other three regions. For most of the remaining skilled jobs studied, median percentages in the South were from 10 to 15 points higher than those in the other regions which were usually closely grouped.

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[12] Relatives drawn from 28 firms employing both men and women class C assemblers produced a median relative of 106 for men and 101 for women. Following the same procedure for class C inspectors, 31 establishment relatives resulted in a 107 median for men and a 104 median for women. For the assembler category, in 12 of the 28 firms the women's relative equaled or was greater than that of men; and for the inspector job, the relative for women employees was equal to or greater than that for men in 11 of the 31 firms.

[13] For definition of regional groupings, see footnote 2, table 1.

Among the three southern labor market areas included in the survey, average hourly earnings of men janitors were: $1.47 in Dallas, $1.61 in Baltimore, and $1.84 in Houston, the largest machinery center in the South. Averages for this job in other areas ranged from $1.76 in Boston to $2.34 in Detroit, and in all but three areas (Boston, Newark and Jersey City, and New York City) exceeded the Houston average. On the other hand, some of the area averages for skilled workers in the South exceeded those in other areas. The Houston average for tool and die makers (other than jobbing) was higher than the average for eight areas outside the South. The greater relative differentials in the South are, therefore, largely the result of the lower than average pay levels prevailing in the region for unskilled labor.

Incentive-wage plans were largely limited to plants in the Northeast and North Central regions. Based on 20 jobs for which median percentages were available for timeworkers and incentive workers in both regions, incentive workers in the Northeast held a position averaging nearly 15 percent over timeworkers, compared with an average of 9 percent in the North Central region. On a nationwide basis, the wage advantage of incentive workers in these 20 jobs averaged about 10 percent in 1961, compared with 12.5 percent in 1952–53.

## Interindustry Variations

Of the nine major product groups commonly recognized in classifying nonelectrical machinery and reported separately in table 2, the metalworking machinery and equipment group has the greatest representation in this analysis, accounting for nearly 30 percent of the plants studied. The farm equipment and the engines and turbines groups account for only 2 and 3 percent, respectively. Labor-management agreements covering a majority of the plant workers were reported by 70 percent of the plants covered by this analysis. In 8 of the 9 product groups, the proportion was two-thirds or more, and it was nearly three-fifths in the large metalworking machinery and equipment group. Incentive wage plans were reported by some plants in each of the major product groups; however, the office, computing, and accounting machines group was the only one in which half the plants reported wage incentives.

Differences in median percentages for the various product groups ranged from 8 to 11 points in 8 of the 12 jobs studied (table 2). The largest differences were found for machine-tool operators in toolrooms and for tool and die makers (other than jobbing), 13 and 15 points, respectively. Smallest differences were computed for class A and class B welders, 6 and 7 points, respectively. There was a lack of consistency among the industry groups with respect to high and low medians. Whereas the metalworking machinery and equipment group had the highest median in five jobs, highest medians in the remainder of the jobs were distributed among four other industry groups. Although lowest medians were shared by 5 of the 9 industry groups, the service industry machines and the engines and turbines groups together accounted for lowest medians in 10 of the 12 occupations considered.

## Trends, 1952–53 and 1961

Comparison of the current findings with those of a similar analysis relating to a 1952–53 period permit some insight into the trend of occupational wage relationships in the machinery industries.[14] However, important differences between the two studies prevent any exact measurement of this change. Changes in the definition of the machinery industries affected the survey coverage in some of the areas studied to a significant extent.[15] Eight areas covered by the earlier study were excluded from the 1961 study: Atlanta, Chattanooga, Cincinnati, Indianapolis, Kansas City, Providence, Seattle, and Tulsa.

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[14] See footnote 9 for reference to earlier study.

[15] The Standard Industrial Classification Manual, prepared by the U.S. Bureau of the Budget, was the basis of industry classification for both studies. The November 1945 edition was used for the 1952–53 study; whereas, the 1957 edition was used for the 1961 study.

The following tabulation of pay relatives for 20 men's jobs paid on a time-rate basis (selected because of their high incidence rate among plants) suggests that some compression in the wage structure of the industries took place between the two studies.

| | Median establishment indexes (Janitors=100) | |
|---|---|---|
| | 1961 | 1952–53 |
| Tool and die makers (other than jobbing) | 149 | 152 |
| Electricians, maintenance | 139 | 140 |
| Machine-tool operators, toolroom | 138 | 139 |
| Engine-lathe operators, class A | 135 | 141 |
| Welders, hand, class A | 135 | 139 |
| Inspectors, class A | 134 | 139 |
| Milling-machine operators, class A | 133 | 140 |
| Grinding-machine operators, class A | 132 | 140 |
| Turret-lathe operators, class A | 132 | 137 |
| Assemblers, class A | 131 | 135 |
| Drill-press operators, radial, class A | 127 | 133 |
| Turret-lathe operators, class B | 123 | 125 |
| Welders, hand, class B | 123 | 127 |
| Milling-machine operators, class B | 122 | 124 |
| Inspectors, class B | 121 | 123 |
| Grinding-machine operators, class B | 119 | 124 |
| Assemblers, class B | 118 | 121 |
| Assemblers, class C | 109 | 109 |
| Inspectors, class C | 109 | 111 |
| Laborers, material handling | 104 | 104 |

For 18 of the 20 jobs used in the comparison, 1961 pay relatives were lower than those recorded in 1952–53, by amounts ranging from 1 to 8 points. The medians for material handling laborers and routine (class C) assemblers were identical in both periods. Changes in the pay relatives for the three highest paid jobs were comparatively slight, amounting to 3 points for tool and die makers and 1 point for electricians and machine-tool operators (toolroom). With these exceptions, the greatest changes tended to be for those jobs requiring the most skill and experience. Thus, the average point change for the eight class A occupations was 5.6, compared with an average decline of 3 points for the six class B jobs.

Comparisons of the relative pay position of time and incentive workers in the same occupation was possible for 16 of the 20 jobs. In all but three instances, the point advantage of incentive workers over their time-paid counterparts was smaller in 1961 than in 1952–53. The amount by which the incentive advantage diminished ranged from 1 to 11 points.

Table 1. Occupational average hourly earnings as percentages[1] of averages for time-rated men janitors in machinery manufacturing, by region[2] and method of wage payment, March–May 1961

| Occupation, grade, and sex | All regions | | | | | | Northeast | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Timeworkers | | | Incentive workers | | | Timeworkers | | | Incentive workers | | |
| | Number of plants | Percent of average for men janitors | | Number of plants | Percent of average for men janitors | | Number of plants | Percent of average for men janitors | | Number of plants | Percent of average for men janitors | |
| | | Median | Middle range within which one-half of plants fell | | Median | Middle range within which one-half of plants fell | | Median | Middle range within which one-half of plants fell | | Median | Middle range within which one-half of plants fell |
| **Men** | | | | | | | | | | | | |
| Assemblers, class A | 248 | 131 | 123-141 | 52 | 142 | 133-155 | 84 | 132 | 123-141 | 22 | 152 | 133-159 |
| Assemblers, class B | 251 | 118 | 113-126 | 69 | 131 | 124-140 | 78 | 120 | 114-128 | 29 | 133 | 126-146 |
| Assemblers, class C | 133 | 109 | 104-115 | 49 | 123 | 113-131 | 41 | 109 | 104-115 | 23 | 117 | 108-130 |
| Electricians, maintenance | 273 | 139 | 132-147 | [3] | [3] | [3] | 102 | 138 | 131-145 | [3] | [3] | [3] |
| Inspectors, class A | 292 | 134 | 126-143 | 11 | 151 | 129-165 | 91 | 134 | 126-144 | [3] | [3] | [3] |
| Inspectors, class B | 208 | 121 | 115-129 | 13 | 142 | 131-161 | 87 | 122 | 116-128 | [3] | [3] | [3] |
| Inspectors, class C | 102 | 109 | 106-117 | 10 | 127 | 116-138 | 38 | 110 | 106-114 | [3] | [3] | [3] |
| Laborers, material handling | 308 | 104 | 100-109 | [3] | [3] | [3] | 109 | 103 | 100-109 | [3] | [3] | [3] |
| Machine-tool operators, production, class A: | | | | | | | | | | | | |
| Drill-press operators, radial, class A | 123 | 127 | 121-133 | 50 | 137 | 129-149 | 41 | 126 | 122-132 | 21 | 147 | 134-168 |
| Drill-press operators, single- or multiple-spindle, class A | 65 | 123 | 117-128 | 41 | 138 | 126-146 | 25 | 122 | 118-127 | 18 | 142 | 131-158 |
| Engine-lathe operators, class A | 186 | 135 | 126-145 | 61 | 143 | 131-156 | 58 | 137 | 126-143 | 24 | 149 | 133-168 |
| Grinding-machine operators, class A | 178 | 132 | 127-144 | 64 | 145 | 132-158 | 64 | 132 | 127-143 | 25 | 155 | 142-169 |
| Milling-machine operators, class A | 184 | 133 | 127-143 | 65 | 141 | 132-155 | 65 | 135 | 128-142 | 24 | 151 | 136-162 |
| Turret-lathe operators, class A | 190 | 132 | 125-138 | 72 | 141 | 132-156 | 61 | 132 | 127-140 | 27 | 154 | 134-164 |
| Machine-tool operators, production, class B: | | | | | | | | | | | | |
| Drill-press operators, radial, class B | 101 | 118 | 112-124 | 42 | 130 | 124-140 | 24 | 116 | 111-121 | 12 | 130 | 126-140 |
| Drill-press operators, single- or multiple-spindle, class B | 97 | 114 | 110-120 | 52 | 127 | 121-136 | 31 | 113 | 110-118 | 21 | 128 | 122-140 |
| Engine-lathe operators, class B | 98 | 124 | 117-135 | 44 | 131 | 125-152 | 38 | 122 | 115-133 | 14 | 152 | 129-162 |
| Grinding-machine operators, class B | 127 | 119 | 114-130 | 57 | 138 | 126-144 | 49 | 119 | 112-127 | 23 | 141 | 128-148 |
| Milling-machine operators, class B | 134 | 122 | 115-128 | 62 | 133 | 121-142 | 51 | 122 | 115-127 | 21 | 137 | 128-148 |
| Turret-lathe operators, class B | 136 | 123 | 116-129 | 64 | 133 | 124-148 | 47 | 124 | 116-128 | 28 | 139 | 130-150 |
| Machine-tool operators, production, class C: | | | | | | | | | | | | |
| Drill-press operators, radial, class C | 31 | 112 | 106-117 | 12 | 117 | 112-121 | [3] | [3] | [3] | [3] | [3] | [3] |
| Drill-press operators, single- or multiple-spindle, class C | 70 | 106 | 102-110 | 33 | 122 | 115-137 | 21 | 103 | 100-107 | 13 | 127 | 114-137 |
| Grinding-machine operators, class C | 48 | 109 | 104-120 | 28 | 123 | 107-133 | 16 | 114 | 106-121 | 13 | 126 | 122-141 |
| Milling-machine operators, class C | 50 | 110 | 104-116 | 30 | 121 | 115-130 | 17 | 105 | 99-115 | 10 | 125 | 111-129 |
| Machine-tool operators, toolroom | 282 | 138 | 131-148 | 14 | 147 | 144-163 | 74 | 136 | 130-142 | [3] | [3] | [3] |
| Machinists, production | 81 | 139 | 132-152 | [3] | [3] | [3] | 27 | 142 | 134-156 | [3] | [3] | [3] |
| Tool and die makers (jobbing) | 65 | 153 | 145-175 | [3] | [3] | [3] | 15 | 161 | 139-188 | [3] | [3] | [3] |
| Tool and die makers (other than jobbing) | 268 | 149 | 142-158 | 11 | 157 | 148-184 | 102 | 148 | 141-155 | [3] | [3] | [3] |
| Welders, hand, class A | 258 | 135 | 127-143 | 45 | 143 | 135-153 | 72 | 135 | 125-141 | 12 | 151 | 135-167 |
| Welders, hand, class B | 115 | 123 | 116-129 | 26 | 136 | 128-146 | 31 | 124 | 117-131 | 10 | 144 | 132-145 |
| **Women** | | | | | | | | | | | | |
| Assemblers, class C | 49 | 100 | 95-103 | 30 | 113 | 107-122 | 13 | 102 | 95-109 | 17 | 116 | 108-122 |
| Inspectors, class C | 61 | 102 | 99-107 | [3] | [3] | [3] | 16 | 105 | 100-107 | [3] | [3] | [3] |
| Drill-press operators, single- or multiple-spindle, class C | 21 | 101 | 99-105 | 15 | 108 | 103-120 | [3] | [3] | [3] | [3] | [3] | [3] |

See footnotes at end of table.

Table 1. Occupational average hourly earnings as percentages[1] of averages for time-rated men janitors in machinery manufacturing, by region[2] and method of wage payment, March–May 1961—Continued

| Occupation, grade, and sex | South[4] | | | North Central | | | | | | West[4] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Timeworkers | | | Timeworkers | | | Incentive workers | | | Timeworkers | | |
| | Number of plants | Percent of average for men janitors | | Number of plants | Percent of average for men janitors | | Number of plants | Percent of average for men janitors | | Number of plants | Percent of average for men janitors | |
| | | Median | Middle range within which one-half of plants fell | | Median | Middle range within which one-half of plants fell | | Median | Middle range within which one-half of plants fell | | Median | Middle range within which one-half of plants fell |
| **Men** | | | | | | | | | | | | |
| Assemblers, class A | 27 | 138 | 131-149 | 94 | 128 | 122-141 | 25 | 138 | 134-149 | 43 | 130 | 123-135 |
| Assemblers, class B | 27 | 118 | 111-126 | 103 | 116 | 112-124 | 37 | 129 | 124-140 | 43 | 117 | 113-123 |
| Assemblers, class C | 13 | 108 | 101-118 | 58 | 110 | 104-114 | 24 | 124 | 119-134 | 21 | 109 | 106-116 |
| Electricians, maintenance | 21 | 150 | 144-159 | 122 | 137 | 132-148 | (3) | (3) | (3) | 28 | 140 | 135-142 |
| Inspectors, class A | 24 | 143 | 138-167 | 128 | 132 | 124-140 | (3) | (3) | (3) | 49 | 136 | 128-143 |
| Inspectors, class B | 15 | 130 | 118-135 | 87 | 120 | 114-126 | (3) | (3) | (3) | 19 | 122 | 116-130 |
| Inspectors, class C | 11 | 111 | 109-123 | 43 | 108 | 105-115 | (3) | (3) | (3) | 10 | 115 | 107-121 |
| Laborers, material handling | 23 | 102 | 99-107 | 145 | 104 | 100-108 | (3) | (3) | (3) | 31 | 108 | 104-110 |
| Machine-tool operators, production, class A: | | | | | | | | | | | | |
| Drill-press operators, radial, class A | (3) | (3) | (3) | 50 | 128 | 120-135 | 25 | 134 | 127-143 | 23 | 127 | 122-131 |
| Drill-press operators, single- or multiple-spindle, class A | (3) | (3) | (3) | 24 | 123 | 115-128 | 20 | 133 | 126-142 | 11 | 125 | 117-131 |
| Engine-lathe operators, class A | 18 | 147 | 137-178 | 77 | 132 | 125-141 | 30 | 137 | 129-145 | 33 | 133 | 127-145 |
| Grinding-machine operators, class A | 13 | 148 | 129-163 | 73 | 129 | 125-140 | 32 | 142 | 130-152 | 28 | 136 | 125-150 |
| Milling-machine operators, class A | 16 | 145 | 133-159 | 71 | 131 | 125-140 | 34 | 138 | 129-149 | 32 | 132 | 128-143 |
| Turret-lathe operators, class A | 19 | 138 | 132-156 | 77 | 129 | 124-138 | 37 | 138 | 130-155 | 33 | 133 | 127-137 |
| Machine-tool operators, production, class B: | | | | | | | | | | | | |
| Drill-press operators, radial, class B | 13 | 129 | 112-150 | 41 | 120 | 114-124 | 25 | 130 | 122-140 | 23 | 116 | 113-119 |
| Drill-press operators, single- or multiple-spindle, class B | (3) | (3) | (3) | 39 | 114 | 110-119 | 27 | 127 | 122-135 | 21 | 115 | 109-120 |
| Engine-lathe operators, class B | 10 | 133 | 122-158 | 40 | 124 | 115-133 | 27 | 131 | 124-140 | 10 | 124 | 119-140 |
| Grinding-machine operators, class B | (3) | (3) | (3) | 57 | 119 | 114-130 | 30 | 133 | 123-142 | 14 | 116 | 115-127 |
| Milling-machine operators, class B | 11 | 134 | 124-156 | 56 | 120 | 114-126 | 37 | 133 | 120-142 | 16 | 121 | 115-129 |
| Turret-lathe operators, class B | 19 | 127 | 122-146 | 46 | 121 | 114-129 | 34 | 131 | 122-145 | 24 | 120 | 116-127 |
| Machine-tool operators, production, class C: | | | | | | | | | | | | |
| Drill-press operators, radial, class C | (3) | (3) | (3) | 14 | 112 | 108-116 | (3) | (3) | (3) | (3) | (3) | (3) |
| Drill-press operators, single- or multiple-spindle, class C | (3) | (3) | (3) | 40 | 107 | 105-112 | 19 | 122 | 116-140 | (3) | (3) | (3) |
| Grinding-machine operators, class C | (3) | (3) | (3) | 23 | 106 | 101-117 | 13 | 115 | 105-127 | (3) | (3) | (3) |
| Milling-machine operators, class C | (3) | (3) | (3) | 25 | 111 | 106-117 | 18 | 121 | 117-132 | (3) | (3) | (3) |
| Machine-tool operators, toolroom | 18 | 152 | 136-167 | 147 | 139 | 130-148 | (3) | (3) | (3) | 43 | 141 | 134-149 |
| Machinists, production | 19 | 152 | 138-166 | 18 | 134 | 130-148 | (3) | (3) | (3) | 17 | 132 | 127-140 |
| Tool and die makers (jobbing) | (3) | (3) | (3) | 35 | 150 | 144-165 | (3) | (3) | (3) | 12 | 160 | 147-174 |
| Tool and die makers (other than jobbing) | 21 | 166 | 149-179 | 115 | 148 | 141-159 | (3) | (3) | (3) | 30 | 152 | 148-156 |
| Welders, hand, class A | 30 | 144 | 138-156 | 103 | 133 | 126-140 | 27 | 142 | 130-152 | 53 | 135 | 128-144 |
| Welders, hand, class B | 20 | 126 | 120-130 | 49 | 120 | 115-127 | 14 | 137 | 126-148 | 15 | 127 | 111-136 |
| **Women** | | | | | | | | | | | | |
| Assemblers, class C | (3) | (3) | (3) | 24 | 100 | 96-102 | 13 | 113 | 104-122 | (3) | (3) | (3) |
| Inspectors, class C | (3) | (3) | (3) | 35 | 101 | 99-106 | (3) | (3) | (3) | (3) | (3) | (3) |
| Drill-press operators, single- or multiple-spindle, class C | (3) | (3) | (3) | 12 | 100 | 97-104 | (3) | (3) | (3) | (3) | (3) | (3) |

[1] Percentages show the relationship between straight-time average hourly earnings (excluding premium pay) for selected plant occupations in machinery plants. In each establishment covered the average hourly earnings for time-rated men janitors were used as a base (100); average hourly earnings for timeworkers (hourly-rated or salaried) and incentive workers (piecework or production bonus) in other occupations were converted to a percentage of that base.

[2] Labor markets studied have been grouped for this analysis as follows: Northeast—Boston, Buffalo, Hartford, Newark and Jersey City, New York City, Philadelphia, Pittsburgh, and Worcester; South—Baltimore, Dallas, and Houston; North Central—Chicago, Cleveland, Detroit, Milwaukee, Minneapolis–St. Paul, and St. Louis; and West—Denver, Los Angeles–Long Beach, Portland, and San Francisco–Oakland.

[3] Number of establishments employing workers in the occupational category (and in the janitor category) too small to justify comparisons.

[4] Number of establishments with incentive plans too small to justify comparisons for other than timeworkers.

Table 2. Occupational average hourly earnings for time-rated men workers as percentages [1] of averages for time-rated men janitors in 9 machinery industries, March–May 1961

| Industry group [2] | SIC code [2] | Establishment percentages for— | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Assemblers | | | | | | Electricians | | Inspectors | | | |
| | | Class A | | Class B | | Class C | | Maintenance | | Class A | | Class B | |
| | | Median | Middle range | Median | Middle range | Median | Middle range | Median | Middle range | Median | Middle range | Median | Middle range |
| Engines and turbines | 351 | [3] | [3] | 112 | 110-117 | [3] | [3] | 131 | 128-145 | 134 | 124-140 | 115 | 112-121 |
| Farm machinery and equipment | 352 | [3] | [3] | [3] | [3] | [3] | [3] | [3] | [3] | [3] | [3] | [3] | [3] |
| Construction, mining, and materials handling machinery and equipment | 353 | 129 | 122-135 | 118 | 112-124 | 112 | 106-116 | 140 | 132-146 | 130 | 124-138 | 121 | 114-126 |
| Metalworking machinery and equipment | 354 | 134 | 125-145 | 120 | 113-131 | 108 | 106-113 | 139 | 132-149 | 137 | 129-152 | 122 | 115-133 |
| Special industry machinery, except metalworking machinery | 355 | 131 | 124-139 | 120 | 113-130 | 114 | 108-121 | 137 | 128-143 | 133 | 126-144 | 125 | 119-135 |
| General industrial machinery and equipment | 356 | 131 | 122-138 | 117 | 113-123 | 108 | 104-114 | 138 | 132-144 | 136 | 128-138 | 120 | 116-127 |
| Office, computing, and accounting machines | 357 | 127 | 119-151 | 114 | 111-134 | [3] | [3] | 141 | 135-151 | 130 | 127-148 | 124 | 117-130 |
| Service industry machines | 358 | 124 | 119-128 | 114 | 112-120 | 104 | 99-112 | 141 | 125-155 | 127 | 122-136 | 119 | 110-124 |
| Miscellaneous machinery, except electrical | 359 | 133 | 128-139 | 117 | 114-125 | [3] | [3] | 146 | 134-153 | 138 | 126-144 | 124 | 118-125 |
| | | Grinding-machine operators | | | | Machine-tool operators, tool room | | Tool and die makers (other than jobbing) | | Welders, hand | | | |
| | | Class A | | Class B | | | | | | Class A | | Class B | |
| Engines and turbines | 351 | [3] | [3] | [3] | [3] | 136 | 130-140 | 144 | 138-153 | 137 | 133-142 | [3] | [3] |
| Farm machinery and equipment | 352 | [3] | [3] | [3] | [3] | 133 | 129-135 | 147 | 139-156 | [3] | [3] | [3] | [3] |
| Construction, mining, and materials handling machinery and equipment | 353 | 127 | 119-136 | 116 | 115-126 | 132 | 127-139 | 147 | 142-152 | 132 | 123-143 | 120 | 116-128 |
| Metalworking machinery and equipment | 354 | 138 | 129-149 | 124 | 114-134 | 145 | 134-154 | 148 | 142-168 | 135 | 128-147 | 122 | 117-127 |
| Special industry machinery, except metalworking machinery | 355 | 129 | 126-139 | 123 | 111-143 | 135 | 131-142 | 147 | 137-153 | 135 | 127-143 | 126 | 117-136 |
| General industrial machinery and equipment | 356 | 129 | 127-144 | 116 | 114-119 | 139 | 132-147 | 148 | 143-162 | 137 | 128-147 | 120 | 111-129 |
| Office, computing, and accounting machines | 357 | [3] | [3] | [3] | [3] | 139 | 137-149 | 159 | 152-183 | [3] | [3] | [3] | [3] |
| Service industry machines | 358 | [3] | [3] | [3] | [3] | 132 | 126-149 | 146 | 141-154 | 131 | 125-139 | 119 | 117-126 |
| Miscellaneous machinery, except electrical | 359 | 135 | 125-145 | 116 | 115-124 | 143 | 134-152 | 153 | 147-166 | 136 | 129-143 | [3] | [3] |

[1] See footnote 1, table 1 for method of computation.
[2] As defined in the Standard Industrial Classification Manual, revised 1957, prepared by the U.S. Bureau of the Budget.
[3] Number of establishments employing workers in this occupational category (and in the janitor category) too small to justify comparisons.

# Appendix B: Wage Indexes, 1945—62

Indexes of average straight-time hourly earnings[1] of production workers in machinery manufacturing in selected areas and occupations, selected periods,[2] 1945-62

(1958-59=100)

| Area and occupation | March–June 1962 | March–May 1961 | January 1960 | January 1959 | January 1958 | January 1956 | January 1955 | January 1954 |
|---|---|---|---|---|---|---|---|---|
| **Area** | | | | | | | | |
| All areas combined[3] | 112.1 | 109.0 | 105.8 | 101.6 | 98.4 | 89.3 | 85.2 | 82.6 |
| Baltimore | 112.5 | 110.4 | 105.8 | 103.0 | 97.0 | 87.8 | 82.9 | 76.8 |
| Boston | 115.4 | 112.1 | 107.4 | 102.2 | 97.7 | 89.1 | 86.4 | 83.7 |
| Buffalo | 111.1 | 109.0 | 104.8 | 101.3 | 98.6 | 88.5 | 83.5 | (4) |
| Chicago | 111.1 | 107.8 | 106.2 | 101.8 | 98.2 | 90.0 | 86.6 | 83.6 |
| Cleveland | 114.5 | 110.3 | 108.0 | 101.1 | 98.9 | 90.4 | 85.7 | 83.6 |
| Dallas | 110.9 | 108.0 | 104.8 | 101.7 | 98.3 | 89.8 | 87.4 | 85.9 |
| Denver | 109.4 | 108.2 | 104.8 | 101.1 | 98.9 | 84.7 | 80.7 | (5) |
| Detroit | 110.4 | 108.2 | 105.3 | 101.1 | 98.9 | 88.7 | 84.2 | 81.9 |
| Hartford | 114.0 | 111.3 | 106.3 | 101.5 | 98.4 | 88.5 | 84.6 | 82.2 |
| Houston | 109.9 | 107.6 | 107.9 | 100.4 | 99.6 | 89.2 | 84.7 | 81.6 |
| Los Angeles–Long Beach | 111.8 | 108.4 | 105.2 | 101.2 | 98.7 | 89.1 | 85.0 | 81.8 |
| Milwaukee | 112.5 | 109.2 | 105.5 | 101.6 | 98.4 | 88.4 | 84.3 | 81.8 |
| Minneapolis–St. Paul | 113.6 | 111.4 | 105.2 | 101.3 | 98.7 | 90.6 | 87.1 | 84.4 |
| Newark and Jersey City | 111.1 | 107.9 | 103.6 | 102.1 | 97.9 | 90.1 | 85.9 | 83.4 |
| New York City | 111.8 | 107.8 | 103.6 | 100.7 | 99.3 | 91.4 | 88.6 | 85.3 |
| Philadelphia | 112.7 | 110.0 | 106.6 | 102.4 | 97.6 | 91.1 | 87.7 | 85.0 |
| Pittsburgh | 110.3 | 108.5 | 105.5 | 102.7 | 97.3 | 87.1 | 80.3 | 78.7 |
| Portland | 117.0 | 113.1 | 110.8 | 101.6 | 98.4 | 88.5 | 85.6 | (5) |
| St. Louis | 115.7 | 110.1 | 105.5 | 101.7 | 98.3 | 89.6 | 84.9 | 81.7 |
| San Francisco–Oakland | 112.6 | 109.9 | 106.7 | 104.1 | 95.9 | 80.9 | 89.0 | 77.8 |
| Worcester | 111.8 | 108.9 | 103.5 | 101.6 | 98.3 | 90.4 | 84.8 | (5) |
| **Occupation** | | | | | | | | |
| Laborers, material handling | 112.5 | 109.9 | 105.7 | 102.3 | 97.7 | 86.7 | 83.7 | 80.7 |
| Tool and die makers (other than jobbing) | 112.7 | 109.7 | 105.9 | 102.0 | 98.0 | 89.2 | 85.1 | 82.7 |

| Area | January 1953 | January 1952 | January 1951 | November 1949 | November 1948 | November 1947 | October 1946 | January 1945 |
|---|---|---|---|---|---|---|---|---|
| All areas combined[3] | 78.7 | 73.8 | 70.0 | 65.1 | 64.1 | 59.0 | 53.8 | 45.0 |
| Baltimore | 73.6 | 67.9 | 66.2 | 62.2 | 62.6 | 57.5 | 52.2 | 43.9 |
| Boston | 79.7 | 75.2 | 72.6 | 69.6 | 66.6 | 59.4 | 53.4 | 45.4 |
| Buffalo | 78.9 | 72.5 | 68.1 | 63.4 | 64.7 | 57.4 | 57.5 | 47.0 |
| Chicago | 79.9 | 74.4 | 71.6 | 65.3 | 65.5 | 59.5 | 53.7 | 44.3 |
| Cleveland | 79.6 | 76.0 | 72.3 | 67.1 | 66.5 | 63.6 | 55.7 | 48.0 |
| Dallas | 81.1 | 76.8 | 74.4 | 69.5 | 67.0 | 62.6 | 58.2 | 51.4 |
| Denver | - | - | - | - | - | - | - | - |
| Detroit | 77.7 | 73.5 | 69.2 | 64.4 | 63.0 | 60.3 | 55.3 | 48.6 |
| Hartford | 78.6 | 72.3 | 68.9 | 63.7 | 64.8 | 58.2 | 52.8 | 44.5 |
| Houston | 78.1 | 73.7 | 70.4 | 66.2 | 65.8 | 58.8 | 52.9 | 47.1 |
| Los Angeles–Long Beach | 79.0 | 73.2 | 69.9 | 65.1 | 64.3 | 60.5 | 56.3 | 48.7 |
| Milwaukee | 78.7 | 73.4 | 67.6 | 62.5 | 62.6 | 57.7 | 52.9 | 41.4 |
| Minneapolis–St. Paul | 80.3 | 74.6 | 70.3 | 66.9 | 64.1 | 58.7 | 53.8 | 45.3 |
| Newark and Jersey City | 81.0 | 76.3 | 71.4 | 68.1 | 66.5 | 59.7 | 56.1 | 47.6 |
| New York City | 81.4 | 76.7 | 75.5 | 70.7 | 66.0 | 61.5 | 55.8 | 46.7 |
| Philadelphia | 80.8 | 73.8 | 70.1 | 66.4 | 63.8 | 57.9 | 54.2 | 44.7 |
| Pittsburgh | 73.2 | 68.5 | 67.6 | 59.7 | 60.1 | 53.2 | 49.5 | 40.1 |
| Portland | - | - | - | - | - | - | - | - |
| St. Louis | 74.3 | 69.9 | 65.6 | 62.3 | 61.2 | 56.9 | 48.0 | 40.7 |
| San Francisco–Oakland | 72.8 | 70.5 | 64.4 | 62.3 | 61.9 | 57.6 | 53.0 | 46.4 |
| Worcester | - | - | - | - | - | - | - | - |
| **Occupation** | | | | | | | | |
| Laborers, material handling | 77.1 | 72.0 | 67.4 | 62.5 | 60.8 | 55.1 | 51.0 | 40.7 |
| Tool and die makers (other than jobbing) | 77.9 | 73.5 | 70.0 | 66.5 | 65.3 | 61.0 | 56.6 | 48.4 |

[1] Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
[2] Data for the periods shown as January 1951–60, cover various months of the winter.
[3] Information for the years 1945 through 1953 was based on 29 areas.
[4] Buffalo was not studied in 1954.
[5] Data for 1954 and earlier years in these areas were not considered sufficiently comparable for separate presentation but were included in the totals for all areas combined.

# Appendix C: Scope and Method of Survey

## Scope of Survey

The survey included establishments primarily engaged in manufacturing machinery, except electrical (major group 35 as defined in the 1957 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. Central offices of the firms studied were excluded.

The study covered establishments with 20 or more workers 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 which 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 industry during the payroll period studied, are shown in the following table.

Estimated number of establishments and workers within scope of survey and number studied, machinery industries, 21 areas, March–June 1962

(Minimum size establishment: 20 workers)[1]

| Area[2] | Payroll period | Number of establishments | | Workers in establishments | | | |
|---|---|---|---|---|---|---|---|
| | | Within scope of study | Studied | Within scope of study | | | Studied |
| | | | | Total[3] | Production workers | Office workers | Total |
| Total, 21 areas | | 4,381 | 912 | 530,226 | 370,227 | 72,740 | 342,091 |
| New England: | | | | | | | |
| Boston | March | 167 | 43 | 20,461 | 12,759 | 2,810 | 13,265 |
| Hartford | May | 151 | 39 | 29,145 | 22,936 | 3,061 | 24,724 |
| Worcester | April | 45 | 19 | 8,555 | 5,828 | 1,161 | 7,529 |
| Middle Atlantic: | | | | | | | |
| Buffalo | April | 86 | 26 | 11,689 | 7,924 | 1,614 | 7,291 |
| Newark and Jersey City | April | 278 | 53 | 31,849 | 21,943 | 4,818 | 18,993 |
| New York City | April | 314 | 65 | 21,497 | 16,401 | 2,117 | 11,471 |
| Philadelphia | May | 203 | 46 | 32,211 | 22,780 | 3,594 | 22,513 |
| Pittsburgh | April | 109 | 28 | 14,825 | 10,337 | 1,772 | 10,779 |
| South: | | | | | | | |
| Baltimore | May | 50 | 20 | 8,661 | 6,162 | 1,350 | 7,185 |
| Dallas | March | 68 | 26 | 7,845 | 5,759 | 794 | 5,587 |
| Houston | March | 89 | 29 | 15,309 | 10,636 | 2,132 | 11,896 |
| Middle West: | | | | | | | |
| Chicago | June | 637 | 111 | 75,800 | 51,258 | 12,031 | 40,102 |
| Cleveland | May | 283 | 64 | 35,260 | 24,087 | 4,576 | 21,743 |
| Detroit | June | 737 | 100 | 67,341 | 50,040 | 7,522 | 40,594 |
| Milwaukee | June | 159 | 43 | 46,869 | 30,520 | 9,456 | 38,149 |
| Minneapolis-St. Paul | May | 149 | 34 | 23,125 | 14,351 | 3,301 | 16,365 |
| St. Louis | April | 126 | 35 | 16,093 | 11,604 | 2,343 | 12,488 |
| Far West: | | | | | | | |
| Denver | May | 31 | 16 | 3,602 | 2,581 | 361 | 2,819 |
| Los Angeles-Long Beach | May | 546 | 74 | 44,416 | 31,309 | 5,621 | 18,109 |
| Portland | May | 33 | 15 | 3,515 | 2,348 | 484 | 2,562 |
| San Francisco-Oakland | March | 120 | 26 | 12,158 | 8,664 | 1,822 | 7,927 |

[1] Establishments which manufactured special dies and tools, die sets, jigs and fixtures, or machine-tool accessories and measuring devices, and which employed 8 to 19 workers were also included.

[2] Standard Metropolitan Statistical Areas except Chicago (Cook County); Hartford (Hartford and New Britain Standard Metropolitan Statistical Areas and Bristol, Conn.); New York City (the 5 Boroughs); Newark and Jersey City (a combination of the 2 Standard Metropolitan Statistical Areas); Philadelphia (Philadelphia and Delaware Counties, Pa., and Camden County, N.J.); and Worcester (Worcester Standard Metropolitan Statistical Area except Northbridge).

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

Method of Study

Data were obtained by personal visits of Bureau field economists under the direction of the Bureau's Assistant Regional Directors for Wages and Industrial Relations. The survey was conducted on a sample basis. To obtain appropriate accuracy at minimum cost, a greater proportion of large than of 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 group in the 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

The estimates of the number of workers within the 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 lists of establishments assembled considerably in advance of the payroll period studied.

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 D for these job 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.

Occupational Earnings

Earnings data for the selected jobs (table A-1 through A-4) are shown for full-time workers, i.e., those hired to work a full-time schedule for the given occupational classification. Working supervisors, apprentices, learners, beginners, trainees, handicapped, temporary, and probationary workers were not included.

The wages represent average 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 workers' regular pay; but nonproduction bonus payments, such as Christmas or yearend bonuses were excluded. The estimated average hourly earnings for each occupation were obtained by weighting each rate (or hourly earning) by the number of workers receiving the rate.

Occupational employment estimates refer to the total in all establishments within the scope of the study and not to the number actually surveyed. Because of the variation in occupational structure among establishments, estimates of occupational employment are subject to considerable fluctuation attributable to sampling. Hence, they serve only to indicate the relative numerical importance of the jobs studied. The fluctuations in employment do not materially affect the accuracy of the earnings data.

Wage Trends

The machinery index series has been developed from data obtained in the Bureau's program of occupational wage surveys and is based on straight-time hourly earnings of men production workers in selected machinery occupations.

The indexes for 1945, 1946, and 1947 are based on "miscellaneous machinery" which consists of all types of machinery manufacture except electrical machinery, machine tools, and machine-tool accessories. For 1949 and successive years, the information includes machine tools and machine-tool accessories, as well as miscellaneous machinery. In order to minimize the effect of the shift in industrial coverage, the two sets of indexes were linked by applying

the percent of change in the miscellaneous machinery group from 1947 to 1948 to the previous 1947 index. The 1948 index computed in this fashion is the published index. To compute the 1949 index, the percentage change in all machinery from 1948 to 1949 was applied to this 1948 index.

Since the 1959 survey was based on a revised definition of the machinery industries group as provided in the 1957 edition of the SIC Manual, a linking procedure was necessary to minimize the effect on the index of the change in industry definition. This was done by computing the percent of change from 1958 to 1959 for those establishments included in both surveys. This percentage change was then applied to the 1958 index (computed on the previous industry definition) to obtain the index for 1959.

Indexes were constructed for each area to minimize the effect of changes in occupational composition of the work force and in the relative importance in the industry of the areas studied. For each year in 2 successive years (1945–46, 1946–47, etc.), the average straight-time hourly earnings for each selected occupation were weighted by the number employed in that occupation during the latter of the 2 years. The result each year was an area aggregate for all selected jobs. The percentage relationship between the aggregates for the pair of years was computed and then linked to the index for the earlier of the 2 years. The resulting indexes based on 1945 were then converted to a 1947–49 base by dividing all the indexes by the average of the indexes for 1947–49. Beginning with 1962, indexes have been converted to a 1958–59 base.

In 1952, the occupational coverage of the machinery industries survey was increased to include all machine-tool operators, classes A, B, and C (except operators of certain special machines). Coverage of machine-tool operators before 1952 was limited to single- and multiple-spindle drill-press operators, engine-lathe operators, grinding-machine operators, and milling-machine operators. The indexes since 1952 have been computed on the basis of the broader occupational coverage indicated above. In addition, a system of constant weights has been utilized (rather than weighting by the actual employment in an occupation during the latter of the 2 years); this minimizes the effect of changes in occupational composition of the work force. The constant weights for the indexes from 1953 through 1961 were based on an average of 1953 and 1954 employment; beginning with the 1962 index, the weights were based on an average for the years 1960 and 1961.

Definitions for production and toolroom machine-tool operators and tool and die makers were revised in 1960. In computing the percent of change from 1959 to 1960 in areas affected by the changes, the average earnings used for these jobs, for the purposes of this index, in both years were based on the earnings of workers classified in accordance with the revised definitions.

In obtaining the composite index for all areas combined, the techniques followed were similar to those employed in determining area indexes. The technique used in computing the composite index for the earlier years, 1945–52, was as follows: For each year in a pair (1945–46, 1946–47, etc.), an overall aggregate for all areas combined was obtained. This aggregate was computed by weighting the overall average (aggregate earnings in selected jobs divided by the total employment in selected jobs) for each area by total production worker employment in the industry and area in the second of the 2 years. From this point, the procedure was identical with that used in constructing individual area indexes for these years. For indexes since 1952, a system of constant area weights has been used, thereby eliminating the effect of changes in the relative importance in the industry of the area studied. For the years 1953 through 1961, the weights were based on average employments for the years 1953 and 1954; beginning with the 1962 index, the weights were based on averages for the years 1960 and 1961.

## Establishment Practices and Supplementary Wage Provisions

Information is presented also (in the C series tables) on selected establishment practices and supplementary benefits as they relate to production workers and, in some cases, office workers. "Production workers" include working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in nonoffice functions. Administrative, executive, professional, and technical employees, and force-account construction employees who are utilized as a separate work force are excluded. The term "office workers," as used in this report, includes all office clerical employees and excludes administrative, executive, professional, and technical personnel.

Method of Wage Payment. With reference to table C-1 the proportions of time and incentive workers directly reflect employment under each pay system. However, technical considerations required that the breakdown of incentive worker employment according to type of incentive plan (piecework or bonus) be based on the predominant plan in each establishment.

Job Evaluation Systems. For purposes of this survey, job evaluation systems were classified into four groups. These groups are described briefly below:

| Job evaluation system | Method of relating jobs |
|---|---|
| Ranking method | Jobs are ranked in their order of relative difficulty or value to the company, and grade levels are sometimes defined after the jobs have been ranked. |
| Classification method | Jobs are allocated to grade levels which are defined arbitrarily prior to evaluating jobs. |
| Point method | Jobs are related to factors. A restricted number of fairly specific factors are selected for application to a limited number of types of work. The point values are predetermined before analysis of jobs and are decided arbitrarily, and the degree of each factor is expressed by a definition. |
| Factor-comparison method | Jobs are related by factorial comparison. The factors used are assumed to be fundamental to all jobs and of universal application; the point values are set after analysis of jobs from existing rates of key jobs, and the degrees of each factor are expressed by sample jobs. |

Labor-Management Agreements. Establishments were classified as having union contract coverage if more than half the workers were employed under terms of union agreements. In all cases, estimates relate to agreement coverage rather than to union membership. (See table C-1.)

Shift Differentials. This information is presented in terms of (a) effective provisions for workers employed on extra shifts at the time of the survey (table C-3), and (b) establishment policy (table C-2). Estimates in the first tabulation relate only to those workers actually employed on the specified shift. Tabulations relating to establishment policy are presented in terms of total production worker employment. An establishment was considered as having a policy if it met either of the following conditions: (1) Operated late shifts at the time of the survey, or (2) had formal provisions covering late shifts.

Scheduled hours; paid holidays; paid vacations; and health, insurance, and pension plans are treated statistically on the basis that these are applicable to all plant or office workers if a majority of such workers are eligible or may eventually qualify for the practices listed. Because of rounding, sums of individual items in these tables may not equal totals.

Scheduled Weekly Hours. Data in tables C-4 and C-5 refer to the predominant work schedule for full-time production and office workers employed on the day shift.

Paid Holidays. Data in tables C-6 and C-7 relate to full-day and half-day holidays provided annually.

Paid Vacations. The summary of vacation plans (tables C-8 and C-9) is limited to formal arrangements, excluding informal plans whereby time off with pay is granted at the discretion of the employer or the 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 were selected as representative of the most common practices, but they do not necessarily reflect individual establishment provisions for progression. For example, the changes in proportions indicated at 5 years of service may include changes in provisions which occurred after 4 years.

Health, Insurance, and Pension Plans. Data are presented in tables C-10 and C-11 for all health, insurance, and pension plans for which all or a part of the cost is borne by the employer, excluding only 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 except in areas where the State law requires such payments. In these areas, sickness and accident insurance plans were included only if the employer contributes more than is legally required or the employees receive benefits in excess of legal requirements.

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. Such plans may be underwritten by a commercial insurance company or a nonprofit organization, or they may be self-insured.

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

Tabulations of retirement pensions are limited to plans which provide upon retirement regular payments for the remainder of the worker's life.

# Appendix D: 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 is essential in order to permit the grouping of occupational wage rates representing comparable job content. Because of this emphasis on interestablishment and interarea comparability of occupational content, the Bureau's job descriptions may differ significantly from those in use in individual establishments or those prepared for other purposes. In applying these job descriptions, the Bureau's field economists are instructed to exclude working supervisors, apprentices, learners, beginners, trainees, 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 upon 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.)

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 or 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 generating, 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 hand-tools 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 operators, 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 speeds to the surfaces to be ground. 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, gear-cutter 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. Performs such operations as examining parts or products for flaws and defects, checking their dimensions and appearance to determine whether they meet the required standards and specifications.

INSPECTOR—Continued

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, polishing floors; removing chips, trash, and other refuse; dusting equipment, furniture, or fixtures; polishing metal fixtures or trimmings; and providing supplies and minor maintenance services; 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 hand truck, car, or wheelbarrow. Longshoremen, who load and unload ships are excluded.

MACHINE-TOOL OPERATOR, PRODUCTION

Operates one or more nonportable, power-driven machine tools in order to shape metal by progressively removing portion of the stock in the form of chips or shavings, or by abrasion. For wage study purposes, this classification is limited to operators of the following types of machine tools:

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, miscellaneous [16]
Milling machines
Planers
Screw machines, automatic
Screw machines, hand
Shapers
Turret lathes, automatic
Turret lathes, hand

[16] Operators required alternately to operate more than one type of machine tools as listed above are to be classified as machine-tool operator, miscellaneous.

MACHINE-TOOL OPERATOR, PRODUCTION

Class A—Sets up machines by determining proper feeds, speeds, tooling and operation sequence or by selecting those prescribed in drawings, blueprints, or layouts; makes necessary adjustments during operation 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 machines 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.

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.

MILLING-MACHINE OPERATOR

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

Performs a variety of work such as grooving, planing, 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.)

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 one to eight 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.)

## TOOL AND DIE MAKER

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

Constructs and repairs machine-shop tools, gages, jigs, fixtures or dies for forgings, punching, and other metal-forming work. Work involves most of the following: Planning and laying out of work from models, blueprints, drawings, or other oral and written specifications; using a variety of tool and die maker's handtools and precision measuring instruments; understanding of the working properties of common metals and alloys; setting up and operating of machine tools and related equipment; making necessary shop computations relating to dimensions of work, speeds, feeds, and tooling of machines; heat-treating of metal parts during fabrication as well as of finished tools and dies to achieve required qualities; working to close tolerances; fitting and assembling of parts to prescribed tolerances and allowances; and selecting appropriate materials, tools, and processes. In general, the tool and die maker's work requires a rounded training in machine-shop and toolroom practice usually acquired through a formal apprenticeship or equivalent training and experience.

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

Tool and die maker (jobbing)

Worker making dies and tools, die sets, jigs, and fixtures, etc., as the end product of an establishment.

Tool and die maker (other than jobbing)

Worker making and/or maintaining dies and tools, die sets, jigs and fixtures, etc., for use within an establishment.

## 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 a 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; 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.

# INDUSTRY WAGE STUDIES

The following reports cover part of the Bureau's program of industry wage surveys. These reports cover the period 1950 to date and may be obtained free upon request as long as a supply is available. However, those for which a price is shown are available only from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C., or any of its regional sales offices.

## I. Occupational Wage Studies

### *Manufacturing*

Apparel:
- Men's Dress Shirts and Nightwear, 1950 - Series 2, No. 80
- Men's and Boys' Dress Shirts and Nightwear, 1954 - BLS Report 74
- *Men's and Boys' Shirts (Except Work Shirts) and Nightwear, 1956 - BLS Report 116
- Men's and Boys' Shirts (Except Work Shirts) and Nightwear, 1961 - BLS Bulletin 1323 (40 cents)
- Men's and Boys' Suits and Coats, 1958 - BLS Report 140
- Women's and Misses' Coats and Suits, 1957 - BLS Report 122
- Women's and Misses' Dresses, 1960 - BLS Report 193
- Work Clothing, 1953 - BLS Report 51
- Work Clothing, 1961 - BLS Bulletin 1321 (35 cents)
- *Work Shirts, 1955 and 1956 - BLS Report 115
- *Work Shirts, 1957 - BLS Report 124

Chemicals and Petroleum:
- Fertilizer, 1949-50 - Series 2, No. 77
- *Fertilizer Manufacturing, 1955 and 1956 - BLS Report 111
- *Fertilizer Manufacturing, 1957 - BLS Report 132
- Industrial Chemicals, 1951 - Series 2, No. 87
- Industrial Chemicals, 1955 - BLS Report 103
- Paints and Varnishes, 1961 - BLS Bulletin 1318 (30 cents)
- Petroleum Production and Refining, 1951 - Series 2, No. 83
- Petroleum Refining, 1959 - BLS Report 158
- Synthetic Fibers, 1958 - BLS Report 143

Food:
- Candy and Other Confectionery Products, 1960 - BLS Report 195
- *Canning and Freezing, 1955 and 1956 - BLS Report 117
- *Canning and Freezing, 1957 - BLS Report 136
- Distilled Liquors, 1952 - Series 2, No. 88
- Flour and Other Grain Mill Products, 1961 - BLS Bulletin 1337 (30 cents)
- Fluid Milk Industry, 1960 - BLS Report 174
- *Raw Sugar, 1955 and 1956 - BLS Report 117
- *Raw Sugar, 1957 - BLS Report 136

Leather:
- Footwear, 1953 - BLS Report 46
- *Footwear, 1955 and 1956 - BLS Report 115
- Footwear, 1957 - BLS Report 133
- Leather Tanning and Finishing, 1954 - BLS Report 80
- Leather Tanning and Finishing, 1959 - BLS Report 150

Lumber and Furniture:
- Household Furniture, 1954 - BLS Report 76
- Lumber in the South, 1949 and 1950 - Series 2, No. 76
- Southern Lumber Industry, 1953 - BLS Report 45
- *Southern Sawmills, 1955 and 1956 - BLS Report 113
- *Southern Sawmills, 1957 - BLS Report 130
- West Coast Sawmilling, 1952 - BLS Report 7
- West Coast Sawmilling, 1959 - BLS Report 156
- Wood Household Furniture, Except Upholstered, 1959 - BLS Report 152
- *Wooden Containers, 1955 and 1956 - BLS Report 115
- *Wooden Containers, 1957 - BLS Report 126

Paper and Allied Products:
- Pulp, Paper, and Paperboard, 1952 - Series 2, No. 91
- Pulp, Paper, and Paperboard Mills, 1962 - BLS Bulletin 1341 (40 cents)

Primary Metals, Fabricated Metal Products and Machinery:
- Basic Iron and Steel, 1951 - Series 2, No. 81
- Fabricated Structural Steel, 1957 - BLS Report 123
- Gray Iron Foundries, 1959 - BLS Report 151
- Nonferrous Foundries, 1951 - Series 2, No. 82
- Nonferrous Foundries, 1960 - BLS Report 180
- Machinery Industries, 1953-54 - BLS Bulletin 1160 (40 cents)
- Machinery Industries, 1954-55 - BLS Report 93
- Machinery Manufacturing, 1955-56 - BLS Report 107
- Machinery Manufacturing, 1957-58 - BLS Report 139
- Machinery Manufacturing, 1958-59 - BLS Report 147
- Machinery Manufacturing, 1959-60 - BLS Report 170
- Machinery Manufacturing, 1961 - BLS Bulletin 1309 (30 cents)
- Radio, Television, and Related Products, 1951 - Series 2, No. 84
- Steel Foundries, 1951 - Series 2, No. 85

Rubber and Plastics Products:
- Miscellaneous Plastics Products, 1960 - BLS Report 168

Stone, Clay, and Glass:
- Pressed or Blown Glass and Glassware, 1960 - BLS Report 177
- Structural Clay Products, 1954 - BLS Report 77
- Structural Clay Products, 1960 - BLS Report 172

Textiles:
- Cotton Textiles, 1954 - BLS Report 82
- Cotton Textiles, 1960 - BLS Report 184
- Cotton and Synthetic Textiles, 1952 - Series 2, No. 89
- Hosiery, 1952 - BLS Report 34
- Miscellaneous Textiles, 1953 - BLS Report 56
- *Processed Waste, 1955 and 1956 - BLS Report 115
- *Processed Waste, 1957 - BLS Report 124
- *Seamless Hosiery, 1955 and 1956 - BLS Report 112
- *Seamless Hosiery, 1957 - BLS Report 129
- Synthetic Textiles, 1954 - BLS Report 87
- Synthetic Textiles, 1960 - BLS Report 192
- Textile Dyeing and Finishing, 1956 - BLS Report 110
- Textile Dyeing and Finishing, 1961 - BLS Bulletin 1311 (35 cents)
- Woolen and Worsted Textiles, 1952 - Series 2, No. 90
- Wool Textiles, 1957 - BLS Report 134

Tobacco:
- Cigar Manufacturing, 1955 - BLS Report 97
- *Cigar Manufacturing, 1956 - BLS Report 117
- Cigar Manufacturing, 1961 - BLS Bulletin 1317 (30 cents)
- Cigarette Manufacturing, 1960 - BLS Report 167
- *Tobacco Stemming and Redrying, 1955 and 1956 - BLS Report 117
- *Tobacco Stemming and Redrying, 1957 - BLS Report 136

Transportation:
- Motor Vehicles and Parts, 1950 - BLS Bulletin 1015 (20 cents)
- Motor Vehicles and Motor Vehicle Parts, 1957 - BLS Report 128
- Railroad Cars, 1952 - Series 2, No. 86

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

## I. Occupational Wage Studies—Continued

*Nonmanufacturing*

Auto Dealers Repair Shops, 1958 - BLS Report 141
Banking Industry, 1960 - BLS Report 179
Contract Cleaning Services, 1961 - BLS Bulletin 1327 (25 cents)
Crude Petroleum and Natural Gas Production, 1960 - BLS Report 181
Department and Women's Ready-to-Wear Stores, 1950 - Series 2, No. 78
Eating and Drinking Places, 1961 - BLS Bulletin 1329 (40 cents)
Electric and Gas Utilities, 1950 - Series 2, No. 79
Electric and Gas Utilities, 1952 - BLS Report 12
Electric and Gas Utilities, 1957 - BLS Report 135
Hospitals, 1960 - BLS Bulletin 1294 (50 cents)
Hotels, 1960 - BLS Report 173
Hotels and Motels, 1961 - BLS Bulletin 1328 (30 cents)
Life Insurance, 1961 - BLS Bulletin 1324 (30 cents)
Power Laundries and Cleaning Services, 1961 BLS Bulletin 1333 (45 cents)
Power Laundries and Dry Cleaners, 1960 - BLS Report 178

## II. Other Industry Wage Studies

Communications Workers, Earnings in October 1956 - BLS Report 121
Communications Workers, Earnings in October 1957 - BLS Report 138
Communications Workers, Earnings in October 1958 - BLS Report 149
Communications Workers, Earnings in October 1959 - BLS Report 171
Communications, October 1960 - BLS Bulletin 1306 (20 cents)
Communications, 1961 - BLS Bulletin 1343 (20 cents)
Factory Workers' Earnings - Distributions by Straight-Time Hourly Earnings, 1954 - BLS Bulletin 1179 (25 cents)
Factory Workers' Earnings - 5 Industry Groups, 1956 - BLS Report 118
Factory Workers' Earnings - Distribution by Straight-Time Hourly Earnings, 1958 - BLS Bulletin 1252 (40 cents)
Factory Workers' Earnings - Selected Manufacturing Industries, 1959 - BLS Bulletin 1252 (35 cents)
Wages in Nonmetropolitan Areas, South and North Central Regions, October 1960 - BLS Report 190

Retail Trade, Employee Earnings in June 1961:
- Building Materials, Hardware, and Farm Equipment Dealers - BLS Bulletin 1338-1 (25 cents)
- General Merchandise Stores - BLS Bulletin 1338-2 (40 cents)
- Food Stores - BLS Bulletin 1338-3 (35 cents)
- Automotive Dealers and Gasoline Service Stations - BLS Bulletin 1338-4 (40 cents)
- Apparel and Accessory Stores - BLS Bulletin 1338-5 (40 cents)
- Furniture, Home Furnishings, and Household Appliance Stores - BLS Bulletin 1338-6 (40 cents)
- Miscellaneous Retail Stores - BLS Bulletin 1338-7 (35 cents)

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## Regional Offices

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