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New England Labor and Labor Problems . . .

A Special Section of Eight Articles

UNITED STATES DEPARTMENT OF LABOR

BUREAU OF LABOR STATISTICS



UNITED STATES DEPARTMENT OF LABOR

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Monthly Labor Review

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

LAWRENCE R. KLEIN, *Editor-in-Chief*
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New England Labor and Labor Problems . . .

NEW ENGLAND, as the late Bernard De Voto admiringly put it, "is the first American section to be finished, to achieve stability in the conditions of its life. It is the first old civilization, the first permanent civilization in America." Hence all Americans, as a matter of tradition, possess a sympathetic interest in the area that cradled our national development. The problems which beset the area today are thus doubly worthy of attention.

The labor, industrial relations, and general economic problems of New England are complex, and in some ways they differ from those prevailing in other areas of the country. No group of eight articles can cover all significant aspects of such problems. What has been attempted here is a selective analysis of certain tendencies deemed to be of importance, interest, and aid in understanding what is taking place in New England. The reader should not look for more. The problems of New England are and have been a subject for study by both local and national commissions, and it is to the reports of these inquiries that the reader should turn if he desires detailed statistical layouts and packaged recommendations.

The situations at which seven of these articles point touch on the problem areas and industries, the broadening base of manufacturing and the increasing influence of new industries, the real lack of homogeneity within the region in respect to wage levels and labor market characteristics, the mature and generally conservative practice of labor relations and collective bargaining. The eighth article, concerned principally with Boston, portrays the changing level of living of the wage earner and his family over the course of three-quarters of a century.

Generally speaking, the authors have assumed a critical but optimistic attitude toward the particular problems they are discussing, and they recognize also that the problems are plainly but inextricably intermeshed. New England is in a state of thoroughgoing change in its economic base and in the relationship of one State to another. An economy once dominated by textiles is now experiencing the ascendance of aircraft engine and electrical equipment manufactures. But the latter are not pushing ahead directly in the path of the receding textiles. The movements frequently affect different localities. Consequently, there are the serious labor

force dislocations and social problems privy to distressed areas. Such a state of pressures and resistances disturbs wage relationships, variegates wage levels, and tends to make both labor and management cautious and conservative in some of their collective bargaining relationships.

Despite the travail which some New England industries, communities, and workers are experiencing, most of the authors feel that the future holds stability and growth in store, in part because of the character and tradition of the New England people. Perhaps what is lacking in the series, although it is hinted at in several of the articles, especially in the review of living and spending habits, is a separate treatment of the special ethos of the New Englander. In 1888, the first U. S. Commissioner of Labor, in reporting on the status of the Boston working girl, may have caught a glimpse of what is meant by this: "Music, literature, art, lectures, are all within reach, and the working girls of Boston avail themselves of such privileges to a great extent. A buttonhole maker gave as her reason for not living in the suburbs, where living was cheaper, that she would then be debarred from lectures, concerts, oratorios . . . Suspender makers . . . belong to Browning clubs, and discuss the tariff and similar vital issues. Work is regarded as honorable, and the barriers which exist between people of leisure and wage earners may in some cases be overcome."

It is worthwhile to note, in closing, that the first experiment by the Monthly Labor Review in publishing a group of articles on a given subject or locality was ventured in July 1946 on the subject Reconversion in New England. An editorial note introducing those five articles somewhat cautiously warned the reader that they were "summary in scope and are not intended to give a comprehensive survey of general labor conditions in the region." As a matter of fact, now that more than a decade has passed there probably is no risk in revealing the editorial secret that availability of the articles for that issue was completely unplanned, even if fortuitous. Ever since, there has been a residue of guilty feeling that something better was due New England. It is with confidence that the following articles are offered as a modicum of redemption.

—L. R. K.

Contributors to the Special Section

The Bureau of Labor Statistics is profoundly grateful to the authors of the eight articles in this issue of the Monthly Labor Review which make up the special section entitled "New England Labor and Labor Problems." Each author is a specialist on the particular subject of his article and also a working resident of New England. The patience of all authors has been strained during the many months this project has been under way, but their diligence has been unflagging; it certainly has been fruitful. No effort has been made to limit or otherwise influence the point of view of the authors to conform with any official policy with respect to the general subject matter.

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Profiles of Worker Family Living in Boston, 1875-1950

Seventy-five years of steadily growing income, credit, and technology have greatly changed patterns of expenditures of worker families in Boston.

WENDELL D. MACDONALD

THE ECONOMIC PROFILE of the Boston wage earner and his family in 1950 was vastly altered from that of his 1875 counterpart. Seventy-five years of sweeping transition in the manner of day-to-day existence, guided by technological, educational, and institutional advances, had heightened and brightened, at least in a material sense, the manner of living of workers in the Nation's oldest urban area.

Students of the mores of Boston and Bay State worker families have access to the findings in six comprehensive studies of worker-family income, savings, and expenditures. Studies made by Federal or State agencies provide data on the ways in which Boston or Massachusetts wage-earner families exchanged their funds, and in recent years their credit also, for goods and services in 1875, 1888, 1901, 1918, 1934-36, and 1950.¹

In addition to considering the shifts in the manner of family living between various points of time over the past 75 years, this article also explores the special consumption characteristics in 1950 of the Boston area in comparison with those of 10 other large city areas—Baltimore, Chicago, Cleveland, Los Angeles, New York, Philadelphia—Camden, Pittsburgh, San Francisco—Oakland, St. Louis, and the northern New Jersey area.

Summary of Findings

Boston worker families had extensively improved their material plane of living by 1950 as compared with any of the earlier years studied. The proportion of total expenditure accounted for by food declined almost steadily from 1875, when food amounted to 56.5 percent, to 1950, when it

was only 35.4 percent. This was a positive sign of rising living standards according to the Engelian hypothesis.² The percentage of expenditure allocated to "sundries," or miscellaneous, advanced from only 6.2 percent to 35.6 percent over the three-quarters of a century. This kind of trend is regarded as a sign of material improvement by consumption analysts. The increase in number of workers owning their own homes has been marked. In 1875, only 1 percent of those surveyed were homeowners and, by 1901, the ratio was 15 percent for Massachusetts families studied. Among Boston families surveyed, the ratio of homeowners to total families increased from 9 percent in 1918 to 27.4 percent in 1950.

Worker-family money income in current dollars was 5 times as high in 1950 as in 1875, while real income in 1950 dollars increased by only 79 percent over the same span of time. The 79-percent gain in real annual earnings occurred mostly between World War I and 1950.

¹ The approach in all six studies was roughly similar in concept, methodology, and presentation, save that in more recent surveys increased consumer credit has injected complications and added to the need for information about changes in family assets and liabilities. Broad comparisons relating to differences in family income and spending between selected years from 1875 to 1950, separated by rather long intervals, are assumed to be reasonably valid. Definitions, coverage, and concepts are not precisely alike in each study, but there is sufficient comparability among the six surveys to warrant meaningful, although somewhat guarded, conclusions.

Sources of the data are: 1875—Massachusetts Bureau of Statistics of Labor, Sixth Annual Report, March 1875, Pt. IV, Condition of Workingmen's Families, Boston, Wright and Potter, 1875 (pp. 191-450); 1888—U. S. Commissioner of Labor, Seventh Annual Report, 1891, Vol. II, Cost of Production: The Textiles—Pt. III, Cost of Living, 1892; 1901—U. S. Commissioner of Labor, Eighteenth Annual Report, 1903, Cost of Living and Retail Prices of Food, 1904; 1918—Cost of Living in the United States, BLS Bull. 357, 1924; 1934-36—Money Disbursements of Wage Earners and Clerical Workers in the North Atlantic Region, 1934-36, BLS Bull. 637, Vol. II, Eleven Cities, 1939; 1950—Family Income, Expenditures, and Savings in 1950, BLS Bull. 1097, Revised, 1953.

² Ernst Engel (1821-96), chief statistician of the Prussian Bureau of Statistics, held that the percentage of family expenditures used to buy food provided "an accurate and truthful measure of the well-being of a people." See *Die Lebenskosten in Belgien*. (*In* Bulletin of International Statistics, Rome, 1895 Vol. IX, pp. 62-124.)

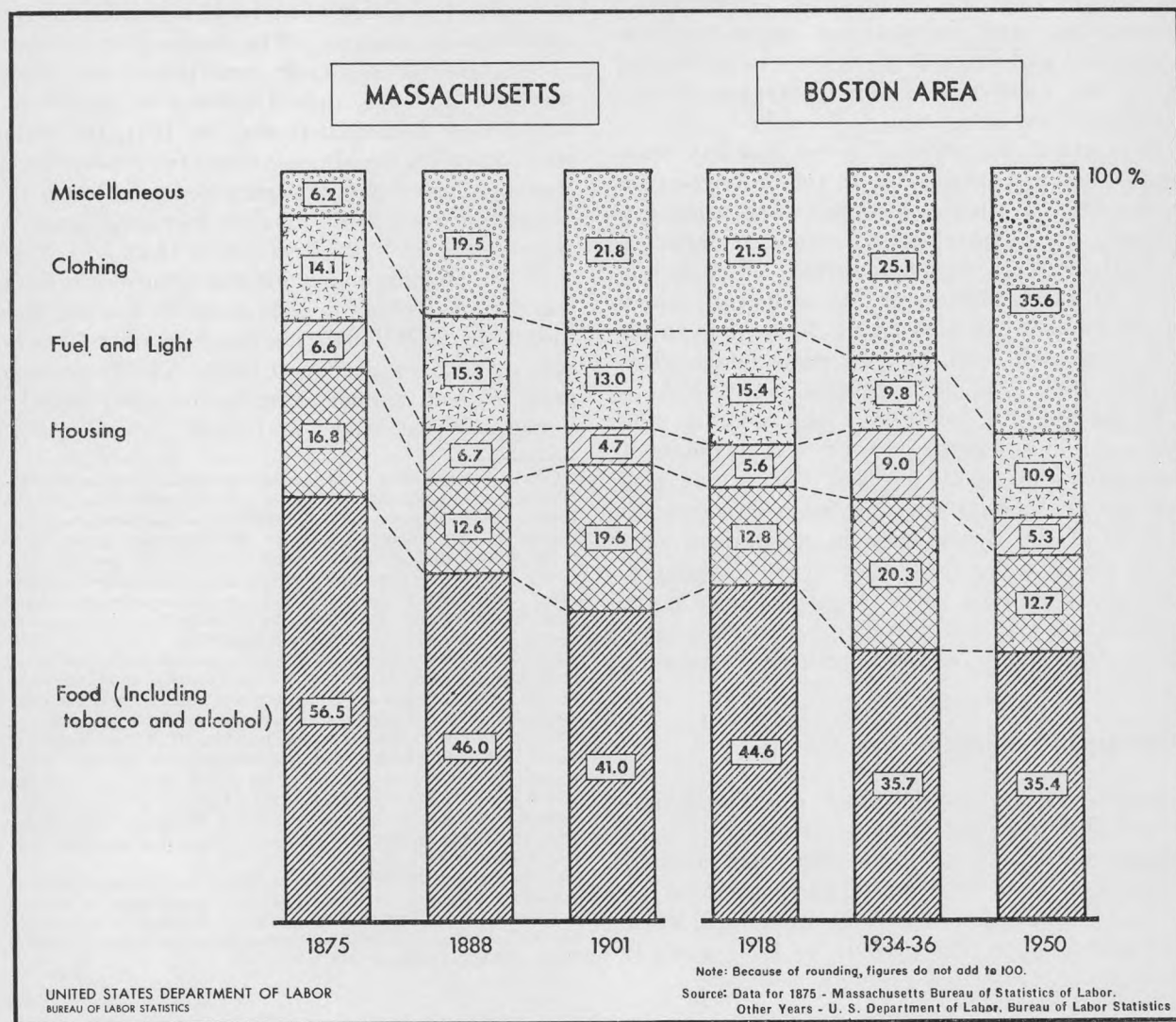
Child labor accounted for one-fourth of worker-family income 75 years ago, but gradually disappeared, and by the mid-20th century was virtually nonexistent. On the other hand, the importance of the wife's earnings to the family budget has increased in the 20th century.

The plane-of-living advance made possible by gains in real income since World War I has been greatly assisted by the expansion of consumer credit. A gradual retreat from frugality has occurred over three-quarters of a century.

The Boston worker family in 1950 had a lower income than worker families in 9 of 11 large cities of the Nation studied in that year. The

mode of living of Boston families in 1950 was not basically different in terms of consumption habits than in other large cities, except for a few significant items of spending. The Boston worker family spent the least, the figures show, among the 11 large cities for alcohol, but expended the most for shelter and tobacco. The Boston worker family also had the largest outlay for reading material, but was among the lowest for auto transportation. For food consumption, at home and in restaurants, these families spent close to the median among the Nation's large cities. In expenditure for clothing, Boston ranked eighth among the 11 cities.

Proportion of Expenditures for Specified Commodity Groups, by Wage-Earner Families in Boston Area and Massachusetts, Selected Periods, 1875-1950



There was little evidence that consumption patterns were much affected by national origin except with regard to a few specific items in the case of first-generation American families or where religious customs dictated food preferences. The foreign-born heads of families were 69 percent of the group surveyed in 1875, 76 percent in 1888, and 57 percent by 1901. In the 1934-36 survey group, the ratio was 39 percent. By 1950, it was only 19 percent.

Rise in Levels of Living

The mode of living of worker families in Boston, as elsewhere in the Nation, exhibited an astounding transformation between 1875 and 1950. Material standards improved so markedly over this sweep of time that the shift was almost one of kind rather than degree. Economic forces, inventive genius, social reforms, and the aspirations of people of varied backgrounds traced an entirely new economic profile. Burgeoning technological inventiveness sparked a rise in industrial productivity which made possible higher earnings, shorter workweeks, and more leisure for workers and minimized the need for children's labor to augment the family's income. The talent of Americans for innovation produced and marketed the new varieties of goods and services—canned goods, frozen foods, refrigerators, radios, automobiles, televisions, diaper services, baby foods—which have not only set the tone but practically dictated the mode of modern living.

Broadened social consciousness led to pressure for improved housing conditions and factory regulation, through civic action and legislation. A growing awareness of the need for improved sanitation and preventive medical care brought about a healthier, stronger people in the Bay State. Traditionally a leader in programs for social and economic progress, Massachusetts was

³ See *Seventy Years of Service—The Story of BLS: A Special Section*, Monthly Labor Review, January 1955.

⁴ As long ago as 1853, E. Ducloux, at the International Statistical Congress, classified family spending into groupings that even today are valid and form the framework of most consumer expenditure studies. One of the two-way Ducloux classifications has been rejected and his division of elastic expenditure into two groups, "good" and "bad," is no longer followed by modern statisticians. See Edouard Ducloux, *Budgets économiques des classes ouvrières en Belgique, subsistances, salaires, population*. Brussels, M. Hayez, imprimeur de la Commission centrale de statistique, 1855 (pp. 6-8).

⁵ The U. S. Bureau of the Census, in the 1950 Census of Population, reported that 18.1 percent of all married women in the Boston metropolitan area were in the labor force.

among the earliest States to legislate in regard to education, sanitation, working conditions of women and children, and industrial safety.

The contributions of the labor movement in urging reforms and sponsoring legislation to improve living conditions and education should not be overlooked. Progressive and enlightened employers have similarly contributed to the great change, often as pioneers. The role of the fact-finder was equally valuable in investigating and publicizing the true condition of the worker and his manner of living.³

The pattern of Boston family living, if techniques of investigation were adequate, might be measured not only by material consumption but by nonmaterial criteria as well. How to measure nonmaterial values remains, of course, an unsolved problem. The lyceum and the local literary society have for the most part disappeared from community life. Although the symphony orchestra and other concert music retain their popularity, and museums and lectures continue to attract Bostonians, such amusements as the horse and dog races, the drive-in movies, and television win large attendance totals. These latter expenditures would be of the luxurious and improvident type in the Ducloux classification.⁴

It is gratifying that the children are no longer forced into employment at an early age to enable the Boston family to make ends meet or to raise family living standards. On the other hand, the working wife or mother spends her time gainfully employed outside the house and away from the children for the length of the work day and week, frequently in order that the components of the new higher standard of living may be purchased.⁵

The rise in consumer credit accounted for a sizable proportion of the greater spending of Boston families by the year 1950. Current family income was no longer divided in the traditional and orthodox fashion between current consumption and savings. The savings considerations have been somewhat dampened and income at the halfway mark of the 20th century was more likely to be earmarked for past consumption than for savings. Whatever the reasons—the increase in social security, buying in anticipation of wartime shortages, the rise of private pension and health funds, a stout faith in the future, the siren call of the "commercial," or some shift in workers' value scales—parsimony appeared to be in full retreat.

Massachusetts Wage-Earner Families, 1875

The profile of the wage-earner family 75 years ago⁶ was completely different from the 1950 counterpart. A study of wage-earner families in Massachusetts in 1875, completed by the Massachusetts Bureau of Statistics of Labor, recorded that the average size was 5.1 persons, in contrast with 3.5 for Boston in 1950. (See table 1.) The annual income of the earlier year families amounted to \$763, or \$2,180 in 1950 dollars.⁷ Of this, \$738 was spent for current consumption.

The consumption pattern of that era was greatly at variance with the 1950's. Not unexpectedly, and in accordance with Engel's law of consumption, a much larger percentage of expenditure was made for food in 1875 by these lower income families—56.5 percent, compared with 35.4 percent in 1950. Table 2 and the chart indicate strikingly the decreasing proportion of family expenditures allocated to food purchases over the period of the six studies, with each survey disclosing a smaller percentage than the previous one, except that the 1918 survey indicated an increase from 1901. This latter relationship, however, may be attributed to the exceedingly high price level for foodstuffs in the World War I era.

Another traditional measure of material well-being is the proportion of family expenditures for the miscellaneous or "sundries" group,⁸ i. e., everything except food, housing, fuel and light, and clothing. There has been a steady advance in the proportion spent for this catchall group—from 6.2 percent in 1875 to 35.6 percent in 1950. Not only did total volume of sundry purchases expand, but the number and varieties of goods and services in the mid-20th century market basket were wholly unlike those in the first Massachusetts sampling.

A notion of the way in which families lived in 1875 in the Bay State is indicated by the presence or absence of expenditures for certain prestige possessions among the families sampled. For example, 11 percent of these families owned pianos or organs, 34 percent were the owners of sewing machines, and 52 percent had one or more rooms carpeted. The carpeting was important not only for decorative purposes but also for insulation during cold winters. Twenty-six percent owned pews in churches.

Another important yardstick of family well-being is the relative importance of meat versus vegetables in their diet. Le Play, who greatly influenced Carroll D. Wright, the director of the first of these Massachusetts expenditure studies, has said that "economic progress could be measured by changes in the proportion of food expenditure, especially the relation between animal and vegetable foods."⁹ Consequently, an attempt was made to obtain this relationship by classifying each family by the number of times meat was eaten each day. The tally was as follows: Of 397 families, 83 had meat once a day, 223 twice a day, 88 three times a day, and only 3 ate no meat.¹⁰

The actual menus of families for three meals a day were collected in this survey and described in detail. Although meat dishes were quite common, there was a monotonous similarity, not only from day to day, but from family to family, in the workers' diet. The usual supper menu was bread, butter, gingerbread, and tea. Not unexpectedly in Boston, baked beans appeared on most family tables each Saturday night, even as today, and the traditional meal of baked beans warmed over for Sunday breakfast was prevalent even in 1875. The ethnic composition of these families apparently had little impact on food consumption, as families ate what was available, not what they would choose because of tradition or custom in the old country.

⁶ For 1875, the figures presented in this article are the results of personal investigations by agents of the Massachusetts Bureau of Statistics of Labor in the "condition, social and pecuniary," of 397 families of workmen in 15 cities and 21 towns of Massachusetts, which were representative of "places where considerable business was carried on and wage-laborers congregated." The heads of families considered were "wage-laborers, men of family, and with comparatively few exceptions, having children dependent upon them for support. . . . As regarded occupations, those prominent in or peculiar to certain towns, were designated as proper for investigation": i. e., ". . . mill operatives at the seats of textile manufacture; those engaged in building trades in large or growing towns; leather-finishers and shoemakers, in those places devoted to the manufacture or utilization of leather; metalworkers in the foundry districts; out-door laborers where public improvements were in progress, or the moving of merchandise carried on to a great extent; and finally, shop trades in those towns having prominent or peculiar industries."

⁷ Adjusted by means of data in index of estimated cost of living in U. S., 1820-1913, compiled by the Federal Reserve Bank of New York and converted to a 1947-49 base by the Bureau of Labor Statistics, which was linked to the BLS Consumer Price Index for years subsequent to 1913. (Mimeographed table available upon request to the Bureau of Labor Statistics.)

⁸ These ratios emphasized by both Engel and Le Play have limited use, according to Carle C. Zimmerman, in his *Consumption and Standards of Living* (New York, D. Van Nostrand Co., 1936, p. 286). "Those who use advancement expenditures as an index of well-being imply that the more complex and prosperous peoples and societies are happier and have a greater fund of psychological well-being than the simpler peoples and societies."

⁹ F. Le Play, *Ferblantier, couvreur et vitrier d'Aix-les-Bains*. (*In Les ouvriers des deux mondes*. Paris, La Société internationale des études pratiques d'économie sociale, 1859, Vol. 2, pp. 9-62.)

¹⁰ In this tally, the combination of eggs at breakfast and fish at supper, or vice versa, was counted as meat for one meal.

TABLE 1.—Average family size, annual income, and current expenditures for goods and services by worker families surveyed in the Boston area and Massachusetts, 1875-1950

Year and survey group	Number of families in sample	Average family size	Annual income after taxes		Current expenditures for goods and services ¹	
			Current dollars	1950 dollars	Current dollars	1950 dollars
<i>Massachusetts</i>						
1875: Wage-earner families.....	397	5.1	\$763	\$2,180	\$738	\$2,109
1888: Cotton-textile worker families.....	400	5.6	704	2,193	661	2,059
1901: Wage-earner families.....	2,577	4.6	818	2,406	731	2,150
<i>Boston area</i>						
1918: Wage- and salaried-worker families.....	407	5.3	1,477	2,363	1,438	3,301
1934-36: Wage- and clerical-worker families.....	516	4.0	1,571	2,766	1,570	2,764
1950: Wage- and clerical-worker families.....	146	3.5	3,900	3,900	4,301	4,301

¹ In this table, the 1875 through 1918 figures count insurance premiums, and the 1875 through 1934-36 figures count gifts and contributions, as current expenditures for goods and services. Conversely, the 1934-36 and 1950 figures exclude outlays for insurance premiums and the 1950 figure also excludes gifts and contributions. This should be borne in mind when comparing the figures in this table.

SOURCE: See text footnote 1.

Typically, the families of 75 years ago bought 2 tons of coal per year for \$19 and 3 cords of wood for \$24 for heating and cooking purposes, and purchased kerosene for lighting at an annual cost which ranged from \$3.60 to \$6 per year. A few families, however, depended upon their children to gather firewood on the streets.

The penchant for self-improvement was exemplified by the fact that 264 of 397 families bought books and papers. Their traits as joiners are shown by the 135 families who allocated funds for membership in fraternal societies. Many of these organizations had beneficial features often carrying an insurance privilege. Significantly, only one family in this survey reported a direct outlay for life insurance premiums, whereas the Boston worker-family averaged \$169 for insurance premiums in 1950.

The most significant findings of this 1875 study, however, are those dealing with the sources of

¹¹ Some understatement of income, the treating of personal insurance not as savings but as an expenditure, and the unusual amount spent on time payments for consumer durables during 1950, in anticipation of expected shortages and price rises because of the Korean conflict, make it virtually impossible to gage with preciseness the amount by which these Boston families went into debt.

¹² In 1888, data were obtained from 400 Massachusetts families in which the head of the family was employed in the cotton-textile industry. The figures used in this article are for all families surveyed and not for the "normal families" (families selected according to specified criteria), for which comparative data are also presented in the original report.

worker-family income. For example, about 35 percent of heads of worker families were able by their individual earnings to supply family needs, while 64 percent relied upon the earnings of wives and children, particularly the latter. Commonly, boys at 12 and girls at 15 were forced by necessity into labor in large numbers. These young people supplied 25 percent of family income, while the father accounted for 75 percent, and the wife for only 0.1 percent. (See table 3.) The children accounted for one-fourth to one-third of total earnings, children under 15 accounting for one-eighth to one-sixth. Without the assistance of children, a majority of families would have been in poverty or debt. With the aid of these younger workers, however, one-half of the families saved money, only one-tenth went into debt, and the rest broke even.

In retrospect, it seems miraculous that the average annual income of \$763 (or \$2,180 in 1950 dollars) reported by these Massachusetts worker families exceeded their reported expenditures by \$25, or 3 percent of their incomes. By contrast, in 1950, with average incomes of \$3,900, the average Boston wage-earner and clerical family laid out more funds for current consumption of goods and services than were taken in as income.¹¹

Massachusetts Cotton-Textile Workers, 1888

Cotton-textile worker families, with an average of 5.6 members, had annual incomes of \$704 in 1888 (\$2,193 in 1950 dollars), according to a U. S. Bureau of Labor Statistics study of 400 cotton-textile worker families in Massachusetts.¹² The difference in annual earnings between the 1875 and 1888 studies is explained partially by the fact that in the later study the workers were entirely from one industry and not as many higher paid craftsmen were represented. In spite of this limitation, certain meaningful comparisons are possible. First, the food expenditure in 1888 was a smaller proportion of the total outlay than in 1875, as food prices had dropped. Both the fuel and light group and the clothing category accounted for about the same percent of the total in both years. Housing expense, on the other hand, had declined as a percentage of all expenditures between 1875 and 1888, but this trend was no doubt greatly influenced by the fact that a large number of the textile workers included in

the 1888 sample lived in small towns where rents were lower and company-owned houses more common than in the cities.

Most important, however, was the rise in the percentage of income available for outlay on the miscellaneous or sundry group, where the percentage rose from 6.2 percent in 1875 to 19.5 percent in 1888, in spite of a lower annual dollar income in the later study. Although retail prices had declined 9 percent from 1875 to 1888, the implication here is that a greater quantity and variety of goods as well as subsistence items were attainable by wage earners.

Although the variety in the family budget was not wide by modern standards, nevertheless by 1888 there began to appear significant expenditures for amusements. Among the 400 families, 210 reported an average of \$11.50 for this category. Two hundred and eighty-nine families spent an average of \$9.47 for tobacco. Labor organization dues were paid by 111 families who averaged \$6.56. Books and magazines accounted for \$6.47 per family, with 327 making expenditures of this kind. Nevertheless, there was only slender evidence in these first two Massachusetts expenditure studies of the amazing changes that were destined to occur by 1950.¹³

As in 1875, it was impossible for wage earners by 1888 to make accounts balance solely through the husbands' efforts. On the average, these Massachusetts cotton-textile worker families could count on an annual income from all sources of \$704, of which \$431 was earned by the husband. In 152 of the 400 families, there was an income from boarders and lodgers; in 105, income from wives' earnings; and in 138, from children's earnings.

TABLE 2.—Distribution of current expenditures for goods and services by worker families surveyed in the Boston area and Massachusetts, 1875-1950

Year and survey group	Total expenditures for goods and services ¹		Food (including tobacco and alcohol)		Housing		Fuel and light		Clothing		Other goods and services	
	Dollars	Per cent	Dollars	Per cent	Dollars	Per cent	Dollars	Per cent	Dollars	Per cent	Dollars	Per cent
<i>Massachusetts</i>												
1875: Wage-earner families.....	\$738	100.0	\$417	56.5	\$124	16.8	\$49	6.6	\$104	14.1	\$46	6.2
1888: Cotton-textile worker families.....	661	100.0	304	46.0	83	12.6	44	6.7	101	15.3	129	19.5
1901: Wage-earner families.....	731	100.0	300	41.0	143	19.6	34	4.7	95	13.0	159	21.8
<i>Boston area</i>												
1918: Wage- and salaried-worker families.....	1,438	100.0	641	44.6	184	12.8	80	5.6	222	15.4	309	21.5
1934-36: Wage- and clerical-worker families.....	1,570	100.0	561	35.7	319	20.3	141	9.0	154	9.8	394	25.1
1950: Wage- and clerical-worker families.....	4,301	100.0	1,524	35.4	548	12.7	229	5.3	470	10.9	1,530	35.6

¹ See footnote 1, table 1.

SOURCE: See text footnote 1.

NOTE.—Because of rounding, sums of individual items do not necessarily equal totals.

One hundred and ninety-one families reported on the average a surplus of \$138 and 136 families reported a deficit of \$48, the others breaking even.

Wage Earners in Massachusetts, 1901

At the turn of the century, a third survey of family living in Massachusetts was conducted by the Bureau of Labor Statistics.¹⁴ By 1901, the income of Massachusetts wage-earner families had risen to \$818, or \$2,406 in 1950 dollars. These Massachusetts families spent an average of \$731. The proportion of income spent on food was 56.5 percent in 1875, 46 percent in 1888, and only 41 percent in the 1901 study. The outlay for sundries as a percentage of total expenditures, on the Massachusetts families spent an average of \$731. other hand, was higher by 1901—21.8 percent.

It was significant that 2,038 of the 2,577 wage earners' families in the 1901 survey reported an annual surplus, while only 143 had a deficit. The remaining 397 families' incomes and expenditures were approximately in balance.

¹³ In 1887, 1 year previous to the date of this study of cotton-textile workers, Looking Backward, 2000-1887, by Edward Bellamy, was published in Boston (Houghton, Mifflin and Co.), which with its sequel, Equality (New York, D. Appleton and Co., 1897), contained an amazing forecast of the future economic profile of Boston by the year A. D. 2000. Bellamy, in his dream of a future society, described the "electroscope"—his word for television, which he visualized would enter every Boston home by the year 2000. Furthermore, the programs would be not only for enjoyment, but also for educational purposes. Bellamy also anticipated heating and cooking by electricity, and eating from paper plates. The radio would become commonplace in the future, according to Bellamy, but he believed that sound would come through telephones, not aeriels and individual sets. Curiously enough, he did not anticipate the automobile and its ability to bring about a complete transformation in transportation and living habits.

¹⁴ The 1901 survey covered 2,577 families of wage earners and small-salaried workers in Massachusetts during 1899-1902 (most of the data applying to the year 1901). All investigations were limited to families headed by persons with a salary or wage not exceeding \$1,200.

TABLE 3.—Average annual income of worker families surveyed in the Boston area and Massachusetts, by source of funds, 1875 to 1934-36¹

Year and survey group	Average income (current dollars)	Husband		Wife		Children		Other	
		Average income	Percent of total	Average income	Percent of total	Average income	Percent of total	Average income	Percent of total
<i>Massachusetts</i>									
1875: Wage-earner families.....	\$763	\$572	75.0	\$1	0.1	\$190	24.9	-----	-----
1888: Cotton-textile worker families.....	704	431	61.2	48	6.8	155	22.1	\$70	9.9
1901: Wage-earner families.....	818	665	81.3	2	.2	22	2.7	129	15.8
<i>Boston area</i>									
1918: Wage- and salaried-worker families...	1,477	1,277	86.5	19	1.3	127	8.6	54	3.7
1934-36: Wage- and clerical-worker families...	1,571	1,302	83.0	² 172	² 10.9	(²)	(²)	97	6.1

¹ Data not available for 1950.

² Earnings of wife and children were combined in the survey reports.

SOURCE: See text footnote 1.

In regard to sources of income, a sensational transformation had occurred since the time of the earlier surveys. By the early 20th century, only 9 percent of the worker families had incomes from the earnings of children, as compared with 35 percent of the families in the 1888 study. About 31 percent of the 1901 families obtained funds from keeping boarders and lodgers and 15 percent derived funds from miscellaneous sources.

The average family income from the earnings of the husband amounted to \$665 in current dollars, or 81 percent of the total, whereas the wife and children accounted for less than 1 percent and 3 percent, respectively, of the total income, while income from other sources (mostly boarders and lodgers) was 16 percent. Of the 2,577 families in the 1901 Massachusetts sample, 15 percent owned their own homes, while 85 percent rented their dwellings. (See table 4.) In 1875, the percentage of homeowners had been only 1 percent.

In the 1901 study, the expenditure patterns of a subsample of 253 families¹⁵ portray the diversity of expenditures and the importance of spending for goods and services which were rarely found in the earlier system of living. For example, 21 percent of these families contributed to charity,

92 percent to religious organizations, 52 percent to labor organizations, and 73 percent contributed to other kinds of organizations. By 1901, the necessity and importance of insurance had grown in the view of the average wage earner in Massachusetts along with the rise of life insurance firms, since 28 percent of these families made outlays for life insurance and 18 percent for property insurance—expenditures almost nonexistent in 1875 and 1888.

These same worker families made an outlay of \$79 per year for furniture, \$11 for books and newspapers, and a similar amount for amusements and vacations. Alcoholic beverages accounted for \$18 of their spending and tobacco for \$13, in 1901.

Boston Wage and Salaried Workers, 1918

The sources and amounts of Boston family income at the close of World War I are recorded in a Bureau of Labor Statistics study.¹⁶ The average wage-earner family size was 5.3 for 407 families for whom detailed income and expenditure information is presented.

The average annual income of \$1,477 in current dollars for these families was double that of the 1888 families and nearly twice that of the 1875 and 1901 families. In 1950 dollars, the relationship was quite different; the 1918 income of \$2,363 was less than that in the 1901 study and only about 8 percent more than in the 2 earlier studies. Of the 1918 income, about 86 percent was earned by the husband, 1 percent by the wife, and 9 percent by the children. Other sources accounted for 4 percent.

Light is cast upon one aspect of living conditions of Boston worker families in 1918 by examining housing facilities. Although these families did not uniformly have modern conveniences, nevertheless

¹⁵ As these families were selected solely on the basis of their ability to give the information sought in the desired detail, the data must be interpreted with caution.

¹⁶ For 1918, the figures pertain to 407 wage-earner and salaried-worker families surveyed in Boston. Eligibility requirements for families to be surveyed were: the family must have as a minimum a husband and wife and at least one child who is not a boarder or lodger (thus increasing average family size); the family must have kept house in the locality for the entire year covered; at least 75 percent of the family income must come from the principal breadwinner or others who contribute all earnings to the family fund; all items of income and expenditures of members other than those living as lodgers must be obtainable; the family may not have boarders nor over three lodgers, either outsiders or children living as such; and the family must have no subrental other than furnished rooms for lodgers. Slum or charity families or non-English-speaking families who had been less than 5 years in the United States were not taken.

a major step forward had been made since the earlier studies. Of 373 Boston families who resided in houses, flats, or apartments,¹⁷ 206 had bathrooms and practically all had inside flush toilets. Nine percent of these Boston wage-earner families owned their residence as compared with 20 percent in 1934-36 and 27.4 percent in 1950. In the earlier Massachusetts studies, only 1 percent were homeowners in 1875, 7.5 percent in 1888, and 15 percent in 1901.

Boston Wage and Clerical Workers, 1934-36

The 1934-36 BLS study of wage earners and clerical workers in Boston reported an average family size of 4.0 and an annual income of \$1,571 in current dollars, or, in 1950 dollars, \$2,766.¹⁸ The food expenditures amounted to 35.7 percent of the total, but had been 44.6 percent in 1918, while sundry spending accounted for 25.1 percent of the total compared to 21.5 percent 17 years earlier.

The proportion of total expenditures going into clothing in the midthirties was lower in Boston (9.8 percent) than in the other large cities studied. In 1934-36, the average amount spent on automobile transportation by wage-earner or clerical families was smaller in Boston than in any other large city. Incidentally, expenditures for this category were only 2 percent of total expenditures in 1934-36, but were 8.5 percent in 1950.

By the mid-1930's, the proportion of income derived from the chief wage earner of the family was 83 percent, compared with 86 percent in 1918, 81 percent in 1901, and 75 percent in 1875. Other earners (wife and children) accounted for 11 percent and other sources for 6 percent of the average net money income of \$1,571 for the 516 Boston

TABLE 4.—Extent of homeownership among worker families surveyed in the Boston area and Massachusetts, 1875-1950

Year and survey group	Percent		
	Total	Owning	Renting
<i>Massachusetts</i>			
1875: Wage-earner families.....	100.0	1.0	99.0
1888: Cotton-textile worker families.....	100.0	7.5	92.5
1901: Wage-earner families.....	100.0	15.0	85.0
<i>Boston area</i>			
1918: Wage- and salaried-worker families.....	100.0	9.0	91.0
1934-36: Wage- and clerical-worker families...	100.0	20.0	80.0
1950: Wage- and clerical-worker families.....	100.0	27.4	72.6

SOURCE: See text footnote 1.

TABLE 5.—Percentage distribution, by nativity, of the family heads in worker families surveyed in the Boston area and Massachusetts, 1875-1950¹

Nativity	Percent				
	Massachusetts			Boston area	
	1875	1888	1901	1934-36 ²	1950 ³
Worker family heads.....	100.0	100.0	100.0	100.0	100.0
American born.....	31.5	23.8	43.3	60.9	81.0
Foreign born.....	68.5	76.2	56.7	39.1	19.0
Canada.....		2.8	14.4	2.7	3.2
Canada (French).....	7.3	18.2		1.4	.4
England.....	20.2	22.0	5.6	1.4	.7
Germany.....	6.5	1.2	2.1	.4	.4
Ireland.....	33.5	26.2	26.8	13.8	3.7
Italy.....				8.8	3.3
Russia.....			1.3	2.7	2.9
Scotland.....		3.3	2.0		.4
Sweden.....			2.8	.9	3.3
Other.....	1.0	2.5	1.7	7.0	.7

¹ Data not available for 1918.

² Data applying to 1934-36 are for homemaker, not head of family. See text footnote 19.

³ Data on nativity were not collected in the 1950 BLS study. Data in this column are from the 1950 Census of Population and are for all families (not just wage-earner families) and, therefore, may understate the proportion of foreign born among wage-earner families.

SOURCE: See text footnote 1.

wage and clerical worker families surveyed in 1934-36. Of the Boston families, 64 percent had a net surplus, 32 percent reported a net deficit, and the remainder came out even.

By 1934, the profile of the Boston worker family had undergone immense changes. Over 90 percent of Boston wage-earner families who owned their houses now had central heat, gas or electricity for cooking, running hot water, and inside flush toilets, while 24 percent had electric refrigerators, 54 percent possessed telephones, and 43 percent had garden space. For the 80 percent who rented, these facilities were less prevalent.

Fourteen percent of the Boston families owned automobiles, on which they spent an average of \$168 for operation and maintenance. For medical care during the year, Boston wage- and clerical-worker families spent an average of \$49, while \$41 went to community organizations, welfare, and gifts. Clothing outlay had declined from \$222 in 1918, to \$154 in 1934, partly because apparel

¹⁷ Excludes those living in owned dwellings and those whose rent included heat or light.

¹⁸ In 1934-36, the group of wage-earner and clerical-worker families surveyed in Boston numbered 516 white families and was confined to those families with 2 or more persons, with family incomes of at least \$500 per year, who had not been on relief during the survey year. A \$200 per month or \$2,000 per year maximum income limit was established for inclusion of clerical workers. No income limit was set for wage earners, but at least 1 earner in a wage-earner family must have been employed for 36 weeks and must have earned at least \$300. Families interviewed were drawn from a random sample. Data obtained for Boston pertain to the year ending February 1935.

prices had decreased by 14.4 percent in Boston. Relatively few persons owned pews in churches, but large numbers contributed in other forms to religious societies in 1934.

Homemakers of 198 families, or 39 percent of the total sample surveyed in 1934-36, were born outside of the United States.¹⁹ (See table 5.) Of this number, the predominating national groups of foreign born were Irish (14 percent), and Italian (9 percent). In the 1875 survey, the ratios were 69 percent of family heads foreign born, with 34 percent of these born in Ireland and 20 percent in England. No information on nativity of either family heads or homemakers was collected in the 1950 survey by the Bureau of Labor Statistics, but the Census of Population for that year indicated only 19 percent of all family heads in Metropolitan Boston were foreign born. This figure may understate the proportion of foreign born among wage earners, which is always higher than among the heads of all families.

This transition in composition of population by national origin of family head constituted a major change in the profile of the wage-earner family in Boston. However, apparently incidence of foreign birth little affected expenditure patterns or material wants of Boston worker families. Although there were differences in preferences for specific commodities and services among first-generation families, by far the overriding considerations determining the manner of family living were level of income, the availability of goods and services, and family size and composition. Examination of the detailed family food menus in the 1875 study and the food item purchases in the 1888 and 1901 surveys by national origin fails to reveal any important nationality tendencies in food consumption, suggesting rapid acceptance of consumption patterns in the country of adoption. Heritage, of course, was important in helping to form the social, political, and cultural patterns of the Boston community. National origin appears to have played a minor role except in such matters as food recipes handed down from mother to daughter,

Table 6.—Average money receipts, average outlays, and percentage distribution of outlays by two-or-more person wage- and clerical-worker families surveyed in the Boston area, 1950

Item	Amount		Boston's rank among 11 large city areas ¹
	Amount	Percent of total ³	
Number of families covered.....	146		
Average family size (persons).....	3.5		2
<i>Average money receipts</i>			
Money income before personal taxes.....	\$4,138		10
Money income after personal taxes ²	3,886		9
Other receipts.....	14		8
Total receipts (after taxes).....	3,900		10
<i>Average outlays</i>			
Current outlays for goods and services (total).....	\$4,301	100.0	10
Food and drink.....	1,352	31.4	5
Alcoholic drinks.....	66	1.5	11
Clothing.....	470	10.9	8
Shelter (current expense) ⁴	548	12.7	1
Fuel, light, refrigeration, and water.....	229	5.3	1
Household operation.....	165	3.8	8
Housefurnishings and equipment.....	259	6.0	9
Automobile purchase and operation.....	367	8.5	9
Other transportation.....	97	2.3	6
Medical care.....	203	4.7	9
Personal care.....	101	2.3	3
Recreation.....	203	4.7	10
Reading.....	44	1.0	1
Education.....	15	.3	8
Tobacco.....	106	2.5	1
Miscellaneous goods and services ⁵	76	1.8	1
Gifts and contributions.....	121		5
Personal insurance premiums.....	169		11
Net change in assets and liabilities ⁶	-347		2
Payments on principal of mortgages and downpayments on owned homes.....	108		10
Balancing difference (average) ⁷	-344		1

¹ The 10 large city areas in addition to Boston are: Baltimore, Chicago, Cleveland, Los Angeles, New York, northern New Jersey area, Philadelphia-Camden, Pittsburgh, San Francisco-Oakland, and St. Louis. See BLS Bull. 1097, Revised, 1953.

² After deduction of Federal and State income, poll, and personal property taxes.

³ Because of rounding, percentages do not add to 100.

⁴ Rent, interest on mortgages, taxes on owned homes, and maintenance.

⁵ A great variety of items: funeral expenses, alimony, etc.

⁶ Personal insurance premiums and all outlays for durable consumer goods except dwellings are treated as current expenses and not included in the assets and liabilities.

⁷ Represents the average net difference between reported money receipts and reported money disbursements (i. e., sum of current outlays, gifts and contributions, and personal insurance premiums subtracted from sum of money receipts, after taxes, plus net decrease in assets and liabilities). It is a measure of the net reporting error and cannot be assigned to any one segment of the accounts.

SOURCE: See text footnote 1.

ter, or skills brought by first-generation immigrants in the fabrication of clothing or housefurnishings.

Boston Wage and Clerical Workers, 1950

The average size in 1950 of wage-earner and clerical-worker families in Boston, 3.5 persons, was smaller than that in any of the 5 earlier surveys but was second largest among the 11 cities of 1,000,000 population or more surveyed in that year.²⁰ (See table 6.) On the other hand, total

¹⁹ In the 1934-36 study, nativity data in regard to the homemaker (usually the wife) were collected, but no information on the head of the family.

²⁰ For 1950, the figures presented in this article were obtained from 146 Boston wage- and clerical- or sales-worker families of 2 or more persons. They were drawn from a random sample and no lower income was set for inclusion nor was any restriction imposed as to receipt of public assistance at any time during the survey year. A \$10,000 maximum income limit was fixed for inclusion of wage- and clerical- or sales-workers.

money receipts after personal taxes amounted for these families to \$3,900 (compared with an average of \$4,038 for the United States²¹)—a level exceeded in 9 of the other large cities, and surpassing only the money income in Baltimore.

In this 1950 survey, the proportion of total expenditures allocated to "miscellaneous" was 35.6 percent, surpassing even the percentage outlay of 35.4 percent spent for food by Boston wage-earner families. These same families had a housing cost which was only 12.7 percent of all purchases. This low ratio compared to 1934-36, when it was 20.3 percent, is attributable to two factors: rent control and much higher real incomes.

Inspection of the differences in the average amount of expenditure for major consumption commodities among the 11 cities reveals that Boston worker families were relatively low spenders for most major categories, but purchased partly by necessity and partly by inclination a few significant items of consumption at relatively high rates compared to families in the other large cities.

The average shelter cost for the Boston wage earner in 1950, for example, was higher than in the other 10 large cities. Similarly, the group which includes fuel, light, refrigeration, and water was one for which Boston families laid out more than in any other large city.²² Boston families ranked first in spending both for tobacco products and for reading materials. For food consumption, at home and in restaurants, Boston wage-earner families spent close to the median among the Nation's large cities. In contrast to the relatively high tobacco expenditures in Boston, the annual worker-family outlay for alcoholic beverages was less than in the other large metropolitan areas.²³ In expenditures for clothing, Boston ranked eighth among the 11 cities.

The relatively low average spending for automobile transportation amounting to only \$367 per worker family, was explained by the much higher rank (6th) for Boston in terms of spending for "other transportation," compared to a rank of 9th among the 11 cities for auto transportation.

Perhaps even more revealing than the amounts spent and the rank of Boston was the wide variety of items of which worker families made purchases in 1950 compared to the earlier years in which family expenditures had been studied. In common with worker families elsewhere in the Nation, Boston families bought television sets and musical

instruments, television combination sets, mechanical refrigerators, cooking stoves, and automatic washing machines in large quantities. The improved plane of living in 1950 was manifest in the purchase of such services as laundry-sent-out, launderettes, and babysitting.

Two hundred and three dollars per wage-earner family were spent for medical services and \$46 per family for clothing services (that is, dry cleaning, shoe repairing, and like items). In the recreation group, Boston worker families made their largest single outlay for paid admissions to concerts and sporting events, and the next greatest for cameras and photographic supplies. All of these were the components of a system of living replete with commodities and services of the sundries group, many of which were unknown and even undreamed of at the time of the previous studies.

Conclusion

The strands of advancement threaded their way through the Boston community, spinning and weaving a new fabric of living in a continuous process over three-quarters of a century. Advancing technology made available new goods at reasonable prices and, at the same time, higher wages and shorter hours. Reform movements focused on education, slum clearance, and working conditions. Political action exercised by various groups, including labor unions, obtained favorable social welfare legislation. Trade unionism and collective bargaining grew and won higher wages, more leisure, and improved conditions for workers. The efforts and accomplishments of many enlightened employers aided in improving working conditions and planes of living. The role of the factfinder in the social sciences brought to light the true conditions of workers' families, providing a factual basis from which to initiate change and bring reform. These statistical explorations began with the Massachusetts Bureau of Statistics of Labor created in 1869 and the United States Bureau of Labor Statistics founded in 1884.

²¹ For a detailed analysis in terms of the averages for the United States, see *Standards and Levels of Living of City-Worker Families*, Monthly Labor Review, September 1956 (p. 1015).

²² Boston showed a relatively high proportion of rented units; however, the comparatively high expenditure for fuel was affected both by the climate and the fact that the rent included heat in only about a third of such units.

²³ Although family expenditures for tobacco and alcohol are known to be underreported in surveys, it can be assumed that the survey results reflect intercity variations in expenditures for these items.

New England's economy has become less dependent on shoes and textiles as employment has risen in both nonmanufacturing and durable-goods manufacturing.

Historical Patterns and Recent Trends in Employment

EDWARD T. O'DONNELL

RECOGNITION and exploitation of New England's natural resources and advantageous location for profitable manufacture came early. For instance, in 1637, Abraham Shaw was granted by the Great and General Court of Massachusetts the right to take ore and fuel from common lands for the purpose of manufacturing "iron bars";¹ and in 1644, a large iron works was begun in Lynn. A year earlier, the town of Braintree had voted the setting aside of 3,000 acres for encouragement of an iron works,² and nearly everywhere in the little coastal settlements, establishments were busily turning out bricks, pottery, hollowware, bar iron, scythes, shovels, axes, hammers, and nails, all articles essential to settlers in a new land. Thus, New England's interest in manufacture and its traditional devotion to the production of light metalwares and consumers' goods both began early and stemmed naturally from the nature of the readiest market.

Near the beginning of the 19th century, the greatest regional industry was born with the building of a spinning frame on the English Arkwright model by Samuel Slater in Rhode Island. With this event, the economic history of New England was revolutionized, for the region possessed every gift necessary to the manufacture of textiles: Available waterpower, the proper degree of humidity for the best processing of yarn, an adequate labor supply, and excellent ports for the import of raw cotton and the export of finished product. In addition, impending political and historical developments were to guarantee markets for New England industries of a magnitude that had previously been unimagined.

Determinants of Markets for Manufactures

Earliest of these great politico-economic events was the War of 1812 which cut the flow of English woven goods into this country and thus afforded an opportunity for New England merchants to seize the domestic market. Prior to 1812, New England had only 32 spinning mills. Between 1812 and 1815, 73 were constructed.³ Even more significant as part of the general regional pattern of industrial development, the first power looms in America were installed in 1813 by the Boston Manufacturing Co. of Waltham. The weaving of cloth and the spinning of thread under a single roof marked perhaps the beginning of the textile industry in America, as well as the factory system as we know it.⁴ New England's position in the mid-20th century in the manufacture of precision machines and interchangeable parts owes much to the development over the years of mechanical skills by workers, and of technical knowledge by management and inventors, in connection with improving the productivity of textile machinery.⁵

Of course, other influences helped shape the region's machinery and metalworking economy and account in part for interstate differences which persist to the present. Although none of the early iron or copper mines of Connecticut appear to have developed into major operations,

¹ Nathaniel Bradstreet Shurtliff, *Records of the Governor and Company of Massachusetts*, Boston, W. White, Printer to the Commonwealth, 1873, Vol. I (p. 206), Vol. II (pp. 61, 81, 103, 125).

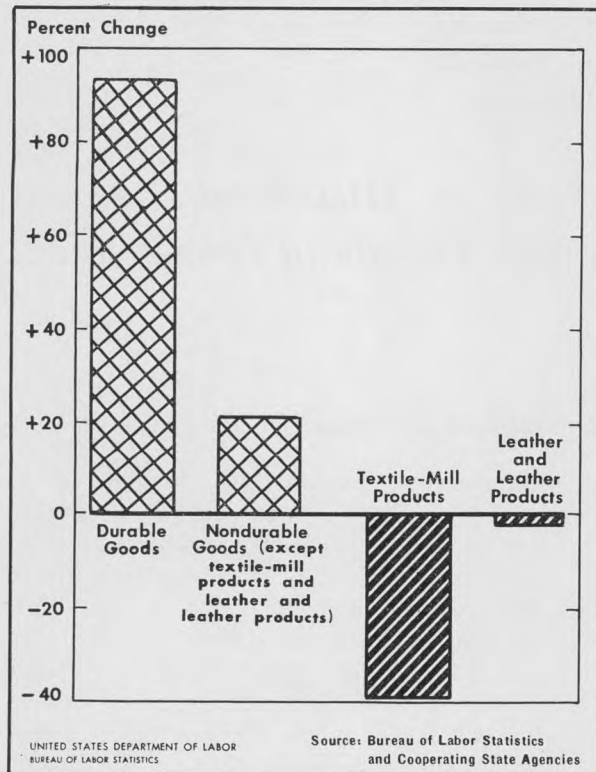
² Samuel A. Bates, *The Ancient Iron Works at Braintree, Massachusetts*, South Braintree, F. A. Bates, 1898 (p. 2).

³ C. J. Ware, *The Early New England Cotton Textile Manufacture*, Boston, Houghton, Mifflin Co., 1931 (p. 37).

⁴ Victor S. Clark, *History of Manufactures in the United States*, New York, McGraw-Hill Book Co., Inc., 1929, Vol. I (p. 450).

⁵ *Ibid.* (p. 516).

Chart 1. Industry Shifts in Manufacturing Employment, New England, 1939 to 1956¹



¹ 1956 data are preliminary.

the presence of the metals and the need of the colonists for handtools and household wares led to the growth of a light manufacturing industry devoted to meeting these demands.⁶ Further impetus was imparted to Connecticut metalworking by the intensive development of clock-making. In the beginning, the clock movements were of wood, but early and continuing effort was made to substitute metal, and in 1837, an inexpensive brass clock was placed on the market by Chauncey Jerome of Plymouth, Conn. Its immediate success proved a boon to the brass mills of the Nutmeg State.⁷ At about the same time, light machines were devised which produced pins from wire and automatically stuck them on paper, an advance which secured to its inventors dominance of the burgeoning American market.⁸ From beginnings such as these, Connecticut developed its metallic industries which make it today a center of hard goods production.

The unparalleled westward surge to settle inland America, beginning not long after the

settlement of the War of 1812, insured even more than earlier developments that New England would specialize in the mass production of commodities for the Nation's ever-increasing population. America needed textiles, shoes, handtools, and weapons, and New England capitalized and prospered upon her early mechanization.

Inevitable Decline in Relative Position

But the westward migration which provided the market also contained the seeds of future competition; each newly developed section of the country built its own manufacturing establishments which utilized closer sources of raw material and sold their goods to the new centers of population. Perhaps the most obvious single factor in speeding the loss of New England's relative position was the universal adoption of steam as a prime source of industrial power and the consequent loss of premium upon waterpower sites—probably New England's greatest locational advantage.⁹

As the fight to retain markets became fiercer and the region's competitive advantages decreased, New England management attitudes became less daring than those of the early innovators and were increasingly concerned with maintenance of existing positions.¹⁰ Beset by unflagging competition from other sections of the country, New England over the years has been sorely pressed to maintain a share of markets sufficient to support full employment in its factories. That it has not been uniformly successful in all aspects of this struggle has engendered a measure of pessimism over the region's future as a manufacturing center.¹¹ Some of this doubt may be justified, but, in major outline, the record contains more favorable than gloomy implications. An examination of the course of New England's economic fortunes since 1939, as revealed by the ebb and flow of employment, indicates much to allay the fears that the region has become static and is concerned principally with fighting holding actions.

⁶ William G. Lathrop, *The Brass Industry in the United States*, revised edition, Mt. Carmel, Conn., William G. Lathrop, 1926 (p. 22).

⁷ William G. Lathrop, *op. cit.* (p. 34).

⁸ *Ibid.* (p. 62).

⁹ Thomas Russell Smith, *The Cotton Textile Industry of Fall River, Massachusetts*, New York, King's Crown Press, 1944 (pp. 41-44).

¹⁰ The Federal Reserve Bank of Boston, *Annual Report for 1955* (p. 6).

¹¹ Seymour E. Harris, *New England's Decline in the American Economy*. (In *Harvard Business Review*, Cambridge, Spring 1947, pp. 348-371.)

Factory Employment Patterns Since 1939

Between 1939 and 1956, nonagricultural employment in New England increased by more than 1 million jobs, or 40 percent, as shown in the following tabulation:

	Monthly average nonagricultural employment (thousands)
1939.....	2,582.4
1943.....	3,380.7
1949.....	3,201.3
1953.....	3,563.8
1955.....	3,513.4
1956 ¹	3,608.3

¹ Preliminary.

SOURCE: Bureau of Labor Statistics and cooperating State agencies.

Analysis of these employment trends reveals elements of both strength and weakness since certain of the region's oldest and largest manufacturing industries have not, over this span of years, shared in the general employment gains. The most dramatic and widely publicized of these unfavorable developments is the deep decline in employment suffered by the region's textile industry (chart 1). Since 1939, when it was the major source of jobs for factory operatives, employment in the New England textile industry decreased by 108,900 jobs, or 39.5 percent. Moreover, between 1939 and 1956, the number of workers in the shoe and leather industry, second only to the textile industry in 1939 as a source of manufacturing employment, remained about stable,¹² as shown in the following tabulation:

	Monthly average employment	
	Textile-mill products (thousands)	Leather and leather products (thousands)
1939.....	275.3	113.9
1943.....	296.5	101.8
1949.....	252.2	114.4
1953.....	214.7	114.3
1955.....	173.0	114.9
1956 ¹	166.4	111.9

¹ Preliminary.

SOURCE: Bureau of Labor Statistics and cooperating State agencies.

On the other hand, offsetting the employment record of textiles and shoes and leather products,

¹² New England's record is better when measured by production rather than by employment. Its relative share of national output has been well maintained and of recent years has increased modestly. For a discussion of this point, see p. 310 of this issue.

¹³ Chris A. Theodore, *New England Economic Indicators*, Boston University, College of Business Administration, Bureau of Business Research, 1955 (section on Manufactures).

job totals in practically all of the other New England major manufacturing industry groups have increased in keeping with the nationwide pattern of advance:

	Monthly average employment	
	Durable goods (thousands)	Nondurable goods, exclusive of textile- mill products and leather and leather products (thousands)
1939.....	391.8	387.2
1943.....	967.3	406.3
1949.....	585.5	423.8
1953.....	791.3	463.9
1955.....	719.4	460.5
1956 ¹	757.8	469.5

¹ Preliminary.

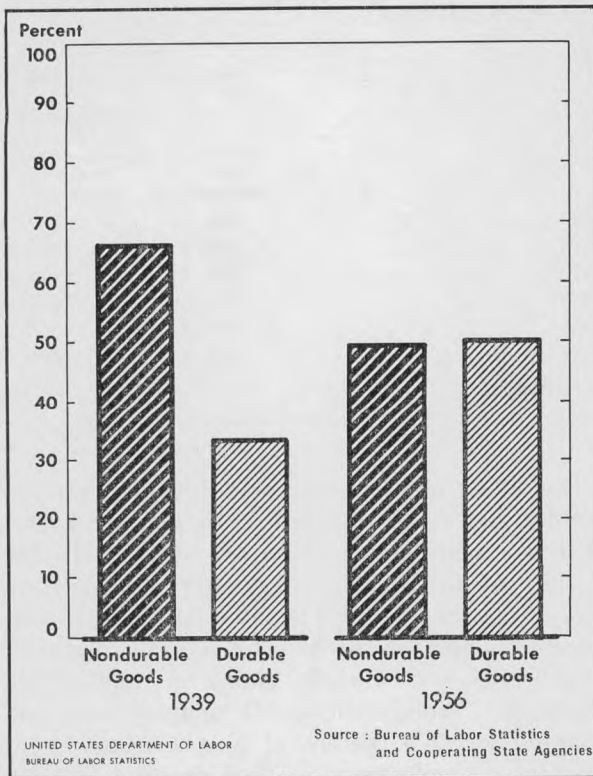
SOURCE: Bureau of Labor Statistics and cooperating State agencies.

One effect of the divergence of trends between textiles and shoes and leather, on one hand, and all other manufacturing, on the other, has been a shift of the balance in factory employment away from the historical heavy reliance upon nondurable goods toward an even division between nondurable and durable goods in 1956. (See chart 2.) Nondurable-goods employment accounted for 66.5 percent of New England manufacturing employment in 1939, for 57.4 in 1949, and for only 49.7 percent in 1956.

New England's improving balance between hard and soft goods is not the result of merely subtracting textile employment from an otherwise static manufacturing economy. Durable-goods employment has had an impressive growth in absolute terms which compares respectably with rates of growth in other sections of the country.

Some of the oldest and most widely disseminated production statistics which treat with New England manufacturing industries are concerned with textiles and shoes and leather.¹³ Their widespread use in the past has tended to focus attention upon the vicissitudes of those two industries which have failed to keep pace with the employment expansion of the rest of the region's manufacturing industries. This emphasis has helped nurture the opinion that New England's productive efforts are somehow overconcentrated in depressed nondurables. In fact, New England's soft-goods industries, apart from textiles and shoes and leather, have experienced a sizable employment gain of 21.3 percent since 1939.

Chart 2. Durable and Nondurable Goods Employment as a Percent of Manufacturing Employment in New England, 1939 and 1956¹



¹ 1956 data are preliminary.

Diversified Base of Manufactures. In comparison with other States and regions, New England's manufacturing employment, whether in durables or nondurables, is not presently unduly concentrated in any small group of industries, but rests upon a broad base of well-diversified manufactures most of which are directly tied in with the national level of industrial activity. It remains undeniable that in the past a heavy concentration of employment in the textile industry worked to New England's disadvantage. Because of this experience, New Englanders currently display a strong inclination to spread employment among a broader list of industries. Not only is the regional factory economy today less vulnerable to employment declines stemming from the ills of a single industry, it is far better diversified than the economies of some competitive areas which have been the heaviest gainers from New England's loss of textile preeminence. None of the New England States was among the top 25 percent of the States in a

ranking by the degree of concentration of manufacturing employment in each State's three largest manufacturing industry groups.¹⁴ Massachusetts and Connecticut, with concentrations of 32.1 and 45.2 percent, were below the median of 46.4 percent. In the remaining New England States, employment in the 3 largest industry groups ranged from 50.7 to 57.0 percent of total manufacturing employment. Comparable figures for other representative States were: New York, 35.6 percent; Virginia, 40.6; Ohio, 43.8; California, 45.2; Georgia, 56.6; North Carolina, 66.7; and South Carolina, 78.0.

Trends in Nonmanufacturing Employment

Because major extractive industries are but lightly represented in New England, and because of the early and intensive development of manufactures, the percentage of the region's work force in nonmanufacturing employment is lower than in the United States as a whole. In 1939, for example, 54.8 percent of New England's nonagricultural workers were concerned with nonmanufacturing activities. At the same time, the national percentage was 66.8 percent. In 1956, however, the national percentage remained almost unchanged at 67.2, while New England's participation in nonmanufacturing employment advanced to 58.2 percent (chart 3). Since 1939, the advances in major categories of nonmanufacturing employment were steady and impressive (table 1).

TABLE 1.—Average monthly employment in principal nonmanufacturing industries, New England, 1939 and 1956¹

Industry	Employment (in thousands)		Percent change from 1939
	1939	1956 ¹	
Total.....	1,414.1	2,102.9	48.7
Construction.....	84.3	177.2	110.2
Transportation and public utilities.....	172.4	220.1	27.7
Wholesale and retail trade.....	506.7	704.4	39.0
Finance, insurance, and real estate.....	100.7	189.0	67.8
Service and miscellaneous.....	255.3	410.9	60.9
Government (Federal, State, and local).....	294.7	421.3	43.0

¹ Preliminary.

SOURCE: Bureau of Labor Statistics and cooperating State agencies.

¹⁴ Based upon employment data obtained from reports by State agencies cooperating in the Federal-State Current Employment Statistics Program. Excluded from this comparison were Delaware, Idaho, Kentucky, Nebraska, Nevada, New Mexico, North Dakota, and Wyoming, since published data for these States were not available in form to permit isolation of the 3 largest Standard Industrial Classification 2-digit industry groups.

Whether it is desirable for New England to experience a decrease in the share of manufacturing employment is a matter over which distinguished experts disagree. Some hold that such a development, if of considerable magnitude, may be the result of substitution of low-paid service employment for well-paid factory jobs and should not be viewed with equanimity.¹⁵ Other experts believe that the tertiary industries assume rising importance in an advancing industrial economy and offer hope for overcoming some of the adverse effects of New England's dependence on manufacturing.¹⁶ Whatever the interpretation, certainly the absolute increase in nonmanufacturing employment has provided many New England workers with jobs; and if the second of the two opinions holds true, the region's great wealth of educational, medical, financial, research, and recreational facilities probably will provide significantly greater employment in the future. The continued exploitation of these industries should be a keystone of State and regional development policy.

Intrastate Employment Trends

To a greater or lesser extent, employment trends within the individual New England States between 1939 and 1956 have reflected overall regional changes. Each State has experienced increases in the relative importance of nonmanufacturing employment and in the absolute number of jobs in both manufacturing and nonmanufacturing. The employment record of the textile industry has been uniformly unfavorable in the 6 States, and an almost sidewise trend of shoe and leather employment has occurred in 2 of the 3 States where this industry is a major factor. Only Maine had a notable increase in the number of shoe and leather operatives, and some evidence exists that Maine's gains were at the expense of her New England neighbors.

Despite the employment trends in textiles and shoe and leather products, every State in the region boosted its manufacturing job total between 1939 and 1956. The rates of gain, as well

TABLE 2.—*Employment in manufacturing and nonmanufacturing industries in New England States, 1939 and 1956*

State	Manufacturing employees			Nonmanufacturing employees		
	Number (in thousands)		Per-cent change from 1939	Number (in thousands)		Per-cent change from 1939
	1939	1956 ¹		1939	1956 ¹	
Connecticut.....	281.2	433.8	54.3	278.0	461.2	65.9
Maine.....	94.6	108.4	14.6	117.0	167.6	43.2
Massachusetts.....	568.8	710.6	24.9	781.6	1,133.9	45.1
New Hampshire.....	68.6	82.7	20.5	76.4	99.7	30.5
Rhode Island.....	127.8	131.5	2.9	113.6	165.9	46.0
Vermont.....	27.3	38.6	41.4	47.5	66.4	39.8

¹ Preliminary.

SOURCE: Bureau of Labor Statistics and cooperating State agencies.

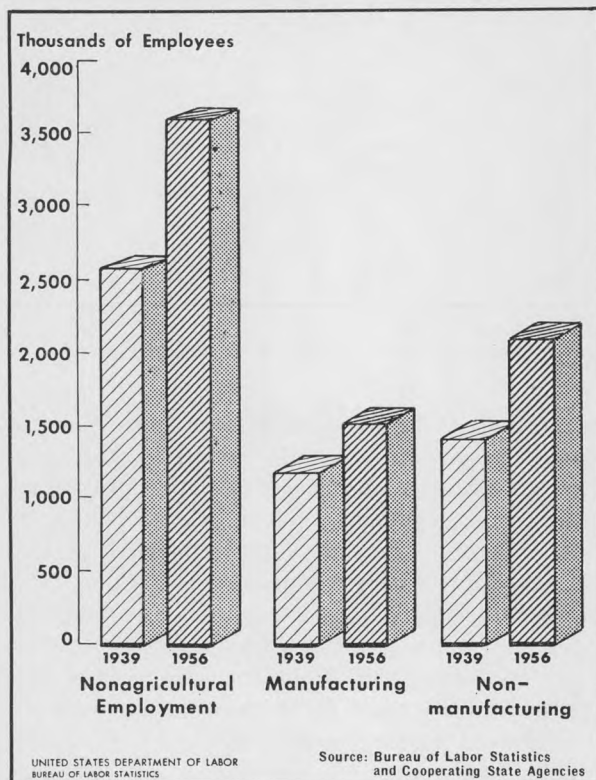
as the underlying reasons, differed from State to State. In general, the States fall roughly into three categories with respect to changes in manufacturing employment. Thus, Rhode Island increased factory jobs only slightly over the period, while moderate gains were scored by Maine, New Hampshire, and Massachusetts. Vermont increased its manufacturing workers by 41.4 percent, and Connecticut's 54.3-percent employment rise put the Nutmeg State far in the van in the matter of increased factory employment, as shown in table 2.

Most dramatic among the manufacturing employment advances were those of the electrical-equipment industry, particularly the light assembly operations comprising the communications-equipment category, and transportation equipment with especial emphasis upon aircraft engines in Connecticut. Rhode Island did not increase employment in any single industry sufficiently to offset the textile industry decline, although the growth of employment in costume jewelry provided a bright spot. New Hampshire and Massachusetts, on the other hand, by increasing employment in their electrical-equipment industries, were able to cushion somewhat the impact of textile job declines. Vermont's gains were for the most part due to a sizable employment increase in the production of metalworking machinery. No new industry of major size developed in Maine over this span of years, but the gain in shoes and leather products served to compensate in some degree for the State's losses in textiles. Connecticut during this period has been New England's prize example of the effect upon employment of a manufacturing boom. Of the enormous job gain

¹⁵ Committee of New England of the National Planning Association, *The People of New England and Their Employment*, Monograph No. 7, Boston, New England Council, 1954 (p. 290). See also William H. Miernyk, *Labor Mobility and Regional Growth*. (*In* *Economic Geography*, Clark University, Worcester, Vol. 31, October 1955, pp. 321-322.)

¹⁶ Seymour E. Harris, *op. cit.* (p. 352).

Chart 3. Manufacturing and Nonmanufacturing Employment in New England, 1939 and 1956¹



¹ 1956 data are preliminary.

in the Nutmeg State, much was due to the extraordinary volume of production of aircraft engines and parts. This has tended, of course, to stimulate activity in allied metalworking and machinery, the overall effect being to establish Connecticut at this point of cyclical expansion not only as the leader among New England States, but as one of the most dynamic in the Nation in terms of employment rise.

The employment situation of nonmanufacturing industries was more uniformly favorable among the States. The gains have been impressive both in relative and absolute terms. Each State has participated in the residential, government, industrial, and highway phases of the nationwide building boom, and, consequently, construction employment has risen extensively everywhere. Aggressive promotional drives have aided each State in developing its recreation industry, with a resulting stimulus to employment in service activities and retail trade. Buoyed by a high level of national income and full employment, the insur-

ance and finance industries, long New England strong points, have become even greater providers of employment in several of the States, notably Connecticut, Massachusetts, and Vermont. During the postwar period, government employment, particularly State and local, mounted in volume with the increased number of schools and the additional police and other civic services required by the great shifts in population and growth of suburban areas since the close of World War II. A combination of these factors of industrial boom, construction activity, and population shifts has contributed to the expansion of job opportunities in transportation and public utilities. In five States, as well as in New England as a region, non-manufacturing industries today account for a greater relative share of total nonfarm employment than in 1939, as seen in the following tabulation:

	Nonmanufacturing employment as a percent of total nonagricultural employment	
	1939	1956 ¹
Connecticut.....	49.7	51.5
Maine.....	55.3	60.8
Massachusetts.....	57.9	61.5
New Hampshire.....	52.7	54.7
Rhode Island.....	47.1	55.8
Vermont.....	63.5	63.2

¹ Preliminary.

SOURCE: Bureau of Labor Statistics and cooperating State agencies.

Conclusions

Several broad conclusions are supported by a review of the historical development of manufacturing in New England and an examination of the regional and State patterns of employment changes since 1939.

The early development of manufacturing and the tendency to emphasize the production of consumers' goods and light, complex machine parts were natural results of geographical and historical forces.

The degree of regional economic homogeneity is sometimes overstressed. Despite similarities, there are important and age-old differences in the economic structures of the several States.

Emphasis upon the manufacture of nondurable goods as a principal source of employment has lessened. The two factors which contributed most to this changing balance are the growth in the production of durable goods, particularly since 1939, and the long-term decline in textiles.

Employment trends in the manufacture of non-durable goods, apart from textiles and, to a lesser extent, shoes and leather products, have been strong. Realistic analysis of the region's economy calls for consideration of the textile industry apart from other manufacturing in order to avoid distortion of nontextile trends.

The nonmanufacturing industries of New England are growing impressively in absolute numbers of workers and are gaining in relative importance as sources of employment.

There is little to suggest that New England could prosper in the absence of national prosperity. Much of the region's manufacture is consumed or

incorporated into end products beyond its borders. Similarly, a large part of New England's non-manufacturing employment advance stems from high levels of national income which have stimulated expenditures in recreation, finance, education, research, medical, and kindred services offered to the Nation. By the same token, apart from the textile situation, there is little to suggest that regional industries are worse off than their national counterparts. Since the rising tide lifts all boats, the economic fortunes of the New England region, and consequently the level of its employment, will rise or fall with those of the country as a whole.

The British commander [in the American Revolution] managed well, but not quite well enough. It is difficult to keep military secrets in the midst of an attentive people, and by the people themselves the discovery was made. Paul Revere had some thirty mechanics organized to watch and report the movements of the British, and these men now became convinced that an expedition was on foot, and one of a serious character. The movement of troops and boats told the story to watchers, with keen eyes and ears, who believed that their rights were in peril. They were soon satisfied that the expedition was intended for Lexington and Concord, to seize the leaders and the stores; and acting promptly on this belief they gave notice to their chiefs in Boston and determined to thwart the enemy's plans by warning and rousing the country.

—Henry Cabot Lodge, *The Story of the Revolution*, New York, Charles Scribner's Sons, 1903 (pp. 31-32).

Labor-Management Relations

Labor and management in New England are faced with problems arising from economic pressures and the transition to more diversified economy.

A. HOWARD MYERS

LIKE ITS ECONOMIC ACTIVITY, New England's industrial relations cannot be easily distinguished from the national pattern. Interregional standards, centralized authority, and nationwide policy-making have influenced both labor and management organizations. Uniform Federal legislation also has affected local labor conditions and relationships, making the distinctive elements stand out less clearly with the passing of time since its introduction. Some distinguishable features continue nonetheless.

Anything peculiar to the New England scene will be a reflection of the people and their economic activity. The conservatism and respect for the past that is generally characteristic of the local population has found expression in their social and economic conduct, with little inclination for innovation or rapid change and less dynamic drive than in some other areas of the Nation.

Industrial Transition and Labor Relations

Manufacturing activity of the region developed early in the Nation's history and generally was limited to a few industries. In recent years, however, the economic pattern has been moving away from industrial homogeneity. Unlike the prewar dominance of textile manufacturing, no single major industry and no predominant labor organization stands out conspicuously in any of the six States. To describe the developing trends and characteristics of labor relations, it will be wise to note the diverse directions in which business and employment have been moving.

The outstanding factor is negative—the lack of any uniform trend of business or industrial relations. There has been a transition from an important textile industry to increasingly mixed industrial activity. While total manufacturing employment in this region fell 9 percent from 1947 to 1955, a decline of 129,000 jobs in postwar textile manufacturing accounted for over 90 percent of the net decline of 141,000 manufacturing jobs.¹

Other major industries in which employment had fallen are machinery manufacturing (except electrical) and fabricated metal products, which accounted, respectively, for 18 percent and 13 percent fewer jobs in 1955 than in 1947. In another major manufacturing activity, leather and leather products, no significant change occurred in total employment. The other manufacturing industry employing over 100,000 workers, electrical equipment, provided 11 percent more employment over the 8-year period, while appreciable gains also occurred in transportation equipment and in apparel manufacturing.

A substantial drop in New England's manufacturing employment as a proportion of total nonagricultural employment contrasts with the relatively stable national situation in recent years. Also, the increasing volume of service industry jobs, particularly in Massachusetts and Rhode Island, and of white-collar employment in trade and finance has not kept pace with national trends.² The degree of unionization of white-

¹ William H. Miernyk, Unemployment in New England Textile Communities, Monthly Labor Review, June 1955 (p. 645).

² Seymour L. Wolfbein, Changing Patterns of Industrial Employment, 1919-55, Monthly Labor Review, March 1956 (p. 250).

collar employees has not been as great as that of workers in the manufacturing and other industries employing manual workers.

Many of these employment changes resulted in large part from labor relations and labor cost difficulties, and in turn had a serious impact on the local problems of unions and management. Industry, labor, and public officials in many urban communities have been faced with employment shifts and changes in job skills that were caused by the liquidation of the older plants.

With many of the displaced workers from the nonexpanding industries in the older age groups, serious problems of adjustment have been posed for management and labor representatives in many local areas. Shifts in production and employment to diverse industrial activities have occurred in or around cities such as Brockton, Lynn, and Worcester in Massachusetts and Nashua and Manchester in New Hampshire. Textile centers such as Fall River, New Bedford, Salem, Lowell, and Lawrence in Massachusetts; Woonsocket and Providence in Rhode Island; and Sanford and Waterville in Maine have become the locations for garment, electronic, machinery, or plastics plants. Labor relations have become unstable because of periods of unemployment pending shifts to new employment, and because the new plants often prefer to employ younger people.

Extent of Unionization

The organization of New England's shoe workers, leather workers, and textile workers predated the unionization of mass-production industry, and although collective bargaining has a long history in the region, recent unemployment, job shifts, and the developing trend from factory to more white-collar employment seem to have slowed down the growth of unionization. It is difficult to give accurate estimates of trends in recent years since no continuing figures are available on labor union membership by State. The National Planning Association estimated that in

1951 union membership included 29.3 percent of the Nation's nonagricultural labor force, with a New England regional membership of 29.6 percent. The high figure for the 6 States was 33.2 percent for Massachusetts, while the low was 22.7 percent for Connecticut.³ There is some later evidence that unionization in New England may be lagging, if not declining absolutely, in net growth as a result of increasing white-collar employment and transitional unemployment.⁴ Normally, union activity will be of small interest to those out of work and usually will take some time to develop among those employed in a new plant.

Competing unions have been active in some of the major New England manufacturing industries for many years, with keen rivalry between unions formerly affiliated with the American Federation of Labor and with the Congress of Industrial Organizations, respectively, as well as between these and independent unions. The textile, leather tanning, shoe, and electrical equipment industries have been subject to this competitive unionism. Although the AFL-CIO unification may eventually reduce rivalry among affiliated unions, the region's independent unions will probably continue their dual union campaigning. The United Mine Workers, District 50, the International Longshoremen's Association, and the United Electrical, Radio and Machine Workers of America each represents New England employees exclusively in some industry or shares representation in others in conjunction with AFL-CIO unions.

It is also pertinent to note the extent of local independent union bargaining of long standing. In the shoe manufacturing centers in and around Brockton and Marlborough, Mass., Nashua and Manchester, N. H., and in Lewiston and Auburn, Maine, multiplant unaffiliated shoe workers' unions compete with the national organizations. Another multicompany local organization of primarily textile workers bargains with management in Woonsocket, R. I., plants. In addition, some employees in the electric power industry have independent representation, local or national.

Factors Shaping Management Policy

The major industrial relations problems of the region have been caused by economic factors rather than by poor personnel practices or anti-

³ Report on the Economic State of New England, National Planning Association, published by New England Council, 1954 (p. 370).

⁴ In the writer's judgment, a fair index of recent local trends, with the possible exception of Connecticut, is the Commonwealth of Massachusetts, Department of Labor and Industries estimates. Total union membership in the State as reported in its Annual Directory of Labor Organizations, was as follows: 1951, 598,000; 1953, 614,000; 1954, 589,000; 1955, 565,000.

labor attitudes.⁵ The highly competitive markets in which New England consumers' goods manufacturers often sell have usually been affected by low-cost, nonunion competition, either domestic or foreign. In bargaining and handling of grievances over work assignments and piece rates, management has frequently been under severe economic pressure.

In a few industries, employers bargain collectively on a multiplant basis through employer associations. In some localities, this type of organization has helped in getting union leaders to consider management's problems and needs at the same time that wages, hours, and working conditions are negotiated. Such employer labor relations associations bargain in building construction, printing and publishing, trucking operations, shoe manufacturing, leather tanning, worsted textile manufacturing, and the fishing industry. The formation of these multiemployer groups has been directed toward a better balance of bargaining power, and toward joint efforts at getting the union to consider the competitive problems of companies with limited economic capacity.

In the cotton-textile industry of Maine and Massachusetts, multicompany bargaining disappeared after the liquidation of the majority of those mills that were operating on that basis. The remaining companies negotiate on a single-company basis, usually with one agreement for the unionized plants of the employer both inside and outside of the region.

Major manufacturing agreements, covering at least 1,000 workers each, were estimated in January 1956 to number 139 in the 6-State area, with a total coverage of 369,000 employees.⁶ Those industry groups in which larger bargaining units occurred most frequently were textile-mill products, 17 agreements; paper and allied products, 7; leather and leather products, 8; primary metals, 6; fabricated metal products, 8; machinery (except electrical), 21; electrical machinery, 9; transportation equipment, 8; and construction, 15.

A few of the larger New England plants have their terms of employment determined largely by centralized bargaining at locations outside of the region. In such situations, national patterns apply to New England operations. Industries in which this type of bargaining occurs include food products, automobile assembly, and rubber in eastern Massachusetts; chemical and electrical equipment

in western and eastern Massachusetts; and shipyards and steel wire fabrication in Connecticut and Massachusetts.

A number of smaller and some large manufacturing plants remain unorganized, even in urban manufacturing centers like Boston and Worcester. Moreover, many of the large employers in the finance and distribution industries continue to administer personnel policy and personnel relations without union participation. Except for organization of the industrial insurance agents in some New England cities, the insurance company employees are not generally unionized.

Bargaining and Economics

The shifts in industrial activity and employment have been influenced primarily by cost considerations. In this regard, the employees have frequently been on the defensive, and their unions have often offered arguments based more on morality than on economics. Justice and efficiency unfortunately do not always coincide.

Efforts to move from a plane of conflict to one of more cooperative bargaining and better operating results have been usually motivated by the need for survival. The liquidation or the exodus of textile mills, of shoe factories, and of leather tanneries has often been the cumulative result of industrial relations difficulties, coupled with other economic factors.

Some of the difficulties of collective bargaining are reflected by the record of strike activity. With about 7 percent of the Nation's nonagricultural workers, New England accounted for 2.5 percent of all workers involved and 8.5 percent of the man-days of idleness caused by work stoppages during 1955. A lengthy textile strike resulted in the larger figure for man-days lost.

The statistics of prior years give evidence of less time lost through stoppages here than might be expected. New England's percentage of total strike idleness has exceeded its present share of the Nation's nonfarm employees in only 2 years from 1935 to 1954, namely, 1942 and 1951. (See table.) These years were more comparable to the

⁵ Recent reports of the National Labor Relations Board show that unfair labor practice charges against employers in New England run from 5 to 6 percent of national totals. By comparison, New England accounted for about 7 percent of total nonagricultural employment in 1955.

⁶ See Characteristics of Major Union Contracts, Monthly Labor Review, July 1956 (p. 808).

late 1920's and early 1930's, when organizing as well as economic causes accounted for an exceptionally high regional share of total time lost.

The principal cause of stoppages in the region, wage issues in the textile and shoe industries, has diminished in importance in recent years, notwithstanding the 1955 textile strike, through better economic understanding in those situations where negotiations continue.

A number of situations could be cited in which the top management of smaller companies in the textile, metal products, and paper products industries have been able to direct the plant's labor relations into more cooperative efforts. In these situations, help from both the union representatives and the employees have lowered labor costs and increased employee earnings. Group incentive systems which are successfully operating in some New England plants⁷ are examples of such cooperative efforts. Flexibly higher machine assignments, varying according to product requirements, have been worked out in some textile cases to the mutual advantage of the company, the employees, and the union. There are woolen mills operating profitably in Vermont and in New Hampshire, which were threatening liquidation a few years ago.

Regularly scheduled labor-management meetings for discussion of whatever problems may be bothering workers or management have replaced grievance procedures in many plants. Cooperative attitudes have replaced aggressive conflict in local paper, textile, and metal products mills which the writer has had the opportunity to observe at first-hand. While these programs improve the administration of bargaining relations, of course, they do not eliminate all disputes over wage adjustments.

Private arbitration of contract terms is not uncommon in New England, particularly in the needle trades and the leather and textile industries. A no-wage-increase award in the 1949 arbitration between the Fall River Textile Manufacturers Association, the New Bedford Cotton Manufacturers Association, and the Textile Workers Union of America was followed by a number of subsequent cotton and rayon arbitrations, some allowing wage reductions and some denying increases.

⁷ Two such cases are reported in the National Planning Association study, *Causes of Industrial Peace*, New York, Harper & Brothers, 1955 (Chs. 16 and 17, entitled "The Lapointe Machine Tool Co. and the Steelworkers (CIO)" and "American Velvet Co. and the Textile Workers (CIO)," respectively, pp. 257-295).

Work stoppages in New England, 1927-55

Year	Stoppages beginning in the year		Man-days idle during year (all stoppages)	
	Number	Workers involved	Number	Percent of United States total
1927	126	21,360	496,470	1.9
1928	119	53,350	4,106,270	32.6
1929	120	31,810	1,060,700	19.8
1930	77	8,360	107,300	3.2
1931	106	56,320	1,310,390	19.0
1932	111	15,960	223,580	2.1
1933	308	149,070	2,272,620	13.4
1934	201	222,010	2,488,800	12.7
1935	196	48,310	967,900	6.2
1936	198	51,450	769,410	5.5
1937	497	111,390	1,409,180	5.0
1938	206	30,750	403,300	4.4
1939	193	57,580	589,880	3.3
1940	170	34,010	360,040	5.4
1941	340	110,180	966,300	4.2
1942	246	109,300	534,100	12.8
1943	244	81,980	378,430	2.8
1944	322	110,840	633,230	7.3
1945	391	143,020	1,869,100	4.9
1946	449	200,240	6,837,900	5.9
1947	312	88,500	1,757,600	5.1
1948	241	59,100	1,429,300	4.2
1949	213	47,600	1,000,200	2.0
1950	350	81,900	995,800	2.6
1951	302	120,900	2,404,800	10.5
1952	311	74,310	2,097,400	3.5
1953	339	95,350	1,383,400	4.9
1954	251	55,750	943,600	4.2
1955	292	125,640	2,390,600	8.5

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, New England Regional Office.

Arbitrations have also been used to adjust costs to a more competitive basis by increasing work standards. Higher spindle and loom assignments frequently have been the subject matter of arbitrations, and these awards influenced other similar situations. Arbitration has had educational results leading to more accommodating attitudes in bargaining subsequently on similar problems. Although, in at least 1 woolen mill arbitration in New Hampshire and in 1 cotton-rayon mill in Massachusetts, weavers refused to undertake big increases in loom assignments and still refused after the proposals by management were allowed by arbitrators on the basis of time studies and engineering data, in most recent arbitrations the awards have been accepted promptly without serious resistances. In the past 6 months, the writer has participated in textile workload disputes in Maine and Massachusetts where weavers who objected to the management proposals finally accepted the arbitrator's award sustaining management's position. A substantial number of disputes over incentive rates have also been resolved in textile mills, shoe factories, garment, and metal products plants by arbitration of time-study data or production-standard proposals.

In many situations, the union officials are inclined to prefer that such disputes go to arbitration because of difficulty in getting the affected members to accept management's demands. Although not finding proposals inherently unreasonable, the union representatives may find it impossible to obtain assent. In such situations, the employer often initiates arbitration, or the union does so after a trial period.

Public and Neutral Influences

Labor legislation and local government policies influence management, labor, and industrial relations practices. In this respect, the three southern New England States have played an affirmative part. Each has enacted statutes covering insurance, factory legislation, and minimum wages for both men and women, all of which affect payroll taxes and costs. Each also has anti-injunction and fair employment practices laws.⁸

Massachusetts, Rhode Island, and Connecticut each has a labor relations act applicable to employees not subject to the Taft-Hartley law. No statutory restrictions on union security agreements exist in New England.⁹

State mediation and arbitration boards have been provided for by legislation in five States, Vermont being the sole exception. Massachusetts established the first such permanent board in the Nation in 1886. Connecticut also has a continuing tripartite organization with authority to intervene through mediation and to arbitrate differences when the disputing parties are willing to accept such services.

The Massachusetts board also has the statutory authority to investigate any important disputes on its own initiative and to publish a report when cooperation of the parties is not forthcoming. In addition, the legislature in 1947 enacted a bill authorizing the Governor to take several optional steps to prevent stoppages in industries furnishing essential services.¹⁰

Management Training

Collective bargaining and personnel work have developed to a professional level with emphasis on the job of management to handle labor relations effectively. Management training and labor relations programs, courses, and conferences,

offered in many local universities, make an important contribution to labor-management relations in New England and in the entire country. The availability of New England's outstanding labor economists has been an important influence on the evolution of mature attitudes within the area as well as beyond its borders.

While not confined to New England, the research and published materials in the labor relations and personnel field by those connected with the educational institutions of New England have had an impact on local thinking by reason of more direct contact and of the local publicity given to their ideas.

With the constant efforts at improving management performance, particularly in the direction of handling group relations and individuals affected by social situations, New England employers have been turning to the schools for trained personnel. Many companies not located here send their executives to New England universities for professional training or recruit management talent from students in the graduate or technical programs of New England schools.

Union Leadership

The competitive situation of New England producers presents problems for labor as well as for management. Many marginal situations exist, and continued employment opportunities often depend on lower labor costs. Therefore, bargaining has often required union members to make some difficult decisions. Labor representatives in many localities have learned from many harsh experiences their importance in influencing the decisions of union workers as well as in influencing management.

The impact of bargaining decisions on the industrial activity of a community can be serious

⁸ 12 States have enacted legislation on fair employment practices.

⁹ When the Federal act was revised in 1947, New Hampshire adopted legislation that made necessary the approval of two-thirds of the affected employees before a union membership agreement could be legally executed; it was repealed 2 years later.

As of 1954, an analysis of major agreements by the Bureau of Labor Statistics showed that 55 percent of the New England contracts provided for a union shop, 22 percent for maintenance of membership, 84 percent for dues checkoff, and 23 percent gave the union sole bargaining rights. (See Union Security Provisions in Agreements, 1954, Monthly Labor Review, June 1955, p. 654.)

¹⁰ Specifically food, fuel, water, electricity, gas, hospital, and medical facilities are covered; the law, generally acceptable to all groups, is popularly known as the Slichter act after Professor Sumner Slichter, of Harvard University, who was chairman of the recommending committee. (See Ch. 596 of the 1948 enactments.)

where competition precludes the passing on to consumers of higher costs. Management believes that one cause of New England's labor relations problems is the existence of too great a degree of union democracy. The main management criticism leveled at the union leaders comes from their failure to overcome membership resistance to needed changes, or membership insistence on non-competitive wage levels.

Educational programs have been undertaken by many of the New England universities in conjunction with union and management advisory groups. Most courses are directed toward the technical training of leaders, however, with little attention to business economics.

The Massachusetts Federation of Labor has introduced into the secondary schools labor essay contests for student scholarships; it also provides scholarships for assisting outstanding labor representatives to attend the Harvard Trade Union Fellowship Program, which is the only full-semester residence program tailored solely for labor leaders and conducted on the university campus. AFL-CIO unions formerly affiliated with the Congress of Industrial Organizations and some of New England's independent unions also sponsor conferences and support courses in conjunction with universities in the six New England States, as well as educational programs in their union halls with assistance from university teachers. The writer has participated in meetings directed to arbitration, legislation, and collective bargaining on wages, and helped plan a number of these undertakings in Massachusetts.

To draw upon the experience and competence of labor officials, local and national, can be extremely helpful to management in meeting the economic impact of industrial relations. As union officials can be an obstacle or an aid in the process of negotiating and administering agreements, they can be helpful to management in getting employee

cooperation, or they can be an adverse factor. In the judgment of the writer, management in New England has not done well in educating the union leaders as to management problems. Where the product is sold in a highly competitive market, improvement in understanding most often came only after harsh experience from a critical situation; sometimes this education has been useful only in other situations where the crisis may not have developed to a fatal stage.

Conclusion

New England, the oldest industrial section of the Nation, has been experiencing a substantial transition in labor relations and in economic activity. The capacity of management and of labor leaders has been severely tested in seeking to work out accommodations to the rapid economic changes. Inflexible attitudes have in some cases aggravated the impersonal economic forces underlying the difficulties. Labor unions and labor leaders today play significant roles along with industry's executives in determining the capacity of industry to meet the competition, and in influencing the job opportunities in New England communities. Situations in which poor labor-management relations have contributed to the liquidation or removal of plants are not uncommon, but costs, productive efficiency, and job security have been improved by mutual efforts in many other cases.

Generally improved labor relations and employment opportunities must come from more vision with less emphasis on the past. New England labor and management, to accomplish their common objectives to their mutual advantage, are faced with the need for working together to permit necessary changes. Industrial growth and better regional prospects can be enhanced by good management-labor relations, not only at the bargaining table but also in community affairs.

New England's wage levels are diversified, but in textiles the level in recent years has come closer to those of other regions.

Wages and Personal Income

PAUL MULKERN

THE ECONOMIC STATUS of any area may be measured by various yardsticks. Any of them, including employment, capital investment, productivity, and wages, to choose but a few, serve as useful tools in evaluating growth in a dynamic society. The present article is concerned primarily with wages of New England workers and how they compare with those elsewhere in the United States.

Wages, of course, mean many things to many people. To the employer, they represent the cost of hiring labor; to the market research analyst—potential purchasing power; to the sociologist—attainable levels in the standard of living; to the economist engaged in fiscal planning, they represent the largest single source of gross national income. To the worker, wages represent many of these things but principally the return for effort expended.

It is difficult to measure wage levels accurately for any broad geographic area. To a great extent, wages depend on the type of industry, skill of the worker, size of the firm, degree of unionization, and a host of other factors. As a result, wide differences within an area can and do exist.

Regional Wage and Income Levels

From the point of view of per capita personal income, New England compares very favorably with other areas of the United States. In 1955, per capita personal income for the 6 States was \$2,087 or approximately 13 percent above the national average. For the seven broad geographic areas of the country, the New England average was exceeded only by the States of the Far West (\$2,189) and the Middle East (\$2,100).¹

Within the six New England States, however, wide differences in income are apparent. Connecticut, the second highest State in the Nation in terms of per capita income, easily led the other States in the region in 1955 with \$2,499; followed by Massachusetts with \$2,097; Rhode Island, \$1,957; New Hampshire, \$1,732; Maine, \$1,593; and Vermont, \$1,535.

The excess of New England's per capita income over the national average has been steadily reduced from 25 percent in 1929 to 13 percent in 1955.² However, this same tendency to increase dollarwise, but at a decreasing rate, is noticeable in other industrialized areas. By contrast, regions with the lowest per capita income in past years, such as the Southeast, Southwest, and Northwest, have shown the greatest relative improvement.

Income from wages and salaries accounted for almost 70 percent of New England's income in 1954. The importance of manufacturing to the region is illustrated by the fact that almost a third of its personal income was derived from manufacturing, as compared with a fourth for the United States as a whole. Wholesale and retail trade accounted for a sizable but considerably smaller percentage, with slightly under one-eighth of the region's personal income attributable to this source.³

Although common historical bonds unite the six New England States, it would be a mistake to overemphasize the qualities which they have in

¹ Charles F. Schwartz and Robert E. Graham, Jr., *Personal Income by States in 1955*. (*In Survey of Current Business*, Washington, August 1956, pp. 8-10.)

² *Ibid.* (p. 8).

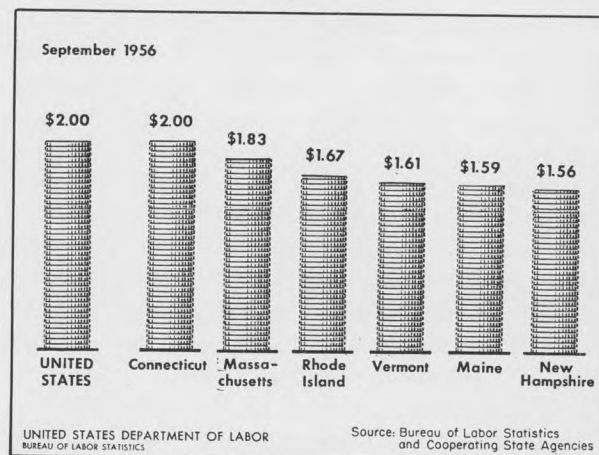
³ Charles F. Schwartz and Robert E. Graham, Jr., *Personal Income by States, 1929-54*. (*In Survey of Current Business*, Washington, September 1955, pp. 20-21.)

common, to the exclusion of important differences which exist. To use the obvious comparison, the economy of New Hampshire, with its dependence on shoes and textiles, is far different from the economy of Connecticut and its concentration on aircraft, brass, machinery, and other hard-goods industries.

In September 1956, gross average hourly earnings for production workers in manufacturing industries reached the \$2 mark for the first time in the Nation's history. Among the New England States, earnings varied by more than 20 percent, with Connecticut leading the other States with average earnings of \$2 an hour, followed by Massachusetts (\$1.83), Rhode Island (\$1.67), Vermont (\$1.61), Maine (\$1.59), and New Hampshire (\$1.56).⁴ (See chart.) State earnings varied considerably by area and by industry. Springfield, Vt., is a case in point where, because of the dominant machine-tool industry, gross average hourly earnings were only 4 cents behind the Connecticut statewide average. These statewide averages must be used cautiously, since they reflect, to a great extent, the industrial composition of the State and also the length of the workweek, since premium pay and shift differentials are included. During September 1956, average hours worked ranged from 39.4 in Rhode Island to 41.9 in Vermont.

Economically, there is strong justification for considering New England according to a north-south division. Earnings in Massachusetts, Connecticut, and Rhode Island are usually higher than in Vermont, Maine, and New Hampshire. The 1950 survey of Family Income, Expenditures, and Savings by the Bureau of Labor Statistics substantiated this general tendency. Annual money income of wage-earner and clerical-worker families for the eight New England cities included in the study ranged from \$4,689 in Middletown, Conn., to \$3,423 in Portland, Maine.⁵ Comparable income in the remaining cities was Hartford, Conn., \$4,246; Boston, Mass., \$3,886; Barre, Vt.,

Gross Average Hourly Earnings of Factory Production Workers



\$3,727; Providence, R. I., \$3,515; Bangor, Maine, \$3,513; and Laconia, N. H., \$3,485.

Wages in Soft-Goods Industries

Textiles. Important differentials between wage levels of textile plants in New England and those in the South have existed throughout the 20th century. As a result, many generalizations have been made leading to the erroneous conclusion that New England is a high-wage area. In the period 1922-26, New England mills maintained an average wage differential of 36 percent over southern plants.⁶ However, in ensuing years industrialization in the South gradually brought the two closer together. By 1939, the differential in the cotton-textile industry had been reduced to 20 percent and, at the time of the Bureau of Labor Statistics last occupational wage survey of that industry in November 1954, average straight-time hourly earnings⁷ of the industry's production workers in New England (\$1.32) were only 13 percent higher than the average (\$1.17) paid in the Southeast, where over 4 out of 5 workers in the industry were located.⁸

Probably a more meaningful comparison, however, can be made by type of product. New England mills have tended to concentrate on fine-combed cotton fabrics since, because of their skilled labor force and the lower proportion of raw material costs to total cost, they can operate more competitively with other areas. Workers in integrated mills or those performing the complete operation on fine-combed cottons averaged \$1.31

⁴ See table C-7, pp. 412-418 of this issue.

⁵ See Family Income, Expenditures, and Savings in 1950, BLS Bull. 1097 Revised, 1953 (pp. 17-41).

⁶ Report of the New England Textile Industry by Committee Appointed by the Conference of New England Governors, 1952 [Seymour E. Harris, chairman, Littauer Center], Cambridge, Mass. (p. 129).

⁷ Average straight-time hourly earnings exclude premium pay for overtime and for work on weekends, holidays, and late shifts and in this respect differ from gross average hourly earnings mentioned earlier.

⁸ See Earnings in Cotton Textiles, November 1954, Monthly Labor Review, May 1955 (p. 533).

an hour as compared with \$1.27 for similar operations in the Southeast. The differential for comparable products is obviously much less than that for all cotton-textile products, including carded yarn, duck cloth, and generally coarser fabrics which constitute the bulk of southern production.

North-South differentials also tend to vary by occupation. In November 1954, hourly wages for the more skilled occupations such as men loom fixers and weavers working on combed yarn fabrics in New England were \$1.67 and \$1.50, respectively, as compared with \$1.63 and \$1.44 in southeastern plants. In other occupations, however, in the unskilled and semiskilled categories, the differences were as high as 25 cents an hour.

In the manufacture of synthetic textiles, New England mills accounted for about 14 percent of the production workers employed in November 1954. Of the three major producing areas, highest hourly earnings of \$1.35 were reported in New England, with workers in mills in the Middle Atlantic States averaging \$1.32 and those in the Southeast, \$1.22 an hour.⁹

New England leads all other regions in the manufacture of woolen and worsted goods. In 1952, over 60 percent of all persons employed in the production of these goods worked in New England. Because of the greater skills required, their wages are generally higher than those in the cotton- and synthetic-textile industry. In the period April-May 1952, at the time of the latest occupational wage survey of the woolen and worsted goods industry made by the Bureau of Labor Statistics, average straight-time earnings for the entire industry were \$1.45 an hour as compared with \$1.50 an hour in New England mills. By comparison, average hourly earnings were slightly lower in the Middle Atlantic States (\$1.47) and considerably lower in the Southeast (\$1.19). These three areas combined accounted for over nine-tenths of the total employment in the industry.¹⁰

Footwear. New England traditionally leads other areas of the United States in the manufacture of footwear.¹¹ Since 1949, its share of the national output has been increasing, and currently over 37 percent of all footwear produced in the United States is manufactured in New England. In 1953, straight-time average hourly earnings in the New England and Middle Atlantic regions were

about 6 percent higher than in the Great Lakes area and 10 percent higher than in the Middle West.¹² The four areas represent the main shoe producing areas of the country.

The favorable ranking of New England was partly explained by the fact that about half of its shoe workers were engaged in the production of women's cement-process shoes, conventional lasted—the process for which wages were highest. Most of its remaining workers were producing men's Goodyear welt dress shoes, the next highest paid group.

Wages in Metalworking

Nonelectrical Machinery. In the latter part of 1946, machinery (except electrical), the largest major group within the metalworking industries, employed about 12 percent of all New England workers engaged in manufacturing. During the succeeding 10 years, there have been only slight variances from year to year. BLS studies illustrate very clearly the importance of this industry to New England. Average straight-time hourly earnings in 1956 for about half of all occupations studied in three major New England machinery centers—Boston, Worcester, and Hartford—were over \$2 an hour.¹³ Rates in Hartford were generally higher than in the other two cities and ranged from \$1.52 an hour for janitors to \$2.35 for tool and die makers. Boston rates, ranging from \$1.43 to \$2.24 for the same occupations, were slightly below those in Worcester.

Compared with machinery workers' earnings in other areas studied, those in New England cities lagged behind. Earnings in the industry were typically highest in the Detroit area, with high levels also characteristic of other cities in the Great Lakes region, Pittsburgh, and, for highly skilled jobs, St. Louis. A ranking of earnings for skilled machine-tool operators¹⁴ in 21 major ma-

⁹ See Earnings in Synthetic-Textile Manufacturing, November 1954 Monthly Labor Review, June 1955 (p. 659).

¹⁰ Woolen and Worsted Textiles Earnings in April-May 1952, Monthly Labor Review, October 1952 (p. 403).

¹¹ For a discussion of the region's footwear industry, see p. 310 of this issue.

¹² Earnings of Shoe Workers, March 1953, Monthly Labor Review, January 1954 (p. 40).

¹³ Wage Structure: Machinery Manufacturing, Winter 1955-56, BLS Report 107, 1956 (pp. 8-9).

¹⁴ This occupational classification includes production workers of a journeyman level of skill working on such machines as drill presses, engine lathes, milling machines, and similar types of machine tools. It represents the broadest classification with the largest number of employees for which comparison is possible.

chinery areas showed a wide dispersion—from \$2.89 in Detroit to \$1.89 in Dallas. Hartford ranked in 17th position, Worcester in 19th, and Boston in 20th place (See table 1.)

However, although New England did not rank among the wage leaders in the machinery manufacturing industry, it nonetheless has succeeded in maintaining its relative position. During the period 1945–56, wages in the 21 key machinery areas combined increased 98.3 percent. In this same period, the advance in Hartford (99.1 percent) was slightly above the overall average and that in Boston (96.4 percent) slightly lower. (The increase for Worcester, although included in the 21-area average, was not published separately.)

Other Metalworking Industries. The steady growth of transportation equipment and electrical machinery has also been of great importance in New England's progress. These industries have brought to New England manufacturing not only a highly desirable degree of diversification but also higher wages. During the past 6 years, for example, wages of Massachusetts production workers in electrical machinery increased from \$1.43 an hour in October 1950 to \$1.82 in October 1956, and in transportation equipment from \$1.66 to \$2.35 an hour during the same period.¹⁵ These industries represented 27 percent and 8 percent, respectively, of production workers employed in Massachusetts durable-goods manufacturing in October 1956.

Community Wage Levels

The community wage survey has proved a successful tool in measuring the general wage level of labor market areas and has made it possible to compare wages in various communities both within a region and among different regions. This type of survey covers a wide range of occupations common to a variety of industries: manufacturing; transportation and public utilities;

¹⁵ See Massachusetts Nonagricultural Employment, 1939–1953, and Manufacturing Hours and Earnings, 1950–1953, Massachusetts Department of Labor and Industries, 1954; also Total Manufacturing Employment and Earnings of Production Workers in Massachusetts, October 1956, Massachusetts Department of Labor.

¹⁶ Wage Differences Among 40 Labor Markets, Monthly Labor Review, December 1952 (p. 620).

¹⁷ Statistical Abstract of the United States: 1956 (77th ed.), U. S. Bureau of the Census, 1956 (p. 113).

TABLE 1.—Employment and average straight-time hourly earnings for machine-tool operators, production, class A, in 21 cities, winter 1955–56

City	Number of workers	Average straight-time hourly earnings
Detroit.....	10,731	\$2.89
St. Louis.....	959	2.49
Chicago.....	7,794	2.43
Pittsburgh.....	2,420	2.42
Milwaukee.....	2,607	2.41
Cleveland.....	5,470	2.40
Philadelphia.....	3,190	2.37
Denver.....	227	2.37
Los Angeles-Long Beach.....	3,769	2.32
San Francisco-Oakland.....	1,375	2.31
New York.....	2,539	2.30
Newark-Jersey City.....	2,528	2.28
Portland (Oreg.).....	351	2.26
Minneapolis-St. Paul.....	2,330	2.24
Houston.....	1,344	2.24
Buffalo.....	922	2.23
Hartford.....	1,348	2.19
Baltimore.....	622	2.18
Worcester.....	1,143	2.11
Boston.....	2,446	2.09
Dallas.....	429	1.89

SOURCE: Wage Structure: Machinery Manufacturing, Winter 1955–56, BLS Report 107, 1956 (pp. 8–9).

wholesale and retail trade; finance, insurance, and real estate; and selected service industries.

A study of 40 labor market areas in 1952 revealed basic and important differences among the areas. Generally, wages were highest in cities along the Pacific Coast and in the Great Lakes region, with cities in the Middle Atlantic area usually higher than in the South and in New England.¹⁶

This study indicated wide differences in the wage levels of office workers among New England cities, which ranked as follows: Hartford, 16th; Boston, 27th; Worcester, 32d; and Providence, 38th. Weekly salaries in the last-named city were less than 75 percent of those received by office workers in San Francisco and Detroit, the highest ranking of the 40 cities surveyed.

Several factors appear significant in explaining the relative position of New England office workers. Among these are the industrial composition of the area, wage levels in the various industries, and the supply of office workers relative to existing demand. Residents of the New England States have one of the highest educational levels in the United States; their average of 10.4 school years completed compares with a national average of 9.3 school years completed.¹⁷

In the 1952 study of 40 major labor market areas, intercity wage relationships for selected plant occupations were generally similar to those for office workers except that pay levels in southern

TABLE 2.—Average weekly salaries or average hourly earnings¹ for selected occupations in 3 New England cities, by sex, selected months, 1956

Occupation and sex	Law- rence	Provi- dence	Boston
	Febru- ary 1956	March 1956	Sep- tem- ber 1956
Average weekly salaries ¹			
Women office workers:			
Clerks, accounting, class A.....	\$59.50	\$58.50	\$65.50
Clerks, file, class B.....	40.50	42.50	44.50
Clerks, payroll.....	49.00	52.50	59.00
Secretaries.....	67.00	61.50	67.50
Stenographers, general.....	54.50	51.50	58.50
Average hourly earnings ¹			
Skilled men workers:			
Carpenters, maintenance.....	\$1.71	\$1.98	\$2.22
Electricians, maintenance.....	1.91	1.95	2.32
Machinists, maintenance.....	1.84	2.00	2.30
Pipefitters, maintenance.....	1.81	1.96	2.24
Tool and die makers.....	2.15	2.31	2.51
Men custodial and material movement workers:			
Janitors, porters, and cleaners.....	1.19	1.31	1.42
Laborers, material handling.....	1.32	1.50	1.61
Truckdrivers, medium (1½ to and including 4 tons).....	1.54	1.82	1.86

¹ Average weekly salaries are standard salaries paid for standard work schedules. Average hourly earnings are straight-time hourly earnings, excluding premium pay for overtime and for work on weekends, holidays, and late shifts.

SOURCE: Occupational Wage Surveys, Lawrence, Mass., Providence, R. I., and Boston, Mass., BLS Bulls. 1188-11, 1188-14, and 1202-4, respectively.

areas were considerably lower than in New England cities for custodial, warehousing, and shipping jobs, but for the skilled maintenance crafts they compared favorably. Within New England, pay levels for maintenance, custodial, warehousing, and shipping occupations were generally highest in Boston, followed by Hartford, Worcester, and Providence in that order.¹⁸

In the 1955-56 community wage surveys of 17 areas, pay levels in Providence (the only New England area included) ranked 16th for women office workers, 17th for skilled maintenance workers, and 13th for custodial and material movement employees.¹⁹

In recent years, largely because of the relocation and consolidation of textile plants, several New England labor markets have been plagued by a substantial labor surplus. Although there are some data on the economic and social effects of such conditions upon the labor force, little information has been available on their impact upon wages. In February 1956, at the urging of local community groups, the Bureau of Labor Statistics conducted a full-scale community wage survey of the Lawrence, Mass., area. Lawrence at one time was the center of the woolen and

worsted industry and, as recently as 1941, about 80 percent of its 37,000 manufacturing employees were engaged in the production of textile goods. By 1956, however, slightly less than 6,000 workers, or approximately one-fourth of its factory work force, were so employed.

Severe hardships resulted from the curtailment of textile production and, in 1949, an estimated 21,000 persons were unemployed. Although great improvement had taken place by the time of the BLS survey in 1956, an estimated 6,000 were still unemployed.

Table 2 shows comparative scales in Boston, Lawrence, and Providence, for all occupations for which comparison is possible. Although the Lawrence and Providence surveys were made 7 and 6 months, respectively, before the Boston study, several general conclusions can be drawn. Even if allowance had been made for the increases which probably occurred in Lawrence and Providence in the interim, wages would have varied considerably among the three cities although they are less than 70 miles apart. Rates were considerably higher in Boston than in the other two cities. Differences were most clearly apparent in the skilled maintenance trades, where Boston hourly rates ranged from 36 to 51 cents above those in Lawrence and from 20 to 37 cents more than in Providence.²⁰ In the office and custodial and material movement occupations, differentials also existed but not to such a marked degree.

Union Wage Scales

Rates paid in the building trades also serve as a useful barometer of a region's wage structure. In January 1957, bricklayers in nine New England cities studied quarterly by the Bureau of Labor Statistics earned \$3.25 an hour or higher. By contrast, the union scale for building laborers was slightly over \$2 an hour, except in Portland, Maine, where it was \$1.95.

Because of local bargaining patterns, wages in construction trades vary from city to city and from region to region. Data from the more comprehensive BLS annual survey of union scales in the building trades show that on July 1,

¹⁸ See Wage Differences Among 40 Labor Markets, op. cit. (p. 622).

¹⁹ See Earnings and Wage Differentials in 17 Labor Markets, 1955-56, Monthly Labor Review, September 1956 (p. 1045).

²⁰ Occupational Wage Surveys, Lawrence, Mass., Providence, R. I., and Boston, Mass., BLS Bulls. 1188-11, 1188-14, and 1202-4, respectively.

1956, for all building trades workers (journeymen, helpers, and laborers) in New England, average hourly wage rates were \$2.85 an hour.²¹ By contrast, the national average was \$3.04 an hour and the range for 9 major geographical regions was from \$3.31 in the Middle Atlantic States to \$2.56 in the Southeast (table 3).

Related Wage Practices

In recent years, considerable attention has been given to fringe benefits. Whether considered as a cost item to management or as a social gain to labor, there can be little question of the need to consider them when discussing wages.

Results of previous surveys in the cotton, synthetic, and woolen and worsted textile industry reveal that New England production workers were granted paid holidays to a greater degree than those in other areas. Approximately 9 out of 10 New England textile workers received 6 or more paid holidays in all 3 segments of the industry. In the Middle Atlantic States, paid holiday provisions were about the same except in synthetic textiles where only about half the plant production employees received 6 or more paid holidays. By contrast, in both cotton and synthetic textiles in the Southeast only about 1 out of 5 production workers received paid holidays, usually 1 or 2 holidays a year. In plants manufacturing woolen and worsted textiles in the Southeast, about 1 out of 10 production workers received 6 paid holidays a year, while about 8 out of 10 received no paid holidays.

In footwear, among the major producing areas, 3 out of 5 production workers in the New England and Middle Atlantic areas received 6 or more paid holidays, while the percentage was slightly higher in the Great Lakes region and considerably higher in the Middle West where slightly over 9 out of 10 plant workers received 6 or more paid holidays.

The 1955-56 series of machinery surveys in 21 areas of the United States reveals that in Boston and New York a majority of plant employees received 8 or more paid holidays and about a third of the workers received 9 or more paid holidays. In Worcester and Hartford, three-fourths of the plant employees in these areas received 7 or

TABLE 3.—Average union hourly wage rates in the building trades by region, July 1, 1956

Region	Average hourly rate
All building trades.....	\$3.04
Middle Atlantic.....	3.31
Great Lakes.....	3.15
Pacific.....	3.00
Middle West.....	2.97
New England.....	2.85
Border States.....	2.82
Mountain.....	2.74
Southwest.....	2.73
Southeast.....	2.56

SOURCE: Union Wages and Hours: Building Trades, July 1, 1956, BLS Bull. 1205, 1957.

more paid holidays. By contrast, the predominant practice in 10 of the 21 areas was to grant 6 paid holidays during the year.

In the footwear industry, the majority of New England shoe workers in 1953 received 1 week's vacation after 1 year of employment and 2 weeks after 5 years. When the 4 principal shoe-producing areas are ranked according to the percentage of workers receiving 2 weeks after 5 years' service, the Middle West area leads, followed by the Great Lakes, New England, and Middle Atlantic areas in that order.

Paid vacation policies applying to New England production workers in the textile industry were generally superior to other sections of the United States. In cotton and synthetic textiles, New England plant employees typically received vacation benefits based on a percentage of the individual's annual earnings; namely, 2 percent after 1 year, 3 percent after 3 years, and 4 percent after 5 years. Provisions in the Middle Atlantic States were not as extensive as in New England but more liberal than in the Southeast where less than 1 in 10 plant employees received additional vacation provisions after 3 years of service. In woolen and worsted textile mills also, New England vacation provisions for plant employees were usually more liberal than those in the Southeast and slightly higher than those applying to plant employees in woolen and worsted mills in the Middle Atlantic States.

In the broad area of health and insurance plans, New England textile workers also received benefits to a greater degree than in the Middle Atlantic and Southeast areas. However, in both textiles and footwear, coverage under pension plans was extremely limited both on a national and regional basis. About 10 percent of New England plant

²¹ Union Wages and Hours: Building Trades, July 1, 1956, BLS Bull. 1205, 1957.

employees were covered under pension programs; but in footwear coverage was even more limited, with only 2 percent of the area's shoe workers covered under a pension program.

However, in contrast to the relatively low proportion of plant workers covered by pension plans, over three-fourths of all New England production workers in cotton and about one-half of those in synthetic textiles were covered by retirement severance pay plans calling for stated amounts for each year of service.

This emphasis on retirement severance plans as opposed to pension programs is due to a number of factors, but primarily to the contracting nature of employment and relative instability of the industry, plus the cost of a pension program.

Comparative Living Costs

One final standard can be used in evaluating the relative position of New England wage earners. Wage statistics have considerably more meaning when considered in relationship to prices. Although current statistics are not available on intercity comparisons of the cost of living, the 1951 City Worker's Family Budget can be used to advantage.²² This budget is defined as "the annual cost of a modest but adequate level of living" for a four-person urban family. The cost of this budget, at October 1951 prices, in 34 major cities ranged from \$3,812 in New Orleans to \$4,454 in Washington, D. C. Boston ranked in the top third, with an estimated budget of \$4,217, which was exceeded in such cities as Milwaukee, Richmond, and Los Angeles. New York and Philadelphia had budgets considerably below the Boston figure—\$4,083 and \$4,078, respectively. The estimated cost of this same level of living in Manchester, N. H., was \$4,090 and in Portland, Maine, \$4,021.

This budget has not been recomputed since 1951. However, some measure of price change is available in the Consumer Price Index which in October 1956 was 117.7 (1947-49=100) or 5 percent above October 1951 for the United States as a whole. The index for Boston had risen to 119.3, or 7.1 percent over its level for the earlier period.

²² City Worker's Family Budget for October 1951, Monthly Labor Review, May 1952 (p. 520).

Summary

Wages and income in New England generally advance and decline in the same manner as they do in other sections of the United States. The principal exception to this tendency is found in the textile industry where wages are usually set by bargaining taking place within the region. Within New England, wages and income vary by area, industry, and level of skill. Wages and income are generally higher in the southern half of New England and particularly in Connecticut. Furthermore, within the States themselves important wage differences exist. In Massachusetts, for example, occupational wage differences are clearly evident for comparable jobs in the Lawrence and Boston areas. The substantial unemployment problem that has existed in Lawrence in recent years appears to be one of the important factors contributing to this difference in wages.

In two principal soft-goods industries—shoes and textiles—wages in New England are higher than those in other regions, although the differential has been narrowing in recent years in the case of textiles. In relation to other areas of the United States, wage levels in New England cities generally rank below cities of the Pacific Coast, Middle West, and Middle Atlantic States. On the other hand, pay levels of office workers in southern cities and in New England correspond closely, while plant workers on indirect jobs (maintenance, custodial, warehousing, and shipping) in New England generally have higher pay levels than their counterparts in the South.

The most noticeable trend in recent years has been for light-weight metal fabricating and assembly companies to locate in New England. Existing wage rates and an industrialized work force have offered a fertile field for manufacturers of electronic equipment. This has been especially noticeable in Massachusetts. In a similar manner, the machine-tool industry in Connecticut has added new firms because of a wage differential favorable in relation to other areas. In many cases, these newly arrived manufacturers of durables pay higher wages than the soft-goods industries which in former times set the pace for the New England economy. At the same time, the new industries mean increasing diversification of the New England economic scene.

Improvement has taken place in those New England areas which have been stricken by severe unemployment, but some difficult problems remain to be solved.

The Problem of Depressed Areas

WILLIAM H. MIERNYK

THE IMPACT of the recession of 1947-49 was unusually severe in New England. In addition to the cyclical rise in unemployment, certain structural changes were taking place in the regional economy which added to total unemployment. Industrial activity declined from 1947 through 1949. Insured unemployment in New England passed the 350,000 mark during the second quarter of 1949.¹ Total unemployment was in excess of this, since some workers had exhausted their unemployment compensation benefit rights, and others were not covered by unemployment insurance.² In Massachusetts and Rhode Island, the unemployment compensation reserve funds were threatened with depletion.³

In July 1949, the trend was reversed. Production and employment began to increase; and by the outbreak of the Korean conflict, in June 1950, the revival was well under way. During the hostilities, employment and production remained at high levels. The recession had ended, but it left behind a serious problem of localized unemployment. While the region as a whole enjoyed prosperity, it was dotted with a number of seriously depressed areas.

During the recession, employment had declined in all industries. But following a brief revival in 1950 and 1951, employment in the New England textile industries resumed the secular decline which had been halted during World War II and the immediate postwar period. At that time, the textile industry group was still the largest employer of industrial labor in the region.

The consequences of the decline in textiles could have been disastrous for the entire region. But during the revival of late 1949, the communications equipment industry began to expand rapidly in New England, and to many observers it appeared that this transition in industrial structure, while producing temporary problems, was actually strengthening the regional economy.⁴ Concern over the decline in textile employment was mitigated by the growth of employment in electronics. And as this growth proceeded, there was an increasing tendency in the region to view the transition optimistically.

In terms of aggregate employment, production, and incomes, New England's recovery from the recession appeared to be progressing satisfactorily. But the rate of unemployment in New England remained well above the national average. It soon became evident that new industry was not growing in the same areas in which old industry was declining. Also, while some of the workers who had been displaced by the closing of textile mills were finding jobs in the communications equipment and other growth industries, this

¹ The Economic State of New England, New Haven, Yale University Press, 1954 (p. 310).

² See Employment and Unemployment Statistics, Hearings before the Subcommittee on Economic Statistics, Joint Committee on the Economic Report (84th Cong., 1st sess.), Nov. 7, 1955 (pp. 33-35).

³ A contributing factor in Massachusetts was the inadequate unemployment compensation tax policy which failed to provide an adequate reserve fund. See Report on Unemployment Compensation Benefit Costs in Massachusetts, Massachusetts Department of Labor and Industries, Division of Employment Security, Boston, August 1950 (p. 6); and Benefit Financing and Solvency of the Employment Security Fund in Rhode Island, Rhode Island Department of Employment Security, Providence, November 1950 (p. 33, ff.).

⁴ The Economic State of New England, op. cit. (pp. 14-17).

shift in employment was not as widespread as many believed. The level of unemployment remained high in the textile towns, hard hit by the liquidation or outmigration of mills. Thus, when the minor recession of 1953-54 occurred, there was a sharp rise in unemployment in many of these communities. Since then, conditions have slowly improved, but the problem of localized unemployment has not been solved yet in all of the region's depressed areas.

Failure to Adapt to Change

Some depressed areas in New England rebounded quickly from the loss of textile jobs. New manufacturing establishments moved into these communities to take up the slack. To some extent, the quick recovery of these areas was due to effective local redevelopment activities.

In Nashua, N. H., for example, an announcement in 1948 of a proposed liquidation of a large mill formerly operated by Textron, Inc., produced a strong public reaction. The Textile Workers Union of America and other groups protested the liquidation so vigorously that a congressional investigation was held.⁵ The publicity, among other things, led the company to initiate and support an effective redevelopment program. Portions of the mill building were occupied by new and smaller establishments, and the economic base of the community became somewhat more diversified. In many ways, however, the experience of Nashua is a special case. Manchester, N. H., likewise became a surplus labor area owing to the loss of textile jobs, and there has been a similar growth of new and more diversified manufacturing establishments in this community. But recovery in Manchester proceeded far more slowly than it had in Nashua.

Redevelopment activities in other communities have been less successful. The communities of Lawrence, Lowell, Fall River, and New Bedford in Massachusetts, and Providence, R. I., were classified as surplus labor areas for a major part of the past 8 years.⁶ While the employment situation in all of these areas has improved since 1954, Lawrence, Lowell, and Providence have not fully recovered from the shock of the recession of 1948-49. And it was not until late in 1956 that

Fall River and New Bedford were removed from the labor surplus category.

For a number of reasons, these communities adapted to change only slowly and with considerable difficulty. The liquidation of textile mills provided a vast amount of vacant factory space, but this was often unsuitable for other types of manufacturing operations. Until recently, these areas were largely bypassed by the growth industries, some of which expanded in smaller, less industrialized communities, while others located in or near the Boston Metropolitan Area, where a large cluster of electronics establishments has appeared.

A further explanation of the slow adaptation to change is to be found in the characteristics of the workers displaced by the outmigration of textile mills. A substantial proportion of these workers were well past middle age; and while they may have had many years of textile employment ahead of them, they became marginal workers with the loss of their jobs. The more mobile, younger displaced workers frequently migrated to jobs in other areas. New establishments which located in these areas usually chose the younger members of the labor force, and some employed a large proportion of women. Thus, the average age of the unemployed workers remaining in the depressed communities was raised. The older, male workers in the community were not easily reemployed.

Initially, redevelopment activities in these communities relied heavily upon advertising the availability of labor and vacant plant space. Only in recent years have local redevelopment agencies taken positive steps, such as the development of industrial parks and the construction of modern plant buildings, in an effort to attract new types of industry.

⁵ Investigation of Closing of Nashua, N. H., Mills and Operations of Textron, Inc., Hearings before a Subcommittee of the Committee on Interstate and Foreign Commerce, U. S. Senate (80th Cong., 2d sess.), Pt. 1, 1948.

⁶ The Bureau of Employment Security classifies areas, according to relative adequacy of labor supply, into six major categories designated by letters ranging from A to F. Group A reflects the relatively greatest labor scarcity; group C denotes a rate of unemployment about in line with the national average; and D, E, and F are designated as areas of substantial labor surplus, with F denoting the relatively greatest surplus. A more comprehensive definition of area classifications appears in the Bimonthly Summary of Labor Market Developments in Major Areas, Bureau of Employment Security, U. S. Department of Labor.

Magnitude of the Problem

It is difficult to make an accurate estimate of the number of chronically unemployed in a depressed area. Theoretically, it is possible to make adjustments for unemployment due to seasonal and cyclical causes and to allow for frictional unemployment. In practice, however, it is difficult to make accurate estimates of the number of workers unemployed owing to secular or structural change. Moreover, there are other problems involving the definition of an unemployed worker. Only those workers in a labor market area who are without jobs and actively seeking work are counted as unemployed. However, there are persons in the depressed areas of New England who are available and interested in further employment, but who have given up an active search for a job. These are often older women, with long records of employment in textile mills. After the loss of their textile jobs, some continued to register at the local employment office for 2 or 3 years. But eventually, failing to find work, they discontinued an active search for a job, although they continued to desire further employment.

If the labor force of a community is defined as estimated total employment⁷ plus the unemployed, the following tabulation, presenting unemployment as a percent of the labor force, provides a measure of the problem in the 5 New England labor market areas in which chronic unemployment has been most serious during the past 8 years.

*Unemployment as a percent of the labor force¹
(annual averages²)*

	1952	1953	1954	1955	1956
Lawrence, Mass.-----	23.1	19.0	24.1	16.4	10.2
Lowell, Mass.-----	7.6	6.5	10.5	8.8	6.8
Fall River, Mass.-----	11.2	5.4	9.3	6.1	6.3
New Bedford, Mass.---	6.9	5.7	11.3	8.6	6.1
Providence, R. I.-----	8.4	6.1	12.3	8.7	8.0

¹ Total estimated employment plus unemployed.

² Averages based on bimonthly data (January, March, May, July, September, and November).

SOURCE: Unpublished data provided by Bureau of Employment Security, U. S. Department of Labor, as reported by the Massachusetts Division of Employment Security except for Providence.

⁷ Total employment includes nonagricultural wage and salaried workers, nonagricultural domestic, self-employed, and unpaid family workers, and agricultural workers.

⁸ In July 1952, for example, there was an arbitrated wage cut of 6½ percent in the northern cotton-rayon textile industry.

The preceding tabulation illustrates the effect upon depressed areas of a cyclical rise in unemployment from a high base of chronic localized unemployment. Between 1952 and 1953, there was a decline in unemployment in all of the selected areas. But the recession that began in late 1953 sent unemployment figures upward again in all the selected areas, and except for Fall River, they were higher in 1954 than they had been in 1952. Since 1954, the number of unemployed has declined in all of the areas listed in the tabulation. By the end of 1956, Fall River and New Bedford had been reclassified as group C, or moderate labor surplus areas, but Fall River was again reclassified in January 1957 to the group D substantial labor surplus category. Further contraction of textile employment, whether cyclical or secular, could again create some of the problems these communities have faced in the past.

Effects upon the Community

The existence of a substantial pool of unemployed in a community tends to exert downward pressure upon the general wage structure of the community. Wages of unionized workers covered by national or regional agreements in nondepressed industries will not be affected. But it is difficult for unions in depressed industries to negotiate increases in the general wage level. At times, indeed, workers in these industries have been forced to accept wage reductions in the face of a rising general wage level.⁸ In addition, the availability of a substantial number of unemployed workers tends to attract certain types of low-wage establishments such as textile jobbing shops, certain types of garment factories, and other small establishments seeking to obtain workers at the lowest possible wages. Some of the displaced workers, long unemployed, have balked at the low wages, but others have been forced by necessity to accept them.

Labor-management relations likewise may become strained. Establishments which continue to operate in these communities may resist wage increases or even seek to impose wage cuts. These are strenuously resisted by unions, reluctant to give up gains achieved after a long and, at times, costly struggle.

The local economy, of course, suffers. Trade and service establishments curtail the level of their operations. Secondary unemployment occurs, induced by the decline in local manufacturing employment. If local business conditions are bad, the community may not be able to properly maintain its social capital. Streets, sewer systems, schools, etc., will not receive proper maintenance. If, in addition, there is substantial outmigration of population from the community, some facilities will not be fully used. Consequently, there is a waste of social capital in addition to its deterioration.

State and Local Community Remedial Efforts

Until quite recently, the redevelopment of depressed communities was considered to be essentially a local matter and in practice depended upon local initiative and activity. Some local development programs have been successful in encouraging sound local growth, as in the case of Nashua, N. H. But others have been able to do little to improve local conditions. Some local development organizations, in their anxiety to provide work for the unemployed, have encouraged the location of manufacturing establishments in their communities which later proved to be unstable. Because there is a rapid turnover of such establishments, they do little to reduce the level of unemployment.

In New England, development activities within communities have not been coordinated by state-wide agencies. Each community agency has sought to solve local problems by its own means. Some have attempted to fill vacant factory space with new establishments. Others have developed industrial parks and constructed modern plant buildings, hoping thus to induce manufacturers from outside to locate in their areas. There is no evidence that development credit corporations, the new type of financial institution pioneered in New England and designed to encourage the development of indigenous businesses, have made a significant contribution to the redevelopment of depressed areas.⁹ Probably to a greater extent than elsewhere, the problem of rehabilitating depressed areas in New England has been narrowly conceived and efforts to solve the problem have been largely restricted to local activities. State agencies have, of course, assisted local development groups. But

with few exceptions, State development organizations have been unable to concentrate upon the redevelopment of specific communities.¹⁰

By way of contrast, Pennsylvania now has a State agency to deal with this problem.¹¹ And in southern Illinois, localized unemployment is viewed, to some extent at least, as an area rather than a local problem, and is being attacked at the area level.

At the present time, conditions in New England are reasonably good. The secular, downward drift in textile employment has slowed down, and there has been a rise in employment in other industries. Moreover, there has been improvement in the employment situation in the depressed areas. But with a cyclical downturn in employment, the situation in those depressed areas which are not yet fully rehabilitated would again worsen. As in the past, they would enter a recession with relatively high levels of unemployment.

Proposed Federal Legislation

In their report of January 1956, the Council of Economic Advisers recognized that "the fate of distressed communities is a matter of national as well as local concern."¹² Congressmen, as well, have recognized that the long-run solution of this problem would depend upon a concerted attack. Several bills to provide assistance to depressed areas were introduced into the 84th Congress. One bill, bearing administration approval, was introduced by Senator H. Alexander Smith of New Jersey. A bill on this subject was also introduced by Senator Paul H. Douglas of Illinois.

Both bills would have provided loans and technical assistance to depressed areas. In addition, the Douglas bill would have provided supplementary compensation to workers who had exhausted their unemployment benefit rights, while the latter were undergoing training for new jobs. The Smith bill did not come to the floor of the Senate for debate. In the final days of the 84th Congress, a modified version of the Douglas

⁹ See New England Development Credit Corporations (*in* Monthly Review, Federal Reserve Bank of Boston, July 1954 (pp. 1-8), and August 1954 (pp. 1-8); especially, Purpose of Loans).

¹⁰ Rhode Island is a notable exception. Since Providence is the only major labor market area in this State, the State development commission has devoted considerable attention to its redevelopment.

¹¹ In 1956, Pennsylvania enacted an Industrial Development Authority Act which provides loan funds to depressed areas in that State.

¹² Economic Report of the President, January 1956 (p. 61).

bill was passed in the Senate by a vote of 60 to 30. It did not come to a vote in the House of Representatives, however, and thus did not become law. There is still, however, much support for Federal assistance, both in Congress and among various private organizations. In his 1957 Economic Report, President Eisenhower proposed the establishment of an Area Assistance Administration Program in the Department of Commerce to revitalize areas with long-standing unemployment.

Some private organizations, however, including a few which are engaged in development or promotional activities, have opposed Federal aid to depressed areas. At a meeting of the New England Council devoted to the problem of depressed areas, held in February 1956, a resolution was passed opposing Federal aid. And at the 1956 meeting of the Association of State Planning and Development Agencies, representatives of some New England States voiced strong opposition to Federal assistance.¹³

Conclusions

Local development organizations in New England are continuing their efforts to create new jobs for the substantial number of unemployed in depressed areas. But because of the improvement in most of these areas during the past 2 years,

interest in the problem of area redevelopment has waned outside the affected communities. Past experience suggests, however, that even a relatively mild recession such as that of 1953-54 will reveal that much remains to be done before the problem of depressed areas is solved. And while the decline of textile employment in New England has slowed down, it has not been halted. Periodically, there is an upsurge in unemployment in one of the depressed areas as still another mill is closed.

There is a strong conviction in some quarters that the problem of localized unemployment is a matter of national rather than local concern. And an excellent case has recently been made for spending substantial sums to reemploy displaced workers on the grounds that the savings in unemployment compensation would more than offset the direct and social costs involved.¹⁴ There has been some support for such a program in New England; but at the same time, some of the most articulate groups in the region have voiced strong opposition to Federal aid. A Federal program of area redevelopment remains a distinct possibility, however, and if enacted will benefit the region in spite of this opposition.

¹³ Proceedings, 11th Annual Convention, Association of State Planning and Development Agencies, Boston, 1956 (pp. 30-31).

¹⁴ Arnold C. Harberger, *The Economics of the President's Economic Report*, *Journal of the American Statistical Association*, September 1956 (p. 458).

Only those [workers] who managed to accumulate a little property were allowed to vote; and everywhere the brand of inferiority was stamped upon them. When the son of a Boston bricklayer was elected to the office of justice of the peace in 1759, the right to the office was attacked on the ground of his low social origins; and his defense was not the dignity of his calling but a reply that the charges were false.

—Charles A. and Mary R. Beard, *The Rise of American Civilization*, New York, Macmillan Co., 1927, Vol. I (p. 131).

Labor Turnover in Textile Mills

With many young workers taking jobs in New England's cotton and synthetic textile mills, management faces the challenging task of retaining and training them.

LEONARD ARNOLD

MANY INVESTIGATIONS have been conducted and much has been written in recent years of the plight of New England's textile industry, its losses, and the impact of these losses on the New England economy. The barrage of material calling attention to the decline of the industry has emphasized the negative aspects and has overlooked certain positive features.

One of these positive features is the fact that younger workers are taking jobs in New England's textile mills and compose a high proportion of new hires. This fact, combined with the fact that there are a substantial proportion of younger persons among job applicants tends to indicate the erroneousness of the popular belief that people are not attracted to work in New England textile mills.

These facts and other data available for the first time are the results of a study by the Northern Textile Association of labor turnover in New England cotton and synthetic textile mills.¹ The period selected for study was the first half of 1953—a period of stability at a relatively high level in both the New England cotton and synthetic textile industry and the New England economy generally. It is, therefore, a particularly useful period for the purpose of studying labor turnover.

In brief, the study showed that although a majority of the work force in New England cotton and synthetic textile mills was 40 years of age or over, with an average age of 43, employees with less than a year's service had an average age of 33, and 48 percent of them were under 30. In addition, 44 percent of job applicants were also under 30 years.

The separation rate in New England cotton and synthetic textile mills was significantly lower than in all-manufacturing industries in various local labor markets and was also below the average for the national cotton and synthetic textile industry. While a high proportion of total separations for the New England industry was composed of quits, the majority of persons quitting were employees with less than a year's service who were apparently shopping for what would be their permanent jobs.

The existence of this situation, however, presents a very real challenge to textile mill managements. Time, effort, and study should be devoted to solving the problem of retaining the younger workers who comprise such a large proportion of the new employees.

Composition of the Work Force

The work force of the New England cotton and synthetic textile industry was almost evenly divided between men and women, with men comprising 52 percent of all production and related workers. The average age of men was 43.6 years and of women, 42.7 years. The proportions of the work force at various age levels were as follows:

	<i>Percentage of the work force</i>
Under 30 years.....	19
Under 35 years.....	28
Under 40 years.....	40
40 years and over.....	60
45 years and over.....	48
50 years and over.....	36

¹ The sample consisted of 20 cotton and synthetic textile mills, employing 15,429 production and related workers, selected to be representative of the New England industry's locality, product, and size of mill.

The high proportion of older workers in the work force poses some rather specialized problems for New England's textile mills. What impact does an aging work force have on productivity and the competitive position of the New England mills? Do the factors of experience and skill offset or even outweigh the physical advantages of youth? Are the advantages of stability and maturity—characteristics of an older work force—an offset to the greater responsiveness to change usually considered more typical of younger workers? These are just some of the many questions which arise from the fact that almost half of the workers in New England cotton and synthetic textile mills are 45 years of age and over. In any event, a greater leavening of younger workers would be desirable if just from the point of view of replacing persons on the verge of retirement age.

The age distribution of employees in each of nine major departments was quite similar to the age distribution of the employees in all the plants combined. While the proportion of employees in various age brackets differed from one department to another, no particular concentration of either younger or older workers was found in any one department. Compared with the 60 percent of all workers who were 40 years of age and over, the proportions in this age group in the various departments ranged from 55.5 percent in the clothroom to 66.5 percent in the carding department. With respect to younger workers, 9.4 percent of all workers were under 25; departmental ratios ranged from 8.3 percent in the clothroom and the carding department to 12.9 percent in the yarn preparation department. Similar situations were found with respect to other age brackets.

A distribution of the work force in nine major departments shows that the largest number of workers, by far, was employed in the weaving department, as shown in the following tabulation. The sex composition of the employees within each department indicates a matching of the different work skills and experience, as well as physical

qualifications, with job requirements in the various departments.

Department	Percentage distribution of total employment by department	Percentage distribution of departmental employment by sex	
		Men	Women
Carding-----	15	62	38
Spinning-----	22	42	58
Yarn preparation----	6	23	77
Filling and winding---	4	30	70
Twisting-----	2	41	59
Slashing-----	2	95	5
Drawing-in and tying-in-----	3	58	42
Weaving-----	37	63	37
Clothroom-----	9	30	70

Total Separations

The average monthly separation rate of the New England cotton and synthetic textile industry during the first half of 1953 was 33 per 1,000 employees, or 6 percent less than the separation rate of 35 per 1,000 employees in the national cotton and synthetic textile industry during the same period.² Moreover, it was, as shown in the following tabulation, consistently below the separation rates of all manufacturing industries in certain local labor market areas in the first half of 1953.³

	Separation rate per 1,000 employees for manufacturing
Average, all areas-----	50
Fall River, Mass-----	42
Lowell, Mass-----	72
Manchester, N. H-----	39
New Bedford, Mass-----	49
Providence, R. I-----	62
Springfield-Holyoke, Mass-----	36

During the period when the New England cotton and synthetic textile separation rate was 33 per 1,000 employees, the accession rate was 28 per 1,000 employees, with a consequent net loss in the industry's total work force.⁴ In the same period, the accession rate in the national industry was identical with the separation rate—35 per 1,000 employees—indicating stable employment. Also, quits accounted for a smaller proportion of total separations in the national cotton and synthetic textile industry, 63 percent, than in the New England mills, 73 percent. To complete the analysis, 12 percent of the separations in the New England industry were discharges; 9 percent were layoffs; 3 percent were military separations; and 3 percent were retirements.

² United States data from monthly turnover series published by the Bureau of Labor Statistics.

³ Unpublished study conducted by the Northern Textile Association from data which were available from the State employment security agencies. Although the 6 areas studied had moderate or substantial labor surpluses in the spring of 1953, they had experienced a gradual buildup in employment during the previous year, and two of the areas had been shifted in the direction of a tighter labor market situation in the first half of 1953.

⁴ These rates apply only to the mills included in the sample and, therefore, do not measure any separations which may have resulted from mill closings.

Quit Rates

By Department. With a quit rate of 24 per 1,000 employees for all employees in all plants studied, the rates in individual departments varied widely—from 10 in the drawing-in and tying-in department to 34 in the twisting department, as shown in the following tabulation:

Department	Quit rates per 1,000 employees	Percent of total quits
Total employees, all plants	24	100.0
Carding.....	25	17.1
Spinning.....	19	19.6
Yarn preparation.....	17	4.4
Filling and winding.....	22	3.5
Twisting.....	34	3.1
Slashing.....	12	1.3
Drawing-in and tying-in.....	10	1.4
Weaving.....	25	44.0
Clothroom.....	13	5.6

By Shift. The largest concentration of quits was from the second shift. The high proportion of quits from that shift—42.6 percent of the total—is accounted for principally by two factors: (1) The second shift is generally found to be the most undesirable from a family and social point of view; and (2) no premium pay was provided for second-shift work, but a 7-cent hourly premium was paid to workers on the third shift.

Since it is generally thought that first-shift work is more desirable than employment on the third shift, it was surprising to find that the proportion of total quits from the first shift was almost as high as from the third shift, 28.3 and 29.1 percent, respectively.

By Age. The largest cluster of quits was composed of employees in the age group under 30 (45 percent of total quits). As would be expected, the percentage of total quits by age groups declined as the age increased.

By Sex and Length of Service. As is the case in most industries, the majority of quits were by new employees: of all persons who quit their mill jobs, 72 percent had less than 1 year of service. Seventeen percent of the quits were by employees with more than 3 years of service, while only 11 percent were employees with from 1 to 3 years of employment.

Although the work force was almost evenly divided between men and women, as previously indicated, 62 percent of total quits were made by

men. Of the men who quit, 77 percent had less than 1 year of service, while 65 percent of the women who quit their jobs were in this category. The proportion of employees who quit after 3 years of work was considerably higher among women than among men—23 percent and 13 percent, respectively.

New Employees

By far the most interesting findings with respect to the new employees, i. e., workers in the employ of a mill for less than a year, were that a large number of them were young and a relatively high proportion had no previous textile experience. Of the 2,948 employees hired during the period studied, 48 percent were under 30 years of age and 30 percent were under 25 years. Of new male employees, 55 percent were below age 30 and 37 percent were under 25. In contrast, only 38 percent of new female employees were below 30 years and 21 percent were below 25. The fairly even balance between men and women in mill employment was not found among new hires; men comprised 60 percent of the hires.

As would be expected, with the high proportion of quits from the second shift, a high proportion (46 percent) of new employees were hired as replacements for that shift. The proportion of hires exceeded that of quits for both the second and third shifts, with 31 percent of new hires going on the third shift. However, replacements on the first shift—24 percent of new hires—were below the quit level for that shift.

A comparison of new hires by departments shows that most departments had about the same proportion of total hires and total quits. The two major exceptions were the spinning department, where hires were greater (22 percent of hires and 20 percent of quits), and the weaving department, where the reverse was true (44 percent of quits as against 39 percent of hires).

With respect to the work experience of new employees, 58 percent had previous textile experience, 24 percent had other manufacturing experience, and 18 percent had no previous manufacturing experience of any kind. The proportion of new employees with previous textile experience was much higher among women (71 percent) than among men (49 percent).

In this connection, information concerning training programs was requested. It appeared that specific well-formulated training programs were carried on by only a minority of the mills, and the information received was inadequate.

Job Applicants

More than 4,000 job applicants were studied to determine the age, sex, and previous experience of potential cotton and synthetic textile employees. The proportion of younger applicants was high, with 44 percent under 30 years of age and 30 percent below the age of 25.

More women applied for work than men. While 53 percent of total applicants were women, they represented only 40 percent of the new hires. Like the new employees, less than half (44 percent) of the job applicants had had no previous textile experience.

Reasons for Quits

It was not possible to gather adequate data permitting valid observations concerning the reasons why employees voluntarily left the employ of the mills covered in this study.

Although exit interviews were conducted by 5 mills employing 22 percent of the workers, actual exit interviews were held with only 18 percent of the total number of quits. The largest proportion of workers interviewed (42 percent of the 448 interviewed) gave no reason for quitting.

Principal Conclusions

Perhaps the most significant conclusion which can be drawn from this study of labor turnover is that the age levels of new employees and applicants for work tend to disprove the popular belief that younger workers are not attracted to the New England textile industry.

The extremely high proportion of persons quitting their jobs after less than 1 year of service, however, indicates that mill management must meet the challenge of retaining their younger workers. Moreover, the lack of adequate data on reasons for quits suggests that management has not been particularly concerned with ascertaining why workers leave the employ of the mills. This is an area which deserves more thought and consideration than it evidently has received.

Finally, the scarcity of training programs at the time of the study can be attributed in part to the availability of experienced workers and in some measure to management's lack of interest in developing such programs. The fairly large proportions of new employees and of applicants for work without either previous textile experience or manufacturing experience of any kind apparently focused management attention on the increasing need for training programs in New England cotton and synthetic textile mills. It is encouraging to note that evidence gathered since the date of the study shows that many additional training programs have been inaugurated and mill managements appear to be cognizant of this need.

[At a meeting in 1846 of the New England Workingmen's Association in Peterboro, N. H., a resolution was adopted condemning work before sunrise. The resolution read] "*Resolved*, That although the evening and the morning is spoken of in the Scripture, yet in that book no mention is made of an evening in the morning. We therefore conclude that the practice of lighting up our factories in the morning, and thereby making two evenings in every twenty-four hours, is not only oppressive but unscriptural."

—George E. McNeill, *The Labor Movement*, Boston, A. M. Bridgman & Co., 1887 (p. 107).

Collective Bargaining and Competitive Cost in the Shoe Industry

Collective bargaining in New England shoe factories has adapted reasonably well in the postwar period to the highly competitive and partially organized footwear industry.

E. R. LIVERNASH

NEW ENGLAND has been maintaining its share in national shoe production since 1925, except during the years 1947-49, after many years of severe decline following the Civil War.¹ And, since 1953, it has shown evidence of enlarging its share. Within the region, production in Maine has increased in importance relative to Massachusetts and New Hampshire, but this is only a minor qualification with respect to an encouraging competitive performance by all three States.

Looking more closely at the New England production record,² we find the following: In the years 1925-29, inclusive, census data³ showed an average share of total national production of 33.8 percent. There was a decline in 1947, 1948, and 1949. The years 1950-53, inclusive, again averaged 33.8 percent. (A revision of the sample in 1950 precludes close comparison with the years of decline, but probably improves the comparison with the predepression base.) In 1954, 1955, and the first 8 months of 1956, the average share has been 37.3 percent—higher than in any of the years of the period since 1924.

Can this production record be related in any significant way to the results of collective bargaining in the postwar years? This is not an easy question to which dogmatic answers may be found. This much may be said: Assisted by the Federal minimum wage, restraint in negotiating general wage increases, compared with most manufacturing industries, seems to have held the increase in earnings in unionized plants to about the same

amount as the average for the industry as a whole. The presumed differential between union and non-union earnings does not appear to have increased. Moreover, some regional earnings differentials, unfavorable to New England, appear to have narrowed. This may in part be the result of collective bargaining, although data demonstrating the impact of bargaining are not available.

Wage and earnings changes, both general and regional, affect the competitive union-nonunion situation, of course, but do not go to its heart.⁴ Whether union plants frequently have a serious labor-cost disadvantage remains an unanswered question. In a piece-rate industry, high average earnings do not necessarily indicate high labor cost. Generally, the traditional shoe centers, including those in New England, have relatively high earnings and are heavily unionized, and manufacturers in these centers appear to feel that they have a disadvantageous labor-cost position. Union spokesmen can reply, however, that if there were a labor-cost disadvantage equal to the earnings differential, these shoe centers would have long since disappeared.

¹ The New England Economy, A Report to the President Transmitting a Study Initiated by the U. S. Council of Economic Advisers and Prepared by its Committee on the New England Economy, July 1951, Washington, 1951 (pp. 173-183).

² The Federal Reserve Bank of Boston, in cooperation with the New England Shoe and Leather Association, has made several studies of New England's share. See *Monthly Review*, Federal Reserve Bank of Boston, November 1948, October 1950, and November 1953.

³ *Facts for Industry: Shoes and Slippers*, Series M68A (monthly reports on output), U. S. Bureau of the Census.

⁴ They are also of interest with respect to New England's production record, though they by no means explain that performance.

The Importance of Labor Cost in Competition

Labor cost is of crucial importance in the shoe manufacturing industry. Marketing channels, market analysis and finesse, and product competition in all its varied aspects are also of great importance; their effects on business success divide firms into dynamically changing groups. But these phases of competition are bounded by and immersed into cost competition.

The shoe industry meets the ordinary criteria associated with a highly competitive industry. Without delving into statistical description, the number of firms is large, the average firm is small in size, the degree of concentration of production in larger firms does not insulate them from competition with each other and with smaller firms, and entry to and exit from the industry are relatively easy. Production is widely dispersed geographically, partly in response to the search for low labor costs. Internal Revenue Service figures for the industry indicate that, in 1929, 711 establishments showed gains and 547 reported losses; in 1932, 298 reported gains and 829 losses; in 1946, 1,029 showed gains and 296 losses; and in 1950, 673 were profitable and 344 were not.⁵

Price competition in the shoe industry is keen though difficult to measure. Substantial quantities of shoes are bought on very detailed specifications, with firms gaining or losing business because of small differences in cost. While prices at retail appear orderly, with fairly commonly accepted price lines and reasonably parallel movement of these lines, there is great underlying change. Competition intensifies as marketing opportunities appear to shift among price lines. An indication of this change is the greater variation in average factory price compared with a price index based on a fixed product composition. If average factory value moves sharply within a few months, the probability is that shoes are being repriced through upgrading or downgrading among price lines rather than that there is a pure change in product mix. At all times there is strong competition to produce a better shoe at a given price.

⁵ These figures, along with others demonstrating the general description in the paragraph, may be found in *Facts and Figures on Footwear*, 10th Edition, New York, National Shoe Manufacturers Association, 1956.

⁶ George P. Shultz, in *Pressures on Wage Decisions* (New York, The Technology Press of the Massachusetts Institute of Technology and John Wiley & Sons, Inc., 1951), has ably demonstrated this basic point, particularly in his discussion of the Brockton grade system.

Accepting as fact a high degree of price and product competition, there remains the question as to why labor cost is of particular significance. While the shoe industry's proportion of labor cost to manufacturing selling price (about 25 percent) is not low, neither is it outstandingly high in comparison with other manufacturing industries.

The answer to our query is to be found, first, in the absence of technological competition. Technology is almost identical from factory to factory for similar constructions and types of shoes. Also, technology is neither controlled nor developed by shoe manufacturers. Meaningful competitive advantage of even a temporary nature cannot be obtained by superior basic methods and processes. This is in sharp contrast to many industries where the technology of product and process is the major focus of competition.

In the second place, the price of the basic raw material, leather, derives from an auction market in hides and, subject to modest qualification for quantity purchasing and speculative intuition, does not provide a competitive advantage for particular firms. If the qualification were of particular importance, it is most doubtful that the figures on concentration for the largest 50 firms (or for smaller numbers) would show, as they do, that the proportion of production of the larger firms declined from 1939 to 1954.

Two major areas thus remain as possible sources of cost advantage; these are labor cost and merchandising and marketing. Superior performance in the latter area, as for example anticipation of shifts in the market or in consumer tastes, may indirectly lower overhead per pair by so broadening the sales base as to permit better organization and consequently increased efficiency of production.

Lower labor cost can yield a similar advantage and is thus a strategic competitive factor. As shoe manufacturing is a piece-rate industry, labor cost is the sum of a list of piece prices plus the cost of "fringe" benefits. Competition in selling price (and product) becomes and is competition in piece prices. Collective bargaining in this decentralized industry of many firms, only partially organized, has never been able to "remove wages from competition." Rather, collective bargaining has its primary focus upon labor cost within this competitive struggle for favorable price position.⁶

Union-Nonunion Changes in Earnings Level

The United Shoe Workers (formerly CIO), the Boot and Shoe Workers (formerly AFL), and independent unions represent little more than half of the industry's production workers. The 1953 wage survey of the industry by the Bureau of Labor Statistics of the U. S. Department of Labor estimated that 50 to 60 percent of the workers were covered by labor-management agreements.⁷ Clearly a most substantial segment of the industry is not organized, including some large multiplant firms that are either entirely or partially unorganized.

Still, it is not appropriate to describe the industry in very many regions as "nonunion," although in the South, the Border States, and Pennsylvania, it is heavily nonunion. But the West,⁸ which in the period of New England's heavy decline (before 1925) was poorly organized, is now probably almost as heavily organized as New England. Unionism, while weak in terms of potential membership, has had a more pervasive influence upon wage movements in World War II and the postwar period than in the prewar era.

The shoe industry is a low-wage industry and, as compared with all-manufacturing, has lost ground in the postwar period. In 1946, average hourly earnings in the shoe industry were 14 percent below the average in manufacturing (\$0.93 compared with \$1.08), according to the hours and earnings series of the Bureau of Labor Statistics. By 1949, with wartime wage controls lifted and the labor market not so tight, earnings in the industry (\$1.10) were 21 percent below average earnings in manufacturing (\$1.40), and by 1955, this percentage had grown to 29 (\$1.34 compared with \$1.88). The total increase in average hourly earnings from 1946 to 1955 was substantially less in the shoe industry than in all-manufacturing—41 cents compared with 80, or, in relative terms, 44 and 74 percent, respectively. Shoe manufacturing has thus been one of the minimum-increase manufacturing industries, lagging even in percentage terms in a period when most relative wage differentials were narrowing.

To estimate the typical impact upon average earnings of general wage increases in union plants, two wage chronologies published by the Bureau of Labor Statistics—for Massachusetts

Shoe Manufacturing and for the International Shoe Co.⁹—can be compared with the average earnings data. While the general wage changes listed in the chronologies are not directly comparable to changes in gross average earnings, such a comparison appears to be generally valid when the two major areas of noncomparability are considered. First, the general wage changes do not include adjustments in individual rates such as promotions and changes in individual job rates that do not have an immediate or noticeable effect on the average wage level and thus would not necessarily coincide with the change in straight-time average hourly earnings even in the situations covered. In the footwear industry, changes in individual piece rates could have an appreciable effect over a number of years. The other major difference stems from the fact that average earnings include premium payments for overtime, shift differentials, sick leave, holidays, vacations, and production bonuses, which are, of course, excluded from the general wage change data. As rough guides to the effect of these inclusions on the average earnings figures, it should be noted that in recent years average weekly hours of work have not exceeded 38 and late-shift work has not been common. With respect to paid holidays and vacations, only those occurring in the week ending nearest the 15th of the month would be included, since that is the date of reference for the earnings data.

General wage changes under the International Shoe Co.'s contracts with the Boot and Shoe Workers and the United Shoe Workers resulted in an increase of approximately 59 cents per hour from the end of World War II through October 1955, when the most recent wage adjustment became effective.¹⁰ When the Massachusetts wage chronology, based on agreements between the United Shoe Workers and a number of shoe companies in the Lynn-Haverhill-Boston area, is updated through January 1956, the date of the last general wage adjustment, the increase comes

⁷ See Wage Structure: Footwear, March 1953, BLS Report 46, 1953 (p. 2).

⁸ Loose New England shoe parlance for Missouri, Indiana, Ohio, Illinois, and Wisconsin.

⁹ Wage Chronology No. 20 and Supplement 1: Massachusetts Shoe Manufacturing, Monthly Labor Review, February 1952 (p. 169) and July 1953 (p. 751); and Wage Chronology No. 25 and Supplement 1: International Shoe Co., Monthly Labor Review, July 1952 (p. 30) and April 1953 (p. 403).

¹⁰ To the general wage changes shown in the published chronology, the author has added his estimate of the cents-per-hour equivalent of the approximately 5-percent increase effective October 3, 1955.

to 58 cents per hour.¹¹ (In Brockton, a second important Massachusetts shoe center, a rough personal estimate places the comparable increase at about 55 cents per hour.)

A rough estimate of changes in earnings in the nonunion segment of the industry can be made by comparing general wage changes in union plants with the 63-cent increase in the average earnings series for the comparable period of September 1945 to March 1956. In making such a comparison, which is of course subject to the qualifications previously mentioned, one must also assume that the average earnings data are based on reports from a sample of firms that is representative of the extent of unionization in the industry as a whole. While no information can be offered to validate this assumption, the fact that the sample firms employ about half of the workers in the industry suggests that it is reasonable. Thus, it can be said that nonunion earnings appear to have increased by almost the same amount as in union plants. But recognition must also be given to the effects of the two changes in the Federal minimum wage which took place during the period covered.

The minimum wage under the Fair Labor Standards Act was increased to 75 cents in January 1950, and average hourly earnings in the shoe industry increased between 2 and 3 cents per hour from 4 months prior to the change to 4 months after the change.¹² General increases were not given during this period. A comparison of earnings in 12 important shoe-producing States for the same period shows an increase of about 5 cents per hour in the lower paying States and about 2 cents in the higher paying States. Despite some deviations, this generalization appears reasonably sound.

In March 1956, the \$1 Federal minimum became effective. It is not desirable to use a 4-month before-and-after comparison in this situation, as late 1955, early 1956 was a period of general increases. Union firms were more willing to negotiate general increases in late 1955 and early 1956 because of the probability that the higher minimum would bring pay increases to a substantial

¹¹ To the published chronology, the author has added the increase amounting to 5 percent of gross weekly earnings effective in January 1956, with a personal estimate of its cents-per-hour equivalent.

¹² Figures for the Federal minimum-wage comparisons are the Bureau of Labor Statistics data on gross average hourly earnings.

¹³ For a discussion of the effects of the \$1 minimum on wages in the southern footwear industry, see p. 323 of this issue.

number of workers in the industry,¹³ and in addition, some important nonunion firms announced general wage increases in advance of negotiations in unionized firms, partly in anticipation of the higher minimum. Earnings in the industry were quite stable at \$1.34 to \$1.35 for the period April to October, 1955, and then increased gradually to \$1.41 in February 1956. This figure increased to \$1.45 in March and maintained this level until August. The only 1 of the 12 States which did not reflect this March increase had increased very substantially from December to January. The pattern of larger advances in low-paying States than in the United States average was a little less marked than in the case of the 75-cent minimum. A fair inference seems to be that the Federal minimum wage increased earnings about 4 cents per hour, with the earlier advances attributable to general increases.

These estimates indicate that the Federal minimum wage has been important in the shoe industry. The 2 increases have contributed at least 5 cents per hour to average earnings in the industry and more probably 7 cents.

Now a rough appraisal of the effects of general wage changes on average hourly earnings may be made. Deduction of the earnings increase that may be attributed to Federal minimum-wage changes from the total increase of 63 cents that occurred from September 1945 to March 1956 leaves an amount that is within the range of the general increases in union firms of 55 to 59 cents per hour shown by the wage chronologies. It would appear, therefore, that nonunion general increases were not too different in average magnitude from the increases in union centers.

Nothing approaching industry bargaining or precise wage patterns exists in the shoe industry, but the International Shoe Co., the largest producer, might be regarded as something of a benchmark. From the unions' point of view, International Shoe has no doubt been a hard bargainer well aware of the partial organization of the industry. New England firms, bargaining from a high earnings base, have about matched International Shoe and have held a constant relative position. The effect of these facts, plus the union awareness of the competitive character of the industry, has produced no general wage increase in various years when such increases were quite prevalent within manufacturing. The union sec-

tor of the shoe industry has negotiated general increases only when there was a good chance that nonunion firms would follow. This restraint, coupled with the effects of changes in the Federal minimum wage, appears to have held to a minimum any union-nonunion earnings differential.

Regional Earnings Levels

The best data on regional wage levels in the industry are two BLS wage structure surveys, one in 1945 and the other in 1953.¹⁴ Comparison of these two surveys shows the following changes in straight-time average hourly earnings:¹⁵

Region ¹	Straight-time hourly earnings		Increase	
	October 1945	March 1953	Cents per hour	Percent
United States.....	\$0. 83	\$1. 31	\$0. 48	58
Middle Atlantic.....	. 95	1. 37	. 42	44
New England.....	. 93	1. 37	. 44	47
Great Lakes.....	. 72	1. 29	. 57	79
Border States.....	. 69	1. 08	. 39	57
Middle West.....	. 66	1. 24	. 58	88
Southeast.....	. 65	1. 19	. 54	83

¹ Data for Pacific and Southwest regions are omitted because they accounted for only 3.2 percent of employment in the industry at the time of the 1953 survey.

The regions for which separate data are presented include: *Middle Atlantic*—New Jersey, New York, and Pennsylvania; *New England*—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *Great Lakes*—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; *Border States*—Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West Virginia; *Middle West*—Iowa, Kansas, Missouri, Nebraska, North Dakota, and South Dakota; and *Southeast*—Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee.

To reflect some of the differences within regions and to give a later terminal comparison, BLS data on gross average hourly earnings by States are shown in the following tabulation for December 1946 and March 1956.¹⁶ Again, it should be noted that the gross earnings figures include payments for overtime, shift differentials, etc., which are excluded from the regional wage data just presented.

¹⁴ Wage Structure: Footwear, 1945, Series 2, No. 23; and Wage Structure: Footwear, March 1953, BLS Report No. 46.

¹⁵ Excludes premium pay for overtime and shift differentials.

¹⁶ December 1946 is the earliest month for which State data are available on a basis fairly comparable with those for March 1956, which was chosen as the terminal month because the \$1 minimum went into effect then.

State	Average hourly earnings		Increase	
	December 1946 ¹	March 1956	Cents per hour	Percent
Massachusetts.....	\$1. 12	\$1. 56	\$0. 44	39
New York.....	1. 19	1. 55	. 36	30
New Hampshire.....	1. 10	1. 54	. 44	40
Wisconsin.....	. 92	1. 50	. 58	63
Illinois.....	. 95	1. 45	. 50	53
Ohio.....	. 94	1. 45	. 51	54
Maine.....	. 94	1. 44	. 50	53
Indiana.....	. 87	1. 42	. 55	63
Missouri.....	. 90	1. 39	. 49	54
Maryland.....	. 79	1. 28	. 49	62
Pennsylvania.....	. 85	1. 26	. 41	48
Virginia.....	. 75	1. 21	. 46	61

¹ Because of some changes in sample composition in this industry, data for December 1946 for a few States are not exactly comparable with the March 1956 averages.

These regional and State data on earnings in the shoe industry show a reduction in differentials that is favorable for New England. This is particularly true in percentage terms, which seems to be the most valid indicator of probable effect upon labor cost. Of course, the regions have their internal variations; for example, Pennsylvania lowers the Middle Atlantic average, and Maine lowers the New England average. But in the early postwar years, New England (particularly Massachusetts and New Hampshire) and the Middle Atlantic States (particularly New York) were well above the West and South. In the more recent years, significant improvement in New England's relative position, as measured by these indicators of labor cost, is indicated with respect to the West, less with respect to major southern competition.

Several reasons for the improvement can be advanced. The impact of the Federal minimum wage has had both a direct and indirect influence. The spreading union organization is important; particular areas in which wages are lowest are those remaining weakly organized. Growing industrialization in some areas where unionization, though stronger, is of relatively recent origin may also have helped to narrow certain differentials in this low-wage industry, but this is a limited conjecture.

Conclusions

If labor cost data were available, a more definitive analysis might be undertaken. If employment, hours worked, and average earnings data were broken down into union and nonunion categories by States and types of shoes, a much more satisfying description would be possible. But even from the data available, two tentative conclusions may be made.

Collective bargaining has adapted reasonably well to the highly competitive and partially organized character of the industry. If, in the period following World War II, union demands had been more forceful and effective, New England's production record might easily have been less favorable. From a union point of view, this degree of restraint has no doubt been most frustrating. When the union has been faced with the task of balancing a management bargaining

position that higher wages might bring reduced employment against the desires of its members for a wage increase, the preservation of union jobs must have appeared to be unreal and speculative. From a management point of view, it has been a thankless task to be a tough bargainer in order to retain or regain competitive position.

In the second place, some regional earnings differentials appear to have narrowed since the end of World War II. Prosperity, particularly in the immediate postwar period, the two increases in the Federal minimum wage, and the spread of unionism may all have contributed to this end. However, growth in the industry continues to favor low-earnings States where organization has had limited success; some significant firms in New England have ceased operations. Competitive difficulties remain, but collective bargaining in the postwar period does not appear to have intensified the problems.

[The Knights of St. Crispin were founded in 1867 by Newell Daniels, a boot-treer of Milford, Mass. Thousands of New England shoe workers in Lynn, Weymouth, Brockton, and other New England towns flocked to this craft organization. Protection of the craft was one of its basic elements. The constitution included a regulation that] "no member of this Order shall teach, or aid in teaching, any part or parts of boot or shoe-making unless the lodge shall give permission by a three-fourths vote of those present . . . *Provided*, this article shall not be so construed as to prevent a father from teaching his own son."

—George E. McNeill, *The Labor Movement*, Boston, A. M. Bridgman & Co., 1887 (p. 200).

New England's skilled work force has joined with management talent and engineering ability to establish a new high-wage industry with a promising future.

The Growth of the Aircraft Industry

DAVID PINSKY

AIRCRAFT is not the leading manufacturing employer in New England. Machinery, textiles, apparel, leather, electrical machinery, and fabricated metals all exceed it in employment. What then is its peculiar importance to the area?

First is its potential. Aircraft is a new and far from mature industry. It is basic to national defense, and its importance and use in this respect are likely to grow. But in the commercial field, its growth potential is much greater. Even today more passengers cross the ocean by aircraft than by surface ships. More coast-to-coast travel is by air than by surface vehicles. For short inter-city travel, the helicopter may become as common as buses and trains in the not too distant future; thus, it is important that New England maintain its basic foothold in the industry.

Second, during the past decade aircraft employment has been advancing at a time when employment in some leading New England industries has been stable or declining. This growth has enabled the area to maintain a skilled work force, an important key to its future growth.

Third, aircraft is a relatively high-paying industry. The level of wages paid to New England aircraft workers has been a significant factor in maintaining its economy at a high level.

Development of New England Aircraft Industry

In 1925, a young executive from Ohio in search of a location and money to realize his idea for an air-cooled airplane engine turned to New England,

where craftsmen of all sorts had their shops. Journeying to Hartford, he concluded an agreement with Pratt & Whitney, producer of precision tools and lathes, whereby that firm furnished him capital and working space. This young executive was Frederick B. Rentschler. The company he founded, first known as Pratt & Whitney Aircraft, eventually became the nucleus of the present United Aircraft Corp. Its engines have been highly successful from the start. They power about 75 percent of all the commercial aircraft outside of Russia flying today. With its licensees, Pratt & Whitney produced about 50 percent of all aircraft engines used by the combined Air Corps and Navy air arm in World War II. A large proportion of today's modern jet aircraft is powered by Pratt & Whitney Aircraft gas turbines.

Through his preeminence in aircraft, Rentschler soon attracted other leaders in the field. They included Igor Sikorsky and Chance Vought, both brilliant engineers and pioneer pilots, and William Boeing, financier and executive, pioneer pilot, and devoted aviation enthusiast. United Aircraft, formed in 1928 under the leadership of Rentschler and these 3 men, gave additional know-how and financing to 3 then small aircraft firms.

United Aircraft established a plant in Bridgeport for one of these, Sikorsky Aircraft, which was producing amphibious planes on Long Island. Bridgeport was selected because a seaport for the flying boats could be built there and the area could supply skilled workers. The plant has discontinued production of its flying boats and is now the world's leading producer of helicopters.

The Chance Vought airplane division of United Aircraft was moved from the environs of New York City to East Hartford and later to Stratford, Conn., largely because United Aircraft had found a good supply of trained workmen in both areas, which were nearer the parent corporation. This division was also highly successful and made a major contribution to the World War II effort with the production of its Corsair fighter planes. After the war, a number of factors caused the division to seek a new location. Principally, the speed of their planes had become too great for testing over the congested metropolitan area around Bridgeport, and the Navy was concerned over the concentration of fighter-plane production in the area with other major producers, Republic and Grumman, on Long Island. As a result, the division was moved to Texas where the flat, unpopulated areas and arid climate better suited jet testing. In 1954, Chance Vought was separated from United Aircraft.

The combination of engine and propeller production was a natural one, and in 1928, Hamilton Standard Propeller, then located in Milwaukee and Pittsburgh, became a part of United Aircraft and moved to the site of the engine plant in East Hartford. Hamilton propellers today are standard equipment on more than 90 percent of all commercial airliners flying in the Western World. With the change from piston engines to jets, the company in 1952 built a new plant to make accessories for jet planes and engines, at the large Bradley Field airport in Windsor Locks, 18 miles away from the Pratt & Whitney engine plant in East Hartford.

The other large airplane plant in Connecticut is Avco Manufacturing Corp.'s Lycoming plant in Stratford, which manufactures airplane and helicopter engines. This plant was established there because the removal of Chance Vought to Texas had left available a good supply of skilled workers, and the vacated plant itself was ideally suited for airplane engine production.

General Electric Co. has a large plant producing jet engines and accessories at Lynn, Mass. Dr. Sanford Moss, working for General Electric in Lynn, pioneered the development of the turbo-supercharger in the 1920's. The plant expanded greatly during World War II. Additional research developed the jet engines it is now producing.

Aircraft and Parts Employment as a Percent of Manufacturing Employment in New England, 1942-56



A smaller but promising company is Kaman Helicopter in Bloomfield, Conn., just outside of Hartford. Charles Kaman, its founder, was an engineer at Hamilton Standard during the war. He conceived the idea of a helicopter having twin rotors intermeshed like an eggbeater and spinning in opposite directions to eliminate the torque resulting from use of a single rotor.

But recital of the rise of these large firms tells only a part of the New England aircraft story. Because of the large amounts of precision parts required, aircraft plants traditionally contract out considerable work. The availability of many small precision metal shops in New England attracted the large producers in the first place. For example, United Aircraft alone purchases products from 2,000 suppliers in New England, employing an estimated 10,000 workers.

The standard airframe is not made in New England. The airplane engine, propellers, and the helicopter are the three principal products. Many New England plants contribute other parts or

subcontract work to aircraft manufacturers. Principal among these are instruments and communication equipment.

Employment and Earnings in Aircraft

Employment. Aircraft employment in New England hit an alltime peak of 85,000 in February 1944.¹ In 1938, employment totaled approximately 7,300. In June 1940, with fighting already started in Europe, aircraft employment reached about 14,700. By the time the bombs fell on Pearl Harbor in December 1941, the number of workers approximated 37,000.

The end of World War II in 1945 resulted in a drop of aircraft workers from the 85,000 peak of 1944 to 20,800 after V-J Day. Following this, the number moved up slowly to 27,400 by the outbreak of the Korean conflict in June 1950. (See accompanying chart.) Employment again moved up rapidly to a peak of 71,600 in December 1953, 3 months after the truce was signed.

Unlike the situation at the end of World War II, no large cutbacks were made in aircraft production following Korea. Aircraft and parts employment dropped in New England to 65,300 by June 1955, but has increased since then to 76,300, in September 1956.

Table 1 shows aircraft employment in New England and the United States for June of each year from 1942 through 1956. The 73,300 air-

TABLE 1.—Number and index of workers employed in the aircraft and parts industry in New England and the United States in June of 1942-56

Date	Employment			
	Number (in thousands)		Index (June 1942=100)	
	United States	New England	United States	New England
1942: June.....	787.4	51.5	100	100
1943: June.....	1,339.7	84.3	170	164
1944: June.....	1,300.6	80.0	165	155
1945: June.....	947.7	63.8	120	124
1946: June.....	229.7	28.4	29	55
1947: June.....	235.7	25.5	30	50
1948: June.....	225.1	25.2	29	49
1949: June.....	262.2	28.4	33	55
1950: June.....	262.5	27.4	33	53
1951: June.....	458.8	41.0	58	80
1952: June.....	651.7	58.7	83	114
1953: June.....	776.0	68.6	99	133
1954: June.....	762.4	66.1	97	128
1955: June.....	726.0	65.3	92	126
1956: June.....	790.4	73.3	100	142

SOURCE: New England data compiled by the author; national data by the U. S. Department of Labor's Bureau of Labor Statistics.

TABLE 2.—Employment in manufacturing and in the aircraft and parts industry by region, December 1955

Region	Employment			Ratio of aircraft and parts employment to all manufacturing
	All manufacturing (in thousands)	Aircraft and parts		
		Number (in thousands)	Percent	
United States.....	¹ 17,027.0	¹ 759.8	100.0	4.6
New England.....	1,504.5	69.6	9.0	4.6
Middle Atlantic.....	4,241.2	106.6	13.8	2.5
East North Central.....	4,962.5	124.5	16.1	2.5
West North Central.....	973.3	65.9	8.5	6.7
South Atlantic.....	1,908.5	52.9	6.8	2.8
East South Central.....	805.2	6.4	.8	.8
West South Central.....	788.8	45.8	5.9	5.8
Mountain.....	210.6	7.7	1.0	3.7
Pacific.....	1,446.8	293.5	38.1	20.3

¹ BLS estimate for United States adjusted to 1955 benchmarks; the States (and regional) series are unadjusted.

SOURCE: Regional estimates compiled by the author; national data by the U. S. Department of Labor's Bureau of Labor Statistics.

craft workers employed in New England in June 1956 represented a 42-percent increase over the 51,500 employed in June of 1942, the first year for which reliable data are available. For the country as a whole, the 790,400 aircraft and parts employment in June 1956 was about the same as in June 1942.

New England's 73,300 aircraft workers in June 1956 comprised 4.9 percent of her total factory employment. This percentage for New England was about the same as the proportion (4.5 percent) for the country as a whole.

Within New England, Connecticut's 59,600 aircraft workers of December 1955 comprised 13.7 percent of its manufacturing employment; in Massachusetts, the proportion was only 1.2 percent.

In numbers of aircraft workers, three regions exceeded New England. The largest employment appeared in the Pacific region, followed by the East North Central and the Middle Atlantic States. (See table 2.)

Worker Concentration in Connecticut. The largest concentration of aircraft workers in New England is in Connecticut, where 65,900 were employed in September 1956. Massachusetts employed a moderate 9,000 workers in this field, and fewer than 1,000 each were employed in Maine and Vermont.

¹ Data presented for New England and other States or regions were provided by the author. Corresponding estimates for the country as a whole are from the U. S. Department of Labor's Bureau of Labor Statistics. The most recent data in each case apply to the latest period for which the author had comparable data available when preparing the article in the early fall of 1956.

There is virtually no direct aircraft employment in New Hampshire and Rhode Island.

These figures do not, however, indicate the large numbers of former residents of other New England States who have moved into Connecticut to man the expanding Connecticut aircraft industry. The first wave hit Connecticut during World War II, when the moves were generally considered temporary. The northern New Englanders were supposedly going to Connecticut to work for "the duration" and then, after the war, presumably would take their hard-earned money back to their native towns. This did not transpire. They liked and became accustomed to their relatively high earnings and their new environment; so they remained in Connecticut in large numbers. The second wave hit during the expansion of the Korean conflict. Again large numbers of workers from the northern States came to Connecticut and found jobs in the aircraft industry. These workers have also generally remained.

Was this migration to Connecticut good or bad? For Connecticut, it permitted an expansion of high-wage aircraft employment and offset losses in other manufacturing industries. The aircraft wages paid within the State have enabled the economy to continue at a relatively high level and have helped make the State the most prosperous in New England. On the other side, the large numbers of migrants have created housing, school, and other social problems.

For the States which the workers left, the migration may have helped to relieve unemployment associated with declines in the textile and shoe industries. On the other hand, it is conceivable that greater industrial development would have occurred in some of those areas, had the labor pool remained available.

TABLE 3.—Hours and gross earnings of production workers in the New England aircraft and parts industry in June of 1947-56

Date	Average weekly earnings	Average weekly hours	Average hourly earnings
1947: June.....	\$54.22	39.8	\$1.36
1948: June.....	60.38	41.5	1.44
1949: June.....	61.28	40.1	1.53
1950: June.....	64.23	41.2	1.56
1951: June.....	85.40	46.6	1.84
1952: June.....	83.57	44.0	1.90
1953: June.....	84.01	43.1	1.94
1954: June.....	82.98	40.7	2.04
1955: June.....	86.86	41.1	2.11
1956: June.....	93.83	42.4	2.21

SOURCE: Estimates compiled by the author.

Labor Turnover. The New England aircraft and parts industry has had a lower separation rate for the past 5 years than manufacturing as a whole. In June 1956, the aircraft total separation and quit rates in New England were 1.7 and 1.4, respectively, per 100 workers employed (see tabulation), compared with a total separation rate of 3.9 and a quit rate of 2.0 for the same month for all manufacturing in Connecticut, where the bulk of aircraft workers are employed. The aircraft and parts accession rate in June 1956 was 5.8 in New England as compared with 4.2 for all manufacturing in Connecticut.

Turnover rates in the New England aircraft and parts industry (per 100 employees)

June of—	Accession rate	Total separation rate ¹	Quit rate
1952.....	3.7	1.9	1.6
1953.....	5.5	1.8	1.0
1954.....	1.6	1.6	1.0
1955.....	2.7	1.5	1.1
1956.....	5.8	1.7	1.4

¹ Includes quits, discharges, layoffs, and military and miscellaneous separations.

SOURCE: Estimates compiled by the author.

The aircraft and parts industry has shown lower turnover in New England than in the country as a whole. For example, in June 1956, the aircraft total separation and quit rates in New England of 1.7 and 1.4 compared with the national industry's total separation rate of 2.4 and quit rate of 1.7. The 5.8 accession rate in the New England aircraft and parts industry in June 1956 compared with 4.8 for the industry as a whole.

Earnings. Weekly wages paid in aircraft and parts are the highest of any industry group in New England. In June 1956, average weekly earnings in aircraft were \$93.83 as compared with an average of \$71.94 for all production workers in New England. (See table 3.) But the New England aircraft average earnings were below the \$94.66 for all aircraft and parts workers throughout the United States in June 1956. Nevertheless, the regional average was substantially above the \$54.22 in 1947. The rise was marked by a jump from \$64.23 in June 1950, to \$85.40 in 1951 as the Korean conflict flared, and a second jump from \$86.86 in June 1955 to the June 1956 figure.

Fringe benefits vary from plant to plant, but aircraft workers in New England generally enjoy 7 paid holidays; 1, 2, or 3 weeks of vacation, de-

pending on length of service; and life insurance, health and medical coverage, and pensions—all financed jointly by employer and worker.

Other Employment Characteristics. Nearly all the New England aircraft workers are represented by labor unions. The International Association of Machinists covers about two-thirds of Connecticut's aircraft workers, and the United Auto Workers, the remainder. In Massachusetts, the International Union of Electrical, Radio and Machine Workers represents nearly all of the aircraft workers. A few very small plants in that State have no unions.

The aircraft industry in the region has a good labor-management record; relatively few work stoppages resulting from labor-management disputes have occurred in New England. The post-war adjustment in 1946 saw several moderately long disputes. No stoppages occurred from 1946 until October 1951, when 1 work stoppage involving 2,000 aircraft workers lasted for 2 weeks. No stoppages have occurred since then.

The Outlook

The future of aircraft development in general is very promising and very complex. The aircraft industry is constantly changing and the location in New England of a substantial segment of the industry is, in itself, no guarantee that it will remain there in the future. However, the New England aircraft plants are blessed with progressive management and skilled labor, which bodes well. Also, they offer a considerable amount of training, ranging from on-the-job training for semiskilled workers to postgraduate courses for their professional workers.

Aircraft and engine designs are not static. Any aircraft company which did not perform constant research and development would soon be out of business. One promising sign is the new atomic engine research center being built in Middletown, Conn. The thousands of scientists and engineers who will be employed there will play a large part in determining which way New England's aircraft production will go.

[Six hundred Boston House Carpenters were involved in the first great strike for the 10-hour day in 1825. In opposing their demands, the master carpenters stated that they were] "fraught with numerous and pernicious evils" . . . and would expose the journeymen themselves "to many temptations and improvident practices" from which they were "happily secure" when working from sunrise to sunset. . . . Finally, they declared that they could not believe "this project to have originated with any of the faithful and industrious Sons of New England, but are compelled to consider it an evil of foreign growth, and one which we hope and trust will not take root in the favoured soil of Massachusetts."

—John R. Commons and Associates, *History of Labor in the United States*, New York, Macmillan Co., 1918, Vol. I, Pt. 1 (pp. 159-160).

The Labor Month in Review

ARREST on March 13 of James R. Hoffa, a vice president of the Teamsters union, on charges of bribing an employee of the Senate Select Committee on Improper Activities in the Labor or Management Field topped all other recent labor news. Mr. Hoffa is widely regarded as the most powerful Teamster official.

A few days earlier, Dave Beck, Teamster president, had returned from Europe to face Committee questioning regarding union affairs and his personal finances. He had been recommended by George Meany, AFL-CIO president, as a labor member of the United States delegation to an International Labor Organization meeting March 11-23 in Germany, but Secretary of Labor James P. Mitchell refused to nominate him on the grounds that attendance at the meeting had been mentioned by Mr. Beck as one reason why earlier appearance before the Committee could not be made. Rudy Faupl of the Machinists substituted for him.

Testimony heard by the Committee thus far has centered on relationships between Portland, Oreg., Teamster officials and local politicians, gamblers, and underworld characters. One line of questioning indicated use of union funds to finance private business ventures.

There were numerous other news stories relating to the subject of the Committee hearings and to recent AFL-CIO actions to enforce its ethical practices code. Curtis R. Sims, secretary-treasurer of the Bakers' Union, accused James G. Cross, its president, of misuse of union funds, and appealed to the AFL-CIO for an inquiry. The Ethical Practices Committee of the federation was to hear the complaint March 15. Sam Berger, long the manager of a Ladies' Garment Workers' trucking local, resigned after pleading self-incrimination before a Federal grand jury. Anthony Doria, secretary-treasurer of the Allied Industrial Workers, under charges by the AFL-CIO of malpractices, also resigned. Concurrently, the charters of four New York locals of the AIW were

revoked. Four officers of the Teamsters were cited for contempt by the Senate for refusing to answer questions.

Most labor news of recent weeks dealt with less seamy matters and was concerned with the usual workaday institutional operations of trade unions. The United Steelworkers in mid-February held a referendum election of officers in which there was a contest for the presidency for the first time. Incumbent David J. McDonald, based on unofficial counts, defeated Donald C. Rarick by a surprisingly close 9-5 margin. A recent \$2-a-month dues increase was a major issue.

When the United Automobile Workers meet in biennial convention April 7, they too will act on a dues increase (50 cents) recommended by their officers. A pamphlet sent to each of the union's 1.3 million members describing in detail the union's financial position was but one step in a broad educational campaign to stimulate pre-convention understanding and discussion of the issue.

Three vexing strikes were settled between mid-February and mid-March. On March 8, the longest (36 days) strike of New York Harbor tugboat crewmen ended after members of the National Maritime Union had twice rejected offers relating to wages, fringe benefits, and working rules. East Coast longshoremen from Maine to Virginia accepted new contracts (including a 3-year "master" agreement providing cumulative wage increases of at least 32 cents an hour along with other improvements). Supplemental contracts deal with purely local issues. Thus ended an 11-day strike of 45,000 dockworkers who had left their jobs on February 12 upon expiration of an 80-day Taft-Hartley Act injunction. In effect, it had been a continuation of last November's 9-day walkout. In the Portsmouth, Ohio, area a 7-month-old strike of telephone workers, members of the Communications Workers of America, ended with a 4¼-cent-an-hour wage increase, a maintenance of membership clause (company insistence on abandoning the union shop clause in a contract with former owners had been a prime cause of the dispute), and arbitration of 19 cases of discharged strikers.

In an unusual action, the city administration of Philadelphia on February 13 granted the State, County, and Municipal Employees ex-

clusive bargaining rights in all city departments in which a majority of the employees are members of the union. The contract presently covers about 15,000 persons, with about 13,000 others, including 8,000 policemen, firemen, and park guards, unaffected. City officials stated that the agreement would centralize union responsibility and accord "blue and white collar workers what has been the rule in private industry—exclusive bargaining rights for one majority union."

The Machinists and the Auto Workers, continuing their joint efforts in the aircraft and guided missiles industry bargaining, announced on February 27 their intentions to press for 1958 demands relating to insurance and pensions, employment security, dispersal and severance benefits, and a wage determination procedure to replace the present job evaluation systems. They criticized the industry for "failures" in the field of skilled manpower training. The UAW had earlier resolved to organize among engineers and technicians. To this end, they established an Aircraft and Avionics Engineering Council to enable organized engineers in the aircraft industry to retain their identity in the union. Almost concurrently, the union won a 579-116 affiliation vote among engineers and technicians of the Minneapolis-Honeywell Corp.

Two unions of paper workers—the former AFL Paper Makers and the onetime CIO United Paperworkers—merged in Chicago on March 5. Although the Pulp and Sulphite Workers, largest of the three paper unions, remained outside the new United Papermakers and Paperworkers, the merger was the first of sizable AFL-CIO unions (combined membership is a claimed 123,000). Four new unions, including the Paper Makers (ex-AFL) and the Pulp and Sulphite Workers, along with the Commercial Telegraphers and the Bill Posters, joined the Industrial Union Department of the AFL-CIO, bringing the membership of that subsidiary to about 7.6 million.

In February a bid by the AFL-CIO Firemen and Enginemen to unite with the Locomotive Engineers was rejected by the independent union. Meanwhile, the Glass Bottle Blowers Association early in March expressed a desire to merge with

three other unions in the glass field. Nearly 150,000 members would be affected.

George Meany, who on April 26 will receive an honorary doctor of laws degree from the University of Pennsylvania, in February dedicated a \$1.5 million union health center in Philadelphia. The project, joint effort of 28 local unions, will provide medical service to 52,000 members and dependents. On February 28, in Washington, Mr. Meany told an AFL-CIO conference on radiation hazards that Federal legislation was needed to provide "one standard of safety . . . to workers exposed to radiation hazards."

In the field of wage legislation, hearings opened in both Houses of Congress on extending coverage of the Federal Wage-Hour Act. Secretary of Labor James P. Mitchell, the first witness, proposed at a Senate Labor subcommittee hearing on February 25 that about 2.5 million more workers in about 3,000 additional enterprises be blanketed under the statutory \$1 an hour minimum. Most of these would be in the retail trade field. No recommendation was made to bring the new workers under the overtime provisions of the law. Rowland Jones, Jr., president of the American Retail Federation, testified that the proposed extension of the law would tend to "destroy job opportunities" for part-time employment. George Meany, on behalf of the AFL-CIO, asked that coverage be extended by 10 million additional workers.

Indiana on March 1 became the first major industrial State and the 19th presently with a right-to-work law. Similar legislation, pending in the legislatures of several States, recently failed of passage in Idaho by only two votes.

The United States Supreme Court in a 6-3 decision ordered the Federal district court in Detroit to reinstate an indictment against the United Automobile Workers for a 1954 violation of the Corrupt Practices and Taft-Hartley Acts. The union was accused for spending its funds to purchase television time for endorsement of congressional candidates. The majority opinion held that the indictment dismissal was "premature" and that an actual trial should precede consideration of the constitutional issues.

Effects of the \$1 Minimum Wage in Seven Industries

NORMAN SAMUELS*

EDITOR'S NOTE.—*The present article is the first of a series describing various studies undertaken by the Department of Labor to analyze the wage and related effects of the \$1 minimum wage. The second half of this article will appear in April; others in the series, in various issues during the next year.*

IN AUGUST 1955, the Fair Labor Standards Act was amended to provide for an increase from 75 cents to \$1 an hour in the statutory minimum wage that employers must pay their employees covered by the act. The higher rate became effective 7 months later, on March 1, 1956.¹

As on similar occasions, and particularly in 1950, widespread interest was expressed during and after the passage of the 1955 amendments as to the impact of the higher minimum wage upon the industries and workers most directly affected. Also, as in 1950,² the Department of Labor planned a series of studies to gage the wage and related economic effects of the \$1 minimum rate. The Wage and Hour and Public Contracts Divisions and the Bureau of Labor Statistics jointly developed a program of wage surveys designed to provide information on the nature and magnitude of the adjustments required to comply with the higher minimum wage. This program of studies includes surveys in 12 traditionally low-wage industries.³ Data for seven of these industries are now available, thus permitting a summary analysis of some of the short-run wage effects of the higher minimum in these industries.

Scope and Method of Study

The industries to be surveyed were necessarily selected from among those whose wage levels

would be most affected by the increase in the minimum wage. Typically, these industries, or regional segments of them, employed substantial proportions of workers earning less than \$1 an hour in mid-1955. In nonseasonal industries, three payroll periods were studied: (1) August 1955, the time of the passage of the amended act; (2) February 1956, immediately prior to the effective date of the higher minimum; and (3) April 1956, shortly after the effective date. This procedure thereby permitted an analysis of the extent to which employers may have sought to adjust wages gradually prior to March 1, as well as the extent to which mandatory adjustments were made upon the effective date of the new minimum rate. In seasonal industries, two payroll periods were selected—the first representing a period prior to the higher minimum which was generally comparable to one after the \$1 rate became effective.

The areas and payroll periods covered in the seven industries for which surveys have been completed appear in table 1. Except for two of the

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¹ The Fair Labor Standards Act of 1938 provided for a minimum wage of 25 cents an hour effective October 24, 1938, 30 cents an hour effective October 24, 1939, and a minimum of 40 cents an hour October 24, 1945. However, the act also provided for industry committees which were to be appointed and convened by the Administrator of the act to reach "... as rapidly as is economically feasible without substantially curtailing employment, the object of a universal minimum wage of 40 cents an hour." The timing of increases in the minimum wage to 40 cents an hour, therefore, varied among industries as the committees met and recommended higher minimums. The effective dates of the wage orders for the 7 industries included in the current study were as follows:

		Cents
Fertilizer	Feb. 7, 1944	40
Footwear	April 29, 1940	35
	Nov. 3, 1941	40
	Oct. 24, 1939	32½
Processed waste	June 30, 1941	37½
	April 20, 1942	40
Sawmills	Nov. 3, 1941	35
	Feb. 7, 1944	40
Seamless hosiery	Sept. 18, 1939	32½
	Sept. 15, 1941	36
	Feb. 15, 1943	40
Work shirts	July 15, 1940	32½
	Sept. 29, 1941	40
Wooden containers	Nov. 3, 1941	35
	Feb. 7, 1944	40

² In 1950, the Bureau of Labor Statistics studied the effects of the 75-cent minimum in 5 low-wage manufacturing industries; the Wage and Hour and Public Contracts Divisions of the Department of Labor, utilizing the wage survey materials as well as other economic data, made a broader analysis of the 75-cent minimum. These findings were summarized in Results of the Minimum-Wage Increase of 1950: Economic Effects in Selected Low-Wage Industries and Establishments, Wage and Hour and Public Contracts Divisions, 1955, which was, in turn, summarized in the Monthly Labor Review, March 1955 (p. 307).

³ In addition to the industries listed in footnote 1, the following industries are part of the program of studies: Canning, cigars, raw sugar, men's and boys' shirts, and tobacco stemming.

industries, the study was limited to regions in the South. The men's seamless hosiery industry was surveyed nationwide, and the footwear industry study included particular types of shoes in specific wage areas (Missouri and southeastern Pennsylvania) as well as in the South. The 7 industries combined included approximately 5,770 establishments employing about 278,000 workers in the summer of 1955.

Industry and Labor Force Characteristics

The industries or industry sectors surveyed were similar in that relatively large numbers of their workers earned less than \$1 an hour; however, they were dissimilar in many other respects. For example, marked differences existed among these industries in the ratio of wages and salaries to value added by manufacture. Payroll expenditures for production workers ranged from about 30 percent of value added in the fertilizer industry to about 64 percent in the work-shirt industry.⁴ The ratios for all seven industries (except fertilizer) were higher than for all manufacturing industries combined, thus indicating that wage costs are relatively more important for these industries than for the average manufacturing industry. Plant size—often important in terms of flexibility to adjust the work force to altered conditions—likewise varied sharply. The average sawmill had about 30 workers, whereas the average shoe manufacturing plant employed about 300 workers. Another factor bearing upon pay levels is the size of community in which plants are located. Sawmills were most often located in small rural communities, and about 60

percent of the workers in 5 of the other industries were employed in plants located in communities with less than 25,000 population. At the other extreme, 75 percent of the workers in the processed waste industry were employed in plants located in cities of 100,000 or more population where wage levels tend to be somewhat higher.

Significant variations also exist in the characteristics of the labor force. Southern sawmills and fertilizer plants employ exclusively men, while in seamless hosiery and work shirt establishments, from 75 to 90 percent of the workers are women. The range and composition of skills within the work force also vary among these industries. The manufacture of mixed fertilizers involves largely simple, repetitive unskilled tasks that are essentially material handling operations. Production of shoes, on the other hand, requires a wide diversity of skills and the usual shoe factory includes a full range of skill levels. The making of a work shirt requires a third type of labor force composition in terms of skill, with a large majority of the workers being semiskilled sewing-machine operators.

In addition, the method of wage payment may be significant in assessing pay levels, especially for individual workers. Straight-time hourly earnings of workers paid under an incentive system are generally more widely dispersed than those of workers paid on a time basis. Among the seven industries studied, a majority of the workers were paid under an incentive system in the footwear, processed waste, seamless hosiery, and work shirt establishments; an hourly basis of pay

⁴ 1954 Census of Manufactures, Advance Reports, U. S. Department of Commerce, 1956.

TABLE 1.—Establishments and workers within scope of surveys, seven industries, August 1955 and April 1956

Industry	Scope of study ¹		Number of establishments ²		Number of employees ³	
	Geographic location	Minimum size of establishment	April 1956	August 1955 ⁴	April 1956	August 1955 ⁴
Fertilizer.....	South.....	8	401	407	20,850	21,580
Footwear.....	South, Missouri, southeastern Pennsylvania ⁵	21	129	130	39,270	39,830
Processed waste.....	South.....	8	34	34	1,770	1,840
Sawmills.....	South.....	8	4,496	4,599	145,050	149,640
Seamless hosiery, men's.....	United States.....	21	262	265	28,800	32,310
Seamless hosiery, children's.....	Southeast.....	21	130	130	16,170	18,880
Wooden containers.....	South.....	8	223	224	23,190	22,710
Work shirts.....	Southeast.....	21	28	30	4,490	4,680

¹ The South includes the three economic regions of: *Border States*—Delaware, Maryland, Kentucky, Virginia, and West Virginia; *Southeast*—Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee; *Southwest*—Arkansas, Louisiana, Oklahoma, and Texas.

² Includes all establishments with total employment at or above the minimum-size limitation at the time the establishment lists were compiled.

³ Includes not only office and production workers but also executive, technical, and professional workers.

⁴ Data for fertilizer relate to April 1955 and for sawmills, to October–December 1955.

⁵ Limited to women's cement-process shoes in Missouri and misses' and children's Goodyear welt shoes in southeastern Pennsylvania.

TABLE 2.—Percentages of workers at selected average hourly earnings¹ levels, by payroll period, seven industries

Average hourly earnings ¹ (in cents) and pay period	Percentage of workers in—							
	Fertilizer ²	Footwear	Processed waste	Sawmills ²	Seamless hosiery, men's	Seamless hosiery, children's	Wooden containers	Work shirts
75 and under 76:								
August 1955.....	3 14	14	38	4 35	12	14	29	25
February 1956.....		10	37		8	10	27	17
75 and under 100:								
August 1955.....	39	42	82	73	49	57	82	77
February 1956.....		30	80		39	48	76	72
April 1956.....	4	1	0	3	2	2	0	1
Under 100:								
August 1955.....	3 41	42	82	4 74	50	58	82	80
February 1956.....		31	80		40	48	76	74
April 1956.....	5	1	0	3	2	2	0	1
100 and under 101:								
April 1956.....	30	32	63	66	27	31	60	29
100 and under 125:								
August 1955.....	33	29	11	17	28	27	9	16
February 1956.....		36	12		30	33	14	21
April 1956.....	64	62	90	85	67	75	87	81
125 and over:								
August 1955.....	3 26	29	8	4 9	22	15	9	4
February 1956.....		36	8		26	19	10	6
April 1956.....	31	39	10	12	31	24	13	18

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

² Seasonal industry in which only two pay periods were studied to provide data prior to and following the effective date of the new minimum.

³ Data relate to April 1955.

⁴ Data relate to October–December 1955.

prevailed in the fertilizer, southern sawmill, and wooden container plants.

These differences in industry and labor force characteristics help to explain the varying effects of the \$1 minimum on industry wage structures. It must be recognized, at the same time, that these particular industries are not representative of all industries. Hence, definitive conclusions as to the short-run impact of the \$1 minimum rate on industry should be drawn with caution.

For the purpose of this article, the significant elements of the wage structure to be examined are (1) the distribution of nonsupervisory workers by average hourly earnings; (2) occupational, geographic, and industry differentials; and (3) practices with regard to supplementary benefits.

Initial Effects of the \$1 Minimum

On the Earnings Distribution. All of the 7 industries employed workers whose straight-time average hourly earnings were at the legal minimum rate of 75 cents an hour in the pre-March 1956 pay periods studied. The proportion of the work force at the minimum varied from 12 percent in men's seamless hosiery (studied nationwide) to 38 percent in processed waste. In these first payroll periods, the workers earning less than \$1 an hour constituted a majority of the workers in 5 of the industries; in the fertilizer industry and footwear establishments, the proportion was two-

fifths. The increase from 75 cents to \$1 in the legal minimum thus directly affected the earnings of most of the workers in these industries (table 2). Several changes obviously occurred. First, virtually all the workers in these industries earned a dollar or more in April 1956. Second, a markedly larger proportion of workers earned \$1 an hour in April 1956 as compared with the proportion who earned 75 cents—the legal minimum—in August 1955. Third, the percentage of workers earning \$1.25 or more generally rose less than in the lower bracket, thus indicating a compression of the earnings distribution.

Further evidence of this compression in wage structures is observed by comparing the percentage of workers in the 25-cent wage intervals beginning at the legal minimum in the two pay periods. In August 1955, the percentage of workers earning 75 cents but less than \$1 ranged from 39 percent in fertilizer manufacturing to 82 percent in processed waste. In April 1956, the percentage of workers earning \$1 but less than \$1.25 ranged from 64 percent to 90 percent in these same industries. These comparisons have been made in terms of the first pay period studied and April 1956, but the wage movements between August and February in the nonseasonal industries would not alter the inferences drawn from these data. Two major conclusions follow: The increase in the minimum wage from 75 cents to \$1 an hour resulted in (1) a sharp compression of the

earnings distribution of the work force and (2) a higher percentage of workers at the minimum.

Average straight-time hourly earnings in April 1956 for the 7 industries ranged from \$1.07 in sawmills to \$1.24 in footwear (table 3). Both the direct wage adjustments to comply with the higher minimum and the secondary adjustments in wage rates above the minimum are reflected in these averages. The minimum establishes a lower limit to wages; above the minimum, however, the distribution of workers by average hourly earnings spreads over a considerable range of earnings.⁵

On Geographic Differences. The averages for April 1956 represented increases over the 1955 pay periods of from 7 cents to 23 cents an hour in the areas studied. Generally, the size of the increase between the two periods was inversely related to the level of average hourly earnings, indicating a greater effect on the lower than on the higher paying industries. However, there were exceptions to this general pattern which had their origin in the differences in industry characteristics and in the proportion of the industry located (or studied) within the various economic regions. The differences in earnings among the three economic regions of the South and the changes that have occurred in these differences provide a significant testing ground for measuring the effects of minimum wage legislation on geographic differentials. Table 3 presents average earnings by economic region for each industry. This permits comparisons of the effects on interindustry averages within a more limited and somewhat more homogeneous geographic area.

Of the 3 regions, the Southeast was most heavily represented in terms of establishments and employees for all 7 industries. Average hourly

earnings in each industry except fertilizer were highest in the Border States. In the case of fertilizer, a unique situation prevailed in the Southwest where mixed fertilizers were being produced by firms which also produced industrial chemicals in the same area. Wage rates in the latter industry apparently influenced wage scales in their fertilizer operations.

The immediate effect of the \$1 minimum was to narrow the wage differences among the regions. In the first pay period, average hourly earnings in the Southeast were from 82 to 96 percent as high as the earnings in the Border States for 5 of the industries studied. In April 1956, earnings in these same industries in the Southeast had climbed to within 86 to 98 percent of the earnings in the Border States. Similarly, earnings in the Southwest increased proportionately more than earnings in the Border States. In the first pay period, earnings in the Southwest—except for fertilizer manufacturing—ranged from 78 to 96 percent of earnings in the Border States, while in April 1956, they had increased to 89 to 98 percent. The pattern of change immediately generated by the \$1 minimum was again reflected, with few exceptions, by the inverse relationship between size of increase and earnings level. The indications are that in most instances the \$1 minimum exerted pressure against prevailing economic and institutional factors so that the increases granted were, in the main, only those required by the law.

Concurrent with the narrowing of regional differences, a corresponding shift in interindustry differences occurred within the regions. In the Border States, industry average hourly earnings

⁵ It should be noted that some employees of these industries are not subject to the law because they are not engaged in interstate commerce, and others may be learners paid a rate less than the minimum under a special certificate.

TABLE 3.—Average hourly earnings¹ in seven industries in the South, by economic region, August 1955 and April 1956

Industry	April 1956				August 1955 ²				Cents-per-hour increase, August 1955–April 1956			
	Total South	Border States	South-east	South-west	Total South	Border States	South-east	South-west	Total South	Border States	South-east	South-west
Fertilizer.....	\$1.20	\$1.32	\$1.14	\$1.45	\$1.10	\$1.25	\$1.03	\$1.31	\$0.10	\$0.07	\$0.11	\$0.14
Footwear.....	1.24	1.26	1.23	1.23	1.10	1.14	1.10	1.06	.14	.12	.13	.17
Processed waste.....	1.09	1.14	1.07	1.01	.90	1.00	.89	.78	.19	.14	.18	.23
Sawmills.....	1.07	1.10	1.06	1.08	.91	.98	.88	.94	.16	.12	.18	.14
Seamless hosiery, men's.....	1.19	1.20	1.19	-----	1.06	1.04	1.06	-----	.13	.16	.13	-----
Seamless hosiery, children's.....	-----	-----	1.15	-----	-----	-----	1.00	-----	-----	-----	.15	-----
Wooden containers.....	1.11	1.20	1.09	1.05	.91	1.02	.89	.88	.20	.18	.20	.17
Work shirts.....	-----	-----	1.12	-----	-----	-----	.89	-----	-----	-----	.23	-----

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

² Data for fertilizer relate to April 1955 and for sawmills, to October–December 1955.

in the 1955 pay period studied ranged from 98 cents an hour to \$1.25—a difference of 27 cents; in April 1956 the industry averages ranged from \$1.10 to \$1.32—a difference of 22 cents. For the early pay period in the Southeast, industry averages ranged from 88 cents to \$1.10—a difference of 22 cents; while in April they ranged from \$1.06 to \$1.23—a difference of 17 cents. Similarly in the Southwest, industry averages in the early pay period ranged from 78 cents to \$1.31—a difference of 53 cents; in April 1956 they ranged from \$1.01 to \$1.45—a difference of 44 cents. Thus the difference in interindustry averages was reduced by 5 cents in the Border States, 5 cents in the Southeast, and 9 cents in the Southwest. The \$1 minimum appeared to produce some tendency toward greater equalization of rates among these industries, particularly in the most severely affected area—the Southeast—where interindustry differences were reduced by nearly 23 percent.

On Production-Office Worker Differences. These comparisons are based on average hourly earnings for all nonsupervisory workers—plant and office—since both groups are subject to the Fair Labor Standards Act. The combination of data for the two groups (instead of the usual separate presentation) appeared to have little material effect on the earnings picture. Although office workers had relatively high earnings compared with production workers in these industries, office workers accounted for 5 percent or less of all nonsupervisory workers and their influence on the overall average was slight. The effect of the \$1 minimum on average hourly earnings differed between office and production workers in the expected pattern, i. e., increases were greater for production workers who were the lower paid. Increases between the early pay periods and April 1956 ranged from 9 percent to 26 percent for production workers but they were from 6 percent to 15 percent for office workers as shown in table 4. The amount of the increases in the averages between the two pay periods for office workers ranged from 53 to 70 percent as high as the increases in the averages for production workers—except in the fertilizer and footwear industries, where office-worker average hourly earnings increased 80 and 86 percent, respectively, as much as wages of production workers.

TABLE 4.—Increase in average hourly earnings¹ from August 1955² to April 1956, seven industries

Industry	All non-supervisory workers		Production workers		Office workers	
	Cents per hour	Per cent	Cents per hour	Per cent	Cents per hour	Per cent
Fertilizer.....	\$0.10	9	\$0.10	9	\$0.08	6
Footwear.....	.14	13	.14	13	.12	12
Processed waste.....	.19	21	.19	22	.10	7
Sawmills.....	.16	18	.17	19	.10	8
Seamless hosiery, men's.....	.14	13	.14	13	.10	9
Seamless hosiery, children's.....	.15	15	.16	16	.09	8
Wooden containers.....	.20	22	.19	21	.12	9
Work shirts.....	.23	26	.23	26	.15	15

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

² Data for fertilizer relate to April 1955 and for sawmills, to October-December 1955.

On Employment. Concern over possible unemployment resulting from higher minimum rates has often been expressed when a change in the law is under consideration. The Fair Labor Standards Act recognizes this possibility in section 2 (b):

It is hereby declared to be the policy of this act, through the exercise by Congress of its power to regulate commerce among the several States and with foreign nations, to correct and as rapidly as practicable to eliminate the conditions above referred to in such industries *without substantially curtailing employment or earning power.* [Italics added.]

Past experience generally indicates that substantial curtailment of employment or earning power in low-wage industries has not followed upward revisions in the legal minimum wage. Strong counteracting economic forces which obviated the necessity for employers to make adjustments in terms of employment, however, have prevailed during these periods. Thus the increase in the legal minimum to 40 cents an hour occurred during World War II, and the increase to 75 cents in January 1950 was followed within 6 months by the Korean conflict.

The wage surveys undertaken by the Bureau to assess the changes arising out of the \$1 minimum were not designed to provide a measure of absolute employment changes in the industries studied, principally because the sample excluded smaller sized establishments—under 8 employees in sawmills, processed waste, fertilizer, and wooden containers, and under 21 employees in hosiery, work shirts, and footwear. Despite these limitations, the Bureau's surveys included a large majority of the workers in each of the industries. Therefore,

TABLE 5.—Selected supplementary benefits,¹ August 1955 and April 1956

Industry	Percent of production workers in establishments providing—					
	Paid vacations		Paid holidays		Health, insurance, and pension plans	
	April 1956	August 1955	April 1956	August 1955	April 1956	August 1955
Fertilizer.....	85	83	81	78	74	73
Footwear.....	97	97	87	86	86	85
Processed waste.....	73	71	44	40	44	39
Sawmills.....	18	18	11	11	26	26
Seamless hosiery, men's.....	63	61	16	11	83	81
Seamless hosiery, children's.....	51	48	6	5	78	76
Wooden containers.....	50	48	32	30	46	45
Work shirts.....	78	77	10	12	84	83

¹ Supplementary wage benefits were considered applicable to all workers if formal provisions in an establishment applied to half or more of the workers. Because of length-of-service and other eligibility requirements, the proportion of workers currently receiving the benefits may be smaller than estimated.

the employment changes that occurred within the sample of identical establishments surveyed from period to period were believed to give an approximation of the short-run change in the level of employment. On this basis, the current surveys indicate that the immediate disemployment effects of the \$1 minimum wage were relatively small.

For the 7 industries combined, the total number of establishments declined 2 percent and employment 4 percent between the 1955 payroll period and April 1956. In terms of actual establishments, 115 apparently had gone out of business and approximately 11,000 fewer workers had jobs in these industries. Not all of this decline can be attributed to the minimum wage. For example, of the 115 establishments that disappeared between the pay periods, 103 were southern sawmills (employing nearly 4,600 workers), an industry that normally has a relatively high rate of turnover. Seamless hosiery mills accounted for virtually all of the rest of the loss in employment, with about 6,200 fewer workers in April 1956 than in August 1955. Employers in this industry reported a decline in sales due to a number of factors, chiefly the entry of a number of small marginal firms into the industry during a preceding period of large sales volume and the concurrent growth in the popularity of stretch hose, a new major product which permitted wholesalers and retailers to carry less inventory. Employment in this industry probably would have declined more had hours of work not been cut.

In an attempt to trace more directly the effects on employment of the \$1 minimum, the Bureau's

field representatives asked employers who reported discharges during the first quarter of 1956 the reasons for such actions. None of the employers in the footwear industry attributed any of the discharges to the \$1 minimum as against two-fifths of the employers in seamless-hosiery mills who attributed such personnel actions to the new minimum. Between these extremes, the percentage of employers who made discharges and attributed some of them to the minimum ranged from 6 to 25 percent. Although the minimum wage appears to have contributed to the decrease in employment that occurred between the pay periods studied, a combination of other factors probably played a more important part. These observations, it must be emphasized, are based on data limited to the period immediately after the \$1 minimum became effective. Any later adjustments in employment level (attributable to the minimum wage) are not reflected.⁶

On Supplementary Wage Benefits. The prevalence of supplementary wage benefits varied widely among these industries, but paid vacations, paid holidays, and health, insurance, and pension plans were available to some employees in all of the industries. The increase in the minimum wage appeared to have had no effect on the current practices of plants with regard to these benefits. None of the plants studied reduced their benefits between the 1955 and 1956 pay periods. The changes in the percentage of production workers in establishments providing these benefits indicated in table 5 resulted from changes in individual plant employment levels, not in the incidence of benefits.

Typically, these benefits are not readily curtailed. They are usually expressed in formal company policies or labor-management agreements. Employees usually regard them as a part of their overall compensation as, for example, paid vacations and holidays. In other instances, such as health, insurance, and pension programs, company commitments extend over a period of time and are not, as a rule, hastily discarded. The extent to which these supplements might be modified—if at all—cannot be determined except after a more prolonged period.

⁶ The Bureau plans to resurvey these industries in the spring of 1957 to ascertain the longer range effects of the \$1 minimum upon wages and related practices.

Layoff, Recall, and Work-Sharing Procedures

EDITOR'S NOTE.—*This article concludes the series begun in the December 1956 issue of the Review on an analysis of provisions for layoff, recall, and work-sharing procedures found in major collective bargaining agreements. The four parts will be made available in BLS Bull. 1209. Illustrative clauses will be found in Collective Bargaining Clauses: Layoff, Recall, and Work-Sharing Procedures (BLS Bull. 1189).*

IV—Recall Procedures; Work-Sharing

ROSE THEODORE*

Recall Procedures

Just as a layoff procedure in a collective bargaining agreement assures the employed worker that the order of layoff, should the occasion arise, will be equitable, a recall procedure assures the laid-off worker that the order of return to work will be based on similar, if not identical, principles. Although business requirements determine the timing and volume of layoff and recall, relative length of employee service is an important and objective consideration in fixing the order in which workers are affected. The recognition of his equity in the job is an important right retained by the laid-off worker under the agreement, usually for a specified period. During recent years, this right has been supplemented by other rights, through collective bargaining or unilaterally by employers, which also enhance, for a time, the status and security of the laid-off worker. For example, he may be entitled to supplemental unemployment benefits financed by the company; he may be permitted to continue his participation in the company's health and insurance plan; he may preserve his credited service under the company's pension plan, or may even qualify under length of service or minimum age requirements for a deferred pension (vesting) during a layoff period which ultimately becomes a permanent separation.

The basic principle underlying most recall procedures is the return to work in inverse order of layoff, i. e., the last person laid off is the first to be recalled. Application of this principle, however, is complicated by plant requirements; production may not be resumed simultaneously in all units of a plant or in inverse order of curtailment, nor is the return to full production necessarily at the same rate among units. Such situations often result in modification of the recall principle, usually by widening or narrowing the area of job opportunity (seniority unit) or by ascribing more weight to ability and skill than these factors may have had in determining the order of layoff. This may be done by mutual agreement when the exigencies arise or may be provided for in the agreement. Some agreements provide for such contingencies by permitting deviation from the regular recall procedure, as in the following provision:

It is recognized that deviations from the [stipulated] order of recall may be made necessary by the sequence in which plant operations are resumed. For example, in the case where plant equipment must be put back into shape before operations can be started, the appropriate senior mechanical department employees required to do the work may be recalled, even though other employees with greater plant seniority are still laid off until such time as the department is operating normally. Similarly, if a particular operating department is to be started up and operating

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employees with the necessary qualifications and experience in that department are required, such employees may be recalled even though employees of other departments with greater plant seniority are still laid off.

Of the 1,743 major agreements studied, layoff procedures were found in 1,347, covering 5.8 million workers. Most of these agreements explicitly set forth a recall procedure; a few, however, contained no reference to the manner in which recall was to proceed. Most agreements also stipulated the length of time that laid-off workers would retain seniority.

Seniority in Recall. As in layoff, qualified seniority, whereby length of service is considered with other factors such as ability, skill, and physical fitness, was the predominant type of seniority

applied in recall: 58 percent of the 1,347 agreements in recall and 56 percent in layoff.¹ Only 28 percent of the agreements specified straight seniority (i. e., length of service is the only factor) in recall, in contrast to 43 percent in layoff. Recall provisions which were not explicit or which provided only for preference over new employees in rehiring accounted for 13 percent of the agreements. The remaining 1 percent provided for recall by straight seniority for some groups and qualified seniority for others. (See table 1.)

Qualified seniority was specified more frequently in manufacturing than in nonmanufacturing industries. Such provisions were found in slightly more

¹ For a discussion of seniority types and their prevalence in layoff procedures, see Part III—Seniority and Bumping Practices, Monthly Labor Review, February 1957 (p. 177).

TABLE 1.—Recall provisions in major collective bargaining agreements, by industry, 1954-55

Industry	Number with layoff provisions		Laid-off employees recalled on the basis of—									
			Straight seniority		Qualified seniority		Straight seniority for some, qualified seniority for others ¹		Preference over new employees, seniority not a factor		Recall procedure not explicit	
			Agreements	Workers (thousands)	Agreements	Workers (thousands)	Agreements	Workers (thousands)	Agreements	Workers (thousands)	Agreements	Workers (thousands)
All industries.....	1,347	5,815.1	373	1,665.1	786	3,136.5	12	296.1	43	155.0	133	562.5
Manufacturing.....	1,039	4,123.1	298	1,255.0	642	2,517.2	10	27.6	28	93.9	61	229.4
Food and kindred products.....	96	320.3	30	66.8	55	232.9	—	—	2	4.8	9	15.8
Tobacco manufactures.....	10	29.5	6	17.8	2	4.7	—	—	1	4.5	1	2.5
Textile-mill products.....	55	118.5	25	65.8	27	46.1	1	1.0	—	—	2	5.6
Apparel and other finished textile products.....	3	4.1	2	3.1	—	—	—	—	—	—	1	1.0
Lumber and wood products (except furniture).....	17	39.2	4	9.0	8	17.1	—	—	2	5.5	3	7.6
Furniture and fixtures.....	16	29.2	4	6.8	10	17.9	1	3.1	—	—	1	1.4
Paper and allied products.....	53	119.5	16	28.6	32	80.9	—	—	—	—	5	10.0
Printing, publishing, and allied industries.....	14	28.1	9	14.8	—	—	—	—	1	1.8	4	11.5
Chemicals and allied products.....	61	132.6	14	24.0	40	97.6	—	—	4	4.9	3	6.1
Products of petroleum and coal.....	26	71.7	4	8.8	17	36.3	—	—	1	3.2	4	23.4
Rubber products.....	21	128.8	8	34.3	9	19.5	—	—	—	—	4	75.0
Leather and leather products.....	14	41.7	6	15.7	6	15.1	—	—	1	9.5	1	1.4
Stone, clay, and glass products.....	32	102.6	6	21.7	23	62.4	—	—	—	—	3	18.6
Primary metal industries.....	117	662.5	22	70.2	90	583.5	2	4.7	1	1.1	2	3.0
Fabricated metal products.....	63	169.2	16	28.3	40	114.7	1	1.5	—	—	6	24.8
Machinery (except electrical).....	142	369.8	33	121.9	100	232.7	1	3.5	2	2.7	6	9.0
Electrical machinery.....	102	424.0	32	79.5	56	286.7	2	3.3	10	50.4	2	4.1
Transportation equipment.....	139	1,205.4	50	615.2	85	572.8	1	9.4	1	2.1	2	5.9
Instruments and related products.....	29	64.8	6	10.1	20	49.4	1	1.2	1	2.4	1	1.7
Miscellaneous manufacturing industries.....	29	61.5	5	12.4	22	46.9	—	—	1	1.0	1	1.2
Nonmanufacturing.....	308	1,692.0	75	410.1	144	619.2	2	268.5	15	61.0	72	333.2
Mining, crude petroleum, and natural gas production.....	15	295.0	3	3.1	8	19.4	2	268.5	—	—	2	4.0
Transportation ²	52	336.9	23	238.0	11	24.4	—	—	1	2.8	17	71.7
Communications.....	68	538.5	10	73.6	47	375.3	—	—	1	3.0	10	86.5
Utilities: Electric and gas.....	64	173.2	13	28.3	34	70.5	—	—	6	11.9	11	62.4
Wholesale trade.....	11	18.6	4	8.5	6	8.6	—	—	—	—	1	1.5
Retail trade.....	48	139.6	6	18.1	22	57.4	—	—	3	13.8	17	50.3
Hotels and restaurants.....	16	102.8	5	16.8	5	44.3	—	—	4	29.5	2	12.3
Services.....	26	74.1	9	19.8	8	14.4	—	—	—	—	9	40.0
Construction.....	6	9.6	2	3.9	1	1.2	—	—	—	—	3	4.5
Miscellaneous nonmanufacturing.....	2	3.8	—	—	2	3.8	—	—	—	—	—	—

¹ 7 of these agreements combined straight seniority in recall for certain occupational groups or departments with qualified seniority for others; 4 used straight seniority if the employee was recalled to his regular job classification and qualified seniority if recalled to a new job classification; the remaining agreement used straight seniority for employees with 7 years' service and qualified seniority for those with less service.

² Excludes railroads and airlines.

NOTE.—Because of rounding, sums of individual items do not necessarily equal totals.

than 60 percent of both layoff and recall provisions in manufacturing agreements. In nonmanufacturing, the proportion was 47 percent in recall and 37 percent in layoff. Recall based on qualified seniority was provided in over 70 percent of the agreements in the stone, clay, and glass; primary metals; and machinery (except electrical) industries.

Of the 786 agreements providing for qualified seniority in recall, length of service was the primary factor in 56 percent and a secondary factor in 30 percent of the agreements, as indicated in the following tabulation:

	Agreements	Workers (thousands)
Total.....	786	3, 136. 5
Seniority governs, provided senior employee is competent to do available work.....	443	1, 656. 9
Seniority secondary, i. e., governs only if ability equal to competing employee.....	237	1, 023. 3
Consideration given seniority not clear.....	98	425. 1
Consideration given seniority varies by length of service or type of occupation.....	8	31. 2

Where seniority was the primary factor, experience on similar or related work, either with the employer or with other firms, was often accepted as demonstration of ability. In some instances, the employee was to be given a short trial period to prove his ability. Under clauses where seniority was secondary, the first test was that of ability or fitness. As between two competing employees, if ability was equal or relatively equal, length of service was the determining factor.

Straight seniority governed the order of recall in 373 agreements, accounting for 28 percent of manufacturing and 24 percent of nonmanufacturing agreements, in contrast to 37 percent and 62 percent, respectively, in layoff. In each industry except lumber, the number of agreements providing for straight seniority in recall was lower than in layoff; the difference was most marked in the communications industry, with 15 percent providing for straight seniority in recall and 90 percent in layoff.

A combination of both straight and qualified seniority was applied in recall under the terms of 12 agreements. The factors determining the type

of seniority applicable were the occupational groups or departments in seven instances; and the employee's length of service in another. In four such agreements, including the national anthracite and bituminous coal contracts, straight seniority governed recall to the employee's former job, and qualified seniority governed recall to a new job classification.

Relation Between Layoff and Recall Procedures.

In 964 agreements, covering 68 percent of the workers under layoff procedures, the order of recall was determined by the same method applicable to layoff, i. e., type of seniority, weight given to ability, skill, or other factors, and composition of the seniority unit (table 2).² Such procedures would normally result in recall in inverse order of layoff, if production were resumed in the same order as it was curtailed. In a number of these agreements, workers were given a wider job area for reemployment by a proviso granting preference in rehire to laid-off employees before new workers could be hired. Thus, employees with recall rights in a unit where operations had not yet resumed would have preference in employment in other units of the company which were expanding.

In another group of 133 agreements, the recall procedure was not explicit. However, it is probable that the intent, in many of these agreements, was to follow the same principles in recall as in layoff. This group also included 6 master agreements which provided for negotiation of layoff and recall provisions at the local level.

In the remaining 250 agreements, recall procedure differed from that used in layoff. The major type of difference, found in 140 agreements, was in the use of qualified seniority for recall as against straight seniority for layoff. In general, such procedure modifications are designed to facilitate recall of workers to jobs that they can perform, without the cost of extensive retraining, if their regular work is not available. Some of these clauses were found in agreements which contained specific provision for broadening the seniority unit or granted laid-off employees preference in reemployment over new hires in other units. It is probable that where clauses specifying qualified seniority occurred in the absence of provisions for broadening the seniority unit, they were designed to implement informal arrangements to this effect. In a relatively small propor-

² For a discussion of seniority units, see Part III of this series, op. cit. (p. 183).

tion of the 140 agreements, the employee's physical fitness at the time of recall was the only factor qualifying length of service. Usually such clauses merely required that the employee be physically fit or physically able to do the job. Less frequently, the agreement specified that the employee was required to pass a physical examination before reemployment.

Only 33 agreements which provided for qualified seniority in layoff based recall on straight seniority. Recall provisions in 43 agreements, contrary to the procedure for layoff, did not specify seniority as a factor, but protected laid-off employees in other ways, either by banning new hires until all laid-off employees were recalled, or by providing for preference in reemployment over new workers.

Other areas of difference in layoff and recall procedures, found in 34 agreements, involved (1) the weight given length of service, which was secondary to ability in layoff but primary in recall; (2) the seniority unit applicable, which was wider for recall than layoff; or (3) the use of straight seniority for some groups and qualified for others

TABLE 2.—Relation between layoff and recall procedures in major collective bargaining agreements, 1954-55

Layoff and recall procedures	Agreements	Workers (thousands)
Total with both layoff and recall provisions	1,347	5,815.1
Total with straight seniority in layoff	579	2,974.1
Recall procedure:		
Same as in layoff—straight seniority	336	1,587.5
Differs from layoff procedure	169	1,024.1
Qualified seniority	140	635.6
Straight seniority for some groups; qualified for others	5	280.3
Seniority not a factor, but preference given in rehire	24	108.2
Not explicit	74	362.5
Total with qualified seniority in layoff	749	2,737.5
Recall procedure:		
Same as in layoff—qualified seniority	621	2,329.3
Differs from layoff procedure	76	278.9
Qualified seniority, but procedure differs ¹	24	160.6
Straight seniority	33	71.5
Seniority not a factor, but preference given in rehire	19	46.8
Not explicit	52	129.3
Total with straight seniority for some groups and qualified seniority for others in layoff	13	43.6
Recall procedure:		
Same as in layoff—combination of straight and qualified seniority	7	25.4
Differs from layoff procedure	5	7.3
Straight seniority	4	6.0
Qualified seniority	1	1.3
Not explicit	1	10.9
Total with type of seniority in layoff and recall not specified (master agreements)	6	59.9

¹ Most of these clauses differed in that (1) in layoff the weight given length of service was secondary to ability, but in recall it was the major factor if the employee was capable of doing the work; or (2) the seniority unit applicable in layoff was narrower than in recall.

NOTE.—Because of rounding, sums of individual items do not necessarily equal totals.

TABLE 3.—Preference to laid-off employees in rehiring, provided by major collective bargaining agreements, 1954-55

Types of preference given laid-off employees in rehire	Agreement	Workers (thousands)
Total with layoff provisions	1,347	5,815.1
With provisions for preference in rehire	440	1,782.5
No new hires until laid-off employees recalled	264	783.4
Preference in rehire over new employees	142	521.1
Some preference in rehire in other plants of company ¹	11	416.4
Other ²	23	61.6

¹ 4 agreements limited preference to employment in new plants only and in 2 instances, preference was applicable only during the first 6 months of operation of the new plant. The remaining 7 agreements granted preference in other plants of the company, but in 3 instances, this was limited to employees laid off because of plant closing.

² Includes agreements which banned new hires for certain departments only, or where employees with a specified amount of seniority were involved; banned new hires "insofar as practical," or waived the ban where special skill or training was required for new work; or permitted new hires in emergencies until laid-off employees returned to work. Also includes agreements which granted preference to laid-off employees if work of a different nature developed; or granted preference to employees who had lost their seniority combined with a ban on new hires where seniority employees were involved.

NOTE.—Because of rounding, sums of individual items do not necessarily equal totals.

in either layoff or recall, where either straight or qualified seniority was specified in the reverse situation.

Preference in Reemployment. In addition to the 43 agreements which did not specify seniority as a factor, but granted preference in reemployment, 397 agreements with provision for seniority in recall gave further protection to laid-off workers by requiring preference in reemployment (table 3). As stated earlier, this procedure may provide the laid-off employee a wider area of job opportunity for recall than was applicable in layoff.

Three-fifths of the 440 preference clauses banned new hires until laid-off employees were recalled. The bulk of the remaining clauses provided for preference over new workers in rehire. Variations in a limited number of clauses included preference to employees who had lost their seniority combined with a ban on new hires where seniority employees were still laid off; ban on new hires for certain departments only, or where employees with a specified amount of seniority were involved, or "insofar as practical"; or preference to laid-off employees if work of a different nature developed. A few agreements waived the ban on new hires in emergency situations; persons so employed would, however, have temporary status pending the recall of laid-off workers.

Extension of the area of reemployment preference to other plants of the same company was

provided for in 11 agreements. In 4, preference was limited to new plants only; and in 2 of these, in the automotive industry, preference was applicable only during the first 6 months of operation.³ In 3 agreements, preference was limited to employees laid off because of plant closing. Preference in employment in other plants was not limited in the remaining 4 agreements.

Retention of Seniority. The employee's retention of his seniority status during extended layoffs is a generally accepted practice. Provisions covering seniority retention were found in 975 agreements, covering 75 percent of the workers under agreements with layoff clauses (table 4). Nearly all of these agreements specified a maximum period of retention; only 49 provided that seniority continue indefinitely during layoffs.

Sometimes management and unions hold divergent views on the length of time that seniority should be retained. Unions tend to argue that a short retention period unjustly penalizes the laid-off worker by forfeiture of the rights he has earned by his years of service. Since seniority is a central factor in determining not only eligibility for recall, but also promotions, vacation benefits, pension eligibility, and other benefits during reemployment, the period of retention is of considerable concern to workers in a layoff situation. From a management viewpoint, the retention of employees on a recall list provides a pool of experienced workers to draw on when needed; high seniority employees, even though employed elsewhere, often prefer to return to their jobs when recalled in order to preserve the benefits acquired through length of service. However, some employers object to long-term retention on the grounds that laid-off employees working in other occupations for an extended period may have lost their skill and speed. Another objection is that, after lengthy layoffs, there is a stronger possibility of the employee's rejection of the job offer, with consequent delay before new employees could be hired.

³ The Executive Board of the United Automobile Workers on September 20, 1956, instructed "all regional directors and department directors to approach employers within their jurisdictions with a view to negotiating supplemental agreements which will include:

"(a) New provisions on the broadening and strengthening of existing contract provisions, requiring corporations, when hiring in any plant, to give preference in order of seniority to workers laid off from their other plants; and

"(b) Provisions to require employers, when hiring, to give preference to laid-off workers in the same area and industry, taking into consideration the seniority of such workers with their former employers."

A uniform period of seniority retention applicable to all employees regardless of differences in length of service was provided by more than half of the agreements with retention clauses. Retention periods of from 1 to 2 years, inclusive, were specified in 460 agreements, covering nearly half of the workers under agreements with retention clauses. One-year periods were most predominant, but agreements providing 2-year periods covered nearly twice as many workers. Seniority was retained for less than 1 year in only 67 agreements, and for more than 2 years in 83.

The period of retention was related to the employee's length of service under 283 agreements. In 126, the period was equal to the employee's length of service. However, this was limited to a maximum number of years, varying from 1 to 7 in 72 agreements, and to 3 years in addition to length of service in 1 agreement. Relatively short-service employees were granted additional protection in 20 of the 126 agreements by provid-

TABLE 4.—Seniority retention period for laid-off employees under major collective bargaining agreements, 1954-55

Period of seniority retentions	Agreements	Workers (thousands)
Total with layoff provisions.....	1,347	5,815.1
No reference to retention of seniority after layoff.....	372	1,469.2
With provisions for retention of seniority after layoff.....	975	4,345.9
Period of retention:		
Less than 1 year.....	67	182.8
1 year.....	197	716.8
More than 1, but less than 2 years.....	102	294.2
2 years.....	161	1,145.3
More than 2 years.....	83	261.6
Equal to employee's length of service.....	33	365.8
Equal to employee's length of service up to a maximum number of years ¹	73	356.1
Related in some other ratio to employee's length of service.....	157	435.5
For specified period; then continued for additional period, provided employee requests extension.....	21	110.1
Equal to length of service or specified period, whichever is greater ²	20	242.1
Continues indefinitely.....	18	76.7
Continues indefinitely, provided employee takes prescribed action ³	31	108.8
Other ⁴	12	50.1

¹ Maximum periods specified were: 5 years in 25 agreements, 3 years in 12, 2 years in 16, 1 year in 13, and from 1½ to 7 years in 6 agreements. The remaining agreement provided for retention equal to length of service, plus 3 additional years.

² Seniority was retained for a minimum period of 1 year under 13 of these agreements; for minimum periods of 1½, 2, or 3 years in the remaining 7.

³ In practically all instances, the actions prescribed consisted of periodic notification by the employee of his desire to remain on the recall list—most frequently at semiannual or annual intervals.

⁴ Includes agreements with no limitation on duration of seniority retention for skilled classifications, or for employees with a specified amount of service (5 and 15 years); agreements with a longer retention period for certain skilled classifications; or a shorter period if the employee refused work other than in his regular occupation. Under 1 agreement, the provision was not applicable if 20 percent of the employees were laid off for over a year; one prohibited loss of seniority due to layoff during the 5-year term of the agreement; another agreement limited retention of seniority beyond the termination date of the agreement or any renewal or amendment.

NOTE.—Because of rounding, sums of individual items do not necessarily equal totals.

ing for retention of seniority for minimum periods of 1 to 3 years if these were greater than the employee's length of service. Retention for a period equal to the employee's length of service was not limited in the remaining 33 agreements in this group.

In 157 of the 283 agreements, the period of retention was related to length of service in some other ratio, such as one-half the length of service; 1 month for each year of service; or periods of 2 years for less than 2 years' service and 5 years for 2 years or more. Some of the agreements in this group also set an upper limit on the length of time that seniority could be retained by a laid-off worker.

Another group of 21 agreements specified an initial period of retention, after which seniority could be further retained if the employee took prescribed action—usually notification at stated intervals of his desire to remain on the recall list. Other variations, found in 12 agreements, included provisions with no limitation on duration of seniority retention for skilled classifications, or for employees with a specified amount of service; provisions for a longer retention period for certain skilled classifications; or for a shorter period if the employee refused work other than his regular occupation.

The degree of freedom accorded workers on layoff to accept or reject proffered work varied. In some agreements, rejection of proffered work did not affect the employee's recall status; in others, such action limited his recall rights to his former occupation or job, limited the period during which his seniority was retained, or resulted in loss of seniority rights. Similar penalties were invoked under some agreements if the employee failed to report for work or to reply to the recall notice within a specified time. Exceptions were sometimes permitted if the employee could not report because of illness or for other valid reasons.

The method of recalling workers was specified in a number of agreements. Such provisions required that notice be given by mail, registered mail, telegram, telephone, or some other specified device. Notification to the union was sometimes required at the time recall notices were sent out. Other agreements left the method of recall to the employer's discretion. No attempt was made in this study to determine the prevalence of these phases of recall provisions.

Work-Sharing

Layoff and recall procedures based on seniority favor workers in proportion to their length of service. If layoffs materialize, workers with relatively low seniority may expect to be laid off early and recalled late; the high seniority workers may expect the reverse or that they might not be affected at all. In contrast, a work-sharing procedure implies an equal division of available work among qualified employees, regardless of differences in length of service. Slackening of work would thus affect all employees in the sharing unit in about the same way.

On the whole, the principle of work-sharing appears to be attractive to many companies and unions up to a certain point. For example, management might favor a reduction of scheduled weekly hours for all employees, prior to resorting to layoffs, so as to keep intact the work force and individual work groups, but would not want to carry this procedure beyond the point where plant efficiency is impaired. Unions, on the other hand, might favor the principle of equal treatment for all union members in the establishment, but not to the point where no one earns a living wage. The availability of unemployment compensation and the expansion of the economy over the past two decades have undoubtedly had a profound influence on current attitudes toward work-sharing, tending to restrict its use. Supplementary unemployment benefit plans may also, in time, modify some procedures.

Two basic types of work-sharing appear in agreements: (1) temporary reduction of scheduled weekly hours for all workers in a plant or unit in order to forestall and minimize layoffs, and (2) equal division of work to take the place of layoffs. Approximately 20 percent of the 1,743 major agreements studied required the employer to reduce hours before regular employees were laid off.⁴ Only 4 percent provided for work-sharing in lieu of layoff, either for as long as work is available or layoff can reasonably be avoided. The following discussion deals with this 4 percent of the agreements which apply the principle of equal division of work.

Seventy-four agreements, covering approximately 525,000 workers, provided for work-

⁴ See Part I, tables 5 and 6, Monthly Labor Review, December 1956 (pp. 1392 and 1393).

sharing in lieu of layoff. Such arrangements were scattered through 10 industries, nearly all manufacturing.⁵ However, 47 of the 74 agreements were in apparel manufacturing, accounting for all but 5 of the major agreements in that industry group. The food, textile, printing, and leather industries accounted for 18 of the remaining 27 agreements.

Almost all of the work-sharing plans, covering 98 percent of the workers under such arrangements, were in agreements negotiated by multi-employer groups.⁶ Bargaining through employer associations is the general practice in the apparel industry, and is fairly common in most of the other industries with work-sharing plans.

Arrangements for equal division of work involve a determination of who will share the work and the area within which work-sharing will take place. The work-sharing unit may vary according to type of establishment and the complexities of the processes involved. Thus the unit may include all or only portions of the labor force covered by the agreement. If skills are not readily interchangeable, work-sharing may be done on an occupational or craft basis, rather than by department or plant. Departmental units may be specified if skills are interchangeable within departments or the nature of the business is such that curtailment of production does not affect all departments in the plant.

Fifty-four of the 74 work-sharing agreements specified the work-sharing unit. In almost half of these, work was to be shared on the basis of occupation, craft, or classification; in slightly more than a fourth, by plant; and in the remaining agreements, by department.⁷

In order to increase the work opportunities for regular employees, layoffs of temporary, probational, or short-service employees may be made before work-sharing begins.⁸ However, 61 of the 74 agreements provided for equal division of work among all employees in the plant or work-sharing unit. It is likely that, in actual practice, work-sharing was limited to regular employees. The remaining 13 agreements specifically provided for sharing work among regular employees. Temporary, probational, "peak force," and, in 2 instances, employees with less than 6 months' service were to be laid off. Further consideration was given length of service in 2 of these agreements: One, in the apparel industry, provided for equal division of work as far as practical among employees who had worked for the employer for 2 consecutive seasons; the other provided for preference in work-sharing, if possible, to employees with the longest service. A few agreements, also in the apparel industry, excluded certain occupations (e. g., workers on sample garments) from the work-sharing plan. Such workers were subject to layoff and recall by seniority.

⁵ See Part I, table 1, op. cit. (p. 1386).

⁶ See Part I, table 2, op. cit. (p. 1387).

⁷ In the apparel industry, it should be noted, a department or plant unit may roughly coincide with what might be called an occupational or classification unit in a more diversified industry or one comprising larger establishments.

⁸ Other devices for increasing work opportunities for regular employees were discussed in Part I (tables 3 and 4). The small number of work-sharing arrangements in major agreements and the concentration of such arrangements in apparel industries would seem to undermine any generalization, based on agreement analysis, relating the practice of work-sharing to the relatively high prevalence of provisions regulating subcontracting, overtime, shift operations, and employment practices, as shown in Part I. In other words, both aspects may be independent characteristics of labor-management relationships in the apparel industries.

Summaries of Studies and Reports

Automobile and New Appliance Purchases in Six Cities, 1953-56

AUTOMOBILES and television sets were the most popular of 7 "big ticket" durables purchased by families in 6 cities in recent periods, as shown by exploratory surveys by the Bureau of Labor Statistics. New appliances were purchased most frequently in appliance stores in practically all the cities, with a substantial proportion of them bought at sale or special prices. Consumers in the four large cities made from one-third to four-fifths of their major appliance purchases in neighborhood or suburban stores. Residents of the two small cities bought about a fourth of their new major appliances in other communities. The practice of making trade-ins varied considerably from city to city for the appliances but was common for automobile purchases in all six cities.

The spread of liberal discount and trade-in practices, as well as the accelerated movement of large-city families to the suburbs, prompted the Bureau of Labor Statistics in 1955 to ask families where they bought, and what they paid, for automobiles and six major appliances. Their replies disclosed the number of cars or appliances bought, the type of store in which purchased, the proportion of suburban versus downtown shopping, the type of price paid, and the number of purchases involving trade-in allowances. The information, particularly on the kind and location of stores in which families purchased appliances, is being used by the Bureau to improve the sample of stores from which prices are collected for the Consumer Price Index.

Scope of the Survey

During the 13-month period ending March 1956, interviewers asked 1,650 families for information about their purchases of new and used cars and 6 new appliances—television sets, washing machines, refrigerators, vacuum cleaners, stoves, and

sewing machines—during specified purchase periods in 1953-56.¹

The six cities surveyed and the various periods of purchases covered are:

	<i>Survey month</i>	<i>Purchase period covered</i> ¹
Small communities:		
Anna, Ill.-----	Mar. 1955.	Jan. 1953-Mar. 1955
Shenandoah, Iowa.	Apr. 1955.	Jan. 1953-Apr 1955
Large cities:		
San Francisco, Calif.	June 1955.	Jan. 1953-June 1955
Washington, D. C.	Nov. 1955.	Jan. 1954-Nov. 1955
Houston, Tex.-----	Feb. 1956.	Jan. 1954-Feb. 1956
Baltimore, Md.----	Mar. 1956.	Jan. 1954-Mar. 1956

¹ Purchases made in the survey month prior to the date of interview were recorded.

Differences in the annual rates of purchase between cities may have resulted to some extent from differences in the time periods studied.

In the four large cities, interviewers visited families living in the suburbs as well as those residing within the city limits. In the two small cities, only families living within the city limits were interviewed.

The accompanying tables apply to all families interviewed. In order to segregate purchases of "index families" (i. e., wage earners and clerical workers) for Bureau study, interviewers recorded the occupation of the head of the household but did not request family income data.² When purchases of index families, as approximated by occupation, appeared to have special significance, the text indicates how they differed.

Rate of Purchase

Automobiles were purchased by more families than any of the six appliances, in the cities surveyed, except Baltimore and Anna, Ill. (table 1). In these two cities, television sets were the

¹ For brief information regarding the sample design, see p. 340 of this issue.

² The Consumer Price Index measures the retail price trend of goods and services bought by families of wage earners and clerical workers; hence they are known as "index families." The head of the family, who was usually the chief income earner, was classified as (a) self-employed, (b) employed by others, or (c) unemployed, retired, or other. If employed by others, the interviewer ascertained the kind of work performed and the nature of the employer's business.

most popular item. Of the appliances, television sets were the most commonly bought in each city. On the whole, washing machines ranked second, and vacuum cleaners competed with refrigerators for third place. Cooking stoves usually ranked fifth in frequency of purchase. Sewing machines represented the smallest percentage of the total purchases of the six appliances, possibly because a number of these durable machines are bought "used."

In terms of annual rate of purchase, Houston families purchased far more of the 6 types of new appliances combined than residents of the other 5 cities. Purchases were fewest among Washington families, despite comparatively high average income. In this connection, it is important to know that 71 percent of Washington's rental units furnished refrigerators and 92 percent included stoves in the equipment as of 1950,³ so purchases of these appliances by renters would be expected to be correspondingly low in Washington. On the other hand, less than one-third of the rental units in Houston provided these appliances in 1950, thus Houston renters bought more cooking stoves and refrigerators than renters in the other five cities. (See table 2.) Families in Anna, where less than a fifth of the rental units were equipped with cooking stoves and refrigerators in 1950, reported the second highest rate of purchase of these two household appliances in the 6 cities.

Families in Houston and Anna, probably stimulated by improvements in telecast facilities for both cities during the periods surveyed, bought television sets at a much higher rate than families in the other four cities. Washington's families purchased fewest television sets, about two-thirds as many as did families in Houston and Anna. Index families in Washington reported buying about half as many sets as index families in the other five cities. A higher rate of television ownership may have been reached in Washington

TABLE 1.—Rate of purchase of automobiles and new appliances per 100 families reporting in 6 cities for specified purchase periods, 1953-56¹

Items purchased	Number of items purchased per year per 100 families					
	Washington, D. C.	Baltimore, Md.	Houston, Tex.	San Francisco, Calif.	Anna, Ill.	Shenandoah, Iowa
Automobiles.....	15.9	9.8	18.2	12.7	11.1	18.3
New automobiles...	11.2	5.7	9.4	6.2	6.7	7.4
Used automobiles...	4.7	4.1	8.8	6.5	4.4	10.9
Appliances:						
Television sets.....	8.1	10.7	13.3	9.5	13.1	12.1
Washing machines...	6.0	5.1	7.7	5.1	6.4	7.4
Refrigerators.....	2.2	4.5	6.4	4.4	5.9	4.3
Vacuum cleaners.....	6.3	4.5	6.2	4.0	3.5	4.3
Cooking stoves.....	1.6	2.9	6.1	2.9	4.0	2.7
Sewing machines...	1.6	1.9	3.0	2.9	1.3	2.3
Number of families reporting.....	289	426	425	220	180	110

¹ For purchase periods surveyed, see text on p. 336 of this issue.

than in most of the other five cities prior to the purchase periods covered in the surveys, due to early introduction of good network coverage and comparatively high average income level.

Car purchases averaged 1 for every 5 or 6 families per annum in Houston, Washington, and Shenandoah, compared with 1 for every 9 or 10 families per year in Baltimore and Anna. Used cars accounted for a relatively high rate of car purchases in Shenandoah, where approximately 11 used cars were bought each year per 100 families interviewed, as compared with about 16 used cars purchased per 100 index families.

The ratios of new to used car purchases in the 6 cities averaged 1.2 new cars to every used car purchased and exceeded the national ratio of new to used car sales for recent years. For example, 70 percent of the automobiles bought by families surveyed in Washington were new when purchased, well above the proportion of cars purchased "new" in the last 3 years nationally.⁴ Shenandoah was the only city surveyed in which the ratio of new to used car purchases (0.68 to 1) approximated the estimated national ratio of new to used car purchases.

On the whole, index families bought more automobiles than nonindex families. However, they bought more used cars and fewer new cars than did nonindex families. In 4 out of 6 cities, a higher proportion of homeowners than of tenants bought cars, with renters buying more used cars than did homeowners in 5 of the 6 cities.

³ For data on housing facilities, see Housing Surveys in 75 Cities, 1950 and 1952, Monthly Labor Review, July 1954 (p. 744).

⁴ The Federal Reserve System's Surveys of Consumer Finances reported that the following percentages of spending units bought used and new cars in 1953, 1954, and 1955:

	1955		1954		1953	
	New	Used	New	Used	New	Used
All spending units.....	11	17	8	16	9	15
Clerical and sales workers.....	15	15	9	14	8	10
Skilled and semiskilled.....	12	26	7	22	9	20
Unskilled and service.....	4	14	4	21	4	17

Place of Purchase

Type of Store (or Other Distributor). Families bought more of the new appliances in general appliance stores than in any other type of store. (See table 3.) When general appliance stores are combined with the specialty appliance stores—radio and television, automobile accessory and appliance, vacuum cleaner and sewing machine—the proportion of appliances purchased in these types ranged from 33 percent in Houston to 82 percent in Anna. Consumers in the two small cities bought, in general, twice as many appliances in this combination of appliance stores as did families in the large cities.

About 15 percent of the purchases reported for the 6 appliances in the large cities were made in department stores and from 7 to 22 percent were made in retail stores of mail order houses. Neither Anna nor Shenandoah had department stores.

Washington, where fair-trade laws are not in effect, was the only city in which families bought a sizable portion (14 percent) of the surveyed appliances in discount stores so designated by the families. Baltimore families reported that they purchased about 9 percent of the 6 appliances in stores which they regarded as discount houses, but families in the other 4 cities did not make many purchases in stores which they classified as discount houses. This is a difficult distinction to make in any city, because it is not always possible to differentiate between appliance stores and discount houses. There were no outstanding differences between the types of stores patronized by index families and other families.

Consumers bought television sets most often in general appliance stores. Department stores ranked second in the large cities, while in the small cities, auto accessory stores were also frequently patronized. Washington families obtained 22 percent of their sets from firms which they identified as "discount houses" (which may be an understatement of the proportion because of the problem of defining discount houses). In each of the large cities except Baltimore, the largest percentage of washing machines was sold to the interviewed families by retail stores of mail-order firms. Baltimore families purchased 27 percent of their washing machines in department stores, 27 percent in appliance stores, and only 18 percent in mail-order stores. Vacuum cleaners as well as sewing machines were commonly bought in stores specializing in their sale and servicing. One exception was Washington, where door-to-door salesmen sold 46 percent of the vacuum cleaners to the families interviewed and accounted for one-ninth of the appliance sales. Purchases from door-to-door salesmen did not make up a significant proportion of the total in the other cities.

Practically all new cars were bought from franchised dealers. About 18 percent of the new car purchases in Houston, however, were reported to have been made from independent (non-franchised) dealers, which included used car dealers. In each of the four large cities, three-fifths of the used cars were obtained from used-car dealers, but in Shenandoah about one-fourth and in Anna only one-ninth of the used cars were bought from used-car dealers. New-car dealers sold most of the used cars in both of the small

TABLE 2.—Rate of purchase of automobiles and new appliances per 100 families reporting in 6 cities for specified purchase periods, by homeownership status, 1953-56¹

Items purchased	Number of items purchased per year per 100 families											
	Washington, D. C.		Baltimore, Md.		Houston, Tex.		San Francisco, Calif.		Anna, Ill.		Shenandoah, Iowa	
	Owner	Tenant	Owner	Tenant	Owner	Tenant	Owner	Tenant	Owner	Tenant	Owner	Tenant
Automobiles.....	17.1	14.4	9.9	9.7	17.6	19.3	13.2	12.3	9.6	12.6	19.4	17.3
New automobiles.....	12.5	9.6	6.7	4.6	10.6	7.3	5.9	6.5	6.6	6.8	12.1	3.0
Used automobiles.....	4.6	4.8	3.2	5.1	7.0	12.0	7.3	5.8	3.0	5.8	7.3	14.3
Appliances:												
Television sets.....	6.2	10.4	12.2	9.0	12.3	15.2	8.8	10.1	11.6	14.5	13.7	10.5
Washing machines.....	6.6	6.0	4.8	4.1	7.6	3.8	2.2	5.8	2.5	4.3	4.0	4.5
Refrigerators.....	3.3	.8	5.1	3.7	6.2	6.9	3.3	5.4	5.6	6.3	5.7	3.0
Vacuum cleaners.....	6.2	5.6	4.8	5.5	8.8	5.7	6.2	4.0	8.1	4.8	8.1	6.8
Cooking stoves.....	2.6	0.4	3.8	1.8	4.7	8.5	2.2	3.6	4.0	3.9	1.6	3.8
Sewing machines.....	1.3	2.0	2.1	1.6	3.2	2.8	4.8	1.1	1.5	1.4	3.2	1.5
Number of families reporting..	159	130	233	193	273	152	109	111	88	92	53	57

¹ For purchase periods surveyed, see text on p. 336 of this issue.

cities. In San Francisco 30 percent, and in Houston 16 percent, of the used cars were bought from their former owners. Few cars were acquired from their previous owners in the other cities.

Location of Store. Location of residence and availability of parking space for shoppers seemed to determine most strongly where families bought appliances in each city except Baltimore. (See table 3.) In Washington, Houston, and San Francisco, the largest number of purchases, 58 to 81 percent, were made in neighborhood and suburban shopping areas. Respondents in Houston bought over half of their appliances in neighborhood shops located within the city limits. Baltimore families said they made 56 percent of their appliance selections in stores located downtown. Families living in Washington and San Francisco—cities with large residential suburbs and extensive suburban shopping facilities—purchased 23 percent and 46 percent, respectively, of their appliances in suburban stores. In those 2 cities, the proportion of appliance purchases made in downtown stores was correspondingly low, 29 percent in Washington and 16 percent in San Francisco. Baltimore families reported the lowest volume of appliances bought in suburban stores, only 1 percent.

Information obtained in San Francisco about the location of automobile dealerships showed that automobile buyers in that city tended to make more of their purchases in the downtown area than did appliance shoppers.⁵ Purchasers of automobiles in the small cities bought about three-tenths of their new cars and one- to two-fifths of their used cars in other communities.

Competitive Prices

Many consumers obtained appliances at sale prices or other special prices below the store's regular price.⁶ (See table 4.) The highest proportion of purchases made at less than regular prices was reported for refrigerators and washing

⁵ Families in Baltimore, Houston, and Washington were not asked about the location of the automobile dealers they patronized.

⁶ The Bureau defined "regular price" as the price charged by the store as its usual policy. For example, the usual discount price regularly charged for an item in a discount store was the *regular* price for that kind of store. If a department or appliance store usually charged the nationally advertised or the manufacturer's suggested list price, then for those stores this price was the regular price.

TABLE 3.—Percentage distribution of new appliance purchases by type and location of store, by families reporting in 6 cities for specified purchase periods, 1953-56¹

Type and location of store (or other distributor)	Washington, D. C.	Baltimore, Md.	Houston, Tex.	San Francisco, Calif.	Anna, Ill.	Shenandoah, Iowa
Total purchases.....	143	283	379	157	137	85
Percentage distribution of purchases by type of store						
All types.....	100	100	100	100	100	100
Department.....	13	18	15	14	-----	-----
Mail-order.....	15	7	16	22	² 1	11
Furniture.....	2	10	23	16	9	6
Discount.....	14	9	1	3	-----	-----
Appliance.....	22	33	15	27	³ 58	³ 43
Radio and TV.....	3	5	3	4	3	5
Auto accessory and appliance.....	4	1	5	(4)	18	20
Vacuum cleaner and sewing machine.....	8	4	10	7	3	4
Wholesale distributors.....	3	3	4	2	1	6
Door-to-door salesmen.....	11	3	1	3	4	2
Other and not reported.....	5	7	7	2	3	3
Percentage distribution of purchases by location of store						
All locations.....	100	100	100	100	100	100
Downtown area.....	29	56	33	16	73	72
Neighborhood area within city limits ⁴	41	36	52	35	4	6
Suburban ⁶	23	1	6	46	(7)	(7)
Out-of-town.....	1	1	3	3	23	22
Not reported.....	6	6	6	0	0	0

¹ For purchase periods, see text on p. 336 of this issue.

² Mail purchases.

³ Includes purchases in hardware stores.

⁴ Combined with data on appliance stores.

⁵ Including purchases from door-to-door salesmen, some made by suburban families in the 4 large cities.

⁶ The percent of city blocks surveyed which are located in the suburbs was as follows for the 4 large cities: Washington, 41; Baltimore, 11; Houston, 12; and San Francisco, 42 percent.

⁷ Area outside city limits not surveyed.

machines. From 30 percent of the refrigerators in Anna to 50 percent in Washington were bought at a special price, and as high as 53 percent of the washing machines in Washington were obtained below the store's regular price. On the whole, residents in the two small communities did not acquire as high a proportion of their appliances at reduced prices as families living in large cities, probably because there was less opportunity to make advantageous purchases in these towns. Anna families purchased only 21 percent of their appliances below stores' regular prices compared with 42 percent of the appliances bought at competitive prices in Washington, D. C.

In Washington, 58 percent of the appliance purchases in department stores and 48 percent of the appliances purchased in retail stores of mail-order companies were made at reduced prices, predominantly conventional sales prices. (See table 4.) Consumers in the other three large cities also bought a large proportion of their ap-

pliances below regular prices in department stores and mail-order stores. Radio and television shops and auto-accessory stores sold the lowest proportion of appliances at reduced prices.

Prevalence of Trade-In Deals

As might be expected, a high proportion of appliance purchases in Anna (46 percent) and in Shenandoah (36 percent) involved trade-in transactions. (See table 5.) These are the small cities in which purchases at reduced prices were lowest. In Washington, where price reductions were most common, only 17 percent of the appliances were purchased on a trade-in basis. A large number of consumers, ranging from 22 percent in Shenandoah to 54 percent in Houston, could not estimate the market value of the articles they gave as trade-ins. In every city, the majority of appliance purchasers who offered an opinion as to the market value of the trade-in article said that the retailer's allowance exceeded the old appliance's value.

Retailers made trade-in allowances most frequently on sewing machines, with the proportions ranging from one-fifth of the purchases in San

TABLE 4.—Percent of all new appliance purchases made below regular price, by families reporting in 6 cities, by type of appliance and store, for specified purchase periods, 1953-56¹

Type of appliance and store	Washington, D. C.	Baltimore, Md.	Houston, Tex.	San Francisco, Calif.	Anna, Ill.	Shenandoah, Iowa
Total purchases ²	135	275	376	156	135	85
Purchases below regular price: Percent of all new appliance purchases						
All appliances.....	42	26	37	32	21	24
Television sets.....	36	20	25	30	16	19
Washing machines.....	53	27	40	43	27	16
Refrigerators.....	50	38	47	33	30	36
Vacuum cleaners.....	34	32	40	27	29	27
Cooking stoves.....	75	19	41	25	27	29
Sewing machines.....	22	24	50	31	17	33
All stores.....	42	26	37	32	21	24
Department.....	58	27	38	41	-----	-----
Mail order.....	48	33	42	37	100	25
Furniture.....	33	11	28	25	34	14
Discount.....	45	25	60	0	-----	-----
Appliance.....	39	24	28	33	23	19
Radio and TV.....	25	20	15	25	0	0
Auto accessory and appliance.....	20	0	28	(3)	4	19
Vacuum cleaner and sewing machine.....	27	33	36	11	20	0
Other distributors.....	43	42	68	43	29	67

¹ For purchase periods surveyed, see text on p. 336 of this issue.

² Represents those purchases for which type of price was reported. Combined with data on appliance stores.

TABLE 5.—Percent of all new automobile and appliance purchases made with trade-ins, by families reporting in 6 cities for specified purchase periods, 1953-56¹

Item purchased	Washington, D. C.	Baltimore, Md.	Houston, Tex.	San Francisco, Calif.	Anna, Ill.	Shenandoah, Iowa
New automobiles.....	88	76	71	73	85	84
Television sets.....	16	23	12	22	6	16
Washing machines.....	21	10	18	18	42	74
Refrigerators.....	8	16	33	33	70	64
Vacuum cleaners.....	23	21	22	14	36	18
Cooking stoves.....	11	0	24	12	44	71
Sewing machines.....	44	22	33	19	67	50

¹ For purchase periods surveyed, see text on p. 336 of this issue.

Francisco to two-thirds in Anna. Television trade-ins were less common than trade-ins for the other older types of appliances. The proportion of television trade-ins was lowest in areas where telecast channels had been added during the survey period. For example, trade-in allowances for television sets were negligible in Anna where reception improved within the period. Similarly, only one-eighth of the television purchases involved trade-in concessions in Houston, another city in which television acquisitions ranked high in the purchase period studied.

From 71 percent to 88 percent of the new-car purchasers traded in an old car in the 6 cities, the highest proportion being in Washington, where the largest percentage of automobiles was purchased "new."

Sample Design

To minimize cost, all six purchase surveys were undertaken concurrently with the Bureau's regular rent and housing surveys. The sample of families for the purchase survey was drawn from approximately one-half of the dwelling units surveyed in a sample of blocks drawn for the Bureau's housing studies.⁷

When 2 or more families shared a dwelling unit, only 1 family was asked to give purchase information—the family who owned the house or was responsible for rent payments. Purchases made by members who had left the family were excluded if the car or appliance went with the departing member. Appliances included in the purchase price of a house were also excluded.

⁷ For a description of the Bureau's housing samples, see Monthly Labor Review, April 1951 (p. 437). These special housing surveys were conducted in one-third of the blocks included in the Bureau's master housing sample.

The proportion of families in the sample for each city from whom interviewers succeeded in obtaining purchase statistics ranged from 55 percent in Washington to 96 percent in San Francisco. The need for an adequately large and representative sample for surveys of purchases of consumer durable goods is due primarily to the fact that the average family makes relatively few purchases of appliances and automobiles in the course of a 2-year period.

Various factors, of which income is but one, influence families contemplating purchases of automobiles and expensive household appliances. The housing sample for large metropolitan areas needs to represent properly the diversity and age of residential structures, a wide range of family incomes, the varying degrees of service offered by public-transit facilities, and differences in the availability of parking space. The characteristics

of the housing sample will affect the findings in the survey of family purchases. For example, inclusion of a high proportion of rental units in the housing sample will have the effect of reducing the rate of purchase of cooking stoves and refrigerators where they are furnished by the landlord (as in Washington, D. C.).

The broad occupational classification and home ownership status of families furnishing purchase information were fairly uniform in the six cities. The heads of about half of the sampled families were wage earners or clerical workers, ranging from 45 percent in Anna to 59 percent in Baltimore. More than half of all of the respondents in 3 cities owned their homes; the range for home ownership in all 6 cities was 48 percent in Shenandoah to 64 percent in Houston.

—LOUISE J. MACK AND RUTH I. ROSAKRANS
Division of Prices and Cost of Living

[In 1900,] only 8 thousand automobiles were privately owned. In 1920 the figure had jumped to 8 million, in 1950 to 40 million, and in 1954 to 48 million. Meanwhile the number of families in the United States had increased from 16 million in 1900 to 38 million in 1950. At the present time 7 out of every 10 families have automobiles. If you limit this comparison to city worker families, less than 15 percent had automobiles in World War I as compared with 65 percent in 1950. Skilled and semiskilled worker families are more likely to have a car than are office workers or unskilled workers.

—The American Workers' Fact Book, United States Department of Labor, 1956 (pp. 132-133).

United States Participation in the International Labor Organization

EDITOR'S NOTE.—*The "Johnson Committee" report is the result of over 8 months of intensive investigation on the part of a committee appointed by the U. S. Departments of State, Commerce, and Labor to study "the effect of the activities and functions of the International Labor Organization in terms of United States national interest, including domestic and foreign policy aspects."*¹ *Instigated as a result of outspoken criticism of the ILO by American employer groups, the study is one of several made or being made on this subject. The excerpts which follow have been restricted, because of space considerations, to the Committee's general conclusions and specific recommendations. Suspension marks to denote unused portions of the report have been omitted for easy reading.*

UNITED STATES POLICY toward and participation in the International Labor Organization must be considered primarily in terms of the goals of United States foreign policy. With such a premise, our conclusions are bound to be somewhat different from those of persons whose chief concern is a narrower interest, whether it be that of labor, of management, or of the promotion of a particular economic or social philosophy. The Committee's views will likewise be different from those of persons who do not share our conviction that the United States is no longer isolated and can no longer afford to be isolationist, who, in short, do not accept the foreign policy goals of the United States as developed over the last decade on a bipartisan basis with broad public support.

Another premise underlying the Committee's conclusions and recommendations is a practical one: While it is difficult to amend any constitution, it is particularly difficult to amend the constitution of an international organization. This requires agreement by the representatives of many nations and may in turn call for an educational campaign among the citizens of those nations. The difficulty is compounded when, as is the case of the amendments to the ILO constitution that some American

employers have proposed, the amendments would strike at provisions that many in the United States as well as elsewhere regard as basic.

These premises underlie the following general conclusions.

The Purposes of the ILO

The rationale and the purposes of the International Labor Organization are set forth in the preamble to its constitution, written in 1919:

Whereas universal and lasting peace can be established only if it is based upon social justice;

And whereas conditions of labor exist involving such injustice, hardship, and privation to large numbers of people as to produce unrest so great that the peace and harmony of the world are imperiled; and an improvement of those conditions is urgently required: as, for example, by the regulation of the hours of work, including the establishment of a maximum working day and week, the regulation of the labor supply, the prevention of unemployment, the provision of an adequate living wage, the protection of the worker against sickness, disease, and injury arising out of his employment, the protection of children, young persons, and women, provision for old age and injury, protection of the interests of workers when employed in countries other than their own, recognition of the principle of equal remuneration for work of equal value, recognition of the principle of freedom of association, the organization of vocational and technical education and other measures;

Whereas also the failure of any nation to adopt humane conditions of labor is an obstacle in the way of other nations which desire to improve the conditions in their own countries;

The high contracting parties, moved by sentiments of justice and humanity as well as by the desire to secure the permanent peace of the world, and with a view to attaining the objectives set forth in this preamble, agree to the following constitution of the International Labor Organization.

The Committee believes emphatically that the rationale and the purposes embodied in the preamble are consistent with and expressive of American philosophy and ideals, and that the promotion of these aims is in the national interest. The Committee also considers this preamble as valid today as in 1919. No one who knows the history of the last four decades will deny that in many

¹ The full text of the report is available upon request to any of the three Departments.

The committee is as follows: *Chairman*—Joseph Johnson, president, Carnegie Endowment for International Peace. *Members*—Robert Gray, Industrial Relations Section, California Institute of Technology; Frederick H. Harbison, Industrial Relations Section, Princeton University; Charles Myers, Industrial Relations Section, Massachusetts Institute of Technology; and Howard Petersen, president, Fidelity Philadelphia Trust Co.

parts of the world, notably the United States, the older members of the British Commonwealth, and much of Western Europe, there has been a great reduction of injustice, hardship, and privation, and that there has been great improvement of the conditions of labor in many countries. But much remains to be done, especially in the underdeveloped areas. And certainly "the principle of freedom of association" is far from being accepted in the Communist world, or indeed in a number of other countries.

Dissatisfaction With the ILO

No organization is perfect, and everyone can find something to criticize in the International Labor Organization. It was only among employers, however, that we found fundamental objections to the very existence of the International Labor Organization and to continued United States participation in it.

Our inquiries among employers revealed that the dissatisfaction expressed in resolutions of the National Association of Manufacturers and the Chamber of Commerce of the United States is widespread among American employers who have had some experience with the ILO. We found, however, that the intensity of dissatisfaction varied considerably, and, most important, we learned that the dissatisfaction was not universal among employers. Employer representatives from the shipping industry, for example, have apparently found the work of the Maritime Commission generally useful, and furthermore two of the former employer delegates to the general conference are vigorous in support of the ILO and have a sophisticated understanding of the difficulties and frustrations of participation.

The first, and by far the most important, cause of dissatisfaction has been the failure of the United States Government to formulate a clear policy with respect to the Organization. The result has been that employers have not known surely what this Government's attitude toward the Organization is or how it conceives the relationship of the International Labor Organization to the advancement of American national objectives.

Until very recently governmental relations with the ILO were primarily the responsibility of the Labor Department, with the State Department showing little interest, the Department of Com-

merce almost none, and the White House even less. Given the relationship between the Department of Labor and organized labor, it was natural that employers should think of the Organization as being primarily concerned with the promotion of the interests of labor, and that employers should, therefore, look upon it with suspicion, a suspicion that may have been fortified by the name of the Organization, which does not accurately describe its function.

There has been a substantial change in the last year or so. Not only have there been policy statements at high levels, but there is now cooperation between the Departments of State, Labor, and Commerce, and the Department of State has upgraded its representation at the general conference.

A second, and lesser, cause of dissatisfaction has been the operation of the ILO machinery. Without going into this criticism in detail, it may be stated that it covers virtually all elements of the ILO. The annual International Labor Conference, its duration, its organization, its voting system; industrial committees; conventions and recommendations; the objectivity of the staff in the International Labor Office; all come under attack. The conditions that have been criticized by American employers existed before the reentry of the Soviet Union into the ILO. They have merely been accentuated by it.

The Committee recognizes the validity of some of these criticisms, and attempts in its recommendations to suggest remedial measures. We believe, however, that the Organization does not deserve the heavy charges that have been laid at its door. Some of the criticisms stem from the critics' limited experience with international organizations, and their consequent inability to put the ILO in perspective. The grounds for others can, we believe, be removed by effective action along the lines of our recommendations.

The third source of employer dissatisfaction can be briefly dealt with here and adequately taken care of by the employers themselves. It is the quick turnover in employer delegates and advisers, both to the general conferences and to industry committees. Whereas the employee delegate to the conferences and member of the Governing Body has served for 8 years, and succeeded one who had served for 11 years, there have been 5 employer delegates in 11 years. We believe

greater continuity of delegates and advisers, with the resultant experience, would lead to greater understanding and effectiveness, provided of course that highly qualified men are chosen.

The Value of the ILO to the United States

An objective observer must in all fairness recognize that the ILO is not of great direct importance to the well-being of most American workers, or for the improvement of the conditions of labor or for the promotion of good industrial relations in domestic industries. By and large, the standards that have been attained in this country are generally higher than those proposed by the ILO.

If the ILO has no positive value internally, is it then harmful in its effect on the United States economy at home? The Committee does not find that it is in any significant sense. We are satisfied that the ILO constitution and our own provide adequate safeguards against invasion by the ILO of the prerogatives of either the Federal Government or the States. The small number of ILO conventions submitted to the Senate and the few ratified (seven in all), none of which invades any American interest, are proof that the safeguards are there and are applied.

If the ILO is neither particularly beneficial nor harmful at home, it has a positive value to the United States in its foreign relations that, although not accurately measurable nor as yet fully realized, is real and recognized.

A vast differential in labor standards exists in the world today. To the extent that ILO action contributes to narrowing this differential, it improves the competitive position of American industry and serves also the interests of American labor. In the present state of our knowledge we cannot assign a rough figure to this improvement; not even in the maritime industry, where the benefits are clearest, is that possible. But neither do we believe that the ILO's contribution here is meaningless.

A more subtle, still less measurable, but in the long run more important, contribution that the ILO can make to the advancement of American interest, lies in the promotion of industrial democracy and efficiency. New trends in the ILO, notably those signified by the Cole report of 1955

and the committee of experts that considered it in 1956, can do much to reduce the pains of transition to industrialism, and thereby make it more likely that the transition will be reasonably efficient and foster the growth of democracy. The Committee believes that it is in this field that the ILO has perhaps most to contribute over the longer term.

Then, there is the political value of the Organization to the United States. It is a window on the United States in which we can display what we do and how we do it, what our labor-management relations are, what our free associations of employers and employees are like. It is also, and this cannot be repeated too often, an instrument in the ideological contest. It is not an excessively complicated instrument, and the Committee is loath to believe that the United States lacks the skill to employ it in the interest of the freedom and dignity of all men.

To put the matter in its most negative sense, if we were to withdraw, or to participate halfheartedly or grudgingly, the damage to American interests in the larger sense, particularly to American prestige among the governments and leaders of Asia and Africa, would be severe.

Specific Recommendations

The Committee, convinced that the International Labor Organization can play an important and useful part in furthering United States foreign policy goals, and believing that United States participation in the ILO should be viewed as an integral part of our membership in international organizations, recommends continued but more effective and vigorous participation in the ILO, and to that end makes the following specific recommendations:

1. The Committee recommends that the Department of State, as the principal agency under the President responsible for United States foreign policy, take the leadership, in collaboration with the Departments of Labor and Commerce, in a clarification and elaboration of the place of United States participation in the International Labor Organization in furthering our broad foreign policy objectives.

2. The Committee recommends that the appropriate agencies of the Government establish formal machinery for periodic discussion and development by Government officers, employers, and labor, of policy objectives for United States participation in ILO.

3. The Committee recommends that the United States Government take urgently specific measures to improve the organization and staff responsible for United States participation in the ILO. Three problems must be tackled.

a. There must be continuous high-level United States governmental representation at Geneva.

b. Delegations to ILO general conferences, to the Governing Body meetings, and to various committees and other ILO gatherings work under high pressure over relatively short periods of time. If United States participation in these sessions is to be effective, account must be taken of four requirements—the quality of the delegates and their advisers, continuity in representation, adequate staffing, and thorough preparation.

c. The third problem is that of adequate and efficient organization and staffing in Washington.

4. The Committee recommends (a) that the United States continue to work for decreased emphasis on the use of conventions and recommendations; but (b) that when, nevertheless, conventions or recommendations are under consideration by the general conference, it should be United States policy to support or oppose them on their substantive merits, and not to oppose a proposal with which the United States is in agreement on principle simply because the measure is in convention form or is thought not to be properly a subject of legislation under the American system.

The Committee recognizes the difficult problems posed for the United States Government by the forced labor convention. On the one hand, the dominant belief in our Government seems to be that this convention in its present form, if ratified by the United States, would run counter to the dictates of our Constitution. On the other hand, this country stands to suffer a major setback in terms of world public opinion if it opposes the measure on forced labor. It seems to us that the convention on forced labor differs from other conventions in its significance for the United States. For one thing, it appears to us as laymen that the 13th amendment to the United States Constitution banning involuntary servitude places the forced labor issue within the realm of Federal jurisdiction, and therefore not subject to the Federal-State disability. Also, this whole issue arose primarily as the result of action taken by the United States in the United Nations. It was we who took the lead in bringing the problem before the world, and, even though it later took the form of an ILO draft convention, we cannot without damage to our prestige ignore that fact.

The Committee believes that the United States should continue to work for redrafting of this convention so that it will not conflict with United States law. But if we are unsuccessful in this effort, we should nevertheless strongly champion it, making it clear that because of our own constitutional processes, and for that reason alone, we will be unable to ratify it.

² Article 3, section 5, of the ILO constitution provides: "The members undertake to nominate nongovernment delegates and advisers chosen in agreement with the industrial organizations, if such organizations exist, which are most representative of employers or workpeople, as the case may be, in their respective countries."

5. The Committee recommends that the United States direct its most careful attention to the technical assistance programs, the field services, and the research and informational operations of the ILO, and that United States delegations take leadership in proposing positive suggestions for the improvement, better integration, and possible expansion of these activities.

6. The Committee recommends that the United States support maintenance of the tripartite structure of the International Labor Organization and utilize this structure to demonstrate the advantages resulting from the activities of free employers and free workers.

The term "tripartite," as it is used here, refers to the unique feature of ILO whereby not only governments, but "the employers and the workpeople of each of the members" actively participate through delegates in the Organization's meetings. The Committee has studied carefully the operation and impact of the tripartite system of ILO in the light of the criticisms directed against it and the arguments advanced in its defense.

The issue was brought to its present acute stage by American employer delegates. Some of them had already manifested a general dislike of ILO's tripartitism, stemming from experience with tripartite agencies in the United States during World War II, from frustrations caused by the need to act as representatives rather than as individuals, and from a feeling that this procedure tends to emphasize class distinctions between employers and workers. To this was now added an intense opposition to the very thought that men from Soviet Russia should be classed as employers, and particularly that Communist employers should be admitted to the councils of free employers.

The discussion and disputes that arose from American employer attack led to the appointment by ILO of a special committee of jurists, under the chairmanship of Lord McNair, to inquire into the degrees of freedom of the nongovernmental delegates from member nations. We are encouraged by the fact that the Governing Body, after considering the McNair report in November 1956, decided to request the Director-General to submit to its next session a report on the desirability and the practicability (a) of establishing continuing machinery which would establish the facts relating to the freedom of association in member states of the International Labor Organization and would report to the Governing Body and to the International Labor Conference; and (b) of improving the practical methods of working of the conference, including the committees of the conference.

We hope the Governing Body will see fit to install this machinery and will make sure that it is allowed to function freely.

But realistically we must recognize that this alone will not solve the problem. The preamble to the ILO constitution proclaims the need for "recognition of the principle of freedom of association," and article 3, section 5, provides that the representatives of employers and workers shall be "nongovernment delegates and advisers." [Emphasis added.] Unfortunately, however, there is no specific requirement that these delegates and advisers be representative of *free* workers or of *free* employers.²

Furthermore, while article 4 guarantees that "every delegate shall be entitled to vote individually," there is no guaranty that this *individual* vote will be *independent*.

The Committee shares the view of American delegates, governmental and worker as well as employer, that the appointment of representatives of state-controlled labor associations and of state industries as nongovernmental delegates and advisers violates the *spirit* of the ILO constitution, but we are not convinced that the *letter* of the constitution is so clearly violated that these representatives can, on constitutional grounds, be denied seats.

As a practical matter, tripartitism is established in the ILO constitution and any change in this principle at the present time is unlikely. Even if this change were possible, we believe that ILO's effectiveness would be decreased by abolition of the tripartite principle.

Since ILO seems likely, in any event, to continue to use the tripartite system, it is essential that the United States utilize this structure to the best of its ability. This cannot be accomplished by the withdrawal, as has been suggested, of American employer participation. If such a withdrawal should take place, the American worker delegate, under the ILO constitution, would be stripped of his right to vote, thus leaving the two American Government representatives as our only two voting delegates. We do not favor representation in ILO solely by Governments, either for this country's delegation or as a principle to be adopted by ILO for all countries. We have stressed the need for participation by workers and employers in the solution of their problems. Of even more importance, perhaps, is our conclusion that representation only by governments would result in a loss to the United States. It does not seem likely that outstanding business or labor leaders would participate in ILO activities if they were limited to advisory roles. In addition, the United States would lose the opportunity of demonstrating before the world the fact that, under our economic and political system, it is possible for either or both the employer delegate and the worker delegate to disagree with the Government, as they frequently have done in voting on ILO matters.

One proposal which we have studied with great sympathy is to give each group in the ILO more autonomy to conduct its own affairs at the general conference. Currently, the standing orders of the ILO provide that a delegate may appeal to the conference if he is denied a seat on a conference committee. This means that, if he wins his appeal, he may be seated as a worker or employer delegate over the opposition of the majority of other workers or employers who consider him not truly representative. It has been proposed that this rule be replaced by that formerly in force, which allowed the employer and worker groups

each to pass on the eligibility of its own members without appeal, as is done in the two Houses of the American Congress.

We believe, therefore, that it should be United States policy to advocate such a change *at the proper time*. But the timing is of vital importance and must be determined in the light of the probable propaganda impact.

Pending such change, the United States delegations should challenge the credentials of employer and worker delegates from Communist nations, emphasizing repeatedly that to seat such delegates violates the spirit of the ILO, and utilizing every challenge to cast in a sharp light the contrast between freedom and oppression. We believe that, even though Communist employer delegates may, despite American objections, continue to be seated in the conference and given deputy membership (without voting rights) on committees, the impact of relentless American attacks will be felt. In any case we are convinced, for reasons set forth above, that, unsatisfactory as it certainly is, this is from the viewpoint of American national interests a less deplorable state of affairs than would result from the withdrawal of the United States or the refusal of American employers to participate in the ILO.

Tripartitism makes possible constant and eloquent testimony to the fact that freedom, as it is enjoyed in most of the Western World, is not to be found in countries controlled by Communists.

7. The Committee recommends that the United States work for a shift in the emphasis of ILO industrial committees away from deliberations leading to a vote on final action, toward an approach based on discussion and exchange of expert information; that the United States press for a policy calling for formation of industrial committees to meet specific problems rather than the present practice of perpetuating committees.

8. The Committee recommends that the United States work to improve the International Labor Office staff and to promote the highest degree of objectivity and competence of staff work.

9. The Committee recommends that the United States Government take the leadership and enlist the cooperation of American employer and employee organizations in undertaking expeditiously to formulate and to work for the adoption of proposals designed to improve the work of the general conference and its committees.

10. Finally, the Committee recommends that the United States Government make vigorous and sustained efforts to call the attention of the American people to the purposes, objectives, and activities of the International Labor Organization, emphasizing that it is the sole specialized agency of the United Nations devoted to improving management and labor standards throughout the world.

Union Wage Scales of Local-Transit Operating Employees, 1956

STRAIGHT-TIME hourly wage scales of organized local-transit operating employees in cities of 100,000 or more population rose an average of 7 cents, or 3.9 percent, between July 1, 1955, and July 1, 1956, according to the 36th annual study of union scales in the local-transit industry by the U. S. Department of Labor's Bureau of Labor Statistics.¹ On July 1, 1956, the average union scale for all operators of local-transit equipment was \$1.99 an hour.²

Labor-management contract provisions which became effective during the 12-month period advanced the scales for 93 percent of the operators included in the survey. Raises varied from 5 to 10 cents an hour for half the workers and amounted to 10 cents or more for a fourth.

Straight-time weekly work schedules were provided in labor-management contracts for all but 8 percent of the transit workers included in the study. As of July 1, 1956, schedules varied from 40 to more than 48 hours and averaged 41.3 hours per week. The 40-hour schedule was most prevalent, applying to seven-tenths of the local-transit operators; slightly more than a tenth had standard workweeks of 48 hours or more.

Negotiated health and insurance provisions were stipulated in contracts covering slightly more than nine-tenths of the workers. Pension programs were reported for a somewhat larger proportion.

Scale Increases and Trend

Changes in wage scales of local-transit operators result primarily from labor-management negotiations. Many contracts currently in effect were negotiated for 2 years—a few were for longer periods. Contracts of more than a year's duration typically provide for one or more interim increases. However, only those scale changes that actually became effective during the year ending July 1, 1956, were included in the current survey. Some of these rate adjustments were provided for in contracts negotiated prior to July 1, 1955. Deferred increases, scheduled to take effect after July 1, 1956, were excluded from the current survey.

Thus, the scale changes presented in this report do not include the total wage advances negotiated in individual agreements during the 12 months covered by the survey.

During the year ending July 1, 1956, union hourly scales for all local-transit operators rose an average of 3.9 percent. This increase exceeded the 2.9-percent gain recorded in the preceding 12 months, but was smaller than the 5-percent advance registered in the year ending July 1, 1954. The rise in scales between July 1, 1955, and July 1, 1956, advanced the Bureau's index (1947-49=100) to 145.9, more than twice the level of July 1, 1945 (table 1).

Advances during the year reflected gains of 3.7 percent for operators of 1-man cars and buses, 3.2 percent for motormen and conductors on 2-man cars, and 5.9 percent for elevated and subway operators.

On a cents-per-hour basis, union scales for all local-transit equipment operators showed an average advance of 7 cents an hour, as did the scales for operators of 1-man cars and buses, who represented 88 percent of all local-transit employees included in the study. Average hourly pay scales rose 6 cents for motormen and conductors on 2-

¹ Union scales are defined as the minimum wage scales or maximum schedules of hours agreed upon through collective bargaining between unions and employers. Rates in excess of the negotiated minimum, which may be paid for special qualifications or other reasons, are not included.

The information presented in this report was based on union scales in effect on July 1, 1956, and covered approximately 73,000 local-transit operating employees in 52 cities with populations of 100,000 or more. Trackmen and maintenance workers were excluded from the study. Operating employees of municipally owned transit systems were included, if unions acted as the bargaining agents. Data were obtained primarily from local union officials by mail questionnaire; in some instances, Bureau representatives visited local union officials to obtain the desired information.

Mimeographed listings of union scales are available for each city included in the survey. More detailed information will be contained in BLS Bull. 1208.

The current survey was designed to reflect union wage scales of local-transit operating employees in all cities of 100,000 or more population. All cities with 500,000 or more population were included, as were most cities in the population group of 250,000 to 500,000. The cities in the 100,000 to 250,000 group selected for study were distributed widely throughout the United States. The data for some of the cities included in the study were weighted in order to compensate for cities which were not surveyed. In order to provide appropriate representation in the combination of data, each geographic region and population group was considered separately when city weights were assigned.

² Average hourly scales, designed to show current levels, were based on all scales reported in effect on July 1, 1956. Individual scales were weighted by the number of union members having each rate. These averages are not designed for precise year-to-year comparisons because of fluctuations in membership and in the classifications studied. Average cents-per-hour and percent changes from July 1, 1955, to July 1, 1956, were, however, based on comparable quotations for the various classifications in both periods, weighted by the membership reported for the current (1956) survey. The index series, designed for trend purposes, was similarly constructed.

Data from the 1955 survey appeared in the Monthly Labor Review, April 1956 (p. 433).

man surface cars and 11 cents for elevated and subway operators.

Upward adjustments were widespread between July 1, 1955, and July 1, 1956. Increased wage rates were reported for 92 percent of the operators on 1-man cars and buses, and for all operators on 2-man surface cars and elevated and subway systems. Among the 1-man car and bus operators affected by upward adjustments, slightly more than half had scale advances of 5 to 10 cents an hour. The rise amounted to less than 5 cents for a fifth and to 14 cents or more for a similar proportion. Increases of the latter magnitude were also reported for some operators on 2-man surface cars and on elevated and subway systems.

Percentagewise, the increases typically represented gains of 2 to 5 percent for operators on 1-man cars and buses, 3 to 6 percent for motormen and conductors of 2-man cars, and 5 to 9 percent for elevated and subway operators.

Wage Scale Variations

Negotiated pay scales for local-transit operators are generally graduated according to length of service. An entrance rate, one or more intermediate rates, and a maximum or top rate³ are frequently provided. Although the time intervals between rate steps varied among the cities, entrance rates typically applied to the first 3 or 6 months of employment. The maximum or top rate was usually reached after a year's service. In some cities, length of service was not a determining factor, as only a single rate was specified in the labor-management contract.

Entrance or starting rates for 1-man car and bus operators varied from \$1.35 in Charlotte, N. C.,

TABLE 1.—Index of union hourly wage rates of local-transit operating employees, 1929-56

[1947-49=100]

Date	Index	Date	Index
1929: May 15	52.4	1943: July 1	68.6
1930: May 15	52.9	1944: July 1	69.1
1931: May 15	52.9	1945: July 1	69.9
1932: May 15	51.9	1946: July 1	81.9
1933: May 15	(1)	1947: Oct. 1	92.4
1934: May 15	50.4	1948: Oct. 1	101.7
1935: May 15	52.3	1949: Oct. 1	105.9
1936: May 15	52.7	1950: Oct. 1	110.9
1937: May 15	55.2	1951: Oct. 1	118.2
1938: June 1	50.8	1952: Oct. 1	127.0
1939: June 1	57.2	1953: July 1	129.9
1940: June 1	57.9	1954: July 1	136.4
1941: June 1	60.0	1955: July 1	140.4
1942: July 1	64.4	1956: July 1	145.9

¹ Information not available.

TABLE 2.—Average union hourly wage rates of local-transit operating employees, by region,¹ July 1, 1956

Region ¹	Average rate per hour			
	All workers	Operators of 1-man cars and buses	Motormen and conductors of 2-man cars	Elevated and subway operators
United States.....	\$1.99	\$1.98	\$2.01	\$2.03
New England.....	1.97	1.97	-----	2.02
Middle Atlantic.....	2.03	2.03	1.91	2.05
Border States.....	1.95	1.95	-----	-----
Southeast.....	1.64	1.64	-----	-----
Great Lakes.....	2.05	2.05	2.05	2.01
Middle West.....	1.95	1.95	-----	-----
Southwest.....	1.77	1.76	1.92	-----
Mountain.....	1.77	1.77	-----	-----
Pacific.....	2.04	2.04	2.03	-----

¹ The regions used in this study include: *New England*—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *Middle Atlantic*—New Jersey, New York, and Pennsylvania; *Border States*—Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West Virginia; *Southeast*—Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee; *Great Lakes*—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; *Middle West*—Iowa, Kansas, Missouri, Nebraska, North Dakota, and South Dakota; *Southwest*—Arkansas, Louisiana, Oklahoma, and Texas; *Mountain*—Arizona, Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming; *Pacific*—California, Nevada, Oregon, and Washington.

and Little Rock, Ark., to \$2.12 in Seattle, Wash. Maximum or top rates for these operators ranged from \$1.45 in Charlotte to \$2.24 for multiunit car operators in Boston. In two-fifths of the cities surveyed, labor-management contracts specified a top rate of \$2 or more an hour for some operators. Such scales were reported for all but one of the cities with a half million or more population.

Hourly rates for all local-transit operating employees in cities of 100,000 or more population averaged \$1.99 on July 1, 1956. Rates averaged \$1.98 for operators of 1-man cars and buses, \$2.01 for operators of 2-man cars, and \$2.03 for those on elevated and subway equipment.

Negotiated hourly scales of \$2 to \$2.15 were stipulated in labor-management contracts covering slightly over 60 percent of the 1-man car and bus operators. Scales of \$2.15 or more were applicable to 4 percent; the same proportion as for those with scales of less than \$1.65 an hour. About 3 of every 10 had scales of \$1.65 to \$2. For motormen and conductors of 2-man cars, hourly rates varying from \$1.90 to \$2.05 prevailed for nearly two-thirds of the operators and \$2.05 or more for one-third. Rates of at least \$2.10 were stipulated for a fourth of the elevated and subway operators, \$2 to \$2.10 for a similar proportion, and \$1.90 to \$2 for slightly more than a third.

³ This so-called top rate actually becomes the employee's basic scale after a specified period of employment with the company. It is not a maximum rate in the sense that the company may not pay more.

City and Regional Rate Differentials

City and regional averages, designed to show current rate levels, are, of course, affected not only by the wide variation of scales which exists among the individual cities, but also by variations in the proportions of union members at each of the graduated scales within cities. These differences are reflected in the weighting of individual rates by the number of workers employed. Therefore, even though all rates in two areas are identical, the average for each area may differ.

Among the 52 cities, average rates varied from \$1.45 an hour in Charlotte, N. C., to \$2.18 in Seattle, Wash. In addition to Seattle, 17 other cities had levels of \$2 or more. Levels of \$1.90 to \$2 prevailed in 7 cities, \$1.80 to \$1.90 in 12 others, and \$1.70 to \$1.80 in 6 cities.

Scale advances provided by labor-management contracts affected some local-transit operators in 46 of the cities covered in the survey. Negotiated increases in individual cities ranged up to 16 cents. However, advances of 5 to 10 cents an hour were most frequently reported.

When the cities included in the survey were grouped according to population size, average scales differed for the various size population groups. They were highest for the group of cities with a million or more population. Scales for these cities averaged \$2.06—3 cents higher than for the next larger size group of cities (500,000 to 1,000,000), and 30 cents higher than for the smallest size city group studied (100,000 to 250,000).

Average hourly scales varied widely among the cities within each population size group. The spread between the highest and the lowest city averages was greatest (52 cents) for cities with populations of 250,000 to 500,000, and narrowest (10 cents) in the group of cities with a million or more population. Some overlapping of average scales existed among cities in the different size population groups. For example, the average hourly rate for Boston in the 500,000 to 1,000,000

group was higher than for each of the cities with a million or more population.

Regionally, levels for local-transit operating employees varied from \$1.64 in the Southeast to \$2.05 in the Great Lakes (table 2). Two other regions—Middle Atlantic (\$2.03) and Pacific (\$2.04)—also had scales averaging in excess of the \$1.99 national average.

Standard Workweek

Weekly work schedules at straight-time rates were reported for 92 percent of all local-transit operators included in the survey. Standard workweeks had been established for 45 of the surveyed cities. In these cities, straight-time hours averaged 41.3 hours on July 1, 1956, as compared with 41.4 hours on July 1, 1955. Reductions in standard weekly straight-time hours were noted in 6 cities.

A 40-hour workweek applied to two-thirds of the operators on 1- and 2-man cars and to all of those on elevated and subway equipment. Workweeks of 48 hours were in effect for a tenth of the 1-man car and bus operators and for a third of the motor-men and conductors on 2-man cars.

Insurance and Pension Plans

Health, insurance, and pension plans incorporated in labor-management contracts for local-transit operating employees have increased in recent years.⁴ The development of such plans in this industry has been widespread, and the coverage has expanded appreciably since World War II. During the year ending July 1, 1956, the coverage of health and insurance plans rose 5 percent and that of pension programs, 3½ percent.

On July 1, 1956, slightly more than 90 percent of the local-transit operating employees were covered by labor-management contracts providing for health and insurance plans, and 96 percent by provisions for pension plans. Contributory plans—those financed jointly by workers and their employers—prevailed for about 80 percent of the workers covered by health and insurance provisions and for approximately 55 percent of those covered by pension programs.

—ANNETTE Y. SHERIER

Division of Wages and Industrial Relations

⁴ The prevalence of negotiated health, insurance, and pension programs for local-transit operating employees was first studied in July 1954. Information for these plans was restricted to those financed entirely or in part by the employer. Plans financed by workers through union dues or assessments were excluded from the study. No attempt was made to secure information on the kind and extent of benefits provided or on the expenditures for such benefits.

Codes of Ethical Practices of the Labor Movement

IN ORDER to implement the constitutional determination that the American Federation of Labor and Congress of Industrial Organizations shall be and remain free from all corrupt influences, the Executive Council of the Federation, after receiving recommendations from the Committee on Ethical Practices, adopted at its meeting in Miami, Fla., in January 1957, three codes of ethical practices regarding: health and welfare plan administration; racketeers, crooks, Communists, and Fascists; and conflicts of interest in the investment and business interests of union officials. The texts of these codes are reproduced on the following pages, together with the first of the ethical practices codes, adopted by the Council in August 1956; the latter dealt with the issuance of local union charters.

On January 28, the Executive Council issued a statement calling on union members to cooperate with legislative committees inquiring into the possible existence of racketeering or other forms of corruption within union ranks. The statement, which also appears on the following pages, pointed out that carefully conducted inquiries had been of great assistance in the past in helping labor eliminate abuses from within its ranks and reminded union members of their responsibility to keep the labor movement free of corruption.

Local Union Charters

1. A local union charter, whether issued by the AFL-CIO or by any national or international union affiliated with the AFL-CIO, should be a solemn instrument establishing a subordinate or affiliated body. To assure this, the AFL-CIO and each national and international union, by constitution or administrative regulation, should require, for issuance of a local union charter, application by a group of bona fide employees, eligible for membership in the union, within the jurisdiction covered by the charter.

2. The purpose of issuing such charters should be to promote the general welfare of workers and to give recognition to their joining together in a subordinate or affiliated body.

3. A charter should never be issued to any person or persons who seek to use it as a "hunting license" for the improper invasion of the jurisdictions of other affiliated unions.

4. A charter should never be issued or permitted to continue in effect for a "paper local" not existing or functioning as a genuine local union of employees.

5. A charter should never be issued to persons who are known to traffic in local union charters for illicit or improper purposes.

6. The provision of the AFL-CIO constitution prohibiting the AFL-CIO and any affiliated national or international union from recognizing any subordinate organization that has been suspended or expelled by the AFL-CIO or any national or international union plainly includes and prohibits the issuance of a local union charter by the AFL-CIO or any affiliated national or international union to any group of individuals or any individuals suspended or expelled from the AFL-CIO or any affiliated national or international union for corruption or unethical practices.

7. The AFL-CIO and each national and international union shall take prompt action to eliminate any loopholes through which local union charters have been or can be issued or permitted to continue in effect contrary to these policies.

8. The AFL-CIO and each national and international union shall take prompt action to insure the forthwith withdrawal of local union charters which have been issued and are now outstanding in violation of these policies.

Health and Welfare Funds

1. No union official who already receives full-time pay from his union shall receive fees or salaries of any kind from a fund established for the provision of a health, welfare, or retirement program. Where a salaried union official serves as employee representative or trustee in the administration of such programs, such service should be regarded as one of the functions expected to be performed by him in the normal course of his duties and not as an extra function requiring further compensation from the welfare fund.

2. No union official, employee, or other person acting as agent or representative of a union, who exercises responsibilities or influence in the administration of welfare programs or the placement of insurance contracts, should have any compromising personal ties, direct or indirect, with outside agencies such as insurance carriers, brokers, or consultants doing business with the welfare plan. Such ties cannot be reconciled with the duty of a union official to be guided solely by the best interests of the membership in any transactions with such agencies. Any union official found to have such ties to his own personal advantage or to have accepted fees, inducements, benefits, or favors of any kind from any such outside agency, should be removed. This principle, of course, does not prevent the existence of a relationship between a union officer or employee and an outside agency where (a) no substantial personal advantage is derived from the relationship; and (b) the outside agency is one in the management of which the union participates, as a union, for the benefit of its members.

3. Complete records of the financial operations of all welfare funds and programs should be maintained in ac-

cordance with the best accounting practice. Each such fund should be audited regularly by internal auditors. In addition, each such fund should be audited at least once each year, and preferably semiannually, by certified public or other independent accountants of unquestioned professional integrity, who should certify that the audits fully and comprehensively show the financial condition of the fund and the results of the operation of the fund.

4. All audit reports should be available to the membership of the union and the affected employees.

5. The trustees or administrators of welfare funds should make a full disclosure and report to the beneficiaries at least once each year. Such report should set forth, in detail, the receipts and expenses of the fund; all salaries and fees paid by the fund, with a statement of the persons to whom paid; the amount paid and the service or purpose for which paid; a breakdown of insurance premium paid, if a commercial insurance carrier is involved, showing, insofar as possible, the premiums paid, dividends, commissions, claims paid, retentions, and service charges; a statement of the person to whom any commissions or fees of any kind were paid; a financial statement on the part of the insuring or service agency, if an agency other than a commercial insurance carrier is employed; and a detailed account of the manner in which the reserves held by the fund are invested.

6. Where health and welfare benefits are provided through the use of a commercial insurance carrier, the carrier should be selected through competitive bids solicited from a substantial number of reliable companies, on the basis of the lowest net cost for the given benefits submitted by a responsible carrier, taking into consideration such factors as comparative retention rates, financial responsibility, facilities for and promptness in servicing claims, and the past record of the carrier, including its record in dealing with trade unions representing its employees.

The trustees of the fund should be required to include in reporting to the membership the specific reasons for the selection of the carrier finally chosen. The carrier should be required to warrant that no fee or other remuneration of any kind has been paid directly or indirectly to any representative of the parties in connection with the business of the fund.

7. Where a union or union trustees participate in the administration of the investment of welfare fund reserves, the union or its trustees should make every effort to prohibit the investment of welfare fund reserves in the business of any contributing employer, insurance carrier, or agency doing business with the fund, or in any enterprise in which any trustee, officer, or employee of the fund has a personal financial interest of such a nature as to be affected by the fund's investment or disinvestment.

(This is not to be construed as preventing investment in an enterprise in which a union official is engaged by virtue of his office, provided (i) no substantial personal advantage is derived from the relationship, and (ii) the concern or enterprise is one in the management of which the union participates for the benefit of its members.)

8. Where any trustee, agent, fiduciary, or employee of a health or welfare program is found to have received an

unethical payment, the union should insist upon his removal and should take appropriate legal steps against both the party receiving and the party making the payment. Where health and welfare funds are negotiated or administered by local unions or by other organizations subordinate to or affiliated with a national or international union, provision should be made to give the national or international union the authority to audit such funds and to apply remedies where there is evidence of a violation of ethical standards.

9. Every welfare program should provide redress against the arbitrary or unjust denial of claims so as to afford the individual member prompt and effective relief where his claim for benefits has been improperly rejected. Every program should provide for the keeping of complete records of the claims experience so that a constant check can be maintained on the relationship between claims and premiums and dividends, and on the utilization of the various benefits.

10. The duty of policing and enforcing these standards is shared by every union member, as well as by local, national, and international officials. The best safeguard against abuses lies in the hands of a vigilant, informed, and active membership, jealous of their rights and interests in the operation of health and welfare programs, as well as any other trade union program. As a fundamental part of any approach to the problem of policing health and welfare funds, affiliated unions, through education, publicity, and discussion programs, should seek to develop the widest possible degree of active and informed interest in all phases of these programs on the part of the membership at large. International unions should, wherever possible, have expert advice available for the negotiation, establishment, and administration of health and welfare plans, and should provide training for union representatives in the techniques and standards of proper administration of welfare plans.

11. Where constitutional amendments or changes in internal administrative procedure are necessary to comply with the standards herein set forth, such amendments and changes should be undertaken at the earliest practicable time.

Racketeers, Crooks, Communists, and Fascists

1. The AFL-CIO and each of its affiliated unions should undertake the obligation, through appropriate constitutional or administrative measures and orderly procedures, to insure that no persons who constitute corrupt influences or practices or who represent or support Communist, Fascist, or totalitarian agencies should hold office of any kind in such trade unions or organizations.

2. No person should hold or retain office or appointed position in the AFL-CIO or any of its affiliated national or international unions or subordinate bodies thereof who has been convicted of any crime involving moral turpitude offensive to trade union morality.

3. No person should hold or retain office or appointed position in the AFL-CIO or any of its affiliated national or international unions or subordinate bodies thereof who is

commonly known to be a crook or racketeer preying on the labor movement and its good name for corrupt purposes, whether or not previously convicted for such nefarious activities.

4. No person should hold or retain office or appointed position in the AFL-CIO or any of its affiliated national or international unions or subordinate bodies thereof who is a member, consistent supporter or who actively participates in the activities of the Communist Party or of any Fascist or other totalitarian organization which opposes the democratic principles to which our country and the American trade union movement are dedicated.

Conflicts of Interest

1. No responsible trade union official should have a personal financial interest which conflicts with the full performance of his fiduciary duties as a workers' representative.

2. No responsible trade union official should own or have a substantial business interest in any business enterprise with which his union bargains collectively, or in any business enterprise which is in competition with any other business enterprise with which his union bargains collectively.

3. No responsible trade union official should own or have a substantial business interest in a business enterprise a substantial part of which consists of buying from, selling to, or otherwise dealing with the business enterprise with which his union bargains collectively.

4. The provisions of paragraphs 2 and 3 above do not apply in the case of an investment in the publicly traded securities of widely held corporations which investment does not constitute a substantial enough holding to affect or influence the course of corporate decision.

5. No responsible trade union official should accept "kickbacks," under-the-table payments, gifts of other than nominal value, or any personal payment of any kind other than regular pay and benefits for work performed as an employee from an employer or business enterprise with which his union bargains collectively.

6. The policies herein set forth apply to: (a) all officers of the AFL-CIO and all officers of national and international unions affiliated with the AFL-CIO; (b) all elected or appointed staff representatives and business agents of such organizations; and (c) all officers of subordinate bodies of such organizations who have any degree of discretion or responsibility in the negotiation of collective bargaining agreements or their administration.

7. The principles herein set forth apply not only where investments are made by union officials, but also where third persons are used as blinds or covers to conceal the financial interests of union officials.

Public Inquiries Into Corruption

The American Federation of Labor and Congress of Industrial Organizations is pledged both by its constitution and by fundamental principles of trade union morality to keep the labor movement free from any taint of corruption.

While the AFL-CIO has its own responsibility for keeping its house in order and is attempting to meet this obligation to the best of its ability, this does not in any sense mean that appropriate agencies of Government and the public do not have rights, obligations, and responsibility in eliminating racketeering and corruption from all segments of American life, including the labor movement.

No institution or agency, whether labor or business, public or private, enjoys special immunity from the equal application of the laws, from appropriate investigation by duly constituted legislative committees, and from scrutiny of its operations by the members of the press or the general public.

Investigations by fair and objective legislative committees in the field of labor-management relations have been of tremendous help in eliminating abuses in this area.

The investigation conducted by the La Follette Committee, exposing as it did unsavory and illegal practices on the part of important business interests, contributed greatly to the enactment of the Wagner Act and to the elimination of employer practices which prevented union organization and caused strife and violence in labor-management relations. The recent investigation by the Douglas Subcommittee of the Senate Labor Committee, exposing as it did instances of corruption and improper conduct by labor officials and others in the handling of health and welfare funds, has provided for the public and the labor movement invaluable information which has laid the foundation for proposed disclosure legislation in this field, endorsed by the AFL-CIO, and which, in addition, has enabled the AFL-CIO and its affiliates to do a better job of keeping their own house in order. Both law enforcement agencies, in the interest of enforcing law, and legislative committees, in the interest of enacting corrective legislation, by reason of their power and authority to subpoena witnesses and to place them under oath, as well as their superior investigatorial facilities, have means beyond those of the labor movement to expose and bring to light corrupt influences.

It goes almost without saying that law enforcement agencies, legislative committees, and the labor movement itself share the common responsibility of conducting investigations fairly and objectively, without fear or favor and in keeping with due process concepts firmly imbedded in the tradition and Constitution of our great country. It is a firm policy of the AFL-CIO that the highest ethical standards be observed and vigorously followed by all officials of the AFL-CIO and its affiliates in the conduct of their offices, in the handling of trade union and welfare funds, and in the administration of trade union affairs. Trade union and welfare funds are the common property of the members of our unions and must, therefore, be administered as a high and sacred trust for their benefit.

The AFL-CIO is determined that any remaining vestiges of racketeering or corruption in unions shall be completely eradicated. We believe that Congress, in the interest of enacting corrective legislation, if the same be deemed and found necessary, has the right, through proper committees, to investigate corruption wherever it exists, whether in labor, industry, or anywhere else.

It is the firm policy of the AFL-CIO to cooperate fully with all proper legislative committees, law enforcement agencies, and other public bodies seeking fairly and objectively to keep the labor movement or any other segment of our society free from any and all corrupt influences. This means that all officials of the AFL-CIO and its affiliates should freely and without reservation answer all relevant questions asked by proper law enforcement agencies, legislative committees, and other public bodies seeking fairly and objectively to keep the labor movement free from corruption. We recognize that any person is entitled, in the exercise of his individual conscience, to the protection afforded by the fifth amendment and we reaffirm our

conviction that this historical right must not be abridged. It is the policy of the AFL-CIO, however, that if a trade union official decides to invoke the fifth amendment for his personal protection and to avoid scrutiny by proper legislative committees, law enforcement agencies, or other public bodies into alleged corruption on his part, he has no right to continue to hold office in his union. Otherwise, it becomes possible for a union official who may be guilty of corruption to create the impression that the trade union movement sanctions the use of the fifth amendment, not as a matter of individual conscience, but as a shield against proper scrutiny into corrupt influences in the labor movement.

Conferences and Institutes, April 16 to May 15, 1957

EDITOR'S NOTE.—As a service to its readers, the *Monthly Labor Review* publishes a list of forthcoming conferences and institutes devoted to the broad field of industrial relations. Institutes and organizations are invited to submit schedules of such meetings for listing. To be timely enough for publication, announcements must be received 90 days prior to the date of a conference.

<i>Date</i>	<i>Conference and sponsor</i>	<i>Place</i>
Apr. 16-17-----	37th Pacific Coast Management Conference. <i>Sponsor:</i> California Personnel Management Association.	Berkeley, Calif.
Apr. 17-19-----	Orientation seminar on Pension, Profit-Sharing, and Deferred Compensation Plans. <i>Sponsor:</i> American Management Association.	New York, N. Y.
Apr. 20-26-----	Industrial Health Conference. <i>Sponsor:</i> Industrial and Railway Medical and Surgical Association.	St. Louis, Mo.
Apr. 22-24-----	National Convention. <i>Sponsor:</i> American Society for Personnel Administration.	Richmond, Va.
Apr. 22-May 1--	Seminars on (1) Setting Standards of Managerial Performance; (2) Administering a Sound Wage and Salary Program; (3) Planning for a Sound Industrial Relations Organization; (4) Post Appraisal Interview and Review; and (5) Management's Responsibility Regarding Engineers, Specialists, and Professional Personnel. <i>Sponsor:</i> American Management Association.	San Francisco, Calif.
Apr. 29-May 3 and May 6-10.	Institute on Human Relations for Supervisors. <i>Sponsor:</i> Texas Manufacturers Association.	Dallas, Tex.
May 2-3-----	Orientation seminar on The Selection of Office Supervisors. <i>Sponsor:</i> American Management Association.	New York, N. Y.
May 6-8-----	Workshop for Top Personnel Directors. <i>Sponsor:</i> Management Center, Marquette University.	Milwaukee, Wis.
May 8-10-----	Workshops on Supervisory Training: Planning and Administering a Sound Program; and Personnel Record Keeping. <i>Sponsor:</i> American Management Association.	New York, N. Y.
May 13-15-----	Workshops on Work Standards and Incentives to Increase Production; and Recruitment and Selection of Office Employees. <i>Sponsor:</i> American Management Association.	Chicago, Ill.

Significant Decisions in Labor Cases*

Labor Relations

Permissible Use of the Strike. The United States Supreme Court, reversing a Federal appellate court and supporting the National Labor Relations Board, held¹ that, under the Labor Management Relations Act, a right for employees to strike exists, after a 60-day notice, even though a contract which authorizes a reopening of negotiations to modify its terms is in effect.

In this case, an employer-union contract provided for its continuance unless a 60-day notice of a desire to amend the terms of the agreement was given and, also, a 60-day notice of termination was given in the event that amendment was not reached. The union had given the required reopening notice, but had not requested contract termination. After negotiations concerning the union proposals for modifying the contract had proceeded for nearly 6 months, the union membership voted to strike. Three months later, after several postponements, the strike commenced and lasted until 1 day following the signing of a new contract. Since the union never gave notice to terminate the original agreement as required by the contract, a collective bargaining agreement was in effect at all times.

After hearing union complaints of employer unfair labor practices in the course of the strike, the NLRB found the employer guilty and rejected his defense that the union violated section 8 (d) (4)² of the LMRA by striking while the contract was in effect. The Board held that the term "expiration date" as used in that section "connoted not only the terminal date of the bargaining contract but also an agreed date in the course of its existence when the parties can effect changes in its provisions." It, therefore, held that the modification date, followed by a waiting period of more than 60 days, satisfied both the contract and the waiting requirements of the act. Upon appeal,

the Federal appellate court set aside the Board order, holding that the "expiration date" of the contract was "the date on which all rights and obligations under it would cease" and stated that the failure to give a contract termination notice resulted in strike activity violating section 8 (d) (4) of the act.

In reaching its conclusion, the Supreme Court relied upon its interpretation of the LMRA in the *Mastro Plastics* case³ and upon the legislative history of section 8 (d) (4). In the *Plastics* case, the Court stated that in expounding a statute, it must not be guided by a single sentence or part of a sentence, but must look to the provisions of the whole law and to its object and policy, and must not accept a construction that would produce incongruous results. Using this guide, the Court decided that neither of the dual purposes of the LMRA, to substitute collective bargaining for economic warfare and to protect the right of employees to engage in concerted activities for their own benefit, would be served by upholding the restrictive construction placed upon section 8 (d) (4) by the lower Federal court. Examining the legislative history, the Supreme Court found that when Congress added section 8 (d) to the act as the result of the Conference Committee Report, it recognized a duty to bargain over modifications if the contract so provided. The Court then concluded: "It would be anomalous for Congress to recognize such a duty and at the same time deprive the union of the strike threat which, together with the occasional strike itself, is the force depended upon to facilitate arriving at satisfactory agreements."

*Prepared in the U. S. Department of Labor, Office of the Solicitor. The cases covered in this article represent a selection of the significant decisions believed to be of special interest. No attempt has been made to reflect all recent judicial and administrative developments in the field of labor law or to indicate the effect of particular decisions in jurisdictions in which contrary results may be reached based upon local statutory provisions, the existence of local precedents, or a different approach by the courts to the issue presented.

¹ *NLRB v. Lion. Oil Co. et al.* (U. S. Sup. Ct., Jan. 22, 1957). For discussion of the NLRB decision in this case, see *Monthly Labor Review*, October 1954 (p. 1133).

² The section states in part as follows:

(d) . . . *Provided* that where there is in effect a collective bargaining contract covering employees in an industry affecting commerce the duty to bargain collectively shall also mean that no party to such contract shall terminate or modify such contract, unless the party desiring such termination or modification—

(4) continues in full force and effect, without resorting to strike or lock-out, all the terms and conditions of the existing contract for a period of 60 days after such notice is given or until the expiration date of such contract, whichever occurs later.

³ *Mastro Plastics Corp., et al. v. NLRB*, 350 U. S. 270 (Feb. 27, 1956).

Qualification on Primary Picketing. The NLRB held⁴ that union picketing of a gasoline station of a struck employer, when the only employees working on the premises were those of a neutral employer, was a violation of the LMRA and was not an activity of legal primary picketing.

In the course of a strike resulting from failure to renew an employer-employee contract, the employer had utilized an independent contractor and outside union labor to rebuild one of his stations. Although all the regular employees at the gasoline station had left their jobs, the union continued intermittent picketing around the establishment, which was more than 2 miles away from other struck stations of the employer.

The Board concluded that the secondary boycott provision of the LMRA (section 8 (b) (4) (A)) was violated since the facts of the case proved that an object of the picketing activity was to compel the neutral employer to cease doing business with the struck employer.

In reaching its decision, the NLRB distinguished this case from a number of so-called common situs cases where picketing was protected. Unlike the other cases, the picket line at the gasoline station would not have an effect on the employees of the primary employer since they were not on the premises. In qualifying the protection afforded primary picketing by the *Ryan* case,⁵ the majority of the Board did not refer specifically to that case but did emphasize the opinion that orderly administration of the LMRA is best effectuated by adhering to "the past practice of deciding cases as they arise and not by extended discussion of the construction to be placed upon decisions previously made." The *Ryan* case and others were cited by the trial examiner whose recommendation was overruled by the Board's majority holding.

Restriction on Union Rule-Making. A Federal appellate court held⁶ that a union violated the

Labor Management Relations Act by refusing full employment clearance to carpenters brought from another community and by threatening to strike if an employer should hire the transferred carpenters ahead of the order of employment established by union rules.

Carpenters familiar with the installation of fixtures in the store of the employer in one community had been brought 500 miles to install similar fixtures for the same employer in a store in another community. For the purpose of saving time and expense, the union had agreed to the employment of these carpenters on this job, but placed them at the bottom of a list of local carpenters who were awaiting work in accordance with a "first in, first out" rule of the union. The union also had informed the employer that if the transferred carpenters attempted to work on the installation ahead of other carpenters with higher union "priority," the union would take all its members off the project. The employer then refused to hire the transferees.

In upholding the petition of the NLRB for enforcement of its order against the union, the court pointed out that while section 8 (b) of the LMRA preserves a union's right to prescribe reasonable rules and policies with respect "to the acquisition and retention of membership," it does not sanction enforcement of such rules so as to inhibit the statutorily guaranteed employment rights of employees through threat of a strike against a recalcitrant employer. The subsequent refusal of the employer to hire the transferred carpenters was considered by the court to be proof that the union did "cause or attempt to cause the employer to discriminate" against them in violation of section 8 (b) (2) of the act. In support of its position, the court cited the Supreme Court decision in the *Radio Officers' Union* case⁷ which stated that coercing an employer to accept the union's desired hiring practices deprived an employee of a protected right.

Employer Selectivity in Granting Benefits. A Federal appellate court reversed an NLRB ruling and held⁸ that under certain circumstances an employer may withhold benefits from employees represented by a union and at the same time may grant the same benefits to other employees outside of the union.

⁴ *Local 618, Automotive, Petroleum, and Allied Industries Employees Union, AFL-CIO, Affiliated with International Brotherhood of Teamsters and Incorporated Oil Co.*, 116 NLRB No. 271 (Dec. 20, 1956).

⁵ *United Electrical, Radio and Machine Workers of America and Local 818, et al. (Ryan Construction Co.)*, 85 NLRB No. 417 (July 28, 1949). See *Monthly Labor Review*, October 1949 (p. 425).

⁶ *NLRB v. Local 1423, United Brotherhood of Carpenters & Joiners of America, AFL (C. A. 5, Dec. 21, 1956).*

⁷ *NLRB v. Radio Officers' Union*, 347 U. S. 17.

⁸ *Intermountain Equipment Co. v. NLRB (C. A. 9, Dec. 27, 1956).*

For a number of years, the employer had provided annual bonuses and sick leave to its employees. A union certified to represent one department of the employer's business negotiated a contract which contained substantial wage, overtime, vacation, holiday, and union-security benefits. The employer opposed the inclusion of bonus and sick-leave provisions in the contract and assured the union representative that there would be no future discrimination as to sick leave between members of the bargaining unit and other employees. However, after the contract was signed, sick leave and annual bonuses were granted to employees outside the bargaining unit but were denied to those in the unit.

Upon complaint filed by the union against the employer, the NLRB ruled that this employer action constituted an unfair labor practice in violation of section 8 (a) (3) of the LMRA, which makes it an unfair labor practice for an employer to encourage or discourage membership in any labor organization by discrimination in regard to hire or tenure of employment or any terms or conditions of employment.

The court, in overruling the Board, distinguished several cases⁹ from the present situation in that (1) union employees in this case received substantial benefits under the contract not available to nonunion employees and (2) the nonunion employees who received the later benefits denied union members were outside the scope of the bargaining unit. Another case¹⁰ was distinguished by the court on the ground that the union there announced that no unilateral changes in working conditions would be permitted, in contrast to the present situation where the union expressly left the benefits in question to the discretion of the employer.

To uphold its position, the court relied on the holding in the *Nash-Finch* case¹¹ that an employer "may not be convicted of an unfair labor practice for doing no more and no less for its union employees than its collective bargaining agreement with them called for" and that the Board could not later obtain for union members what the union had failed to obtain in bargaining.

Unlawful Discharge for NLRB Testimony. The NLRB, in a case remanded to it by a Federal

court of appeals,¹² held¹³ that an employer violated the LMRA in discharging a supervisory employee for testimony given to an NLRB agent concerning discharge of other employees.

During an unfair labor practice hearing regarding the dismissal of six employees, the supervisor, after receiving a subpoena, had testified concerning the substance of his earlier statements made to a NLRB agent prior to the hearing. A few days after the case was settled, the supervisor was discharged without notice stated reason.

At the supervisor's dismissal hearing, the employer claimed that the supervisor was discharged because he was actively engaged in support of the union's organizing efforts, to the extent of threatening employees with loss of jobs if they did not assist or join the union. The Board dismissed the complaint, asserting that it had no jurisdiction over the employer, and later denied a motion for reconsideration of its decision and order. A Federal appellate court reversed the Board's findings and remanded the case to the Board for determination on its merits.

The Board concluded in its final disposition of the case that the employer's assertion was not supported by evidence that the supervisor was actively soliciting on behalf of the union. Of the two employees allegedly threatened by the supervisor, the Board determined that the testimony of one disproved the employer claim against the supervisor and that the testimony of the other was not credible. Since the employer had not proved his contention, the NLRB decided at the rehearing that the supervisor was discharged because of his testimony and that in dismissing the supervisor the employer committed an unfair labor practice by interfering in the exercise of rights guaranteed in the act.

Unemployment Compensation

Vacation Shutdown. Affirming the decision of a State board of review, a circuit court of Illinois

⁹ *General Motors Corp. v. NLRB*, 150 F. 2d 201; *Radio Officers' Union v. NLRB*, 347 U. S. 17; and *Allis-Chalmers Manufacturing Co. v. NLRB*, 162 F. 2d 435, 440.

¹⁰ *Armstrong Cork Co. v. NLRB*, 211 F. 2d 843.

¹¹ *NLRB v. Nash-Finch Co.*, 211 F. 2d 622.

¹² *Pedersen v. NLRB*, 234 F. 2d 417 (C. A. 2, June 7, 1956).

¹³ *Modern Linen and Laundry Service, Inc. and Eugene Pedersen*, 116 NLRB No. 284 (Dec. 28, 1956).

held¹⁴ that the weeks for which claimants received no vacation pay were weeks of unemployment within the meaning of the Illinois Unemployment Compensation Act since the claimants performed no services for wages.

Claimants' employer closed down its plant for a period of 2 weeks to enable its employees to take a vacation. Under the collective bargaining agreements, the employees were entitled to 2 weeks' vacation either without pay or with pay for 1 or 2 weeks, depending upon length of employment. The employees filed claims for unemployment benefits for the period during which they did not receive vacation pay.

The court stated: "The statutory definition of an 'unemployed individual' does not require a severance of the employer-employee relationship or a permanent or indefinite separation of the worker from his job." Furthermore, the board of review and the court rejected the employer's argument that claimants were voluntarily unemployed because each worker knew of the vacation plan and presumably accepted employment with the understanding that the plant would be idle 2 weeks during the summer of each year.

Recovery of Benefits. The Maryland court of appeals held¹⁵ that an employee claimant was absolved of liability for the full amount of overpaid unemployment benefits and that recovery from the employer may be had under the principle of unjust enrichment or restitution.

In this case, the claimant, laid off because of lack of work, received unemployment benefits for several weeks prior to her recall to work. Under the terms of the collective bargaining agreement between her employer and her union, she was entitled to return to work prior to the date of recall. In accordance with an arbitrator's award, she was paid back wages for the period in dispute less the amount of unemployment benefits received during the same period. The Maryland Employment Security Board sued the claimant and her employer to recover the benefit payments which were made during the period for which the claimant received back wages. The employer contended unsuccessfully that the Unemployment Insurance

Law required repayment only of benefits obtained by reason of nondisclosure or misrepresentation of a material fact and that admittedly no fraudulent act was committed.

The court stated that an action based upon restitution exists "whenever the defendant has obtained possession of money which, in equity and good conscience, he ought not to be allowed to retain," and that "recovery in such an action is not barred by the Unemployment Insurance Law even if it is assumed that recovery against the claimant would not lie under the statute."

Receipt of Civil Service Annuity. The Supreme Court of Ohio held¹⁶ that claimant should receive unemployment benefits even though an annuity under the United States Civil Service Retirement Act was also being received.

The claimant, after retiring from Federal employment, worked in private employment. When he was laid off, he filed a claim for unemployment compensation. He was first denied benefits on the ground that the Federal retirement annuity was a remuneration in the form of social security old-age benefits or "similar payments under any act of Congress." (Under the Ohio Unemployment Compensation Act, unemployment benefits must be reduced by the amount of such remuneration.) The Ohio court of appeals reversed the denial. In upholding the lower court, the Supreme Court of Ohio reasoned that even though social security old-age benefits and civil service retirement annuities are similar in that age and prior earnings are factors in determining entitlement of both types of payment, there are pronounced dissimilarities. The court said that social security benefits are a benevolence or a gratuity, whereas a retirement annuity is contractual. Unlike an annuity, social security payments are reducible if a recipient's annual earnings exceed \$1,200. Social security protection is provided against unemployment resulting from old age; civil service retirement payments, on the other hand, resemble an annuity purchased by the annuitant with his own funds. Under certain circumstances, an employee's retirement contributions may be recovered by the employee, his heirs, or his legal representative. In reaching its conclusion, the supreme court followed decisions by the courts of Missouri and Minnesota.

¹⁴ *General Time Corp. v. Cummins* (Ill. Cir. Ct., Nov. 16, 1956).

¹⁵ *State of Maryland v. Rucker et al.* (Md. C. A., Nov. 7, 1956).

¹⁶ *Moore v. Board of Review* (Ohio Sup. Ct., Nov. 14, 1956).

Veterans' Reemployment

Court Jurisdiction and Seniority Limitations. A Federal court of appeals¹⁷ recently dismissed two claims of lack of Federal jurisdiction made by the employer in a case involving the seniority of a veteran in railroad employment, and approved the action of the lower court in dismissing the veteran's claim respecting his seniority date as having no legal foundation.

The bargaining agreement for railroad clerks in this case gives employees in group 2 a preference, "based upon fitness and ability," over nonemployees for group 1 positions. Vacancies are posted and after applications are received the name of the selected person is announced. Seniority on promotion to group 1 commences upon assignment and may thereafter be exercised within the group by one whose job is abolished. The agreement also provides that after a leave of absence a worker may return to his position or exercise seniority rights to any position "bulletined" during his absence.

The veteran in this case left a clerical position in group 2 for military service. While he was absent, two group 1 positions were bulletined. The first position posted for group 1, that of bill clerk, was announced September 8, 1952, and was assigned to a nonemployee on September 15, 1952. The second, posted on September 10, 1952, was that of assistant cashier and was also assigned to a nonemployee on September 22, 1952.

Upon the veteran's return on October 2, 1952, the employer placed him as an assistant cashier in group 1 and gave him seniority as of October 7, 1952, displacing the incumbent. The veteran protested his seniority date with the claim that his priority over former nonemployees should give him seniority as of the date of bulletining of either vacancy filled in his absence. On September 4, 1953, the position of assistant cashier was eliminated. The veteran then tried to assert his claim of seniority over the incumbent bill clerk in group 1, but the employer rejected his claim.

After demotion to group 2, the veteran initiated legal action which a Federal district court dismissed as without merit. The court of appeals affirmed this dismissal and construed the so-called escalator principle to mean simply that "all of [the veteran's] rights, including seniority, move on as though he had not left the employ of the company. It further held, however, that the rights are limited to "only such established seniority rights as he had when he entered the service." The court then said that the veteran had no "absolute" right to a group 1 position because, if he had been present when the vacancies occurred, he could not have demanded the positions except upon a determination of fitness and qualification. It further expressed doubt that the veteran had a right to "bump" the assistant cashier who, in the opinion of the court, was his senior in group 1. In discussing the relationship of the veteran's seniority to his rights in group 1, the court considered only the dates after his return from military service.

The court also rejected the contention of the railroad that the National Railroad Adjustment Board has exclusive primary jurisdiction of veterans' claims dealing with railroad employment. It ruled that, inasmuch as labor disputes concerning veterans' reemployment rights are peculiar to veterans and are dealt with specifically in the Universal Military Training and Service Act,¹⁸ veterans employed by railroads do not have to go to the Adjustment Board before seeking a remedy in court. The court further considered as ill-founded another contention of the railroad that it was powerless to act since the bill clerk, the nonemployee hired for the first group 1 position, was not made a party to the proceeding. The court pointed out that the 1951 amendments to the veterans' reemployment law of 1948 require only the employer as a necessary party defendant.¹⁹

¹⁷ *McKinney v. M-K-T Railroad Co., et al.* (C. A. 10, Dec. 22, 1956, affirming D. C., E. D. Okla.).

¹⁸ 50 App. U. S. C. 459.

¹⁹ *Ibid.*, 459 (d).

Chronology of Recent Labor Events

January 1, 1957

A NEW 2-year agreement between the Ladies' Garment Workers and the Chicago Association of Dress Manufacturers, providing higher wage rates for 4,000 employees of 41 factories and mediation of price rates on new garments, went into effect.

January 2

THE Federal Wage and Hour Administrator signed 2 orders, effective January 24, raising the minimum wage rates under the Fair Labor Standards Act for 4 Puerto Rican industries. The industries affected and the ranges of their new hourly rates are: Communications, utilities, and transportation—70 cents to \$1 (except for a railroad now liquidating its assets); wholesaling, warehousing, and other distribution—90 cents to \$1; food and related products—43 to 55 cents; and alcoholic beverages and industrial alcohol—\$1.

January 5

THE Miami Beach, Fla., hotel strike, in progress since April 1955, ended when the Hotel and Restaurant Employees Union and the Miami Beach Hotel Association signed a no-strike, 10-year master contract providing for recognition of the union and seniority, negotiated wages and working conditions by May 1, annual reopenings on wages, and arbitration on grievances and wages and working conditions. The agreement is to cover only those association member hotels which accept it individually and authorize the association to bargain for them. (See Chron. item for Oct. 10, 1955, MLR, Dec. 1955.)

On January 8, the U. S. District Court for the District of Columbia ruled, in *Hotel Employees Local No. 255, et al., . . . v. . . . NLRB*, that the Board has discretionary power to decline jurisdiction over the hotel industry.

January 8

JOHN J. O'ROURKE, who had bid unsuccessfully for the presidency of the New York City Teamsters' Joint Council in the February 1956 election (see Chron. item for Mar. 21, 1956, MLR, May 1956), was nominated, without opposition, for council president.

THE Federal Wage and Hour Administrator revoked, effective January 14, the recently announced special overtime pay policy for holiday weeks under the Fair Labor Standards and the Public Contracts Acts (see Chron. item for Nov. 14, 1956, MLR, Jan. 1957). Countrywide experience with enforcement of the policy over the Christmas and New Year's holidays demanded its withdrawal.

January 9

THE Chicago & North Western Railway and 12 non-operating unions agreed on a supplemental unemployment benefit plan—the first in the industry—for railmen with 2 years or more of service, retroactive to May 8, 1956. Maximum benefits under the plan, when combined with Federal payments under the Railroad Unemployment Insurance Act, would amount to 75 percent of after tax earnings for most workers. (See also p. 364 of this issue.)

January 11

LOCOMOTIVE Fireman and Enginemen and the Canadian Pacific Railway agreed to resume operations after a 9-day strike, pending the outcome of a Government inquiry to determine whether firemen are essential to safety on diesel locomotives in freight and yard service. The strike of the 2,800 firemen idled about 65,000 of the company's employees.

January 14

THE Supreme Court of the United States denied review, thus leaving in effect the lower court decisions, in the following two companion cases:

1. *International Brotherhood of Teamsters, . . . , Local No. 878, et al. v. Blassingame, et al.* The Arkansas Supreme Court had ruled that a "product picketing" of a struck dairy's retail outlets had been properly enjoined because it violated the State's public policy.

2. *Burke et al., of Milk Wagon Drivers . . . , Local 603, (Teamsters) AFL, et al. v. Adams Dairy, Inc.* The Missouri Supreme Court had ruled that a union's attempt, in a jurisdictional dispute with an independent union, to establish a boycott of a dairy's products by distributing leaflets asking customers not to buy "unfair products" violated the State's antitrust law and was subject to State court jurisdiction, as such boycott was neither protected by the concerted activities provision of the Taft-Hartley Act nor forbidden by the secondary boycott of the act.

January 18

ENDING its annual conference in Miami, Fla., the General Executive Board of the Ladies' Garment Workers' Union voted to affiliate the union with the Industrial Union Department of the AFL-CIO and to limit the duration of collective agreements to 3 years. (See also p. 365 of this issue.)

January 22

THE Supreme Court of the United States ruled, in *NLRB v. Lion Oil Co. et al.*, that a strike in support of union demands in reopening negotiations under the existing contract, called more than 60 days after the notice of contract modification was served on the employer but without a formal contract termination notice, did not violate the Taft-Hartley Act. (See also p. 354 of this issue.)

January 23

THE PRESIDENT nominated James T. O'Connell of Upper Montclair, N. J., to the post of Under Secretary of Labor, succeeding Arthur Larson, who resigned to become Director of the United States Information Agency (see Chron. item for April 5, 1954, MLR, June 1954).

THE PRESIDENT of the New York Building and Construction Trades Council disclosed that 4 New York City construction unions would invest some of their pension reserves, initially \$650,000, in the construction of a \$35-million cooperative housing project in the East Bronx. (See also p. 364 of this issue.)

January 25

THE PRESIDENT, acting under the Railway Labor Act, created an emergency board to study a dispute over wages and rule changes between the Railway Express Agency and the Teamsters.

January 28

THE AFL-CIO Executive Council opened its midwinter meeting in Miami, Fla. During the first 3 days of the meeting, the council, among other actions, voted a policy declaration that union leaders who invoke the fifth amendment to avoid scrutiny by properly constituted Federal bodies inquiring into corruption on their part should be ousted from their jobs, and adopted a code of ethical practices in the conduct of union affairs. It also admitted the Train Dispatchers Association to the Federation. (See also pp. 350 and 361 of this issue.)

HARRY LUNDEBERG, 56, president of the AFL-CIO Maritime Trades Department and the Seafarers' International Union, died in San Francisco.

THE Supreme Court of the United States ordered a new trial for Ben Gold, ex-president of the defunct Fur and Leather Workers (Ind.), convicted by a Federal court of the charge of filing a non-Communist affidavit with the NLRB. (See Chron. item for Oct. 6, 1955, MLR, Dec. 1955.) The High Court held that, during Gold's trial, FBI agents unwittingly "intruded into the privacy of the jury" by questioning several jurors concerning an unrelated matter. The case was *Gold v. United States*.

January 30

THE Senate established the Select Committee on Improper Activities in the Labor or Management Field, with a \$350,000 budget. The committee is to report to the Senate by January 31, 1958. (See also p. 361 of this issue.)

WHILE the longshore contract negotiations in New York City (see Chron. item for Dec. 4, 1956, MLR, Feb. 1957) remained in a deadlock, the 10,000-member local of the International Longshoremen's Association (Ind.) in New Orleans signed a 3-year agreement with the local shippers providing for a package increase of 31 cents.

THE Federal Wage and Hour Administrator signed an order under the Fair Labor Standards Act, raising the minimum wage rates for the tobacco industry in Puerto Rico, effective February 21. The new rates for the industry's 3 classifications range from 36 to 75 cents an hour.

January 31

THE California Superior Court issued a preliminary injunction against enforcement of the Palm Springs, Calif., "right to work" ordinance outlawing union-shop agreements (see Chron. item for Nov. 14, 1956, MLR, Jan. 1957). According to the court, the city had no right to enact such an ordinance since, under the Taft-Hartley Act, only "State laws" can prohibit union-shop contracts, and in California, such contracts are lawful. The case was *Stephenson, of Local Union 440, International Brotherhood of Electrical Workers v. City of Palm Springs, et al.*

Developments in Industrial Relations*

LABOR NEWS during January was dominated by investigations of racketeering and misuse of union funds and efforts on the part of the labor movement to correct such abuses and to resolve jurisdictional difficulties between industrial and construction unions within the AFL-CIO.

Union Developments

Union Standards. The Permanent Investigations Subcommittee of the Senate Committee on Government Operations, headed by Senator John L. McClellan of Arkansas, focused public attention on these problems when it began hearings on racketeering and diversion of union funds. As the inquiry progressed, many top union officials, gathered for the winter session of the AFL-CIO Executive Council, voiced publicly their views that the Federation should take forthright action to assure cooperation with such investigations and to clear up corrupt situations.

Consequently, standards of conduct for union officials became the first order of business at the AFL-CIO Executive Council session, which opened January 28, and several significant actions were taken on this subject. The council issued a policy statement¹ pledging full cooperation with all properly authorized government bodies objectively investigating corruption "wherever it exists." The declaration stated that any union official who uses the fifth amendment for his personal protection and to avoid scrutiny into alleged corruption on his part, has no right to continue to hold office in his union. Federation President George Meany later stated that the council would call before it any union that did not observe this policy and would take appropriate action against it.

The only dissenting vote on the resolution was cast by Dave Beck, president of the Teamsters. Mr. Beck expressed the view that Government inquiries into labor abuses often turned into "inquisitions" and that the course adopted by the AFL-CIO "would come home to haunt the labor

movement." Concurrently, the Teamsters union affirmed its stand that its officers would not be disciplined for exercising their constitutional privilege against self-incrimination and that individual unions were autonomous in governing their own affairs without interference from the Federation. Earlier in the month, some Teamster leaders had refused to testify before the McClellan subcommittee on the ground that it had no jurisdiction over union activities; they offered to cooperate, however, with any congressional committee with proper authority over union activities. Some officers of an Allied Industrial Workers local in New York City, appearing before the same committee, had invoked the fifth amendment.

At the end of January, the Senate approved a resolution authorizing establishment of an 8-member Select Committee on Improper Activities in the Labor or Management Field, composed of members chosen from the Government Operations Committee and the Labor and Public Welfare Committee, which also will be under the chairmanship of Senator McClellan. The new committee consists of Democratic Senators Sam J. Ervin, Jr., North Carolina; John F. Kennedy, Massachusetts; and Patrick V. McNamara, Michigan, in addition to Senator McClellan; and of Republican Senators Barry M. Goldwater, Arizona; Irving M. Ives, New York; Joseph R. McCarthy, Wisconsin; and Karl E. Mundt of South Dakota.

The AFL-CIO Executive Council action on the fifth amendment had been preceded by adoption by the Executive Board of the International Union of Electrical Workers of a ruling that any officer invoking the fifth amendment in a congressional investigation into racketeering (or communism) would automatically face a union trial and be subject to expulsion. The IUE's Executive Board also adopted a comprehensive code of ethical practices for its officers which would govern organizing activities and administration of welfare funds, provide for maintenance of internal democracy, and prohibit racial discrimination. Violation of the provisions, claimed to be more stringent than any thus far approved by other unions, would be punishable through the union's regular trial machinery.

*Prepared in the Division of Wages and Industrial Relations, Bureau of Labor Statistics, on the basis of currently available published material.

¹ For the text of this statement, see p. 350 of this issue.

Also prior to the meeting of the AFL-CIO Executive Council, the United Automobile Workers Executive Board had adopted a resolution urging the Federation to cooperate with any "fair" congressional investigation of corruption and racketeering on the part of labor, business, and industry. The UAW resolution declared, "there must not be tolerance within the leadership of the united labor movement for either Communists or crooks." The resolution credited the AFL-CIO Ethical Practices Committee for making a good beginning in dealing with corruption within the labor movement but pointed out that a congressional committee would have certain advantages, including authority to subpoena witnesses.

As part of its efforts to force its constituents to do any needed house cleaning, the Executive Council adopted three codes of ethics proposed by the AFL-CIO Ethical Practices Committee to guide the conduct of union officials.² One of the codes was aimed at eliminating conflicts of interest by prohibiting officers from engaging in a business with which their unions have collective bargaining agreements. The other two codes set up standards for union officials and administrators of health and welfare funds. The codes stated that there is "no room" in the organization for any officer who is "a crook, a racketeer, a Communist, or a Fascist," whether convicted of "any crime involving moral turpitude offensive to trade union morality" or "commonly known to be . . . preying on the labor movement" for corrupt purposes even though without criminal record. Each union was urged to apply the principles on the basis of common sense with due regard for individual rights.

In addition to the banning of kickbacks and other abuses of welfare funds, as disclosed in 1955 during hearings of the Senate Subcommittee on Welfare and Pension Funds,³ the code requires maintenance of complete records, full reports to members, and selection of insurance carriers by competitive bidding. These codes, it was hoped, would serve as a guide or yardstick for the Federation's international unions. Failure of the internationals to adhere to the policies would make them susceptible to suspension or ultimate expulsion under the AFL-CIO constitution. In the case of the Federation's own subsidiary departments, councils, and 900 directly affiliated federal unions, the Federation has authority to act directly.

Just such action was taken when Mr. Meany, acting upon the recommendation of a hearings officer, expelled Charles Naddeo, secretary-treasurer of a Can Workers federal labor union in Philadelphia, removed the local's other officers, and extended a temporary trusteeship until the local demonstrates that it is in compliance with standards set up by the Federation. The chief officers of this local as well as those of another federal union—the Waste Material Handlers in Chicago—were suspended in December on charges of maladministration of welfare funds;⁴ hearings on the latter case were expected to be completed in February. Mr. Naddeo was also a vice president of the Laundry Workers' International Union, facing action by the AFL-CIO Executive Council on charges of welfare fund maladministration.

The Laundry Workers, as well as the Allied Industrial Workers and the Distillery Workers, which were accused of similar malpractices, were directed by the council after 2 days of hearings to remove officials who had been found guilty by the Ethical Practices Committee.⁵ If they failed to cooperate in eliminating "corrupt influences" within 90 days, they would be automatically suspended. The Industrial Workers and the Distillery Workers immediately denied the existence of any abuses in their organizations and criticized the council's resolution as "too vague" and unclear as to just what reform measures were expected. President Meany later remarked that he would not specify what should be done but that the Federation would provide assistance if so requested. Meanwhile, the president of the International Chemical Workers Union suspended all officers of a New York local because of their reported relationships with racketeers. The international also ordered a full investigation and appointment of supervisors for all its "amalgamated" locals in the New York area. This step was taken, it was said, for investigative purposes only and not because the unions were prejudged guilty of dubious practices.

² For the text of these Codes, see p. 350 of this issue.

³ For a summary of the Subcommittee's report, see *Monthly Labor Review*, July 1956 (p. 812).

⁴ See *Monthly Labor Review*, February 1957 (p. 209).

⁵ The 3 international unions, with a combined membership of 170,000, were tried before the Ethical Practices Committee following disclosure of the activities of their officers in a Senate committee investigation 2 years ago. In December, the secretary-treasurer of the Laundry Workers was "suspended indefinitely" by his international Executive Board. See *Monthly Labor Review*, February 1957 (p. 209).

A 10-point reform program proposed by the Maritime Trades Department of the AFL-CIO was accepted by the independent International Longshoremen's Association on January 23, apparently as part of an effort to rejoin the Federation. The program provided for reorganization of the union's internal structure along democratic lines and adherence to the principles of the Federation's constitution. The union also promised to honor the rival International Brotherhood of Longshoremen's existing contracts and its status as a union entitled to seek exclusive bargaining rights. However, AFL-CIO President Meany found ILA acceptance of the plan unsatisfactory for reaffiliation unless the Federation received actual proof of a "cleanup" of the expelled longshoremen's union. Meanwhile the ousted union, operating under a no-strike injunction secured under the national emergency provisions of the Labor Management Relations Act, and the New York Shipping Association appeared to make no progress toward settling of their protracted dispute.⁶

Jurisdictional Problems. A sharp conflict within the AFL-CIO was highlighted early in the council's meeting as the presidents of 19 building trades unions rejected a proposal that Mr. Meany had offered to settle their longstanding jurisdictional controversies with former CIO industrial unions. The disputes involved jurisdiction over installation of new equipment, moving, maintenance of equipment, and related inplant construction. Mr. Meany had proposed that such disputes be settled on the basis of past practice, with arbitration as a last resort. Under his plan, construction work on new plants would have been assigned to the building trades unions but most maintenance work and installation of new equipment in existing plants would have been allocated to industrial unions. The proposal would also have barred the boycotting of union-made products in disputes of this sort. Further efforts to solve the problem, by a 13-man special committee, were scheduled for February. Meantime, a special 3-member subcommittee was to render final decision in a frictional situation between the Sheet Metal Workers and the Steel Workers. Recently the

Sheet Metal Workers had boycotted, as nonunion, products of an Akron, Ohio, plant organized by the Steelworkers because they refused to recognize the Steelworkers' right to make new equipment.

The issue between the two groups of unions was sharpened by the building craft unions' adoption of a reorganization plan for the Building Trades Department intended to "protect their rightful chartered jurisdiction and to regain work now being performed by other organizations."

At its closing session, the council charged the International Union of Electrical Workers (IUE) with violating the no-raiding provision of the AFL-CIO constitution by seeking to oust the Sheet Metal Workers as bargaining agent at a plant in New York City. The Metal Workers threatened to sue the IUE for libel after the IUE claimed collusion between the company and the Metal Workers on representation rights.

An agreement entered into by the International Brotherhood of Paper Makers and the Pulp, Sulphite and Paper Mill Workers in 1909 to minimize jurisdictional and other conflicts was terminated by the Paper Makers Executive Board, effective March 1. The Paper Makers were to merge with the United Paperworkers in a March convention.⁷ The Paper Makers union explained that it had no authority to commit the new organization—the United Papermakers and Paperworkers International Union—to continue the Paper Makers policies of cooperation with the Pulp Workers, including joint executive board meetings and joint organizing and bargaining negotiations. The Paper Makers, however, expressed the hope that the new union and the Pulp Workers "can live together in the paper industry with a minimum of friction and disagreement" and that the previous relationships can continue. It also pointed out that frequent changes in industry techniques and job content rendered the agreement obsolete and that the jurisdiction of the new 123,000-member union would be extended to include workers in the pulp and related industries. The Pulp Workers have a membership of about 150,000.

Other Union Activities. Skilled workers represented by the United Automobile Workers obtained greater recognition of their problems as a result of a series of intraunion meetings.⁸ At a 2-day conference in Detroit, delegates representing 350,000 General Motors workers approved a re-

⁶ *Ibid.*

⁷ See Monthly Labor Review, January 1957 (p. 83).

⁸ For an account of special bargaining policies adopted last month by the UAW's Fifth Annual Skilled Trades Conference, see Monthly Labor Review, February 1957 (p. 208).

organization of the National General Motors Negotiating Committee along functional rather than existing geographical lines. Union members engaged in similar work or in similar plants (i. e., Chevrolet assembly, Fisher Body assembly, Fisher Body stamping plants, etc.), although in different sections of the country, will be in the same sub-council. The reconstituted negotiating committee will continue to consist of a representative from each of 9 subcouncils but in addition will include 2 new members representing the 48,000 skilled workers—tool and die workers, pattern makers, maintenance employees, and design and engineering employees.

The AFL-CIO plans to organize white-collar workers were implemented by the council when it agreed to assign a total of about 120 organizers, including 30 or 40 new organizers, to work with any international union requesting such assistance. The council also pledged full support to efforts to raise the pay of Government employees and increase the benefits of retired Federal workers.

The United Mine Workers' Executive Board acted to bolster the organization's finances by voting a special assessment of \$10 on each working member. The union's officers reported that the international's funds were reduced because of last year's "tremendous expenses" for law suits, organizing activities, and its quadrennial convention, which cost nearly half a million dollars. At the October convention,⁹ the delegates had approved a resolution that all miners pay an additional 25 cents monthly in local dues.

The American Federation of Teachers became the third union whose members had in recent months rejected a dues increase proposed by its leadership. The membership vote, announced early in January, was 17,469 to 15,688. The other two organizations were the Machinists and the Typographical Union.¹⁰

Announcement was made by the New York Building and Construction Trades Council that 4 New York City construction unions were planning construction of a \$35 million cooperative housing development in the city. Sponsors were the Lathers Union, the Operating Engineers, the Plumbers, and the Steamfitters, while the International Brotherhood of Electrical Workers indicated it would also participate. The 2,400-apartment project would be the first tangible accomplishment of a drive begun more than a

year ago by the city administration to interest construction unions in investing part of their reserves in cooperative housing built under Title I of the National Housing Act.¹¹

Plans for establishing a center for elderly union workers were announced by the New York Joint Board of the Amalgamated Clothing Workers for its 7,000 retired members.¹² Recreation and education facilities for pensioners are to be added to the union's Sidney Hillman Health Center which services all members. Education classes, including an arts and crafts program, will be conducted with the assistance of city and State agencies.

Wage and Supplementary Benefit Developments

Transportation. The first supplementary layoff pay plan in the railroad industry was negotiated early in January by the Chicago & North Western Railway and 12 "nonoperating" unions representing 16,000 workers. The plan provided that the railroad make payments to unemployed workers, with at least 2 years' service, who have been displaced by technical change, mechanization, or economy measures. Benefits, which will supplement amounts received under the Railroad Unemployment Insurance Act, are to be based on the employee's length of service and earnings. The plan was made retroactive to May 8, 1956, and hence benefited a substantial number of the employees laid off last spring as an economy measure when operations on the railroad were reorganized following a change in management. For laid-off workers who have 15 or more years of service and who are otherwise qualified for maximum payments of \$10.20 a day (\$8.50 under the Railroad Unemployment Insurance Act and \$1.70 from the railroad) for 18 to 20 months, the railroad, during the first year, will pay the full \$10.20 daily benefit after the worker exhausts the 130 days of benefits (covering about 6 calendar months) to which he is entitled under the Railroad Unemployment Insurance Act. Maximum benefits would reportedly amount to 75 percent of "take home" pay for most workers. The plan, nego-

⁹ See Monthly Labor Review, December 1956 (p. 1456).

¹⁰ See Monthly Labor Review, February 1957 (p. 208).

¹¹ Under title I of the act, municipalities can condemn land as a slum clearance measure and then sell it to the cooperative developers for less than the acquisition price, with one-third of the difference made up by the city and the remaining two-thirds by the Federal Government.

¹² For other programs affecting retired workers, see Monthly Labor Review, February 1957 (p. 211).

tiated for a 3-year period, had the approval of the Railroad Retirement Board. The agreement was regarded by the unions as a present-day supplement to the Washington Job Protection Agreement of 1936, negotiated by most railroad unions and carriers to provide job transfers or separation allowances to workers laid off because of railroad consolidations and mergers.

Textiles, Apparel, and Related Industries. Wage and salary increases were announced for about 4,000 union employees of rayon and cellophane plants of E. I. du Pont de Nemours Co. in Old Hickory, Tenn. About 1,300 members of the Textile Workers Union received advances ranging from 7 to 10 cents an hour, as did workers represented by unaffiliated local unions.

In the cotton and synthetic branch of the textile industry, the Bates Manufacturing Co. asked the Textile Workers Union to accept a pay cut of about 14 cents an hour for 6,000 employees at the company's 5 mills in Maine. In a January letter to the union president, the company stated that its wage costs averaged 14 cents an hour higher than those of southern competitors and requested union cooperation to eliminate this differential. The company added that it might be forced "to curtail operations drastically" if it failed to receive wage-cost relief since it had lowered prices and its earnings were "off sharply." The union contended that a wage increase of 10 cents an hour received by southern textile workers in October 1956 had raised wage scales for some job classifications above northern rates, and termed the proposal "ill conceived and a disservice to employees." The union was scheduled to meet February 9 to formulate its bargaining demands under its contracts with New England cotton and synthetic textile producers, which either expire or are subject to wage reopening in April. The Bates contract provides for binding arbitration in the event the parties fail to agree, but TWUA employees at other mills would be free to strike if their negotiations proved unsuccessful. (In 1955, following a strike lasting 13 weeks at some mills, the union had signed 2- or 3-year contracts that provided for maintenance of existing wage rates, subject to annual reopening. In the 1956 reopening, pay increases averaging about 8 to 8½

cents an hour were negotiated to restore wage cuts made in 1952 under arbitration awards.¹³)

Abandonment of a policy of industrywide bargaining in the woolen and worsted industry was announced at a January 5 meeting of Textile Workers Union delegates representing 25,000 workers in 100 mills. The departure from the uniform "pattern" approach was attributed to the disappearance from the industry of any company large enough to serve as a wage leader; American Woolen Co., formerly the largest producer, had merged into Textron, Inc., and subsequently liquidated a number of its mills. Another reason cited was the increased product diversification by producers whose disparate competitive and profit positions required individual contract negotiations. Numerous contract cancellation notices and reopening requests by local unions were expected to follow this decision. The union's Passaic, N. J., Joint Board notified Forstmann Woolen Co. that it was terminating its contract, which otherwise would have been automatically extended beyond its March 15 expiration date.

By contrast, the Executive Board of the International Ladies' Garment Workers voted to authorize a study of the feasibility of negotiating a nationwide agreement in the women's coat and suit industry. It also agreed upon a 3-year limit on the term of all future agreements; decided to affiliate the union with the AFL-CIO Industrial Union Department; and proposed that contracts provide for lowering the retirement age for women from 65 to 62. The National Coat and Suit Recovery Board, the labor-management advisory group of the garment industry, which is characterized by a large number of small competing firms, decided to sponsor a nationwide campaign for the creation of a new Government agency to aid small business. David Dubinsky, president of the ILGWU, thereupon stated he would recommend to his union that it underwrite 10 percent of the expenses of the promotion drive, which is expected to cost about \$600,000.

Metalworking. At the American Motors Corp.'s Kenosha, Wis., plant, an estimated 5,000 employees, members of the United Auto Workers, left their jobs on January 22 in a dispute centering on the seniority layoff provision in the 1955 agreement covering layoffs of 2 days or less. Early last year the company proposed a contract modifi-

¹³ See Monthly Labor Review, June 1956 (p. 694).

cation that would allow it to prohibit employees from "bumping" workers with lower seniority for layoffs lasting 2 days or less. This modification was approved by the union's Executive Board but was rejected by its membership in September and again in December 1956. However, the agreement ending the strike, ratified by the union membership on January 29, reportedly gave the company the right to furlough workers for 2 days or less without following seniority rules rigidly.

Over 10,000 salaried employees of Douglas Aircraft Co., Inc., received wage increases ranging from 4 to 7 percent on January 7. The raise affected all of the company's salaried employees in California, Oklahoma, and North Carolina, including 3,400 technical employees represented by the Professional Engineering Association, an affiliate of the independent federation of Engineers and Scientists of America.

A 1-year contract negotiated by the International Brotherhood of Electrical Workers and the Western Electric Co. provided wage increases for 15,000 employees at the company's Hawthorne Works in Cicero, Ill. The rate increases, retroactive to December 20, ranged from 13 to 16 cents an hour for maintenance workers and 7 to 11 cents for other classifications. Hourly earnings, including incentive pay, reportedly would rise by an average of about 12 cents.

Construction. The same union negotiated wage-rate increases of 17 cents an hour for 11,500 members in the Chicago construction industry, and the Pipefitters Union negotiated an 18-cent increase for 6,000 workers in the area. The increases, effective April 1 and June 1, respectively, were agreed to under wage reopening provisions of contracts expiring in 1958. Wage increases of 20 cents an hour were also scheduled for 6,500 Chicago bricklayers under a new 2-year contract effective June 1. The agreement, containing no provision for reopening, was negotiated with 2 employer groups representing 450 contractors.

The first contract covering Kentucky highway and heavy construction workers on a statewide basis was negotiated by the Associated General Contractors and 3 unions—the Teamsters, the Carpenters, and the Laborers—representing about 15,000 workers. Wages were set by geographical zones and deferred pay increases ranging between

10 and 15 cents an hour were provided for July 1957. The agreement was to expire a year later.

Other Industries. Employee stock plans were under consideration by the United States Steel Corp. and were adopted by the Piasecki Aircraft Corp. and Montgomery Ward & Co. The United States Steel plan provided for company contributions of 50 cents for each dollar saved by salaried employees having at least 1 year's continuous service, including those covered by collective bargaining contracts incorporating such a plan. The employee could elect to put 5 to 8 percent of his base salary either entirely into Government bonds or half in Government bonds and half in U. S. Steel common stock. All company contributions would be invested in the stock and would become "vested" as a part of the employee's permanent account after 3 years. The company said the savings plan, which would be made effective in May if ratified by stockholders at that time, was formulated to provide salaried workers with a substitute for supplemental unemployment benefits and to help them acquire a continuing ownership interest in the company. Under the Piasecki program, the aircraft company would also add an amount equal to 50 percent of the employee's share (up to 10 percent of his earnings) toward the purchase of the company's common stock. At Montgomery Ward, officers and other key management personnel became eligible for both a stock option plan and a pension program. The company estimated that about 18,000 employees would also be eligible to participate in the retirement plan on February 1, the effective date, with the employee contributions to be matched by company contributions.

Hallmark Cards, Inc., announced the establishment of profit-sharing and optional "thrift" plans, as well as company-financed medical and life insurance. Under the profit-sharing plan, the company will make annual payments to a trust fund for each of its 4,000 employees having at least 2 years' service. Such amounts will vary from 5 to 15 percent of the employee's earnings, depending on company profits. The worker or his estate can receive the amounts credited to him upon retirement, permanent and total disability, death, or termination of employment after 12 years' service (with reduced amounts for those

terminated sooner). Under the thrift plan, the company will add 20 percent to employees' voluntary savings funds. If an employee cancels his savings fund, he will be able to withdraw the full amount of his own contribution (2 to 5 percent of total earnings), plus part of the company contribution. In addition, a company-financed retirement plan was revised.

Other Developments

Wage-Price Relationships. The dangers of inflation were emphasized by President Eisenhower in his State of the Union message and again in his Economic Report to Congress. While reporting "an unprecedented peak in our economic prosperity," he pointed out that Government fiscal and monetary policies alone could not prevent inflation and appealed to management and labor to practice self-discipline in price and wage policies. The President urged that the parties to wage negotiations seek only to correct inequities and reward higher productivity and that they recognize the right of the public to share the benefits of technological advance. His Economic Report attributed pressures on prices largely to "wage increases that tended to outrun the year's small gain in productivity."

The AFL-CIO Executive Council, at its mid-winter meeting, evidenced its own concern over inflation. It endorsed a proposal by the Economic Policy Committee, headed by Walter P. Reuther, that the Federation call for a congressional investigation into price-wage-profit relationships. Union officials believed that such a study would show that wage increases, instead of being primarily responsible for higher living costs, actually widened the market for industry's products and thus encouraged greater production at lower unit costs. They stated that automatic wage increases due in 1957 represented workers' share in improved efficiency.

Administrative and Court Actions. The Hotel and Restaurant Employees Union announced that about 300,000 of its members would receive an estimated \$3 million in tax refunds for the past 3 years as a result of a Treasury Department decision approved December 31, 1956. The ruling

exempted workers from payment of income taxes on the value of meals and lodgings furnished in kind "at the employer's convenience."

The Supreme Court, reversing a lower tribunal's decision, held that unions can legally strike before termination of a contract provided they give a 60-day reopening notice permitted under the agreement. It ruled that since a collective bargaining agreement between the Oil Workers International Union (now merged into the Oil, Chemical and Atomic Workers) and the Lion Oil Co. in Arkansas provided for renegotiation, such a strike was not an unfair labor practice.¹⁴

Labor-management agreements in the California women's sportswear industry were found not to be in restraint of trade and competition by a Federal Trade Commission examiner, whose ruling is subject to review by the Commission. In 1955, the FTC had charged that price fixing and control of output was being practiced by 2 unions—the International Ladies' Garment Workers and the Teamsters—and 3 employer groups—the California Sportswear and Dress Association, Inc., the Associated Sportswear Manufacturers of Los Angeles, and the California Apparel Contractors Association—representing 51 manufacturers and 32 contractors. The Commission's complaint had stated that agreements specifying which contractor each manufacturer could deal with and controlling the prices paid to them limited competition among contractors and that other agreement provisions restricted the freedom of movement of manufacturers and jobbers in opening new plants and in acquiring interests in competing concerns. The examiner concluded that the "provisions have been historic union goals," which have "come to be recognized as a normal subject for collective bargaining"—to protect "the employment opportunities and labor standards of its membership."

The Government was asked by a committee of labor experts, under the chairmanship of David L. Cole, gradually to extend its general policy of nonintervention in labor disputes to the atomic energy industry. The committee, which was appointed by Secretary of Labor James P. Mitchell following a 1954 strike at the Oak Ridge installation, recommended to Mr. Mitchell that atomic labor problems be handled under regular procedures, with agreements between contractors and

¹⁴ For discussion, see p. 354 of this issue.

unions to contain provisions for "safeguarding property, processes, and life in case of strike." The committee also urged that contractors recognize their special responsibility to reach agreement expeditiously and that the AFL-CIO actively participate in the labor-management program under discussion. The report held that there should be no finding that an emergency exists or is threatened because of a labor dispute at any Government-owned, contractor-operated atomic energy installation except by the President acting on the advice of the National Security Council. It called for liquidation of the panel procedure established in 1949 to deal with the special problems in atomic labor-management relations as soon as the President decides it is timely to do so. For the interim, it advocated a tapering off of the panel's activities in favor of "more dependence on the parties in settling their differences through collective bargaining." (Cyrus S. Ching, chairman of the panel, recently gave notice that it would enter disputes only after all other collective bargaining procedures had been exhausted.)

The committee's recommendations that labor-management relations at atomic energy installations be treated "in the same manner as those in other important industries," including defense production, resulted from its finding that the unusual features of the atomic energy industry which led to the introduction and maintenance of panel procedure no longer have "the compelling influence they had in former years." It pointed out that operations at installations have become more stable after a decade of experience during which both labor and management have proved their concern for the welfare of the installations

and of the atomic energy program. A growing emphasis on industrial and peacetime uses of atomic energy was mentioned as still another factor. The committee found that when alternatives to collective bargaining are provided by the Government for arriving at labor-management agreements, they are increasingly relied upon at the expense of direct negotiations. This development was viewed as contrary to national labor policy which relies on "collective bargaining without Government intervention other than effective mediation, save only in rare cases of genuine national emergency."

Personnel. Several personnel changes occurred in the field of labor and labor-management relations during January. President Eisenhower nominated James T. O'Connell of New Jersey as Under Secretary of Labor, Joseph A. Jenkins of Texas as a member of the National Labor Relations Board, and Jerome Fenton of Connecticut as the Board's general counsel. The post of president of the Maritime Trades Department was vacated by the death of Harry Lundeberg, who was also president and founder of the Seafarers' International Union and secretary of its affiliated Sailors Union of the Pacific. He was succeeded as president of the international by Paul Hall, who was to hold the office until the union's biennial convention in March. Professor John T. Dunlop of Harvard University submitted his resignation as chairman of the National Joint Board for the Settlement of Jurisdictional Disputes in the building and construction industry. The arbitrator agreed to stay on until his successor had been selected.

Erratum

In the Monthly Labor Review for December 1956 (p. 1455), it was stated that an agreement between the Metropolitan Life Insurance Co. and the Insurance Workers of America provided for ". . . maintenance of agents' rights to the territories assigned to them. (The company had sought the right to reassign such areas.)" A company communication points out that "the new agreement . . . does not include such terms and that the company has always retained the right to determine the size, location, and composition of debits and there has been no need or occasion for the company to seek that right in negotiations."

Book Reviews and Notes

EDITOR'S NOTE.—*Listing of a publication in this section is for record and reference only and does not constitute an endorsement of point of view or advocacy of use.*

Special Reviews

Research in Industrial Human Relations—A Critical Appraisal. Edited by Conrad M. Arensberg and others. New York, Harper & Brothers, 1957. x, 213 pp. (Industrial Relations Research Association Publication 17.) \$3.50.

Since Elton Mayo, the interest focus of professional management has shifted from "scientific management" (fathered by Taylor and Gilbreth and developed in numerous directions by others) to "human relations." Management, aware, however reluctantly, that "scientific management" did not provide satisfactory answers to evolving problems in a dynamic industrial society of the workplace and the work force (especially in the light of a Government labor policy requiring collective bargaining), looked elsewhere for tools and techniques. As though the dragon's teeth had been scattered, legions of experts in human relations began to assault the citadel of corporate treasuries. Management officials were subjected to an intensive bombardment of high pressure salesmanship on communications (upward, downward, sideways), participation, decisionmaking, training, development programs, group dynamics, etc., etc. Probably the largest part of these programs was based on the instinctive or "seat-of-the-pants" navigation of their proponents. Some were founded upon the "human relations" research and the study of social scientists. Until recently there has been little data to indicate how successful (or desirable) these programs have been. The human relations researchers have been criticized by two groups: by the trade unions as seeking to subvert the democracy of a union-

management society with new techniques of manipulation of people; and by other social scientists as failing to take into account the variable environmental factors (economic, social, and political) that have more to do with the behavior of workers and their organizations than the "human" motivations studied by the human relations folks.

The IRRA volume, 17th in a distinguished series, is exceptionally timely and makes fascinating reading. Thirteen knowledgeable contributors, with university, labor, and management backgrounds, to the limited extent that objective data are available, review and appraise the experience of practitioners and the vast amount of research that has been accomplished in the field in recent years. Most of such information has heretofore been diffused and distributed in the journals of the learned societies.

Considerations of space prohibit a lengthy description of the contents. Suffice it to say that Harold L. Wilensky, in addition to providing a valuable bibliography in the field, contributes a noteworthy appraisal of recent research; James C. Worthy writes of management's approach to human relations; Reinhard Bendix, the history of management attitudes to workers; Conrad M. Arensberg, of the changing American scene; David Riesman and Warner Bloomberg, Jr. of the relationship of work and leisure; Abraham J. Siegel, of the crucial importance of environmental factors; Herbert A. Simon, of the acceptance of managerial authority; Wilbert E. Moore, of a comparison of management and union organizations; Leonard R. Sayles, of the relation of the small group to the larger organization; Floyd C. Mann, of change in social organization; William Foote Whyte, of the impact of the union on management organization and the development of the industrial relations department; and Mason Haire, of interpersonal relations in collective bargaining. Solomon Barkin concludes with an excellent profile of the union and the union leader from the viewpoint of human relations.

This is a rewarding book: informative, perceptive, interesting, and even witty. It is highly recommended to the folks sitting on both sides of the fence and even to those who sit on the fence with both ears to the ground.

—PETER SEITZ

Arbitrator and Consultant, New York City

Labor—Institutions and Economics. By Alfred Kuhn. New York, Rinehart & Co., Inc., 1956. xx, 616 pp. \$6.50.

Occasionally a textbook appears which, because of its widespread use in training the minds of future leaders of opinion, has a real impact on contemporary thought. For example, it seems reasonable to suppose that the popularity of Samuelson's introductory economic text in leading colleges shortly after World War II not only reflected the liberal outlook already adopted by most economists but also gave impetus to general acceptance of their ideas.

A text which may well have similar influence in the field of labor economics and labor relations has been written by Alfred Kuhn. *Labor—Institutions and Economics* is solidly based on the recent findings of leading scholars, and it is written with vigor and clarity.

The specialist will find nothing essentially new here, but he may be surprised by the author's fresh insights into some hitherto murky areas. For example, Dr. Kuhn resolves the running argument between theoretical economists and institutionalists as to which forces determine wages by simply and rationally combining the viewpoints of both sides into a single theory. Briefly, he suggests that the approximate wage (general level of wages) for a particular type of labor is determined by the forces of supply and demand, as described in marginal productivity theory, and frictional forces cause the wage in any particular firm to be as much as 33 percent higher or lower than the average wage. In dealing with collective bargaining and the strike, the author defines a number of underlying concepts and thereby helps to clarify discussion of these topics and to explain union and management actions which at first glance appear irrational. His distinction between bargaining issues which involve advantage and those which involve survival, his analysis of bargaining power, and his statement that solid decisions are made on the basis of the parties' interests rather than any generalized concept of inherent prerogatives, are all cases in point.

On subjects where there is no general agreement, but only conflicting opinions, Dr. Kuhn indicates as much, presents the facts of the matter, and then does not hesitate to state his own opinion, clearly

labeled as such. For instance, he concludes that right-to-work laws "are intended to weaken unions rather than to protect the rights of individual workers." Otherwise, he asks, why should such laws prohibit maintenance of membership as well as the closed and union shop, since maintenance of membership only holds the worker to a commitment which he voluntarily assumes and which he can drop during an escape period?

The book is divided into two parts. The first discusses union history, organization, and functions; collective bargaining processes and results; and public policy toward unions and collective bargaining. The second part turns from institutions to economics and discusses wages, hours, and job security. Though one might wish for more detailed treatment of some subjects, such as jurisdictional strikes, the range of the book is really remarkable. Here is a comprehensive presentation of current thought in the field of labor, which may play an important part in forming the attitudes of the personnel workers and union staff members of tomorrow.

—THEODORE ALLISON
Bureau of Labor Statistics

Labor Problems in Communist China (to February 1953) By Shao-er Ong. [San Antonio], Lackland Air Force Base, U. S. Air Force Personnel and Training Research Center, Air Research and Development Command (for Maxwell Air Force Base, Human Resources Research Institute), 1955. xv, 83 pp. (Research Memorandum, 42.)

Pre-Communist China's sociological milieu serves as the point of departure for this scholarly study of labor in Communist China. The study was prepared for the U. S. Air Force by Shao-er Ong, a well known student of China, under the direction of Dr. Theodore H. E. Chen, University of Southern California. In keeping with the objectives of the Air Force's Chinese Documents Project, it aims to depict the "structure and organization" of labor in Red China and the "organs and methods" used by the government "to control the population."

Each aspect of the Communist labor program is examined carefully with a view to ascertaining the real objectives of the Communists. The study

covers the major Chinese Communist labor institutions and indicates the function of each in the overall control plan. Thus, the All-China Federation of Labor, though theoretically an independent organization, is shown to be a subordinate organization of the Ministry of Labor having close working relationships with the latter with respect to personnel, work, and finance. Members of Chinese trade unions must support the government's production quotas and plans. They are responsible for spying on the personal conduct and businesses of their employers and fellow employees and reporting their findings to the cadres of the Communist Party.

The author refers to the labor insurance program as "their outstanding achievement." However, these benefits are limited to factories or mines with 100 or more employees. Gang rule among transport workers, which had resulted in the greater part of the earnings of these workers going to gang chieftains, was eliminated in 1950. Welfare programs were instituted which included new housing projects, cultural centers, rest homes, nurseries, and safety measures in mines and factories. Due to shortage of facilities, only a small group of privileged workers such as the "labor models" (model workers) were able to benefit from most of the welfare programs, but their propaganda value was exploited fully.

The author summarizes the position of the workers in these words, "As tools of the Communist Party, they must work harder and longer than before and their real wages remain ridiculously low. In theory, the 'surplus value' belongs to labor. In practice, it goes to the state in the form of contributions and dues. Only a small group of selected 'labor models' are the new 'masters' of the nation who can enjoy the limited sanatoria facilities and the labor insurance benefits. No opposition is allowed. The workers do not even dare make complaints unless they are ready to spend the rest of their lives in slave labor camps. The Communist leaders themselves admit that the majority of the working class is still groaning from the pangs of hunger and poverty."

—BORIS S. YANE
Bureau of Labor Statistics

Ageing in Industry: An Inquiry, Based on Figures Derived from Census Reports, into the Problem of Ageing Under the Conditions of Modern Industry. By F. Le Gros Clark and Agnes C. Dunne. New York, Philosophical Library, Inc., 1956. xi, 146 pp. \$7.50.

Using a rather complex system of analysis based on data from the 1921, 1931, and 1951 decennial censuses of Great Britain, the authors of this book have attempted to develop estimates concerning "survival rates" for workers in their "mid-sixties" in 32 major occupational fields. This book presents a highly technical, statistical treatment of a complicated problem. Its primary contributions are: (1) To suggest and test several different statistical approaches to the analysis of census occupational data on an age basis; (2) to point up the limitations of such approaches; and (3) to describe a variety of other factors which need to be explored in much greater depth if accurate estimates of "survival rates" are to be developed.

The basic statistical approach used involves a concept of "moving cohorts" of workers in an occupational group, by age, from one decennial census period to another, comparing such estimates to the numbers reported as actually employed in the next census period, subtracting the one from the other, and then adjusting for deaths, retirements, and movement out of the occupational field. Age-group ratios are also computed for each occupation for 2 different age groups and 3 census periods. Finally, changes in the age structure of each occupation for the 1931 and 1951 census periods are secured by calculating percentage increases for 5 age breakdowns in each occupation.

Among the wide range of occupations included in the study are farmers; coal miners; heavy metal workers; construction workers; precision workers in jewelry, clocks, and watches; transportation workers; signalmen; salespersons; and workers in wholesale trade. The "survival rate" for each occupation derived from the data is an estimate of "What proportion of men who reach their mid-sixties in a given job are *physically capable* of remaining on the same job into their late sixties, or even in some cases beyond?" The rates by occupation range from 75 to 85 percent, for pre-

cision watchmakers, jewelry workers, and musical instrument makers, to 5 to 15 percent for coal miners working "at the face" and for signalmen on railroads.

Generally, the authors seem to assume that a declining number or proportion of workers age 65 and over in an occupation means that those reaching age 65 are no longer physically able to do the work. They go on to explain that mechanization of certain occupations and the introduction of "superannuation," (the British term for private pension plans) affect "survival rates."

All of this assumes a more orderly and reasoned process than actually seems to exist, at least in American experience. In other words, it would appear that what started out to be a scientific statistical study to probe work-life expectancy beyond age 65 in selected occupations, based on the abilities of workers to continue on the job, turned out to be a rationalization for what the data seem to indicate has happened. One must certainly agree with the authors that much more intensive analysis of what is actually happening in the selected occupations, and in the industries in which they function, is needed before meaningful conclusions can be drawn about valid "survival rates."

The book presents a sound technical approach to statistical analysis of census data by age and occupation. However, its most important contribution lies in the questions raised concerning the "survival rates" of older workers in various occupational fields.

For rough comparisons with American experience, attention is called to the study, based on census data for 1940 and 1950, by Carl Raushenbush and Abraham J. Berman of the New York State Department of Labor and reported in *Making the Years Count*, the 1955 annual report of the New York State Joint Legislative Committee on Problems of the Aging.

—CHARLES E. ODELL

Coordinator for Older Worker Programs
U. S. Department of Labor

Automation

Looking Toward Automation. By Katharine A. Lembright. (In *National Safety News*, Chicago, January 1957, pp. 20-21, 102-110, bibliography. \$1.)

New Horizons in Labor Dignity—The Power of Automation. By Adam Abruzzi. (In *Automation*, Cleveland, December 1956, pp. 38-42. \$1.)

Social Implications of Technological Progress. By Charles D. Stewart. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1956. 4 pp. (Reprint 2213; from *Monthly Labor Review*, December 1956.) Free.

Cooperative Movement

Cooperation—A Workers' Education Manual. Geneva, International Labor Office, 1956. 157 pp., bibliography. \$1.50. Distributed in United States by Washington Branch of ILO.

Are Cooperatives Good Business? By Joseph G. Knapp. (In *Harvard Business Review*, Boston, January-February 1957, pp. 57-64. \$2.)

Costs and Standards of Living

Standards and Levels of Living of City-Worker Families. By Faith M. Williams. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1956. 9 pp. (Reprint 2204; from *Monthly Labor Review*, September 1956.) Free.

New Light on the Consumer Market. By Irwin Friend and Irving B. Kravis. (In *Harvard Business Review*, Boston, January-February 1957, pp. 105-116. \$2.)

Postwar Studies of Family Expenditures. (In *International Labor Review*, Geneva, December 1956, pp. 576-599. 60 cents. Distributed in United States by Washington Branch of ILO.)

Education and Training

Technological Advances and Skilled Manpower: Implications for Trade and Industrial Education—An Annotated Selected Bibliography. Washington, U. S. Department of Health, Education, and Welfare, Office of Education, November 1956. 67 pp. (Miscellaneous 3509, rev.) 45 cents, Superintendent of Documents, Washington.

Training Factory Workers: A Report on a Survey of the Training of Semiskilled and Unskilled Workers in the United Kingdom Carried Out Under Project 179 of the European Productivity Agency. London, National Institute of Industrial Psychology, 1956. 127 pp.

Automation in Industry and Its Implications for Program Development in Vocational Education for Secondary School Students and Adult Industrial Workers. Washington, U. S. Department of Health, Education, and Welfare, Office of Education, Division of Vocational Education, 1956. 13 pp.

"*Institutos de Trabajo*" en Brasil. Washington, Pan American Union, Department of Economics and Social Affairs, Division of Labor and Social Affairs, 1956. 40 pp., bibliography. 25 cents.

Industrial Hygiene

The Public Health Service in Occupational Health. Washington, U. S. Department of Health, Education, and Welfare, Public Health Service, 1956. 16 pp. (PHS Publication 490.) 20 cents, Superintendent of Documents, Washington.

Emerging Industrial Health Problems. By Henry N. Doyle. (In *Industrial Medicine and Surgery*, Chicago, January 1957, pp. 1-5. 75 cents.)

Industrial Health Promotes Family Health. By Harold J. Magnuson, M. D. (In *Personnel Administration*, Washington, January-February 1957, pp. 18-22, bibliography. \$1.)

Labor Legislation

How "Right-to-Work" Laws Are Passed—Florida Sets the Pattern. By John G. Shott. Washington, Public Affairs Institute, 1956. 67 pp. \$1.

Regulation of Union Elections in Australia. By Leroy S. Merrifield. (In *Industrial and Labor Relations Review*, Ithaca, N. Y., January 1957, pp. 252-269. \$1.50.)

The Evolution of Industrial Relations Law in France Since the Liberation. By Paul Durand. (In *International Labor Review*, Geneva, December 1956, pp. 515-540. 60 cents. Distributed in United States by Washington Branch of ILO.)

Labor-Management Relations

Collective Bargaining: The Positive Approach Pays Off. By James Menzies Black. (In *Dun's Review and Modern Industry*, New York, January 1957, pp. 36-37, et seq. 75 cents.)

Labor Status and Collective Bargaining. By H. M. Douty. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1956. 7 pp. (Reprint 2212; from *Monthly Labor Review*, June 1956.) Free.

The Good Faith Requirement in Collective Bargaining. (In *Virginia Law Review*, Charlottesville, Va., January 1957, pp. 77-98. \$2.)

Management's Right to Discharge Employees for Conduct Off the Job. By Walter L. Daykin. Iowa City, State University of Iowa, College of Commerce, Bureau of Labor and Management, 1956. 18 pp. (Research Series, 15.) 25 cents (free to Iowa State residents).

Role of Foremen in Collective Bargaining. By James J. Bambrick, Jr., and Marie P. Dorbandt. (In *Manage-*

ment Record, National Industrial Conference Board, Inc., New York, January 1957, pp. 2-5, 21-22.)

Unionization Among American Engineers. New York, National Industrial Conference Board, Inc., 1956. 72 pp. (Studies in Personnel Policy, 155.) \$2.50.

Manpower

Our Manpower Future, 1955-65: Population Trends—Their Manpower Implications. Washington, U. S. Department of Labor, 1957. 32 pp. 30 cents, Superintendent of Documents, Washington.

Skilled Worker Shortages in Our Changing Economy. (In *Labor Market and Employment Security*, U. S. Department of Labor, Bureau of Employment Security, Washington, November 1956, pp. 6-10. 30 cents, Superintendent of Documents, Washington.)

Personnel Shortages in the Health Field and Working Patterns of Women. By Walter L. Johnson. (In *Public Health Reports*, U. S. Department of Health, Education, and Welfare, Public Health Service, Washington, January 1957, pp. 61-66, bibliography. 55 cents, Superintendent of Documents, Washington.)

Better Utilization of College Teaching Resources. New York, Fund for the Advancement of Education, 1956. 45 pp.

The Soviet Labor Market. By Emily Clark Brown. (In *Industrial and Labor Relations Review*, Ithaca, N. Y., January 1957, pp. 179-200. \$1.50.)

Occupations

Estimates of Worker Trait Requirements for 4,000 Jobs as Defined in the Dictionary of Occupational Titles. Washington, U. S. Department of Labor, Bureau of Employment Security, U. S. Employment Service, 1956. ix, 158 pp. \$2.25, Superintendent of Documents, Washington.

Career, 1957—The Annual Guide to Business Opportunities. Edited by William H. Ottley. New York, Careers Inc., 1957. 256 pp. 7th ed. \$1.95, Simon and Schuster, New York.

Engineering as a Career. By Ralph J. Smith. New York, McGraw-Hill Book Co., Inc. 1956. 365 pp.

Backgrounds of Vocational Choice: An Apache Study. By William T. Ross and Golda Van Buskirk Ross. (In *Personnel and Guidance Journal*, Washington, January 1957, pp. 270-275. 80 cents.)

Manual de Análisis Ocupacional. Lima, Peru, Servicio Cooperativo del Empleo, Departamento de Análisis e Informes, 1956. 73 pp.

Pension Plans

Private Pension Plans. By Theodore Geiger and Rosanne McLaughlin. Washington, National Planning As-

sociation, 1956. 29 pp. (Special Report 44.) 30 cents.

Legal Problems of Private Pension Plans. (In *Harvard Law Review*, Cambridge, Mass., January 1957, pp. 490-509. \$1.25.)

Proceedings of a Pension Plan Conference, Monterey, Calif., April 15-20, 1956. [San Francisco], California State Federation of Labor; Berkeley and Los Angeles, University of California, Institute of Industrial Relations, 1956. 68 pp.

Plan for Industrial Pensions. By a group of trade unionists. London, Fabian Society, 1956. 11 pp. (Fabian Tract 303.) 6d.

Personnel Management

Counseling as a Function of the Counselor's Personality. By Henry Weitz. (In *Personnel and Guidance Journal*, Washington, January 1957, pp. 276-280. 80 cents.)

Improving Human Relations. New York, National Association of Manufacturers, Industrial Relations Division, 1956. 32 pp., bibliography. 50 cents.

Wages, Salaries, and Hours of Labor

Wages and Related Benefits, 17 Labor Markets, 1955-56. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1956. 93 pp. (Bull. 1188.) 50 cents, Superintendent of Documents, Washington.

Occupational Wage Survey, Tulsa, Okla., Area, August 1956. Oklahoma City, Oklahoma Employment Security Commission, Research and Planning Division, 1956. 63 pp.

Postwar Wage Bargaining in the United States. By H. M. Douty. (In *Economica*, London School of Economics and Political Science, London, November 1956, pp. 315-327. Also reprinted. 8s. 6d.)

Incentive Wage Problems in Collective Bargaining and in Arbitration. By Clifford M. Baumback. Iowa City, State University of Iowa, College of Commerce, Bureau of Labor and Management, 1956. 46 pp. (Research Series 14.)

Can the GAW [Guaranteed Annual Wage] Cure Seasonal Unemployment? By Edwin B. George. (In *Dun's Review and Modern Industry*, New York, December 1956, pp. 55-56, 125-131. 75 cents.)

Weekly Salaries for Office Occupations in Manufacturing in Canada, October 1, 1955. Ottawa, Canadian Department of Labor, Economic and Research Branch, [1956]. 29 pp. In English and French. (Supplement to Report 38.) 25 cents.

Women Workers

1956 Handbook on Women Workers. Washington, U. S. Department of Labor, Women's Bureau, 1957. 96

pp. (Bull. 261.) 35 cents, Superintendent of Documents, Washington.

The Legal Status of Women in the United States of America—United States Summary as of January 1, 1953. By Laura H. Dale and Laura H. Harris. Washington, U. S. Department of Labor, Women's Bureau, 1956. 103 pp. (Bull. 157, rev.) 35 cents, Superintendent of Documents, Washington.

Women's Two Roles—Home and Work. By Alva Myrdal and Viola Klein. London, Routledge & Kegan Paul, Ltd., 1956. 208 pp., bibliography.

Miscellaneous

Information for Administrators—A Guide to Publications and Services for Management in Business and Government. By Paul Wasserman. Ithaca, N. Y. Cornell University Press, 1956. 375 pp.

The Pattern of Management. By Lyndall F. Urwick. Minneapolis, University of Minnesota, 1956. 100 pp. \$2.50, University of Minnesota Press, Minneapolis.

Processes of Organization. By Robert S. Weiss. Ann Arbor, University of Michigan, Institute for Social Research, Survey Research Center, 1956. 117 pp., bibliography.

Work and Its Discontents: The Cult of Efficiency in America. By Daniel Bell. Boston, Beacon Press, 1956. 56 pp. \$1.25.

Workers and Farm Income. By Stephen Raushenbush. Washington, Public Affairs Institute, 1956. 34 pp. 50 cents.

Economic Rationale of Codetermination. By Abraham Shuchman. (In *Industrial and Labor Relations Review*, Ithaca, N. Y., January 1957, pp. 270-283. \$1.50.)

Foreign Labor Information: Labor in the Philippines. By Alice W. Shurcliff. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1956. 22 pp. Free.

Economic Survey of Small Industries, 1954, State of West Bengal. Calcutta, Government of West Bengal, State Statistical Bureau, 1956. 205 pp. 6 rs., West Bengal Government Press, Alipore.

The International Labor Organization. New York, Chamber of Commerce of the State of New York, 1956. 21 pp.

Rocznik Statystyczny, 1956 (Statistical Yearbook, 1956). Warsaw, Central Statistical Office of the Polish People's Republic, 1956. 476 pp. 15 zlotys.

Das Neue Jugoslawische Wirtschaftssystem (The New Yugoslav Economic System). By Viktor Meier. Zurich, Polygraphischer Verlag Ag, 1956. 216 pp. (Handels-Hochschule St. Gallen, Reihe-A, Heft 46.)

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¹ Beginning with the July 1956 issue, data shown in tables A-2, A-3, A-4, A-5, C-1, C-2, C-3, C-4, and C-5 have been revised because of adjustment to more recent (First quarter 1955) benchmark levels. These data cannot be used with those appearing in previous issues of the Monthly Labor Review. Comparable data for earlier years are available upon request to the Bureau of Labor Statistics.

² This table is included in the March, June, September, and December issues of the Review.

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F.—Building and Construction

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G.—Work Injuries

- Table G-1: Injury-frequency rates for selected manufacturing industries ³

³ This table is included in the January, April, July, and October issues of the Review.

A: Employment and Payrolls

TABLE A-1: Estimated total labor force classified by employment status, hours worked, and sex

(In thousands)

Labor-force status	Estimated number of persons 14 years of age and over ¹												
	1957	1956											
	Jan.	Dec.	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.
	Total, both sexes												
Total labor force.....	68,647	69,855	70,560	70,905	70,896	71,787	72,325	72,274	70,711	69,434	68,806	68,396	68,691
Civilian labor force.....	65,830	67,029	67,732	68,082	68,069	68,947	69,489	69,430	67,846	66,555	65,913	65,490	65,775
Unemployment.....	2,940	2,479	2,463	1,909	1,998	2,195	2,833	2,927	2,608	2,564	2,834	2,914	2,885
Unemployed 4 weeks or less.....	1,367	1,231	1,401	964	1,019	1,011	1,384	1,676	1,181	1,063	1,100	1,130	1,405
Unemployed 5-10 weeks.....	787	580	443	408	368	491	784	556	615	639	680	865	691
Unemployed 11-14 weeks.....	291	183	182	117	139	223	184	195	210	214	371	278	238
Unemployed 15-26 weeks.....	308	238	233	209	261	237	269	326	380	417	401	359	281
Unemployed over 26 weeks.....	188	247	204	211	209	233	213	175	222	231	281	283	270
Employment.....	62,890	64,550	65,269	66,174	66,071	66,752	66,655	66,503	65,238	63,990	63,078	62,576	62,891
Nonagricultural.....	57,947	59,440	59,076	59,000	58,683	59,487	58,955	58,627	58,092	57,603	57,400	57,107	57,256
Worked 35 hours or more.....	46,638	48,309	43,158	46,867	47,371	45,975	43,661	46,524	46,587	46,615	46,015	45,092	46,576
Worked 15-34 hours.....	6,612	6,555	11,164	7,305	5,903	5,710	5,725	5,973	6,557	6,264	6,441	7,131	5,794
Worked 1-14 hours.....	2,672	2,804	2,775	2,646	2,516	2,171	2,283	2,473	2,980	2,784	2,855	2,760	2,727
With a job but not at work ²	2,025	1,772	1,980	2,182	2,834	5,631	7,287	3,657	1,969	1,941	2,089	2,124	2,159
Agricultural.....	4,943	5,110	6,192	7,173	7,388	7,265	7,700	7,876	7,146	6,387	5,678	5,469	5,635
Worked 35 hours or more.....	3,032	3,245	4,163	5,384	5,554	5,300	5,419	5,647	5,185	4,281	3,645	3,528	3,579
Worked 15-34 hours.....	1,162	1,175	1,445	1,305	1,348	1,384	1,656	1,623	1,475	1,540	1,356	1,213	1,269
Worked 1-14 hours.....	471	460	433	350	329	361	431	430	360	416	437	477	509
With a job but not at work ²	279	229	151	134	157	219	194	177	125	149	239	253	278
	Males												
Total labor force.....	47,501	47,927	48,303	48,340	48,490	49,682	49,969	49,928	48,663	48,206	47,930	47,690	47,820
Civilian labor force.....	44,717	45,135	45,508	45,550	45,697	46,875	47,167	47,118	45,832	45,361	45,071	44,818	44,938
Unemployment.....	1,995	1,665	1,466	1,124	1,152	1,319	1,672	1,767	1,599	1,643	1,887	2,049	1,951
Employment.....	42,722	43,470	44,042	44,426	44,546	45,556	45,495	45,351	44,233	43,718	43,183	42,769	42,987
Nonagricultural.....	38,395	39,112	39,020	39,007	39,056	39,880	39,569	39,337	38,671	38,370	38,316	38,003	38,095
Worked 35 hours or more.....	32,619	33,620	30,422	33,036	33,519	32,980	31,439	33,358	32,922	32,782	32,236	31,552	32,572
Worked 15-34 hours.....	3,291	3,080	6,232	3,482	2,771	2,869	2,888	2,875	3,257	3,191	3,322	3,794	2,890
Worked 1-14 hours.....	1,143	1,219	1,126	1,123	1,012	863	957	1,071	1,253	1,226	1,335	1,217	1,222
With a job but not at work ²	1,341	1,193	1,240	1,366	1,754	3,168	4,285	2,033	1,239	1,172	1,423	1,440	1,411
Agricultural.....	4,327	4,358	5,022	5,419	5,490	5,676	5,926	6,013	5,562	5,348	4,867	4,766	4,892
Worked 35 hours or more.....	2,854	2,998	3,741	4,374	4,484	4,511	4,640	4,806	4,496	3,952	3,340	3,254	3,316
Worked 15-34 hours.....	825	773	837	691	636	732	864	775	722	942	936	868	893
Worked 1-14 hours.....	400	378	307	226	226	242	266	294	243	322	373	405	420
With a job but not at work ²	247	210	137	128	144	191	156	139	100	131	218	239	264
	Females												
Total labor force.....	21,146	21,928	22,258	22,565	22,405	22,105	22,355	22,346	22,048	21,228	20,876	20,706	20,871
Civilian labor force.....	21,113	21,894	22,224	22,532	22,372	22,071	22,321	22,312	22,014	21,194	20,842	20,672	20,837
Unemployment.....	945	814	997	785	847	876	1,161	1,160	1,009	921	947	865	933
Employment.....	20,168	21,080	21,227	21,748	21,525	21,196	21,160	21,153	21,005	20,272	19,895	19,807	19,904
Nonagricultural.....	19,532	20,327	20,056	19,994	19,627	19,607	19,386	19,290	19,422	19,233	19,084	19,104	19,161
Worked 35 hours or more.....	14,018	14,689	12,736	13,831	13,852	12,995	12,222	13,166	13,665	13,833	13,779	13,540	14,004
Worked 15-34 hours.....	3,321	3,475	4,932	3,823	3,192	2,841	2,837	3,098	3,300	3,073	3,119	3,336	2,903
Worked 1-14 hours.....	1,529	1,585	1,649	1,523	1,504	1,308	1,326	1,402	1,727	1,558	1,520	1,544	1,505
With a job but not at work ²	684	579	740	817	1,080	2,463	3,002	1,624	1,730	769	668	684	748
Agricultural.....	616	752	1,171	1,754	1,898	1,589	1,775	1,863	1,584	1,039	811	703	743
Worked 35 hours or more.....	178	248	422	1,010	1,070	789	779	841	689	329	305	274	263
Worked 15-34 hours.....	337	403	608	614	712	652	792	848	753	598	420	345	377
Worked 1-14 hours.....	71	82	126	124	103	119	165	136	116	94	64	72	89
With a job but not at work ²	21	20	14	6	13	28	38	38	25	18	21	13	14

¹ Estimates are subject to sampling variation which may be large in cases where the quantities shown are relatively small. Therefore, the smaller estimates should be used with caution. Data refer to the week including the 12th of the month. All data exclude persons in institutions. Because of rounding, the individual figures do not necessarily add to group totals.

² Census survey week contained legal holiday.

³ Includes persons who had a job or business, but who did not work during the survey week because of illness, bad weather, vacation, labor dispute, or because of temporary layoff with definite instructions to return to work within 30 days of layoff. Also includes persons who had new jobs to which they were scheduled to report within 30 days.

SOURCE: U. S. Department of Commerce, Bureau of the Census.

TABLE A-2: Employees in nonagricultural establishments, by industry¹

[In thousands]

Industry	1957		1956										Annual average		
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1956	1955
Total employees.....	51,297	53,134	52,484	52,455	52,261	51,881	50,896	51,709	51,197	50,848	50,499	50,246	50,284	51,490	49,950
Mining.....	801	811	811	812	818	817	746	812	786	790	783	780	777	795	770
Metal.....	109.3	109.1	110.0	110.9	112.1	108.7	85.1	110.5	108.4	109.3	107.3	106.9	105.7	106.9	101.0
Iron.....	33.8	34.6	34.6	36.0	36.8	34.6	10.6	36.0	35.1	35.9	34.1	34.0	33.7	32.9	33.7
Copper.....	35.1	35.2	35.0	35.1	34.8	34.7	34.5	34.0	33.9	33.8	33.6	33.4	33.4	34.4	29.2
Lead and zinc.....	17.8	17.9	17.5	17.5	17.2	17.2	17.5	17.3	17.3	17.3	17.3	17.0	16.2	17.3	16.6
Anthracite.....		34.3	33.0	32.7	32.1	32.3	31.3	31.5	26.5	31.4	32.1	34.0	33.3	31.9	33.5
Bituminous coal.....	233.6	233.4	232.0	232.1	231.2	227.5	182.5	226.0	223.6	222.9	223.1	224.5	222.9	223.5	216.7
Crude petroleum and natural-gas production.....		323.5	323.0	321.5	327.3	332.1	332.7	329.1	315.3	314.9	313.5	309.9	310.4	320.9	312.1
Nonmetallic mining and quarrying.....	106.1	110.7	113.3	114.6	115.5	115.9	114.6	115.1	112.6	111.1	107.3	104.5	104.8	111.7	107.0
Contract construction.....	2,754	2,998	3,191	3,301	3,340	3,353	3,270	3,257	3,040	2,853	2,669	2,588	2,588	3,037	2,780
Nonbuilding construction.....	489	551	594	606	607	591	591	539	477	425	399	403	522	501	501
Highway and street.....	198.6	237.6	269.3	280.3	282.7	276.6	271.9	242.1	204.5	168.0	153.2	156.5	227.9	222.9	222.9
Other nonbuilding construction.....	290.2	313.7	325.0	325.3	324.7	314.7	319.2	296.7	272.4	256.8	245.6	246.3	294.5	278.2	278.2
Building construction.....	2,509	2,640	2,707	2,734	2,746	2,679	2,666	2,501	2,376	2,244	2,189	2,185	2,515	2,279	2,279
General contractors.....	1,024.8	1,093.3	1,137.7	1,153.9	1,166.2	1,134.4	1,126.4	1,038.4	981.8	914.2	878.4	880.0	1,043.4	937.7	937.7
Special-trade contractors.....	1,484.2	1,546.4	1,568.8	1,579.7	1,579.6	1,544.9	1,539.6	1,462.4	1,394.4	1,330.1	1,310.7	1,304.8	1,471.5	1,341.6	1,341.6
Plumbing and heating.....	343.7	349.8	354.2	353.2	349.6	344.6	340.3	327.4	317.3	313.5	310.2	311.9	334.5	318.3	318.3
Painting and decorating.....	181.9	198.9	208.7	216.9	220.7	209.7	205.0	185.6	166.2	147.3	144.3	142.5	185.6	165.6	165.6
Electrical work.....	211.2	209.7	208.4	204.4	199.3	194.0	187.6	179.1	173.7	170.7	170.6	172.2	190.0	169.1	169.1
Other special-trade contractors.....	747.4	788.0	797.5	805.2	810.0	796.6	806.7	770.3	737.2	698.6	685.6	678.2	761.4	688.6	688.6
Manufacturing.....	16,935	17,129	17,151	17,222	17,121	17,034	16,291	16,809	16,715	16,769	16,764	16,824	16,842	16,893	16,557
Durable goods ¹	9,944	10,031	10,024	9,958	9,788	9,743	9,277	9,764	9,747	9,795	9,730	9,776	9,811	9,791	9,536
Nondurable goods ²	6,991	7,098	7,127	7,264	7,333	7,291	7,014	7,045	6,968	6,974	7,034	7,048	7,031	7,102	7,021
Ordnance and accessories.....	132.0	133.4	131.5	131.0	131.6	129.3	130.9	130.5	129.4	129.6	129.7	130.2	131.1	130.6	139.2
Food and kindred products.....	1,490.8	1,542.2	1,593.9	1,690.6	1,784.1	1,751.7	1,631.9	1,575.0	1,509.4	1,475.0	1,468.1	1,459.7	1,466.6	1,577.8	1,544.7
Meat products.....	352.9	352.7	348.2	343.1	342.0	339.7	337.0	332.5	328.7	324.3	324.6	332.2	336.7	340.1	327.6
Dairy products.....	108.5	110.2	112.0	116.9	122.3	124.1	121.7	116.1	112.3	108.4	105.5	104.4	113.6	113.9	113.9
Canning and preserving.....	194.6	230.0	323.5	426.8	389.7	272.9	223.2	192.6	179.2	172.0	171.7	173.1	243.7	231.5	231.5
Grain-mill products.....	117.4	117.3	121.0	122.1	123.0	123.6	121.9	118.4	117.2	117.9	117.7	117.9	119.7	121.7	121.7
Bakery products.....	293.4	294.8	295.7	293.0	294.7	294.2	295.2	289.4	288.0	286.7	287.2	286.9	291.6	285.9	285.9
Sugar.....	42.3	46.2	44.5	30.4	27.7	28.0	28.0	26.9	26.6	26.8	27.5	31.3	32.6	32.4	32.4
Confectionery and related products.....	85.9	87.1	87.6	84.3	78.3	70.3	71.8	74.6	74.6	73.2	80.7	81.5	79.5	79.8	79.8
Beverages.....	211.7	218.0	218.4	226.4	229.9	234.3	229.0	216.1	209.6	205.9	200.1	200.3	216.9	211.5	211.5
Miscellaneous food products.....	135.5	137.6	139.7	140.9	144.1	144.8	147.2	142.8	138.8	137.6	137.1	134.5	140.1	140.4	140.4
Tobacco manufactures.....	98.4	105.8	110.2	119.1	121.6	111.4	86.1	88.5	88.1	88.2	90.1	98.5	103.6	100.9	103.5
Cigarettes.....	34.3	34.6	34.2	34.3	34.5	34.2	34.7	34.2	33.7	33.7	33.8	34.1	34.2	33.0	33.0
Cigars.....	35.0	35.2	34.6	34.4	34.0	32.8	34.5	34.5	35.3	35.7	37.3	37.0	35.0	38.3	38.3
Tobacco and snuff.....	6.8	6.8	6.8	7.0	6.9	6.9	7.1	7.1	7.2	7.2	7.2	7.2	7.0	7.4	7.4
Tobacco stemming and redrying.....	29.7	33.6	43.6	45.9	36.0	12.2	12.4	12.3	12.0	13.5	20.2	25.3	24.7	24.8	24.8
Textile-mill products.....	1,023.0	1,033.6	1,039.6	1,041.8	1,039.3	1,040.5	1,013.3	1,050.9	1,054.6	1,061.4	1,071.5	1,081.4	1,082.7	1,050.7	1,075.4
Scouring and combing plants.....	6.2	6.2	6.1	6.3	6.4	6.2	6.3	6.2	6.3	6.5	6.5	6.4	6.3	6.5	6.5
Yarn and thread mills.....	119.8	119.9	119.2	119.6	119.9	118.7	121.8	123.1	125.0	126.4	128.0	128.1	122.5	129.9	129.9
Broad-woven fabric mills.....	447.8	449.1	450.1	450.2	453.3	441.0	459.5	459.7	462.7	465.1	467.2	469.4	456.2	467.4	467.4
Narrow fabrics and small wares.....	28.9	29.6	29.7	29.5	29.2	28.3	29.2	29.7	30.1	30.4	30.7	30.8	29.7	30.5	30.5
Knitting mills.....	219.4	224.1	226.8	224.8	225.8	217.6	223.5	221.3	219.8	222.6	225.2	224.0	222.8	222.4	222.4
Dyeing and finishing textiles.....	84.6	84.9	84.6	83.7	83.6	80.7	85.4	86.4	87.9	89.5	90.3	90.5	86.0	89.2	89.2
Carpets, rugs, other floor coverings.....	50.7	50.5	50.7	50.6	48.8	48.0	51.3	52.3	53.1	53.7	54.3	53.8	51.4	52.4	52.4
Hats (except cloth and millinery).....	12.1	12.0	11.5	12.2	11.9	12.5	12.7	12.6	12.3	13.0	13.8	13.7	12.5	13.2	13.2
Miscellaneous textile goods.....	64.1	63.3	63.1	62.4	61.6	60.3	61.2	63.3	64.2	74.3	65.4	66.0	63.3	63.9	63.9
Apparel and other finished textile products.....	1,195.4	1,224.0	1,222.4	1,224.7	1,211.0	1,213.7	1,149.2	1,180.1	1,178.5	1,198.4	1,248.4	1,262.6	1,234.8	1,212.1	1,206.6
Men's and boys' suits and coats.....	122.8	122.1	122.3	123.1	123.1	116.1	122.3	122.5	119.7	122.0	122.8	122.8	121.8	119.0	119.0
Men's and boys' furnishings and work clothing.....	300.1	305.7	312.5	311.8	314.6	301.8	311.4	312.8	315.5	317.3	319.4	313.6	311.3	309.7	309.7
Women's outerwear.....	376.3	365.3	358.3	354.4	362.3	336.2	339.8	342.8	356.0	385.3	392.0	376.8	362.1	360.4	360.4
Women's, children's undergarments.....	129.4	131.4	130.4	128.8	128.8	119.7	124.6	123.0	126.2	128.1	127.8	124.3	126.5	120.9	120.9
Millinery.....	18.2	16.0	18.8	18.4	18.2	15.8	13.5	13.4	17.1	22.7	24.0	21.6	18.2	20.0	20.0
Children's outerwear.....	70.5	70.0	72.0	70.9	70.3	70.2	71.9	68.8	66.2	69.6	73.0	72.1	70.6	71.7	71.7
Fur goods.....	12.8	13.3	13.4	12.5	12.2	12.7	12.8	11.4	8.4	9.6	10.2	10.9	11.7	12.3	12.3
Miscellaneous apparel and accessories.....	60.0	62.7	64.0	63.3	63.0	57.3	61.8	60.1	61.0	62.1	61.7	59.7	61.4	60.9	60.9
Other fabricated textile products.....	133.9	135.9	133.0	127.8	123.2	119.4	122.0	123.7	128.3	131.7	131.7	133.6	128.5	131.7	131.7

See footnotes at end of table.

TABLE A-2: Employees in nonagricultural establishments, by industry¹—Continued

[In thousands]

Industry	1957		1956										Annual average		
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1956	1955
Manufacturing—Continued															
Lumber and wood products except furniture.....	642.6	672.7	702.3	733.9	751.9	770.7	757.9	765.0	735.3	709.7	686.1	703.6	703.6	724.0	742.8
Logging camps and contractors.....	81.4	95.1	107.7	112.5	119.8	114.9	117.1	99.5	82.4	69.6	83.2	83.0	96.8	100.9	100.9
Sawmills and planing mills.....	356.5	368.7	382.1	389.8	398.6	395.4	398.4	388.3	379.6	372.2	376.3	375.3	381.8	392.0	392.0
Millwork, plywood, and prefabricated structural wood products.....	123.7	126.8	131.1	136.8	139.6	136.4	135.9	134.1	133.7	131.3	131.4	133.6	132.8	139.6	139.6
Wooden containers.....	54.5	54.4	55.6	55.1	55.0	55.2	56.2	56.6	56.4	55.9	55.5	55.3	55.5	55.3	55.3
Miscellaneous wood products.....	56.6	57.3	57.4	57.7	57.7	56.0	57.4	56.8	57.6	57.1	57.2	56.4	57.1	55.0	55.0
Furniture and fixtures.....	371.3	378.5	378.1	382.9	382.0	377.0	365.0	370.6	370.0	373.9	377.5	380.1	380.3	376.0	366.3
Household furniture.....	260.3	260.8	263.5	261.9	257.3	251.1	253.9	254.5	258.6	262.7	266.5	266.6	259.6	257.2	257.2
Office, public-building, and professional furniture.....	48.1	48.1	48.8	49.3	49.6	47.7	48.0	47.3	47.5	47.5	47.1	46.8	48.0	44.1	44.1
Partitions, shelving, lockers, and fixtures.....	41.4	40.3	41.6	42.0	41.7	38.3	40.3	39.4	38.8	38.9	38.6	39.3	39.9	38.3	38.3
Screens, blinds, and miscellaneous furniture and fixtures.....	28.8	28.9	29.0	28.8	28.4	27.9	28.4	28.8	29.0	28.4	27.9	27.6	28.5	26.7	26.7
Paper and allied products.....	573.6	576.3	574.2	574.5	576.0	575.4	567.1	570.6	565.1	563.7	559.6	556.7	558.7	568.4	549.6
Pulp, paper, and paperboard mills.....	287.7	285.0	285.4	287.7	289.4	285.7	286.6	281.6	280.2	278.7	277.3	277.9	283.8	272.9	272.9
Paperboard containers and boxes.....	153.8	155.5	154.8	153.2	152.0	148.8	161.2	150.1	149.1	148.4	145.2	148.8	151.2	146.7	146.7
Other paper and allied products.....	134.8	133.7	134.3	135.1	134.0	132.6	132.8	133.4	134.4	132.5	131.2	132.0	133.4	130.0	130.0
Printing, publishing, and allied industries.....	872.5	878.1	871.1	870.1	860.6	853.9	848.5	850.9	846.9	847.0	844.1	839.6	836.4	854.3	823.0
Newspapers.....	324.1	319.3	320.0	318.0	316.1	315.0	315.8	314.0	312.7	310.5	309.1	304.5	315.1	302.1	302.1
Periodicals.....	69.0	68.0	67.3	65.8	64.5	64.1	64.4	64.7	65.2	65.8	66.4	66.6	65.9	64.4	64.4
Books.....	55.7	55.3	54.8	54.3	54.4	55.0	53.8	53.8	53.9	53.7	52.9	52.1	54.1	51.3	51.3
Commercial printing.....	229.2	227.3	226.5	224.0	222.7	220.6	221.3	220.0	219.8	219.8	218.3	219.9	222.5	214.2	214.2
Lithographing.....	64.0	64.5	64.3	63.6	62.8	62.0	62.5	62.1	62.9	63.1	62.5	62.3	63.1	62.0	62.0
Greeting cards.....	18.6	19.9	20.2	19.7	19.2	18.6	19.2	18.3	17.9	17.9	17.8	18.0	18.8	18.9	18.9
Bookbinding and related industries.....	47.6	47.1	47.6	47.5	47.0	46.0	46.4	46.1	46.3	45.6	45.2	44.7	46.5	42.9	42.9
Miscellaneous publishing and printing services.....	69.9	69.7	69.4	67.7	67.2	67.2	67.5	67.9	68.3	67.7	67.4	68.3	68.3	67.2	67.2
Chemicals and allied products.....	835.3	838.8	837.0	840.4	838.6	835.6	828.1	831.3	833.2	839.0	836.0	827.4	824.3	834.5	810.5
Industrial inorganic chemicals.....	109.9	109.6	110.1	111.0	110.6	110.2	110.7	109.5	109.0	108.8	108.3	108.0	109.6	105.0	105.0
Industrial organic chemicals.....	318.7	317.5	317.2	318.7	320.9	315.4	317.8	316.2	315.6	315.6	315.0	314.3	317.1	308.6	308.6
Drugs and medicines.....	96.6	96.5	96.3	96.4	96.6	96.3	94.1	91.8	93.2	93.0	92.7	92.6	94.7	92.5	92.5
Soap, cleaning and polishing preparations.....	49.4	49.7	50.0	50.0	51.0	49.9	50.0	49.5	49.7	49.7	49.6	49.9	49.9	49.8	49.8
Paints, pigments, and fillers.....	74.9	75.1	75.1	75.5	76.1	75.6	75.3	74.8	74.5	74.2	74.2	74.0	75.0	73.4	73.4
Gum and wood chemicals.....	8.6	8.6	8.5	8.5	8.5	8.4	8.2	8.4	8.3	8.4	8.4	8.4	8.4	8.0	8.0
Fertilizers.....	34.4	33.2	34.7	32.9	30.3	31.4	34.3	43.4	48.5	45.5	37.8	35.9	36.9	36.9	36.9
Vegetable and animal oils and fats.....	42.5	43.4	44.0	42.1	38.1	37.4	37.9	38.9	40.3	41.2	42.5	43.6	41.1	41.5	41.5
Miscellaneous chemicals.....	103.8	103.4	104.5	103.5	103.5	103.5	103.0	100.7	99.9	99.6	98.9	97.6	101.8	94.8	94.8
Products of petroleum and coal.....	253.0	253.4	254.1	255.5	257.6	259.9	252.0	254.7	251.3	250.8	251.5	248.9	249.1	253.2	252.6
Petroleum refining.....	202.2	202.2	202.6	204.4	206.9	204.7	202.5	199.6	199.3	199.7	199.7	198.7	199.2	201.8	201.3
Coke, other petroleum and coal products.....	51.2	51.9	52.9	53.2	53.0	47.3	52.2	51.7	51.5	51.8	50.2	49.9	51.4	51.3	51.3
Rubber products.....	279.1	277.5	257.8	280.3	275.5	271.7	268.5	269.3	275.8	278.7	280.1	283.3	288.9	275.9	274.0
Tires and inner tubes.....	118.6	101.0	119.7	119.6	118.5	118.3	118.6	119.6	120.0	120.4	121.0	121.8	118.4	117.5	117.5
Rubber footwear.....	22.7	23.1	23.6	23.8	23.8	23.5	23.9	24.4	24.7	24.9	25.0	25.0	24.0	22.5	22.5
Other rubber products.....	136.2	133.7	137.0	132.1	129.4	126.7	126.8	131.8	134.0	134.8	137.3	142.1	133.5	134.0	134.0
Leather and leather products.....	369.4	368.2	366.7	367.3	368.5	377.1	369.2	373.7	364.9	372.0	384.7	390.2	385.8	374.2	381.1
Leather: tanned, curried, and finished.....	44.3	44.2	44.2	43.6	44.3	43.4	43.4	44.2	43.9	44.6	44.9	45.1	45.3	44.4	45.0
Industrial leather belting and packing.....	4.7	4.7	4.6	4.7	4.6	4.5	4.5	4.8	5.0	5.0	5.1	5.2	4.8	4.9	4.9
Boot and shoe cut stock and findings.....	17.6	17.5	17.1	16.8	17.4	17.2	17.6	17.0	17.1	18.2	19.1	18.2	17.7	17.5	17.5
Footwear (except rubber).....	238.5	235.0	233.2	235.7	243.0	239.6	243.4	239.0	243.2	251.4	254.7	253.5	242.6	247.6	247.6
Luggage.....	15.1	15.1	15.4	15.5	16.1	15.8	16.5	16.2	15.7	15.7	15.6	15.1	15.6	16.6	16.6
Handbags and small leather goods.....	30.1	31.6	33.6	32.8	32.5	30.0	28.7	26.0	28.6	32.0	33.5	31.6	30.9	32.4	32.4
Gloves and miscellaneous leather goods.....	17.9	18.6	19.2	19.4	19.2	18.7	18.8	18.0	17.8	17.5	17.1	16.3	18.2	17.1	17.1
Stone, clay, and glass products.....	549.6	566.8	572.5	577.3	572.4	575.6	566.7	577.2	572.7	570.6	563.8	556.2	556.7	569.2	550.0
Flat glass.....	34.6	35.0	34.7	34.3	34.2	33.4	33.5	33.8	34.4	33.7	34.0	35.0	34.3	33.5	33.5
Glass and glassware, pressed or blown.....	98.1	99.4	100.0	94.1	96.7	92.4	92.4	97.9	98.2	96.9	96.3	95.2	97.0	94.2	94.2
Glass products made of purchased glass.....	19.1	19.0	18.7	18.3	17.6	16.8	17.2	18.0	18.6	18.5	18.6	18.9	18.2	17.5	17.5
Cement, hydraulic.....	43.2	43.4	43.6	44.0	44.4	43.9	44.0	43.4	43.0	42.3	42.2	42.9	43.4	42.6	42.6
Structural clay products.....	83.2	84.6	87.0	88.4	88.4	88.7	90.0	86.6	85.6	86.0	84.0	83.1	86.4	82.2	82.2
Pottery and related products.....	55.0	55.3	55.4	53.9	54.6	52.4	55.1	55.7	56.1	55.4	53.5	54.2	54.6	53.9	53.9
Concrete, gypsum, and plaster products.....	116.3	119.0	120.9	122.6	123.8	123.2	123.0	121.0	118.0	114.1	111.3	110.8	118.7	112.0	112.0
Cut-stone and stone products.....	20.4	20.6	20.6	20.7	20.4	20.9	21.1	21.0	20.8	20.5	20.1	20.1	20.6	20.2	20.2
Miscellaneous nonmetallic mineral products.....	96.9	96.2	96.4	96.1	95.5	95.0	95.1	95.3	95.9	96.4	96.2	96.5	96.0	93.9	93.9

See footnotes at end of table.

TABLE A-2: Employees in nonagricultural establishments, by industry¹—Continued

[In thousands]

Industry	1957	1956												Annual average	
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1956	1955
Manufacturing—Continued															
Primary metal industries.....	1,361.7	1,355.4	1,350.2	1,347.9	1,342.3	1,306.7	960.9	1,334.1	1,331.0	1,348.6	1,342.5	1,345.9	1,345.6	1,309.6	1,283.1
Blast furnaces, steelworks, and rolling mills.....		667.6	666.4	666.9	669.6	650.6	310.0	663.2	655.2	665.9	661.7	661.7	659.3	633.1	635.3
Iron and steel foundries.....		237.2	235.5	236.1	229.9	233.5	231.6	233.4	236.0	241.3	242.1	245.3	245.8	237.8	230.0
Primary smelting and refining of nonferrous metals.....		73.1	72.5	72.2	72.7	67.3	70.9	69.0	67.9	67.8	67.4	66.4	66.4	69.4	63.8
Secondary smelting and refining of nonferrous metals.....		13.8	13.6	13.9	13.6	13.4	13.3	13.3	13.6	13.8	13.6	13.7	13.5	13.6	12.7
Rolling, drawing, and alloying of nonferrous metals.....		116.6	116.4	114.9	117.0	111.2	116.4	119.5	121.3	122.1	119.2	118.5	119.4	117.8	114.0
Nonferrous foundries.....		80.7	80.7	80.3	77.5	75.2	73.7	74.5	75.7	76.9	77.5	79.1	80.7	77.7	77.1
Miscellaneous primary metal industries.....		166.4	165.1	163.6	162.0	155.5	145.0	161.2	161.3	160.8	161.0	161.2	160.5	160.2	150.2
Fabricated metal products (except ordnance, machinery, and transportation equipment).....	1,133.7	1,143.5	1,143.5	1,140.6	1,114.7	1,095.0	1,056.0	1,098.1	1,107.1	1,120.6	1,117.0	1,122.2	1,134.5	1,116.4	1,108.1
Tin cans and other tinware.....		53.6	53.4	58.5	61.7	61.6	61.0	60.6	58.9	58.5	56.2	55.0	54.0	57.8	58.3
Cutlery, handtools, and hardware.....		153.0	151.7	148.0	143.8	140.7	137.6	143.7	148.0	154.1	155.0	156.2	158.6	149.3	154.1
Heating apparatus (except electric) and plumbers' supplies.....		113.4	116.7	120.8	120.8	119.2	117.7	122.2	123.0	123.8	124.0	125.2	125.2	121.2	125.7
Fabricated structural metal products.....		321.2	320.6	319.8	317.8	315.6	296.7	309.1	301.4	297.5	293.5	290.1	288.3	305.8	278.2
Metal stamping, coating, and engraving.....		252.2	251.2	246.6	229.9	222.8	217.3	226.0	233.9	240.6	240.8	244.8	252.2	238.4	243.8
Lighting fixtures.....		50.8	50.2	49.7	46.8	45.7	44.7	44.3	45.8	47.7	48.1	48.7	51.5	47.8	51.0
Fabricated wire products.....		63.4	63.1	62.3	60.0		55.4	58.3	59.5	60.4	60.6	61.5	63.2	60.5	60.6
Miscellaneous fabricated metal products.....		135.9	136.6	134.9	133.9	131.7	125.6	133.9	136.6	138.0	138.8	140.7	141.5	135.6	136.4
Machinery (except electrical).....	1,758.0	1,752.4	1,736.4	1,723.9	1,722.8	1,717.5	1,711.7	1,730.7	1,725.9	1,734.0	1,720.1	1,708.4	1,689.1	1,723.6	1,592.3
Engines and turbines.....		86.4	86.2	84.8	83.2	82.0	77.5	77.3	77.0	78.1	77.3	77.3	76.4	80.3	74.5
Agricultural machinery and tractors.....		139.9	133.7	129.1	137.2	137.2	141.6	146.7	148.1	152.4	154.8	156.3	159.3	144.9	153.0
Construction and mining machinery.....		156.7	157.2	158.1	158.0	157.8	155.7	157.7	153.2	154.0	152.2	150.5	147.4	155.3	133.3
Metalworking machinery.....		296.5	293.7	291.1	290.3	288.0	286.3	289.3	290.8	289.1	287.6	284.7	281.5	289.3	264.7
Special-industry machinery (except metalworking machinery).....		194.6	194.3	193.0	193.8	193.2	194.0	194.8	192.4	192.2	191.9	190.3	188.4	192.8	180.0
General industrial machinery.....		275.9	275.1	273.7	272.7	272.1	269.7	266.9	263.7	262.6	258.5	255.4	251.6	266.4	238.6
Office and store machines and devices.....		134.6	133.4	131.2	126.9	127.9	126.8	127.8	126.7	124.8	122.5	120.9	118.4	126.9	110.1
Service-industry and household machines.....		187.5	184.3	185.9	187.0	187.2	190.0	198.8	200.7	205.5	200.8	198.4	193.2	193.3	184.9
Miscellaneous machinery parts.....		280.3	278.5	277.0	273.7	272.1	270.1	271.4	273.3	275.3	274.2	274.6	272.9	274.4	253.2
Electrical machinery.....	1,242.0	1,258.2	1,268.7	1,258.8	1,235.7	1,221.9	1,194.5	1,200.3	1,196.3	1,195.6	1,162.2	1,162.9	1,162.5	1,211.5	1,125.2
Electrical generating, transmission, distribution, and industrial apparatus.....		431.1	429.7	429.6	426.3	422.9	418.9	418.6	417.0	415.8	391.0	387.1	381.8	413.9	382.9
Electrical appliances.....		52.9	52.9	53.3	53.6	53.2	49.6	51.8	51.9	53.3	51.3	50.3	49.4	52.0	46.2
Insulated wire and cable.....		25.2	24.8	24.8	24.1	23.6	23.2	23.4	23.8	23.5	23.7	23.7	23.7	24.0	22.2
Electrical equipment for vehicles.....		78.5	76.9	73.9	70.1	67.4	66.3	67.8	71.1	75.4	76.1	78.0	83.4	73.7	80.3
Electric lamps.....		32.5	32.5	32.5	32.1	31.7	32.2	32.1	31.8	31.4	26.5	26.2	26.9	30.6	27.6
Communication equipment.....		585.1	598.5	591.4	575.6	569.6	554.5	555.1	548.9	544.5	542.5	545.8	546.5	565.0	516.7
Miscellaneous electrical products.....		52.9	53.4	53.3	53.9	53.5	49.8	51.5	51.8	51.7	51.8	51.8	51.8	52.3	49.3
Transportation equipment.....	1,927.7	1,881.5	1,795.1	1,679.5	1,706.8	1,721.9	1,729.8	1,755.2	1,788.9	1,805.6	1,841.4	1,891.3	1,795.1	1,822.0	
Automobiles.....		853.9	825.0	757.8	657.8	695.5	716.0	732.2	775.3	817.8	840.6	875.1	933.8	791.3	896.5
Aircraft and parts.....		867.2	856.6	840.7	829.5	816.8	804.3	790.4	775.5	771.5	766.0	771.5	764.1	804.1	738.4
Aircraft.....		550.1	544.2	535.1	529.0	523.0	514.9	504.7	491.9	489.9	489.9	485.5	493.5	512.0	471.2
Aircraft engines and parts.....		179.4	176.3	172.7	169.6	165.2	163.6	162.4	160.4	160.2	159.0	156.8	154.3	165.2	147.1
Aircraft propellers and parts.....		18.6	18.1	17.6	17.1	16.3	16.0	15.6	15.2	14.9	14.7	14.6	14.3	16.1	13.6
Other aircraft parts and equipment.....		119.1	118.0	115.3	113.8	112.3	109.8	107.7	108.0	106.5	106.5	106.6	106.0	110.8	106.5
Ship and boat building and repairing.....		138.7	132.8	127.9	125.7	126.1	132.8	134.7	131.6	127.9	126.1	124.4	123.8	129.6	123.2
Shipbuilding and repairing.....		116.5	111.6	107.5	105.8	106.8	110.9	110.9	105.9	102.1	102.2	102.4	98.8	98.9	106.5
Boatbuilding and repairing.....		22.2	21.2	20.4	19.9	19.3	21.9	23.8	25.7	25.8	25.9	25.6	24.9	23.1	23.3
Railroad equipment.....		60.8	56.6	57.8	55.5	57.6	58.8	62.2	62.8	62.5	61.8	61.2	61.1	60.2	54.9
Other transportation equipment.....		8.7	10.5	10.9	11.0	10.8	10.0	10.3	10.0	9.2	9.1	9.2	8.5	9.9	9.0
Instruments and related products.....	347.0	346.1	346.3	345.3	343.7	341.4	336.0	336.3	334.8	335.1	334.2	332.6	330.8	338.5	321.8
Laboratory, scientific, and engineering instruments.....		71.5	71.2	70.9	69.4	68.2	67.3	66.1	65.2	64.3	63.6	61.8	60.1	66.7	57.4
Mechanical measuring and controlling instruments.....		87.2	87.4	86.6	85.4	84.8	83.7	83.7	83.5	84.6	84.9	84.8	84.8	85.1	82.4
Optical instruments and lenses.....		14.1	14.0	13.9	14.0	13.6	13.7	13.9	13.9	14.0	14.0	14.0	14.0	13.9	13.8
Surgical, medical, and dental instruments.....		44.0	43.7	43.1	43.1	43.2	42.5	42.9	42.7	42.5	42.3	42.2	41.8	42.8	40.3
Ophthalmic goods.....		27.9	27.8	28.1	28.2	28.4	28.1	28.5	28.5	28.6	28.5	28.2	28.0	28.2	25.9
Photographic apparatus.....		66.8	67.0	66.9	67.6	68.2	67.1	66.7	65.6	65.4	65.3	65.1	65.0	66.4	65.4
Watches and clocks.....		34.6	35.2	35.8	36.0	35.0	33.6	34.5	35.4	35.7	35.6	36.5	37.1	35.4	36.6
Miscellaneous manufacturing industries.....	478.5	494.3	512.9	520.9	511.7	500.8	475.6	491.1	489.1	488.0	491.0	492.5	485.8	496.3	484.7
Jewelry, silverware, and plated ware.....		53.1	53.4	53.9	52.9	51.3	47.8	49.8	50.3	52.0	52.7	53.7	53.4	52.0	52.7
Musical instruments and parts.....		19.9	19.9	19.7	19.3	19.0	18.2	18.7	18.8	18.7	18.9	18.8	18.5	19.1	17.9
Toys and sporting goods.....		85.7	98.0	103.9	102.5	99.3	93.5	96.4	94.0	90.1	86.7	85.2	81.2	93.5	86.9
Pens, pencils, other office supplies.....		32.0	32.6	32.9	32.6	32.3	31.2	31.6	31.5	31.4	31.3	31.0	30.6	31.7	30.7
Costume jewelry, buttons, notions.....		61.2	62.7	64.5	64.2	63.7	59.9	61.3	59.1	59.0	63.3	65.8	64.8	62.4	64.5
Fabricated plastics products.....		89.6	90.6	89.9	87.3	84.3	82.4	83.8	85.0	84.7	85.6	85.5	85.5	86.0	81.5
Other manufacturing industries.....		152.8	155.7	156.1	152.9	150.9	142.6	149.5	150.4	151.2	152.6	152.5	151.8	151.6	150.5

See footnotes at end of table.

TABLE A-2: Employees in nonagricultural establishments, by industry¹—Continued

[In thousands]

Industry	1956												Annual average		
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1956	1955
Transportation and public utilities	4,124	4,169	4,170	4,177	4,179	4,178	4,148	4,181	4,138	4,121	4,106	4,083	4,083	4,145	4,056
Transportation.....	2,715	2,761	2,760	2,769	2,760	2,745	2,717	2,776	2,751	2,737	2,729	2,712	2,719	2,745	2,717
Interstate railroads.....	1,167.3	1,175.2	1,189.0	1,188.6	1,188.6	1,184.6	1,172.8	1,222.6	1,208.4	1,195.8	1,189.1	1,188.3	1,192.6	1,190.0	1,205.3
Class I railroads*.....	1,017.8	1,027.8	1,041.5	1,041.4	1,036.9	1,032.9	1,074.8	1,062.0	1,048.1	1,048.1	1,041.2	1,040.8	1,045.8	1,042.8	1,057.2
Local railways and buslines.....	106.5	106.6	107.1	108.0	108.4	108.8	109.7	110.2	110.7	111.2	109.6	112.2	109.1	115.7	
Trucking and warehousing.....	828.1	826.5	821.1	809.4	799.7	789.2	791.1	783.8	783.3	784.9	777.1	780.2	797.6	762.6	
Other transportation and services.....	659.5	653.0	651.3	654.4	652.2	646.2	652.5	648.5	646.8	643.4	636.9	633.7	647.7	633.7	
Buslines, except local.....	43.3	43.6	44.1	44.6	45.2	44.5	44.5	44.0	43.4	43.2	42.9	43.7	44.0	44.1	
Air transportation (common carrier).....	135.8	134.6	133.6	132.9	132.8	131.4	129.4	127.4	125.3	123.6	120.6	119.3	128.6	113.9	
Communication.....	813	813	814	812	816	824	822	805	798	796	791	787	781	805	753
Telephone.....	770.4	770.7	768.5	772.8	778.4	780.4	778.0	761.4	755.0	748.0	743.4	737.4	761.8	709.8	
Telegraph.....	42.1	42.4	42.6	42.8	42.8	42.8	42.6	42.6	42.6	42.6	42.6	42.6	43.1	42.7	
Other public utilities.....	596	595	596	603	609	609	600	589	588	586	584	583	595	586	
Gas and electric utilities.....	572.8	572.8	573.4	579.7	585.2	584.8	576.8	566.6	565.0	563.2	561.3	560.5	571.9	562.9	
Electric light and power utilities.....	252.5	252.5	252.7	256.5	259.0	258.7	255.4	250.6	250.3	249.4	249.0	248.5	252.9	250.4	
Gas utilities.....	146.9	146.9	147.2	148.3	149.8	149.3	147.6	144.4	143.5	143.0	142.2	142.0	146.0	141.3	
Electric light and gas utilities combined.....	173.4	173.4	173.5	174.9	176.4	176.8	173.8	171.6	171.2	170.8	170.1	170.0	173.0	171.2	
Local utilities, not elsewhere classified.....	22.4	22.6	22.8	23.0	23.6	24.0	23.3	22.5	22.8	22.4	22.4	22.4	22.9	22.7	
Wholesale and retail trade	11,182	12,091	11,496	11,288	11,164	11,047	11,015	11,091	10,985	10,928	10,931	10,819	10,920	11,144	10,803
Wholesale trade.....	3,034	3,070	3,047	3,021	3,003	3,002	2,974	2,955	2,920	2,920	2,926	2,924	2,925	2,974	2,858
Wholesalers, full-service and limited-function.....	1,798.6	1,777.4	1,763.2	1,752.6	1,749.4	1,737.2	1,725.1	1,706.8	1,706.0	1,710.3	1,711.3	1,714.8	1,738.7	1,671.1	
Automotive.....	114.1	114.2	114.8	115.9	117.1	116.7	115.3	114.2	114.1	113.8	114.1	113.7	114.9	112.4	
Groceries, food specialties, beer, wines, and liquors.....	315.9	311.2	306.8	305.8	304.4	303.8	301.8	298.0	299.4	300.8	301.9	301.2	304.1	296.7	
Electrical goods, machinery, hardware, and plumbing equipment.....	469.1	467.8	464.8	465.1	465.7	463.6	460.6	454.0	452.0	449.4	446.5	444.5	458.5	432.2	
Other full-service and limited-function wholesalers.....	899.5	884.2	876.8	865.8	862.2	853.1	847.4	840.6	840.5	846.3	848.8	855.4	861.2	829.8	
Wholesale distributors, other.....	1,271.8	1,269.6	1,258.1	1,250.1	1,252.4	1,236.8	1,229.8	1,213.1	1,213.1	1,215.3	1,212.6	1,209.9	1,235.3	1,187.0	
Retail trade.....	8,148	9,021	8,449	8,267	8,161	8,045	8,041	8,136	8,065	8,008	8,005	7,895	7,995	8,179	7,945
General merchandise stores.....	1,410.1	1,980.9	1,604.2	1,479.0	1,424.1	1,346.5	1,340.2	1,381.6	1,395.4	1,369.9	1,384.1	1,333.4	1,397.0	1,451.8	1,430.9
Department stores and general mail-order houses.....	1,295.8	1,057.5	961.7	922.9	880.9	880.4	902.5	892.5	889.5	883.9	889.7	858.5	902.4	941.2	912.7
Other general merchandise stores.....	685.1	546.7	517.3	501.2	465.6	459.8	479.1	502.9	486.0	494.4	474.9	494.6	510.6	518.2	
Food and liquor stores.....	1,609.5	1,650.5	1,622.1	1,599.4	1,578.9	1,568.9	1,575.4	1,578.2	1,567.3	1,557.1	1,552.6	1,551.0	1,545.8	1,578.6	1,492.0
Grocery, meat, and vegetable markets.....	1,173.9	1,152.3	1,133.2	1,111.6	1,096.9	1,101.7	1,103.8	1,097.5	1,093.9	1,090.0	1,089.4	1,090.5	1,110.5	1,039.8	
Dairy-product stores and dealers.....	227.2	228.8	229.5	236.4	241.8	242.7	240.4	233.3	229.4	225.8	224.0	223.5	232.0	226.6	
Other food and liquor stores.....	249.4	241.0	236.7	230.9	230.2	231.0	234.0	236.5	233.8	236.8	237.6	231.8	236.1	225.6	
Automotive and accessories dealers.....	799.1	805.6	794.6	786.8	788.8	796.4	801.3	801.2	804.1	806.2	810.9	815.5	800.3	801.0	
Apparel and accessories stores.....	569.6	711.3	620.0	600.7	580.4	536.4	545.9	585.1	582.8	576.0	589.5	557.9	571.8	587.6	
Other retail trade.....	3,759.8	3,872.2	3,807.3	3,801.1	3,788.4	3,796.8	3,777.1	3,789.5	3,718.0	3,700.5	3,672.7	3,647.1	3,664.5	3,751.4	
Furniture and appliance stores.....	403.5	392.0	386.9	384.1	382.6	381.3	383.0	383.1	385.2	387.1	388.1	388.1	386.8	382.3	
Drug stores.....	378.6	352.2	351.8	343.6	342.1	340.8	340.7	334.2	334.4	330.5	330.2	332.2	341.7	327.3	
Finance, insurance, and real estate	2,297	2,308	2,313	2,312	2,321	2,355	2,342	2,320	2,289	2,278	2,265	2,250	2,238	2,300	2,215
Banks and trust companies.....	591.9	590.1	586.3	584.6	593.0	591.2	580.0	571.2	570.8	569.7	566.2	561.1	579.7	549.3	
Security dealers and exchanges.....	83.6	83.5	83.2	83.3	84.8	84.5	83.4	82.4	81.8	81.0	80.6	80.1	82.7	77.6	
Insurance carriers and agents.....	833.3	831.4	828.5	835.3	838.2	835.2	822.7	815.1	814.5	814.9	810.8	803.9	823.1	795.4	
Other finance agencies and real estate.....	799.5	807.9	814.2	824.7	839.2	831.3	833.8	820.2	810.4	799.1	792.7	792.7	814.3	792.8	
Service and miscellaneous	5,912	5,972	6,010	6,045	6,105	6,137	6,137	6,089	6,041	5,979	5,859	5,818	5,803	6,000	5,854
Hotels and lodging places.....	462.1	471.5	477.7	477.7	512.2	582.6	580.4	620.6	491.9	486.4	467.7	466.7	457.7	498.0	498.8
Personal services.....	330.0	331.7	332.9	333.7	336.6	341.9	339.3	335.0	331.1	330.2	328.9	330.7	333.6	332.1	
Laundries.....	164.6	165.1	166.9	165.3	161.5	167.4	173.4	169.1	165.4	163.4	160.8	161.8	165.4	163.4	
Cleaning and dyeing plants.....	211.5	216.6	225.6	230.8	230.7	230.4	229.1	232.4	230.5	218.3	214.7	216.9	224.1	230.7	
Motion pictures.....	7,292	7,656	7,342	7,298	7,213	6,960	6,947	7,150	7,203	7,130	7,122	7,084	7,033	7,176	6,915
Federal.....	2,195	2,534	2,201	2,202	2,196	2,208	2,208	2,193	2,176	2,168	2,162	2,160	2,156	2,214	2,188
State and local.....	5,097	5,122	5,141	5,096	5,017	4,752	4,739	4,957	5,027	4,962	4,960	4,924	4,877	4,962	4,727

¹ The Bureau of Labor Statistics series on employment in nonagricultural establishments are based upon reports submitted by cooperating firms. These reports cover all full- and part-time employees in private nonagricultural establishments who worked during, or received pay for, any part of the pay period ending nearest the 15th of the month. Because of this, persons who worked in more than one establishment during the reporting period will be counted more than once. In Federal establishments the data generally refer to persons who worked on, or received pay for, the last day of the month. Proprietors, self-employed persons, unpaid family workers, and domestic servants are excluded. These employment series have been adjusted to first-quarter 1955 benchmark levels indicated by data from government social-insurance programs.

Data for the 2 most recent months are subject to revision without notation; revised figures for earlier months will be identified by asterisks the first month they are published.

These data differ in several respects from the nonagricultural employment data shown in the Monthly Report on the Labor Force (table A-1, civilian labor force), which are obtained by household interviews. It includes all persons (14 years and over) with a job whether at work or not, proprietors, self-employed persons, unpaid family workers, and domestic servants.

* Durable goods include: ordinance and accessories; lumber and wood products (except furniture); furniture and fixtures; stone, clay, and glass

products; primary metal industries; fabricated metal products (except ordinance, machinery, and transportation equipment); machinery (except electrical); electrical machinery; transportation equipment; instruments and related products; and miscellaneous manufacturing industries.

² Nondurable goods include: food and kindred products; tobacco manufactures; textile-mill products; apparel and other finished textile products; paper and allied products; printing, publishing, and allied industries; chemicals and allied products; products of petroleum and coal; rubber products; and leather and leather products.

³ State and local government data exclude, as nominal employees, elected officials of small local units and paid volunteer firemen.

* Beginning with January 1956, class I railroads include only those having annual operating revenues of \$3,000,000 or more. This class formerly included all railroads having annual operating revenues of \$1,000,000 or more.

SEE footnote 1, p. 375.

NOTE.—Information on concepts, methodology, etc., is given in a technical note on Measurement of Industrial Employment, which appeared in the September 1953 Monthly Labor Review.

TABLE A-3: Production workers in mining and manufacturing industries ¹

[In thousands]

Industry	1957	1956											Annual average		
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1956	1955
Mining:															
Metal.....		93.5	94.2	94.5	95.8	92.8	68.9	94.5	92.9	93.6	91.8	91.2	90.7	91.0	86.1
Iron.....		29.7	30.4	31.7	32.3	30.2	6.0	31.5	30.9	31.4	29.5	29.3	29.3	28.4	29.2
Copper.....		29.8	29.9	29.6	29.8	29.6	29.4	29.3	28.8	28.8	28.9	28.6	28.7	29.3	24.6
Lead and zinc.....		15.2	15.2	14.9	14.9	14.7	14.7	14.9	14.8	14.8	14.8	14.5	13.8	14.7	14.2
Anthracite.....		31.8	30.4	29.9	29.3	29.6	28.6	28.8	24.2	28.6	29.1	30.8	29.9	29.1	30.3
Bituminous coal.....		213.8	212.5	212.6	212.0	208.8	163.1	206.1	203.7	203.0	203.5	205.6	204.8	204.1	198.7
Crude petroleum and natural-gas production:															
Petroleum and natural-gas production (except contract services).....		129.5	129.3	129.3	132.5	136.4	137.6	134.8	128.5	128.6	127.6	128.3	128.4	130.9	129.4
Nonmetallic mining and quarrying.....		94.6	97.2	98.5	99.3	99.5	97.9	98.5	96.4	95.1	91.4	89.1	89.5	95.7	91.7
Manufacturing.....	13,117	13,316	13,353	13,439	13,335	13,245	12,514	13,078	13,036	13,114	13,125	13,212	13,260	13,174	13,053
Durable goods ¹	7,709	7,798	7,802	7,751	7,583	7,541	7,081	7,602	7,613	7,674	7,621	7,692	7,751	7,630	7,538
Nondurable goods ¹	5,408	5,518	5,551	5,688	5,752	5,704	5,433	5,476	5,423	5,440	5,504	5,520	5,509	5,544	5,515
Ordinance and accessories.....	81.6	82.8	81.8	81.6	81.6	79.6	81.7	83.2	83.4	84.2	83.7	85.7	87.1	83.1	93.8
Food and kindred products.....	1,030.1	1,082.4	1,131.1	1,225.8	1,312.0	1,275.7	1,158.0	1,103.6	1,050.7	1,023.3	1,020.7	1,013.0	1,021.8	1,117.1	1,103.3
Meat products.....		279.1	277.5	273.8	268.9	267.6	264.9	262.1	258.2	256.0	262.4	259.4	264.4	266.3	257.4
Dairy products.....		70.0	71.2	72.8	76.7	80.9	82.5	81.1	77.1	73.6	70.5	68.1	67.1	74.4	75.3
Canning and preserving.....		160.7	195.8	288.3	389.7	353.0	238.4	188.2	159.4	146.9	140.1	140.0	141.1	209.8	199.7
Grain-mill products.....		82.9	82.5	86.0	86.9	87.9	88.2	86.8	83.8	82.9	83.8	83.4	84.0	85.1	87.8
Bakery products.....		173.4	175.4	176.3	174.0	174.7	173.9	174.7	171.6	170.0	169.3	169.4	170.3	172.8	172.1
Sugar.....		36.8	40.2	38.6	25.0	22.4	22.6	22.5	21.8	21.4	21.4	22.0	25.5	27.0	27.0
Confectionery and related products.....		71.2	72.3	72.7	69.6	64.1	56.3	57.7	60.2	60.3	63.7	66.3	67.0	65.0	65.5
Beverages.....		116.9	122.7	122.5	125.2	127.4	132.3	128.6	120.2	116.9	114.5	110.3	110.2	120.8	119.9
Miscellaneous food products.....		91.4	93.5	94.8	96.0	97.7	98.9	101.9	98.4	95.3	95.0	94.1	92.2	95.9	98.6
Tobacco manufactures.....	89.4	96.6	100.8	109.8	112.7	102.6	77.3	79.8	79.5	79.4	81.6	89.7	94.9	92.0	95.0
Cigarettes.....		30.8	30.9	30.7	31.0	31.2	30.7	31.2	30.7	30.2	30.4	30.4	30.8	30.8	30.0
Cigars.....		33.2	33.5	32.9	32.7	32.3	31.0	32.6	32.8	33.7	34.0	35.5	35.2	33.3	36.5
Tobacco and snuff.....		5.7	5.7	5.7	5.9	5.9	5.8	6.0	6.0	6.0	6.1	6.1	6.2	5.9	6.3
Tobacco stemming and redrying.....		26.9	30.7	40.5	43.1	33.2	9.8	10.0	10.0	9.5	11.1	17.7	22.7	22.0	22.2
Textile-mill products.....	932.2	943.2	948.9	951.6	948.8	949.7	922.0	959.6	963.1	971.0	980.5	989.0	990.9	960.2	982.3
Scouring and combing plants.....		5.7	5.6	5.6	5.8	5.9	5.7	5.7	5.6	5.7	6.0	6.0	5.9	5.8	5.9
Yarn and thread mills.....		110.5	110.9	110.2	110.6	110.9	109.6	112.7	113.9	115.7	117.1	118.6	118.8	113.3	120.4
Broad-woven fabric mills.....		421.2	422.4	423.2	423.2	426.4	414.2	432.3	432.4	436.1	438.0	440.0	442.5	429.3	439.6
Narrow fabrics and small wares.....		25.4	26.0	26.1	26.0	25.6	24.8	25.5	26.1	26.6	26.9	27.2	27.2	26.2	26.6
Knitting mills.....		199.2	203.9	207.1	205.0	205.7	197.7	203.8	201.8	200.2	202.8	205.0	203.4	203.1	201.7
Dyeing and finishing textiles.....		74.1	74.3	74.0	73.2	73.0	70.0	74.3	75.0	76.7	78.1	78.8	79.0	75.0	78.0
Carpets, rugs, other floor coverings.....		42.4	42.2	42.5	42.4	40.5	39.4	43.2	44.3	45.2	45.7	46.0	45.9	43.3	44.2
Hats (except cloth and millinery).....		10.8	10.5	10.0	10.6	10.4	10.8	11.1	11.1	10.8	11.5	12.0	12.2	11.0	11.7
Miscellaneous textile goods.....		53.9	53.1	52.9	52.0	51.3	49.8	51.0	52.9	54.0	54.4	55.4	56.0	53.2	54.2
Apparel and other finished textile products.....	1,062.1	1,089.5	1,087.9	1,091.4	1,079.2	1,082.3	1,020.3	1,049.2	1,048.9	1,067.8	1,116.1	1,130.9	1,104.8	1,080.8	1,077.3
Men's and boys' suits and coats.....		110.5	109.9	110.2	111.0	111.1	104.7	110.2	110.2	107.4	109.7	111.0	109.7	109.7	107.1
Men's and boys' furnishings and work clothing.....		273.9	280.0	287.2	286.6	289.6	277.0	286.6	288.0	291.4	292.8	295.4	289.3	286.6	285.6
Women's outerwear.....		334.3	323.6	316.7	313.3	321.0	296.0	299.0	303.5	315.1	343.3	350.0	336.1	321.0	319.5
Women's, children's undergarments.....		115.1	116.8	116.0	114.4	112.5	105.6	110.7	109.2	112.1	114.4	114.4	111.3	112.6	107.9
Millinery.....		16.1	14.0	16.5	16.2	16.0	13.8	11.5	11.3	14.9	20.2	21.2	19.3	16.0	17.7
Children's outerwear.....		62.8	62.3	64.5	63.6	63.0	63.0	64.4	61.3	58.7	62.4	65.5	64.6	63.1	64.8
Fur goods.....		9.8	10.0	10.3	9.7	9.4	9.5	9.5	8.4	5.6	6.7	7.0	7.9	8.7	9.3
Miscellaneous apparel and accessories.....		54.2	56.1	57.5	57.1	56.9	51.4	55.7	53.8	54.7	55.8	55.3	53.2	51.5	54.5
Other fabricated textile products.....		112.8	115.2	112.5	107.3	102.8	99.3	101.6	103.2	107.9	110.8	111.1	113.4	108.0	110.9
Lumber and wood products (except furniture).....	575.4	604.0	634.2	663.6	681.4	700.0	687.9	696.1	666.7	641.7	618.5	635.3	634.7	654.9	675.2
Logging camps and contractors.....		74.6	88.3	100.0	105.0	112.5	108.0	110.0	92.8	76.6	63.4	76.0	76.1	89.9	94.3
Sawmills and planing mills.....		326.2	338.8	351.1	359.2	368.2	365.6	369.1	358.9	350.2	343.7	347.9	346.1	352.1	363.4
Millwork, plywood, and prefabricated structural wood products.....		102.6	105.8	110.0	114.8	117.2	113.9	114.0	112.2	111.7	109.1	109.4	111.1	110.9	117.7
Wooden containers.....		50.2	50.2	51.3	50.9	50.7	50.7	52.0	52.2	52.0	51.7	51.2	51.2	51.2	51.0
Miscellaneous wood products.....		50.4	51.1	51.2	51.5	51.4	49.7	51.0	50.6	51.2	50.6	50.8	50.2	50.8	48.8
Furniture and fixtures.....	310.6	317.8	317.6	322.1	321.3	316.1	303.8	310.5	310.8	315.0	318.3	321.9	321.7	316.4	309.3
Household furniture.....		225.3	226.0	228.6	227.2	222.6	216.6	219.3	220.4	224.6	228.2	232.6	232.3	225.2	223.7
Office, public-building, and professional furniture.....		38.9	38.9	39.4	39.8	40.0	38.4	38.7	38.2	38.3	38.5	38.2	38.0	38.9	35.6
Partitions, shelving, lockers, and fixtures.....		31.2	30.1	31.5	31.9	31.6	27.6	30.5	29.7	29.3	29.7	29.6	30.4	30.2	29.5
Screens, blinds, and miscellaneous furniture and fixtures.....		22.4	22.6	22.6	22.4	21.9	21.2	22.0	22.5	22.5	21.9	21.5	21.0	22.1	20.5

See footnotes at end of table.

TABLE A-3: Production workers in mining and manufacturing industries¹—Continued

[In thousands]

Industry	1957		1956										Annual average		
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1956	1955
Manufacturing—Continued															
Paper and allied products	465.8	468.5	467.4	467.9	469.7	468.8	460.6	465.6	462.4	460.2	457.1	455.5	457.6	463.7	452.2
Pulp, paper, and paperboard mills		237.6	235.4	235.7	238.0	239.1	235.7	237.9	234.3	232.3	231.3	230.4	231.5	235.2	228.9
Paperboard containers and boxes		125.1	127.0	126.5	125.3	124.1	120.4	123.1	122.2	121.2	121.0	121.0	121.4	123.2	120.2
Other paper and allied products		105.8	105.0	105.7	106.4	105.6	104.5	104.6	105.9	106.7	104.8	104.1	104.7	105.3	103.1
Printing, publishing, and allied industries	561.3	567.6	563.8	563.5	556.8	550.1	543.6	549.1	546.6	547.4	544.8	540.3	538.2	551.3	528.6
Newspapers		162.7	160.0	160.0	158.4	156.1	154.7	157.2	157.0	155.7	153.7	153.0	150.7	156.6	150.4
Periodicals		28.9	29.0	29.1	28.5	27.7	27.8	28.0	28.2	28.9	28.8	28.3	28.3	28.5	26.9
Books		35.4	34.8	34.3	34.3	33.8	33.5	33.5	33.5	33.8	33.4	32.6	32.2	33.8	31.1
Commercial printing		185.5	184.1	183.9	181.7	180.6	178.3	179.7	178.6	178.3	179.5	178.3	179.7	180.8	173.8
Lithography		49.0	49.2	48.7	48.2	47.5	46.5	47.1	46.5	47.2	47.5	47.1	46.4	47.6	46.9
Greeting cards		13.2	14.2	14.7	14.5	14.1	13.5	13.9	13.1	12.7	12.6	12.9	13.5	13.5	13.9
Bookbinding and related industries		38.6	38.2	38.7	38.6	37.9	37.1	37.5	37.3	37.5	36.8	36.3	35.6	37.5	34.3
Miscellaneous publishing and printing services		54.3	54.3	54.1	52.6	52.4	52.2	52.2	52.4	53.3	52.4	52.1	52.4	53.0	51.3
Chemicals and allied products	547.7	552.0	550.3	554.4	552.5	548.7	543.5	552.4	559.4	569.0	566.1	557.5	556.2	555.2	546.1
Industrial inorganic chemicals		75.4	75.6	76.0	76.6	75.9	75.5	76.5	76.0	75.8	76.0	75.8	76.0	75.9	74.1
Industrial organic chemicals		215.3	213.5	213.7	214.5	217.2	213.3	219.1	219.5	221.2	221.1	220.6	219.7	217.6	215.0
Drugs and medicines		56.3	56.5	56.2	56.7	56.6	56.7	55.5	54.4	55.9	55.6	55.6	56.0	55.9	56.1
Soap, cleaning and polishing preparations		29.7	29.9	29.9	30.3	30.6	29.7	29.8	29.4	29.8	29.9	29.6	30.1	29.9	30.1
Paints, pigments, and fillers		46.7	46.7	46.8	47.1	47.7	47.2	46.9	46.9	46.9	46.9	46.9	46.9	47.0	46.5
Gum and wood chemicals		7.2	7.2	7.2	7.2	7.2	7.1	6.8	7.1	7.0	7.1	7.1	7.1	7.1	6.8
Fertilizers		25.4	24.2	25.8	24.1	21.7	22.7	25.4	34.4	39.7	36.6	28.9	27.1	28.0	28.0
Vegetable and animal oils and fats		30.0	30.7	31.5	29.7	26.0	25.2	25.7	26.7	28.1	28.9	30.0	30.9	28.7	28.7
Miscellaneous chemicals		66.0	66.0	67.3	66.3	65.8	66.1	66.4	65.0	64.6	64.0	63.0	62.4	65.1	60.8
Products of petroleum and coal	173.1	173.8	174.8	175.2	176.2	177.9	169.6	174.5	171.6	171.3	171.8	169.7	170.5	173.0	173.7
Petroleum refining		132.6	132.9	133.3	133.1	135.1	133.6	132.4	129.9	130.0	130.0	129.3	130.1	131.7	132.2
Coke, other petroleum and coal products		41.2	41.9	42.9	43.1	42.8	36.0	42.1	41.7	41.3	41.8	40.4	40.4	41.3	41.5
Rubber products	217.0	216.3	198.9	220.0	215.4	210.8	208.0	208.5	216.0	218.7	220.8	224.5	229.5	216.2	216.3
Tires and inner tubes		89.8	74.8	91.7	91.6	89.8	90.0	90.1	91.6	91.8	92.6	93.2	93.7	90.5	92.6
Rubber footwear		18.4	18.7	19.1	19.3	19.2	18.9	19.4	20.0	20.3	20.7	20.9	21.0	19.7	18.2
Other rubber products		108.1	105.4	109.2	104.5	101.8	99.1	99.0	104.4	106.6	107.5	110.4	114.8	106.0	107.9
Leather and leather products	329.1	328.4	326.9	328.0	328.9	337.5	330.0	333.6	324.8	331.5	344.1	349.5	345.0	334.3	340.4
Leather: tanned, curried, and finished		39.8	39.5	39.6	39.1	39.9	39.0	39.7	39.5	40.1	40.3	40.6	40.7	39.8	40.5
Industrial leather belting and packing		3.6	3.5	3.5	3.5	3.5	3.4	3.4	3.7	3.9	3.9	4.0	4.0	3.7	3.7
Boot and shoe cut stock and findings		15.8	15.1	15.3	15.0	15.5	15.3	15.7	15.1	15.3	16.4	17.3	17.0	15.8	15.7
Footwear (except rubber)		214.4	211.0	209.7	211.9	218.7	215.7	219.0	214.3	218.1	226.5	229.8	228.4	218.3	222.8
Luggage		12.7	12.9	13.1	13.2	14.0	13.6	14.2	13.9	13.5	13.3	12.8	13.4	14.2	14.2
Handbags and small leather goods		26.4	27.8	29.8	29.1	28.9	26.4	25.0	22.5	25.0	28.3	29.7	28.0	27.3	28.8
Gloves and miscellaneous leather goods		15.7	16.5	17.0	17.1	17.0	16.6	16.6	15.8	15.6	15.2	14.8	14.1	16.0	14.7
Stone, clay, and glass products	457.4	473.2	478.9	484.3	477.8	482.4	472.9	484.2	479.9	478.2	472.2	465.8	467.5	476.5	462.1
Flat glass		31.1	31.4	31.1	30.7	30.5	29.8	29.7	30.2	30.6	29.9	30.3	31.3	30.6	30.1
Glass and glassware, pressed or blown		83.1	84.6	85.0	77.7	81.7	77.6	83.2	82.6	83.1	82.0	81.2	80.2	81.9	80.0
Glass products made of purchased glass		16.1	16.0	15.9	15.4	14.9	14.0	14.4	15.4	15.9	15.7	15.8	16.2	15.4	15.0
Cement, hydraulic		36.4	36.6	36.8	37.1	37.5	37.0	37.1	36.4	36.1	35.5	35.3	36.0	36.5	35.8
Structural clay products		73.6	74.9	77.5	78.9	79.1	79.1	80.6	77.3	76.5	74.6	74.2	76.9	73.5	73.9
Pottery and related products		48.3	48.8	48.9	47.4	48.1	45.9	48.4	49.3	49.5	49.0	47.2	48.0	48.2	47.7
Concrete, gypsum, and plaster products		94.0	96.4	98.3	99.9	101.1	100.7	101.4	99.0	96.2	92.6	90.9	90.5	96.8	91.7
Cut-stone and stone products		17.8	18.0	18.0	18.1	17.8	18.2	18.5	18.4	18.2	18.0	17.5	17.6	18.0	17.6
Miscellaneous nonmetallic mineral products		72.8	72.2	72.8	72.6	71.7	70.6	70.9	71.3	72.1	72.9	73.0	73.5	72.2	70.7
Primary metal industries	1,137.3	1,136.5	1,132.0	1,131.6	1,126.2	1,090.8	743.0	1,117.7	1,117.4	1,136.2	1,130.3	1,138.4	1,141.0	1,095.7	1,084.0
Blast furnaces, steelworks, and rolling mills		567.4	567.1	568.9	572.4	552.3	210.6	563.8	557.1	568.2	563.3	566.5	566.5	535.5	544.6
Iron and steel foundries		206.9	205.5	205.7	199.3	203.3	200.9	202.8	205.5	211.1	211.9	215.5	216.6	207.6	201.9
Primary smelting and refining of nonferrous metals		59.0	58.5	58.2	58.8	58.7	57.1	55.6	54.9	54.8	54.6	53.5	53.6	56.1	51.5
Secondary smelting and refining of nonferrous metals		10.4	10.1	10.4	10.2	10.0	9.9	9.8	10.1	10.3	10.3	10.5	10.3	10.2	9.6
Rolling, drawing, and alloying of nonferrous metals		91.7	91.4	90.5	91.9	86.2	91.4	94.8	96.8	97.7	95.4	95.2	95.6	93.2	91.2
Nonferrous foundries		67.1	67.0	66.6	63.9	61.5	60.3	60.9	62.5	63.5	64.1	66.0	67.8	64.2	64.1
Miscellaneous primary metal industries		134.0	132.4	131.3	129.7	123.8	112.8	130.0	130.5	130.6	130.7	131.2	130.6	128.9	121.1
Fabricated metal products (except ordnance, machinery, and transportation equipment)	900.5	910.1	911.3	910.5	885.4	864.1	825.1	870.4	880.9	894.5	893.0	899.2	912.5	888.3	892.9
Tin cans and other tinware		46.5	46.3	51.2	54.4	54.2	53.9	53.4	51.7	51.3	49.0	47.8	46.7	50.5	51.0
Cutlery, handtools, and hardware		123.8	122.7	119.3	115.3	112.0	108.8	114.7	119.0	124.8	126.1	127.4	130.0	120.5	126.5
Heating apparatus (except electric) and plumbers' supplies		86.2	89.2	93.1	93.6	92.0	90.5	94.5	95.8	96.4	96.7	97.6	97.4	93.8	98.9
Fabricated structural metal products		240.4	240.6	241.1	239.2	235.8	215.6	232.8	226.5	224.0	220.7	218.0	216.8	229.1	209.0
Metal stamping, coating, and engraving		210.1	209.7	205.2	188.5	181.3	176.2	184.5	192.3	198.3	199.1	203.5	211.3	196.8	204.5
Lighting fixtures		41.0	40.3	40.2	37.3	36.3	35.3	34.7	36.4	38.2	38.7	39.5	41.8	38.3	41.2
Fabricated wire products		52.7	52.3	51.6	49.4	47.1	45.3	47.8	49.0	50.0	50.3	51.1	52.9	50.0	50.5
Miscellaneous fabricated metal products		109.4	110.2	108.8	107.7	105.4	99.5	108.0	110.2	111.5	112.4	114.3	115.6	109.3	111.3

See footnotes at end of table.

TABLE A-3: Production workers in mining and manufacturing industries¹—Continued

[In thousands]

Industry	1957		1956												Annual average	
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1956	1955	
Manufacturing—Continued																
Machinery (except electrical).....	1,290.3	1,285.5	1,272.9	1,263.6	1,262.3	1,257.2	1,253.5	1,278.2	1,280.9	1,291.8	1,281.0	1,274.3	1,261.3	1,273.0	1,178.3	
Engines and turbines.....	62.6	62.3	61.8	60.6	59.7	55.2	55.6	55.7	57.1	57.1	57.1	57.0	56.3	58.5	53.6	
Agricultural machinery and tractors.....	99.7	94.5	89.0	97.0	96.3	100.6	106.3	107.7	112.3	114.3	115.7	119.2	104.5	113.3		
Construction and mining machinery.....	113.0	113.7	115.0	115.0	115.0	113.2	116.1	112.6	113.5	112.1	110.7	108.0	113.5	96.6		
Metalworking machinery.....	227.7	225.5	223.4	222.7	220.3	218.9	222.2	223.7	222.5	221.4	219.3	217.7	217.7	202.3		
Special-industry machinery (except metalworking machinery).....	137.3	137.3	136.7	137.5	137.0	137.5	138.3	137.4	137.0	137.5	136.7	134.3	137.1	127.9		
General industrial machinery.....	185.0	184.4	183.0	182.3	180.9	180.3	179.4	178.0	178.3	176.0	174.1	171.8	179.5	160.7		
Office and store machines and devices.....	100.9	100.1	98.7	93.8	95.8	94.9	96.5	96.3	94.8	92.9	91.7	90.0	95.7	85.6		
Service-industry and household machines.....	141.1	138.3	140.2	141.0	141.5	143.7	152.9	155.4	159.8	153.9	152.4	147.9	147.3	140.3		
Miscellaneous machinery parts.....	218.2	216.8	215.8	212.4	210.7	209.2	210.9	214.1	216.5	215.8	216.7	216.1	214.5	198.0		
Electrical machinery	891.2	904.3	918.3	913.8	891.4	877.7	854.3	866.4	871.6	874.0	841.5	848.6	853.7	877.5	823.2	
Electrical generating, transmission, distribution, and industrial apparatus.....	304.2	304.2	306.5	302.9	298.9	295.9	300.1	299.9	301.0	275.8	274.7	271.2	294.3	269.3		
Electrical appliances.....	41.4	41.5	42.2	42.6	42.1	38.8	41.0	41.5	43.0	41.1	40.6	39.8	41.3	37.2		
Insulated wire and cable.....	19.8	19.7	19.7	19.1	18.6	18.3	18.7	19.1	18.8	19.0	18.8	18.9	19.1	17.7		
Electrical equipment for vehicles.....	63.7	62.2	59.3	55.5	53.0	51.5	52.9	57.2	60.2	60.8	63.0	68.5	59.0	65.6		
Electric lamps.....	28.4	28.5	28.5	28.3	28.1	28.5	28.3	28.3	28.1	23.2	23.2	22.9	27.1	24.0		
Communication equipment.....	407.8	422.8	418.4	403.1	397.1	384.9	387.2	386.9	384.1	383.5	389.4	393.5	397.8	372.5		
Miscellaneous electrical products.....	39.0	39.4	39.2	39.9	39.9	36.4	38.2	38.7	38.8	38.1	38.9	38.9	38.9	36.9		
Transportation equipment	1,446.8	1,449.4	1,402.0	1,318.9	1,205.0	1,234.9	1,249.9	1,268.5	1,295.3	1,332.4	1,353.7	1,392.4	1,448.7	1,330.3	1,399.4	
Automobiles.....	698.9	669.1	603.8	503.6	541.3	560.6	574.2	613.2	655.3	678.1	713.2	772.4	633.2	740.4		
Aircraft and parts.....	577.9	568.6	554.3	544.9	534.9	523.1	522.5	512.9	512.0	511.5	519.1	517.3	532.7	504.9		
Aircraft.....	365.8	360.3	351.5	346.5	342.0	333.1	332.1	323.2	324.3	323.8	332.1	331.9	338.2	322.4		
Aircraft engines and parts.....	114.6	111.9	109.0	105.8	102.1	101.4	102.1	101.7	100.9	100.9	99.6	98.3	104.2	95.3		
Aircraft propellers and parts.....	12.5	12.1	11.7	11.4	10.8	10.6	10.2	10.2	10.0	9.9	9.9	9.8	10.8	9.3		
Other aircraft parts and equipment.....	85.0	84.3	82.1	81.2	80.0	78.0	77.7	77.8	76.8	76.9	77.5	77.3	79.5	77.9		
Ship and boat building and repairing.....	119.4	113.6	108.6	106.6	107.0	114.3	116.0	113.0	110.0	109.9	106.3	105.9	110.9	105.9		
Shipbuilding and repairing.....	100.3	95.5	91.4	89.8	90.9	95.3	95.4	90.5	87.1	87.1	83.8	84.1	90.9	85.7		
Boatbuilding and repairing.....	19.1	18.1	17.2	16.8	16.1	19.0	20.6	22.5	22.9	22.8	22.5	21.8	20.0	20.2		
Railroad equipment.....	46.1	42.0	43.0	40.6	42.7	43.6	47.3	47.9	47.6	46.8	46.3	46.2	45.3	40.9		
Other transportation equipment.....	7.1	8.7	9.2	9.3	9.0	8.3	8.5	8.3	7.5	7.4	7.5	6.9	8.2	7.3		
Instruments and related products	235.2	236.2	237.3	237.1	235.4	233.3	228.5	231.1	230.9	231.4	230.9	230.5	230.4	232.8	224.5	
Laboratory, scientific, and engineering instruments.....	41.5	41.5	41.1	40.0	39.1	38.5	38.7	38.1	37.6	37.3	36.1	35.5	38.8	33.9		
Mechanical measuring and controlling instruments.....	60.7	61.4	61.2	59.8	59.0	57.7	58.3	58.5	59.5	59.7	59.5	59.8	59.6	58.5		
Optical instruments and lenses.....	10.5	10.5	10.5	10.6	10.4	10.4	10.6	10.7	10.7	10.8	10.8	10.8	10.6	10.6		
Surgical, medical, and dental instruments.....	30.6	30.5	30.1	30.1	30.1	29.5	29.9	29.8	29.7	29.3	29.4	29.2	29.8	27.9		
Ophthalmic goods.....	22.0	21.9	22.2	22.2	22.3	22.2	22.6	22.6	22.7	22.5	22.4	22.4	22.3	20.5		
Photographic apparatus.....	42.8	42.8	42.8	43.3	43.9	43.1	43.1	42.5	42.3	42.3	42.5	42.3	42.9	43.1		
Watches and clocks.....	28.1	28.7	29.2	29.4	28.5	27.1	27.9	28.7	28.9	29.0	29.8	30.4	28.8	30.0		
Miscellaneous manufacturing industries	382.3	397.7	415.3	423.5	414.9	404.4	380.6	395.2	395.0	394.1	397.7	399.7	392.4	401.1	395.5	
Jewelry, silverware, and platedware.....	42.3	42.3	43.1	42.1	40.7	38.0	39.4	39.8	41.4	42.3	43.7	42.9	41.5	42.3		
Musical instruments and parts.....	16.8	16.9	16.7	16.4	16.2	15.4	15.9	16.0	15.9	16.1	16.0	15.7	16.2	15.3		
Toys and sporting goods.....	71.6	82.9	88.3	87.2	84.0	78.5	81.8	79.1	75.3	72.0	70.3	66.5	78.5	73.0		
Pens, pencils, other office supplies.....	23.8	24.4	24.7	24.6	24.1	23.1	23.5	23.5	23.3	23.5	23.3	22.7	23.7	22.8		
Costume jewelry, buttons, notions.....	49.4	50.4	52.2	51.9	51.5	48.3	49.0	48.0	48.7	51.7	54.1	53.1	50.6	53.6		
Fabricated plastics products.....	71.9	72.9	72.4	69.8	67.0	64.8	66.8	68.3	68.2	69.0	69.3	69.6	69.0	66.4		
Other manufacturing industries.....	121.9	125.5	126.1	122.9	120.9	112.5	118.8	120.3	121.3	123.1	123.0	121.9	121.6	122.1		

¹ See footnote 1, table A-2. Production and related workers include working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, janitorial, watchman services, products development, auxiliary production for plant's own

use (e. g., powerplant), and recordkeeping and other services closely associated with the above production operations.

² See footnote 2, table A-2.

³ See footnote 3, table A-2.

SEE footnote 1, p. 375.

TABLE A-4: Indexes of production-worker employment and weekly payrolls in manufacturing industries¹

[1947-49=100]

Period	Employment	Weekly payrolls	Period	Employment	Weekly payrolls	Period	Employment	Weekly payrolls
1939: Average.....	66.2	29.9	1952: Average.....	106.3	136.6	1956: September.....	107.8	165.8
1940: Average.....	71.2	34.0	1953: Average.....	111.8	151.4	October.....	108.7	168.7
1941: Average.....	87.9	49.3	1954: Average.....	101.8	137.7	November.....	108.0	167.7
1942: Average.....	103.9	72.2	1955: Average.....	105.5	152.5	December.....	107.7	170.9
1943: Average.....	121.4	99.0	1956: Average.....	106.5	161.3			
1944: Average.....	118.1	102.8				1957: January.....	106.0	
1945: Average.....	104.0	87.8	1956: January.....	107.2	159.1			
1946: Average.....	97.9	81.2	February.....	106.8	157.7			
1947: Average.....	103.4	97.7	March.....	106.1	157.9			
1948: Average.....	102.8	105.1	April.....	106.0	158.2			
1949: Average.....	93.8	97.2	May.....	105.4	157.3			
1950: Average.....	99.6	111.7	June.....	105.7	158.2			
1951: Average.....	106.4	129.8	July.....	101.2	151.0			
			August.....	107.1	161.4			

¹ See footnote 1, tables A-2 and A-3.

SEE footnote 1, p. 375.

TABLE A-5: Government civilian employment and Federal military personnel

[In thousands]

Unit of Government	1956												1955	Annual average	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1956	1955
Total civilian employment ¹	7,656	7,342	7,298	7,213	6,960	6,947	7,150	7,203	7,130	7,122	7,084	7,033	7,324	7,176	6,915
Federal employment ²	2,534	2,201	2,202	2,196	2,208	2,208	2,193	2,176	2,168	2,162	2,160	2,156	2,436	2,214	2,188
Executive.....	2,507.7	2,174.7	2,175.9	2,169.1	2,181.1	2,182.0	2,166.6	2,150.0	2,142.1	2,135.8	2,134.0	2,130.0	2,410.0	2,187.4	2,161.7
Department of Defense.....	1,034.8	1,037.5	1,041.0	1,038.8	1,046.5	1,046.2	1,040.2	1,030.0	1,025.8	1,022.9	1,022.9	1,022.6	1,023.8	1,034.1	1,027.9
Post Office Department.....	856.9	518.9	514.0	511.4	509.8	510.1	506.1	509.9	509.4	509.4	510.6	508.7	790.5	539.6	530.0
Other agencies.....	616.1	618.3	620.9	618.9	624.8	625.6	620.3	610.0	606.8	603.6	600.5	598.6	595.7	613.7	603.8
Legislative.....	22.0	22.0	22.1	22.1	22.1	21.9	22.1	21.9	21.9	21.9	21.7	21.6	21.4	21.9	21.6
Judicial.....	4.4	4.5	4.4	4.4	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.3	4.1
District of Columbia ³	239.2	231.4	231.2	230.3	233.0	233.7	232.7	228.5	228.6	228.7	228.6	228.1	234.9	231.2	230.0
Executive.....	218.3	210.4	210.1	209.2	211.9	212.8	211.7	207.6	207.8	207.9	207.9	207.6	214.6	210.3	209.4
Department of Defense.....	88.0	88.1	88.3	88.2	89.7	90.1	89.8	88.1	88.1	88.3	88.4	88.5	88.4	88.6	89.3
Post Office Department.....	16.7	8.8	8.7	8.6	8.6	8.6	8.5	8.5	8.6	8.6	8.7	8.5	16.1	9.3	9.3
Other agencies.....	113.7	113.5	113.1	112.4	113.6	114.1	113.3	111.1	111.1	111.0	110.8	110.7	110.1	112.4	111.0
Legislative.....	20.2	20.3	20.4	20.4	20.4	20.2	20.3	20.2	20.1	20.1	20.0	19.8	19.6	20.2	19.8
Judicial.....	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7
State and local employment.....	5,122	5,141	5,096	5,017	4,752	4,739	4,957	5,027	4,962	4,960	4,924	4,877	4,888	4,962	4,727
State.....	1,320.8	1,321.0	1,317.6	1,278.0	1,252.1	1,252.6	1,291.1	1,296.8	1,270.9	1,269.2	1,260.0	1,242.0	1,245.6	1,281.0	1,215.4
Local.....	3,800.9	3,819.9	3,778.4	3,738.8	3,500.3	3,486.7	3,665.4	3,730.1	3,690.8	3,690.9	3,664.1	3,635.2	3,642.5	3,681.4	3,511.2
Education.....	2,347.9	2,349.7	2,316.0	2,192.2	1,878.5	1,877.2	2,125.3	2,245.0	2,242.0	2,250.1	2,241.1	2,210.4	2,200.6	2,189.2	2,060.8
Other.....	2,773.8	2,791.2	2,780.0	2,824.6	2,873.9	2,862.1	2,831.2	2,781.9	2,719.7	2,710.0	2,683.0	2,666.8	2,687.5	2,773.2	2,665.8
Total military personnel ⁴	2,809	2,827	2,829	2,824	2,827	2,839	2,835	2,841	2,865	2,879	2,893	2,908	2,916	2,848	3,025
Army.....	992.3	1,002.4	1,004.1	1,005.6	1,013.5	1,027.3	1,025.8	1,039.4	1,054.7	1,064.4	1,060.5	1,070.7	1,083.6	1,030.1	1,165.8
Air Force.....	915.0	918.3	916.0	911.5	909.0	909.0	910.0	908.2	911.6	911.5	934.2	938.7	936.7	916.1	955.3
Navy.....	672.6	675.0	677.7	676.9	675.1	673.6	669.9	666.2	671.6	674.5	669.4	669.8	666.7	672.7	668.8
Marine Corps.....	200.3	202.1	202.8	201.5	200.9	200.5	200.8	198.6	198.5	199.4	199.7	199.5	200.0	200.4	205.9
Coast Guard.....	28.6	28.8	28.8	28.7	28.7	28.7	28.4	28.7	28.9	29.1	29.2	29.3	29.3	28.8	28.6

¹ Data refer to Continental United States only.² Data are prepared by the Civil Service Commission.³ Includes all Federal civilian employment in Washington Standard

Metropolitan Area (District of Columbia and adjacent Maryland and Virginia counties).

⁴ Data refer to Continental United States and elsewhere.

SEE footnote 1, p. 375.

TABLE A-6: Employees in nonagricultural establishments for selected States¹

[In thousands]

State	1956												1955	Annual Average	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1955	1954
Alabama ²	744.9	738.5	739.0	736.0	720.7	698.6	705.4	706.7	720.0	717.0	712.3	709.9	721.0	690.8	665.5
Arizona	256.2	252.1	248.4	246.7	239.1	241.3	242.0	239.7	239.6	238.3	235.5	234.6	236.8	221.2	204.5
Arkansas	333.8	334.1	335.0	334.8	326.8	328.0	329.7	329.0	324.9	324.4	317.1	317.7	331.1	317.5	307.8
California	4,554.1	4,469.0	4,486.2	4,475.8	4,446.5	4,354.6	4,348.7	4,288.3	4,247.5	4,212.4	4,168.5	4,130.4	4,263.4	4,087.5	3,859.8
Colorado	470.5	466.5	472.2	473.2	470.2	460.1	463.6	451.5	444.8	438.2	433.7	436.3	448.6	433.2	406.9
Connecticut ²	930.1	914.6	911.7	910.6	903.8	904.7	909.6	903.4	898.7	890.0	884.3	884.3	910.5	868.9	855.9
District of Columbia ²	517.0	505.7	503.2	500.9	502.0	504.2	504.2	498.4	497.4	494.9	492.9	492.4	509.1	494.6	490.9
Florida ²	1,128.6	1,079.2	1,039.0	1,015.2	1,006.1	1,003.0	1,015.3	1,030.5	1,051.3	1,058.0	1,055.6	1,045.8	1,041.3	951.0	868.9
Georgia ²	995.5	985.3	982.9	980.3	976.7	963.5	969.9	965.8	961.6	959.1	957.2	955.0	978.9	936.7	891.3
Idaho	143.0	144.4	146.6	147.5	145.9	144.9	144.0	139.7	136.3	134.0	132.3	133.3	140.7	137.5	132.3
Illinois	3,525.7	3,491.3	3,490.7	3,477.7	3,449.4	3,412.8	3,471.5	3,436.9	3,424.8	3,418.4	3,403.7	3,413.5	3,507.6	3,375.0	3,290.3
Indiana ²	1,436.2	1,422.4	1,425.3	1,424.2	1,407.7	1,344.3	1,423.8	1,420.0	1,420.5	1,412.3	1,407.8	1,412.3	1,449.7	1,393.2	1,329.3
Iowa ²	663.9	657.6	665.2	667.3	661.2	656.5	659.6	652.0	648.2	638.2	634.9	637.5	657.6	641.3	624.5
Kansas	556.9	554.3	554.0	554.6	549.9	555.0	557.6	554.0	548.3	545.9	536.4	537.7	550.8	547.5	542.3
Louisiana	750.4	741.3	735.9	734.7	729.8	725.9	724.1	718.6	717.6	715.9	712.8	714.2	735.3	705.1	694.1
Maine	278.8	278.0	281.9	284.2	290.1	286.9	285.7	270.9	262.6	263.1	266.1	267.3	276.2	272.4	269.5
Maryland	878.5	868.7	864.0	865.6	855.4	821.6	853.1	844.2	840.1	832.3	822.2	823.9	848.1	817.8	790.8
Massachusetts ²	1,892.7	1,859.0	1,860.6	1,855.4	1,864.8	1,841.4	1,864.6	1,842.2	1,828.2	1,815.5	1,807.3	1,802.7	1,865.7	1,800.3	1,774.5
Michigan	2,451.1	2,423.6	2,384.1	2,304.1	2,296.1	2,289.1	2,340.4	2,366.6	2,401.9	2,401.4	2,411.3	2,458.5	2,543.4	2,437.1	2,319.4
Minnesota	900.0	900.5	914.0	917.7	906.2	879.7	895.0	882.6	863.5	847.4	846.2	853.1	883.9	865.2	854.6
Mississippi						353.0	351.4	353.3	352.9	351.5	349.1	350.7	365.2	352.7	339.1
Missouri ²	1,323.0	1,301.7	1,299.4	1,294.5	1,291.1	1,290.5	1,300.2	1,289.8	1,288.2	1,287.0	1,274.0	1,278.5	1,321.3	1,277.6	1,254.6
Montana	163.1	164.4	169.2	171.5	172.0	170.8	169.9	163.3	158.0	152.7	152.2	154.7	159.6	160.1	155.0
Nebraska ²	357.1	358.5	361.0	359.7	357.2	359.2	362.1	357.9	355.7	353.5	349.6	350.6	358.5	355.5	348.3
Nevada	85.4	85.0	86.3	88.9	91.0	90.9	88.9	85.3	83.1	81.2	79.7	80.4	84.7	84.0	75.7
New Hampshire	184.2	182.6	184.7	185.7	188.2	186.1	186.0	180.7	177.7	177.8	178.0	177.5	182.8	180.2	174.6
New Jersey	1,922.4	1,909.6	1,907.8	1,910.5	1,908.9	1,897.5	1,904.3	1,874.0	1,869.5	1,852.8	1,842.3	1,841.5	1,899.8	1,853.0	1,819.5
New Mexico ²	200.3	200.5	200.4	197.4	195.4	195.5	195.0	191.6	189.7	187.6	183.8	183.4	188.8	181.6	174.1
New York	6,124.5	6,062.9	6,059.5	6,026.3	5,997.7	5,907.7	5,975.3	5,931.6	5,900.0	5,893.7	5,880.6	5,880.5	6,115.5	5,906.8	5,858.9
North Carolina	1,068.8	1,063.9	1,059.6	1,057.2	1,046.0	1,031.2	1,037.8	1,037.3	1,036.6	1,039.4	1,039.8	1,043.6	1,068.0	1,036.9	1,001.8
North Dakota	116.7	118.8	122.0	122.4	121.4	120.7	119.5	116.9	113.2	108.9	108.0	109.1	113.7	113.5	114.5
Ohio	3,192.9	3,154.1	3,162.4	3,153.3	3,118.4	3,018.1	3,127.6	3,103.9	3,112.7	3,084.3	3,071.5	3,086.6	3,185.0	3,064.7	2,986.2
Oklahoma ²	577.1	576.3	575.8	577.7	573.7	572.8	576.1	574.0	571.7	569.5	562.3	565.0	579.0	559.8	537.9
Oregon	488.1	493.5	509.5	524.0	521.0	511.8	512.9	492.4	480.1	465.1	458.5	457.6	478.4	472.6	453.5
Pennsylvania	3,816.0	3,777.6	3,779.0	3,754.0	3,716.9	3,529.8	3,747.1	3,711.5	3,705.7	3,671.5	3,652.8	3,653.1	3,782.4	3,663.0	3,637.1
Rhode Island	300.6	300.2	298.2	300.0	298.6	294.6	297.3	294.8	296.6	296.0	295.3	296.4	306.0	294.7	288.5
South Carolina ²	542.7	535.9	535.5	536.4	533.1	527.2	534.2	532.6	534.0	533.6	531.7	531.9	546.8	524.7	509.8
South Dakota	125.8	129.9	131.9	131.8	130.4	130.7	131.5	129.3	125.3	120.1	119.3	120.2	124.3	124.4	121.9
Tennessee	873.7	861.5	864.1	862.8	857.1	853.6	853.1	854.1	853.8	851.6	849.2	852.2	879.7	846.2	821.7
Texas	2,454.9	2,419.5	2,410.8	2,402.9	2,387.5	2,377.5	2,383.5	2,354.1	2,344.2	2,333.0	2,316.5	2,313.7	2,375.5	2,292.4	2,206.6
Utah	238.1	239.7	243.3	245.8	237.5	232.6	234.1	231.4	228.5	223.2	218.7	220.7	230.8	223.3	210.7
Vermont	106.0	105.0	106.7	107.5	108.0	106.3	106.3	104.5	103.0	102.7	102.0	101.7	105.1	101.8	101.4
Virginia ²	1,012.0	999.6	997.0	989.5	976.6	972.2	976.6	969.4	958.5	944.3	938.5	935.0	958.5	920.4	882.7
Washington ²	794.2	790.4	799.6	804.9	792.0	782.6	781.1	765.5	753.8	739.9	728.0	730.8	760.3	756.4	728.5
West Virginia ²	508.4	501.8	499.5	496.4	496.2	479.9	496.2	497.6	490.6	486.0	482.2	479.9	498.9	472.7	468.2
Wisconsin	1,155.9	1,146.2	1,154.4	1,171.6	1,158.8	1,148.8	1,139.3	1,125.2	1,118.5	1,114.0	1,108.9	1,111.2	1,114.2	1,105.7	1,064.6
Wyoming	87.2	88.1	92.0	93.0	96.4	94.2	91.4	85.8	82.2	80.4	79.3	80.0	85.0	85.8	85.6

¹ Data for earlier years are available upon request to the Bureau of Labor Statistics or to the cooperating State agency. State agencies also make available more detailed industry data. See table A-7 for addresses of cooperating State agencies.

² Revised series; not comparable with data previously published.

TABLE A-7: Employees in manufacturing industries, by State¹

[In thousands]

State	1956												1955	Annual average	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1955	1954
Alabama ²	246.3	246.8	248.4	248.2	241.4	225.2	229.6	230.3	243.8	242.7	243.7	243.3	242.8	235.4	226.3
Arizona	37.7	37.4	37.1	36.5	34.2	36.4	36.1	35.5	35.1	34.9	34.0	33.4	33.5	31.3	26.5
Arkansas	87.0	89.2	90.7	91.3	88.6	91.1	90.6	90.1	89.6	89.9	88.2	88.1	88.2	85.7	80.8
California	1,238.8	1,239.0	1,269.8	1,267.8	1,271.8	1,203.4	1,188.8	1,172.1	1,162.9	1,155.6	1,139.0	1,126.6	1,145.2	1,121.0	1,048.6
Colorado	76.1	76.5	77.3	75.5	73.7	65.6	71.9	69.7	68.3	67.4	66.5	66.9	68.7	67.1	65.0
Connecticut ²	438.1	435.1	433.9	434.6	428.8	429.3	435.7	435.6	437.8	433.6	432.2	433.0	434.6	418.8	421.2
Delaware ²	59.2	59.3	57.6	61.1	61.1	57.9	59.9	59.7	60.5	59.9	59.8	60.3	61.3	58.3	55.9
District of Columbia ²	16.5	16.4	16.4	16.2	16.1	16.2	16.3	16.2	16.2	16.0	16.0	15.8	16.5	16.2	16.4
Florida ²	163.0	157.6	148.2	144.3	141.0	140.9	145.7	149.2	150.2	151.4	153.6	152.2	151.5	138.5	128.1
Georgia ²	337.5	337.7	336.7	337.0	336.0	330.1	333.1	332.7	333.7	334.4	337.4	337.1	340.4	331.7	309.6
Idaho	26.3	28.7	29.3	29.7	29.1	28.7	27.5	25.8	24.2	23.4	23.7	24.4	25.3	25.2	23.7
Illinois	1,285.3	1,287.8	1,289.9	1,290.5	1,277.7	1,242.0	1,283.0	1,274.7	1,280.1	1,287.6	1,289.5	1,291.8	1,297.8	1,253.7	1,211.7
Indiana ²	616.5	612.9	614.8	609.8	606.8	547.0	608.7	611.2	621.6	623.1	629.5	633.4	640.4	620.2	582.0
Iowa ²	168.8	168.3	170.2	171.5	171.9	167.8	168.1	166.9	167.2	167.9	169.0	170.4	172.5	167.4	161.3
Kansas	128.5	126.8	124.0	124.0	123.9	123.9	123.6	123.6	122.6	122.8	121.9	121.8	121.8	126.2	133.0
Kentucky	175.6	170.0	169.5	169.5	169.1	163.4	168.7	170.7	170.7	170.4	171.7	174.2	181.0	165.7	151.3
Louisiana	148.7	151.8	148.0	147.2	147.8	147.5	146.6	143.8	143.3	143.2	144.4	144.7	151.8	149.0	151.0
Maine	107.5	109.7	112.0	112.4	115.9	111.9	112.4	103.4	100.2	102.8	106.0	106.9	105.5	106.7	106.0
Maryland	276.3	279.0	279.0	279.2	281.0	249.5	272.8	269.2	266.9	264.1	263.9	260.9	263.2	258.9	252.4
Massachusetts ²	715.1	712.4	713.5	707.7	711.8	687.8	711.6	707.6	710.6	717.4	718.2	713.0	717.2	691.8	683.7
Michigan	1,099.8	1,083.0	1,044.6	970.8	984.2	987.4	1,019.9	1,057.2	1,092.9	1,102.3	1,129.2	1,171.3	1,193.6	1,148.9	1,061.2
Minnesota	220.5	220.0	222.3	227.7	231.6	221.7	218.8	215.2	213.1	211.6	209.7	208.4	212.8	209.8	210.3
Mississippi						103.6	103.1	102.6	103.9	104.0	104.6	103.9	103.9	103.5	95.7
Missouri ²	394.1	391.0	388.8	386.4	388.8	386.0	389.0	386.5	389.2	391.6	391.6	391.1	392.3	383.4	382.6
Montana	20.6	21.7	22.7	22.3	22.3	22.0	21.4	20.0	19.0	18.4	18.6	19.5	20.4	20.4	18.3
Nebraska ²	57.3	57.7	58.9	57.8	58.1	58.6	58.4	57.6	56.3	58.0	58.1	58.4	59.7	58.7	58.2
Nevada	5.7	5.7	5.8	5.9	6.1	6.0	5.9	5.7	5.7	5.7	5.7	5.7	5.9	5.7	4.8
New Hampshire	83.1	83.5	83.1	82.6	82.6	81.2	82.9	81.0	81.3	82.9	84.1	83.8	84.3	82.2	79.0
New Jersey	810.5	810.8	810.3	812.5	810.6	796.7	804.8	798.5	804.7	807.3	808.0	805.7	810.1	798.2	791.6
New Mexico ²	19.9	19.8	20.0	19.9	20.1	20.0	19.9	19.4	19.1	18.7	18.4	18.1	18.3	18.1	16.4
New York	1,935.2	1,950.2	1,958.5	1,938.0	1,916.8	1,820.9	1,883.1	1,871.2	1,886.8	1,914.0	1,925.0	1,912.6	1,949.7	1,908.4	1,914.5
North Carolina	465.1	469.8	468.1	468.4	465.9	450.6	453.9	452.1	454.3	457.5	461.5	464.6	466.7	456.9	436.8
North Dakota	6.3	6.6	6.6	6.7	6.8	6.9	6.8	6.6	6.4	6.3	6.2	6.2	6.3	6.4	6.4
Ohio	1,373.9	1,361.0	1,372.1	1,358.3	1,344.3	1,250.3	1,350.9	1,357.5	1,370.1	1,366.4	1,368.2	1,379.0	1,385.2	1,343.9	1,291.3
Oklahoma ²	91.0	92.0	91.8	91.0	90.7	90.0	90.7	90.5	90.7	90.7	90.3	90.5	90.6	87.9	83.0
Oregon	133.1	141.1	152.4	162.2	166.5	161.6	162.5	149.0	142.2	133.2	131.8	130.0	137.4	143.3	135.7
Pennsylvania	1,491.5	1,492.9	1,500.5	1,495.7	1,482.5	1,328.0	1,493.4	1,490.6	1,489.1	1,472.1	1,473.9	1,470.5	1,479.4	1,457.5	1,454.3
Rhode Island	131.2	132.4	132.6	133.2	131.8	127.2	129.1	128.8	130.3	132.5	134.5	134.4	136.0	131.4	128.7
South Carolina ²	229.8	230.2	231.1	232.6	231.8	226.5	231.4	230.5	231.3	233.0	233.8	234.0	234.9	229.8	218.6
South Dakota	11.7	12.0	12.0	11.7	12.0	12.1	12.0	11.5	11.4	11.3	11.2	11.2	11.5	11.6	11.6
Tennessee	291.1	292.7	294.4	295.3	295.4	293.0	292.0	292.6	293.2	292.9	295.3	295.5	299.1	291.3	275.8
Texas	477.8	478.0	476.3	473.5	474.2	464.9	473.6	466.6	463.6	465.0	462.1	459.9	459.6	446.1	428.4
Utah	36.1	36.8	38.5	40.5	36.4	33.4	35.3	33.8	33.2	32.7	32.3	32.5	34.6	33.4	31.2
Vermont	38.8	38.4	38.9	39.1	39.1	37.6	38.7	38.8	38.4	38.7	38.3	38.1	38.4	36.5	36.9
Virginia ²	262.2	264.6	266.7	264.1	261.0	255.0	256.4	255.6	253.9	252.8	253.5	253.7	256.1	250.7	243.2
Washington ²	211.6	213.0	218.3	222.7	218.9	211.8	210.6	204.2	198.8	194.1	192.1	193.4	197.6	202.4	189.9
West Virginia ²	130.6	132.4	131.3	128.7	130.8	121.9	131.7	132.7	132.3	129.9	129.9	129.4	132.2	128.6	125.5
Wisconsin	463.1	461.2	467.1	483.0	476.9	468.5	458.3	454.8	459.0	463.9	462.4	461.3	464.7	450.9	434.4
Wyoming	6.7	6.9	7.1	6.6	6.8	6.8	6.4	6.0	6.0	5.9	5.9	6.3	6.6	6.5	6.6

¹ Data for earlier years are available upon request to the Bureau of Labor Statistics or to the cooperating State agency. State agencies also make available more detailed industry data.

² Revised series; not comparable with data previously published.

Cooperating State Agencies

Alabama—Department of Industrial Relations, Montgomery 4.
 Arizona—Unemployment Compensation Division, Employment Security Commission, Phoenix.
 Arkansas—Employment Security Division, Department of Labor, Little Rock.
 California—Division of Labor Statistics and Research, Department of Industrial Relations, San Francisco 1.
 Colorado—U. S. Bureau of Labor Statistics, Denver 2.
 Connecticut—Employment Security Division, Department of Labor, Hartford 15.
 Delaware—Unemployment Compensation Commission, Wilmington 99.
 District of Columbia—U. S. Employment Service for D. C., Washington 25.
 Florida—Industrial Commission, Tallahassee.
 Georgia—Employment Security Agency, Department of Labor, Atlanta 3.
 Idaho—Employment Security Agency, Boise.
 Illinois—Division of Unemployment Compensation and State Employment Service, Department of Labor, Chicago 6.
 Indiana—Employment Security Division, Indianapolis 25.
 Iowa—Employment Security Commission, Des Moines 8.
 Kansas—Employment Security Division, Department of Labor, Topeka.
 Kentucky—Bureau of Employment Security, Department of Economic Security, Frankfort.
 Louisiana—Division of Employment Security, Department of Labor, Baton Rouge 4.
 Maine—Employment Security Commission, Augusta.
 Maryland—Department of Employment Security, Baltimore 1.
 Massachusetts—Division of Statistics, Department of Labor and Industries, Boston 8.
 Michigan—Employment Security Commission, Detroit 2.
 Minnesota—Department of Employment Security, St. Paul 1.
 Mississippi—Employment Security Commission, Jackson.
 Missouri—Division of Employment Security, Jefferson City.
 Montana—Unemployment Compensation Commission, Helena.

Nebraska—Division of Employment Security, Department of Labor, Lincoln 1.
 Nevada—Employment Security Department, Carson City.
 New Hampshire—Division of Employment Security, Department of Labor, Concord.
 New Jersey—Bureau of Statistics and Records, Department of Labor and Industry, Trenton 25.
 New Mexico—Employment Security Commission, Albuquerque.
 New York—Bureau of Research and Statistics, Division of Employment, State Department of Labor, 500 Eighth Avenue, New York 18.
 North Carolina—Division of Statistics, Department of Labor, Raleigh.
 North Dakota—Unemployment Compensation Division, Workmen's Compensation Bureau, Bismark.
 Ohio—Division of Research and Statistics, Bureau of Unemployment Compensation, Columbus 16.
 Oklahoma—Employment Security Commission, Oklahoma City 2.
 Oregon—Unemployment Compensation Commission, Salem.
 Pennsylvania—Bureau of Employment Security, Department of Labor and Industry, Harrisburg.
 Rhode Island—Division of Statistics and Census, Department of Labor, Providence 3.
 South Carolina—Employment Security Commission, Columbia 1.
 South Dakota—Employment Security Department, Aberdeen.
 Tennessee—Department of Employment Security, Nashville 3.
 Texas—Employment Commission, Austin 19.
 Utah—Department of Employment Security, Industrial Commission, Salt Lake City 10.
 Vermont—Unemployment Compensation Commission, Montpelier.
 Virginia—Division of Research and Statistics, Department of Labor and Industry, Richmond 14.
 Washington—Employment Security Department, Olympia.
 West Virginia—Department of Employment Security, Charleston 5.
 Wisconsin—Statistical Department, Industrial Commission, Madison 3.
 Wyoming—Employment Security Commission, Casper.

TABLE A-8: Insured unemployment under State programs and the program of unemployment compensation for Federal employees,¹ by geographic division and State

[In thousands]

Geographic division and State	1956												1955
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.
Continental United States	1,285.0	1,013.4	878.4	988.3	1,058.6	1,209.5	1,177.6	1,255.5	1,358.5	1,472.4	1,535.0	1,490.9	1,143.6
New England.....	109.3	80.7	66.0	64.8	69.1	83.0	73.7	89.4	103.1	99.1	98.2	105.0	79.6
Maine.....	10.0	7.3	4.8	5.1	5.1	5.9	6.2	10.4	13.1	10.1	10.2	10.7	9.3
New Hampshire.....	5.9	5.3	5.1	6.0	5.4	5.6	5.9	8.2	9.5	7.2	6.2	6.7	5.6
Vermont.....	2.2	1.6	1.3	1.2	1.2	1.6	1.6	1.6	2.1	2.5	2.6	2.4	1.9
Massachusetts.....	59.4	42.9	34.0	31.5	30.1	37.0	34.0	40.8	46.4	46.9	47.4	51.4	39.4
Rhode Island.....	12.8	8.9	8.2	8.0	9.5	12.9	10.8	13.6	15.3	15.4	14.4	14.8	9.4
Connecticut.....	19.0	14.7	12.7	13.0	17.8	20.1	15.2	14.8	16.7	17.1	17.4	18.9	14.0
Middle Atlantic.....	377.9	292.7	259.5	284.0	308.8	376.8	369.5	395.3	425.5	448.3	446.0	469.9	370.2
New York.....	176.3	125.6	102.0	114.4	117.2	161.7	176.2	191.3	201.1	199.3	203.7	219.4	176.0
New Jersey.....	68.2	57.1	50.8	53.3	55.9	65.1	63.2	69.4	78.6	78.9	83.7	88.0	66.9
Pennsylvania.....	133.4	110.0	106.7	116.3	135.7	150.0	130.1	134.6	145.8	170.2	158.6	162.4	127.3
East North Central.....	228.3	193.0	195.4	274.0	277.7	288.9	281.0	275.6	274.9	283.7	283.5	237.8	176.4
Ohio.....	51.4	38.4	30.7	35.2	43.4	48.8	48.9	46.9	51.0	58.3	63.3	54.8	39.5
Indiana.....	29.3	24.4	23.0	29.5	32.7	36.0	33.6	33.4	33.4	34.8	35.6	30.5	20.5
Illinois.....	56.0	51.4	45.8	53.9	58.5	65.6	64.4	65.5	69.0	57.0	62.9	66.4	55.7
Michigan.....	67.8	58.9	83.8	142.7	128.0	121.1	115.9	112.7	101.3	110.9	97.2	61.5	40.9
Wisconsin.....	23.9	19.8	12.2	12.6	15.1	17.4	18.2	17.2	20.2	22.6	24.5	24.6	19.9
West North Central.....	83.6	60.0	46.6	47.6	49.2	51.8	53.3	60.8	82.5	102.4	117.9	110.3	76.1
Minnesota.....	23.1	14.2	9.1	9.1	11.9	11.5	11.1	16.3	28.6	33.7	36.0	33.5	22.3
Iowa.....	9.5	6.2	4.7	4.6	5.7	6.0	6.3	6.0	7.9	11.9	13.4	11.6	7.4
Missouri.....	29.4	26.0	23.5	26.0	22.7	25.0	26.3	27.4	28.6	30.3	34.8	35.0	24.8
North Dakota.....	3.4	1.5	.4	.2	.3	.4	.4	1.0	3.2	4.9	5.4	5.1	3.6
South Dakota.....	2.4	1.1	.5	.4	.5	.5	.5	.7	1.7	3.4	4.1	3.7	2.4
Nebraska.....	6.9	4.3	2.7	2.6	3.0	3.0	3.2	3.8	5.3	8.0	9.6	8.9	6.3
Kansas.....	8.8	6.5	5.7	4.6	5.1	5.3	5.5	5.7	7.2	10.2	14.5	12.6	9.3
South Atlantic.....	116.4	100.8	96.6	109.7	120.8	143.2	130.9	132.3	130.0	128.1	134.6	136.3	103.4
Delaware.....	2.6	1.9	2.2	1.7	1.9	1.8	1.7	1.8	2.0	2.4	2.7	2.5	1.6
Maryland.....	12.2	8.7	8.1	9.3	11.0	13.2	12.2	13.5	14.0	11.6	15.3	17.2	12.0
District of Columbia.....	4.6	4.0	3.7	3.5	3.9	3.9	3.6	3.8	4.5	5.4	6.2	5.8	4.3
Virginia.....	9.4	7.1	6.0	7.7	10.4	14.8	16.0	13.1	10.6	13.6	14.2	13.1	9.3
West Virginia.....	10.3	8.3	7.8	9.1	11.7	13.3	10.1	9.8	10.9	12.4	13.9	14.3	10.3
North Carolina.....	30.1	25.2	20.5	23.2	24.8	34.3	35.6	38.8	40.0	36.0	34.8	33.2	25.3
South Carolina.....	12.7	12.4	12.1	13.8	12.4	14.1	13.0	14.3	13.6	12.4	12.3	13.1	10.1
Georgia.....	21.6	19.1	18.1	19.5	21.5	26.9	24.5	24.7	22.7	21.4	21.2	21.8	17.8
Florida.....	13.0	14.1	18.1	21.9	23.2	21.0	14.1	12.4	11.7	12.9	14.0	15.2	12.7
East South Central.....	97.7	85.8	75.5	76.9	92.7	108.8	110.5	115.1	104.5	106.7	108.7	99.1	75.7
Kentucky.....	29.6	27.3	26.0	26.1	29.1	30.2	30.6	32.4	34.2	34.4	33.7	27.9	21.8
Tennessee.....	36.4	32.1	28.3	28.2	32.8	38.4	36.7	38.5	38.9	39.9	42.4	41.1	30.2
Alabama.....	17.5	15.6	12.8	14.2	20.5	28.4	32.5	32.6	19.0	19.2	18.4	17.7	14.0
Mississippi.....	14.1	10.8	8.4	8.4	10.3	11.7	10.8	11.6	12.4	13.2	14.3	12.3	9.8
West South Central.....	65.3	51.7	42.5	42.9	48.1	50.5	50.5	56.4	65.1	71.1	81.2	70.8	54.1
Arkansas.....	15.0	10.6	7.6	7.1	8.8	9.3	9.0	10.1	12.7	14.5	18.4	16.1	11.3
Louisiana.....	11.2	8.8	7.5	8.6	9.9	11.5	11.9	13.3	15.4	17.0	18.4	15.1	11.3
Oklahoma.....	12.3	9.8	8.1	7.8	8.4	8.7	8.5	9.6	11.1	12.8	15.4	14.1	10.8
Texas.....	26.8	22.5	19.4	19.4	21.0	21.0	21.2	23.4	25.9	26.7	28.9	25.5	20.7
Mountain.....	33.0	21.5	13.5	12.5	14.3	16.3	14.8	19.9	31.2	45.0	52.4	45.0	32.9
Montana.....	5.2	2.3	.9	.7	.8	1.0	1.4	2.7	5.2	8.3	9.1	7.6	5.3
Idaho.....	6.5	3.6	1.6	1.2	1.4	1.6	1.4	2.0	4.2	6.9	8.6	8.2	6.8
Wyoming.....	1.7	.9	.4	.3	.4	.8	.7	1.2	1.9	3.0	3.4	2.6	1.6
Colorado.....	4.7	3.4	2.2	2.0	2.6	3.0	2.0	2.4	3.5	5.3	6.4	5.2	3.8
New Mexico.....	2.7	2.1	1.5	1.5	1.8	1.9	2.1	2.4	3.2	4.2	4.9	4.1	3.4
Arizona.....	4.2	3.5	3.1	3.1	3.4	3.3	3.2	4.3	6.0	7.0	6.9	6.1	4.2
Utah.....	4.8	3.1	1.8	1.8	2.3	3.1	2.4	2.7	4.1	6.2	8.0	6.7	4.6
Nevada.....	3.2	2.7	2.1	1.9	1.6	1.6	1.6	2.2	3.2	4.2	5.0	4.6	3.3
Pacific.....	173.5	127.3	82.8	75.9	78.0	90.2	93.3	110.7	141.6	188.0	212.6	216.7	175.2
Washington.....	41.8	30.6	19.5	15.0	14.4	14.2	11.9	17.2	28.6	42.6	51.2	51.8	46.2
Oregon.....	28.8	19.3	10.1	6.4	5.8	6.3	6.3	8.8	15.9	27.5	30.3	30.3	24.5
California.....	102.9	77.5	53.2	54.6	57.9	69.7	75.1	84.7	97.1	118.0	131.1	134.6	104.5

¹ A average of weekly data adjusted for split weeks in the month. Figures may not add to exact column totals because of rounding.

SOURCE: U. S. Department of Labor, Bureau of Employment Security.

NOTE.—Data for months prior to April 1956 differ from figures previously published because of the inclusion of data for the UCFE program.

TABLE A-9: Unemployment insurance and employment service programs, selected operations ¹

[All items except average benefit amounts are in thousands]

Item	1956												1955	1954
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Dec.
Employment service:														
New applications for work.....	612	674	683	608	660	690	799	732	675	660	733	811	602	665
Nonfarm placements.....	410	474	599	591	577	519	558	567	504	450	402	432	431	393
State unemployment insurance programs: ²														
Initial claims ³	1,229	973	834	761	837	1,119	863	993	984	936	1,049	1,349	1,193	1,450
Insured unemployment ⁴ (average weekly volume).....	1,285	1,013	878	988	1,059	1,209	1,178	1,255	1,359	1,472	1,535	1,491	1,144	1,666
Rate of insured unemployment ⁵	3.3	2.6	2.3	2.6	2.7	3.1	3.1	3.3	3.6	3.9	4.1	4.0	3.1	4.6
Weeks of unemployment compensated.....	3,950	3,503	3,461	3,556	4,286	*4,292	4,503	4,896	5,122	5,775	5,499	5,287	3,787	6,280
Average weekly benefit amount for total unemployment.....	\$27.42	\$27.26	\$27.57	\$27.77	*\$27.05	*\$26.91	\$26.79	*\$26.70	*\$27.03	\$27.13	\$26.95	\$26.61	\$26.10	\$25.22
Total benefits paid.....	\$104,245	\$91,700	\$91,476	\$94,919	\$112,207	\$111,708	\$116,052	\$125,786	\$133,926	\$151,998	\$143,923	\$135,722	\$95,153	\$153,050
Unemployment compensation for veterans: ⁶														
Initial claims ³	23	21	18	18	27	27	29	20	21	26	30	37	32	42
Insured unemployment ⁴ (average weekly volume).....	35	28	24	33	42	41	37	35	44	57	61	58	47	79
Weeks of unemployment compensated.....	145	118	122	169	211	187	*167	175	214	271	262	252	197	350
Total benefits paid ⁷	\$3,883	\$3,168	\$3,258	\$4,499	\$5,630	\$4,970	\$4,452	\$4,694	\$5,722	\$7,274	\$7,050	\$6,726	\$5,230	\$9,381
Railroad unemployment insurance:														
Applications ⁸	17	21	12	11	23	97	18	5	5	7	10	21	21	34
Insured unemployment (average weekly volume).....	59	49	37	41	57	66	19	25	36	48	55	57	47	124
Number of payments ⁹	119	98	89	94	173	85	50	69	95	126	124	129	107	297
Average amount of benefit payment ⁹	\$58.08	\$58.04	\$59.19	\$58.92	\$58.23	\$48.89	\$52.66	\$53.03	\$54.70	\$57.40	\$57.67	\$55.33	\$54.82	\$60.11
Total benefits paid ¹⁰	\$6,868	\$5,637	\$5,197	\$5,561	\$10,201	\$4,145	\$2,571	\$3,604	\$5,144	\$7,242	\$7,112	\$7,162	\$5,791	\$17,921
All programs: ¹¹														
Insured unemployment ⁴	1,377	1,090	939	1,060	1,158	1,316	1,234	1,316	1,439	1,578	1,651	1,606	1,238	1,869

¹ Average weekly insured unemployment excludes territories; other items include them.

² Data include activities under the program of Unemployment Compensation for Federal Employees (UCFE), which became effective on January 1, 1955.

³ An initial claim is a notice filed by a worker at the beginning of a period of unemployment which establishes the starting date for any insured unemployment which may result if he is unemployed for 1 week or longer.

⁴ Number of workers reporting the completion of at least 1 week of unemployment.

⁵ The rate of insured unemployment is the number of insured unemployed expressed as a percent of the average covered employment in a 12-month period.

⁶ Based on claims filed under the Veterans' Readjustment Assistance Act of 1952. Excludes claims filed by veterans to supplement State, UCFE, or railroad unemployment insurance benefits.

⁷ Federal portion only of benefits paid jointly with other programs. Weekly benefit amount for total unemployment is set by law at \$26.

⁸ An application for benefits is filed by a railroad worker at the beginning of his first period of unemployment in a benefit year; no application is required for subsequent periods in the same year.

⁹ Payments are for unemployment in 14-day registration periods; the average amount is an average for all compensable periods. Not adjusted for recoveries of overpayments or settlement of underpayments.

¹⁰ Adjusted for recoveries of overpayments and settlement of underpayments.

¹¹ Represents an unduplicated count of insured unemployment under the State, UCFE, and veterans' programs, and that covered by the Railroad Unemployment Insurance Act.

*Revised.

B: Labor Turnover

TABLE B-1: Monthly labor turnover rates in manufacturing, by class of turnover ¹

[Per 100 employees]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
Total accession													
1948.....	4.6	3.9	4.0	4.0	4.1	5.7	4.7	5.0	5.1	4.5	3.9	2.7	4.4
1949.....	3.2	2.9	3.0	2.9	3.5	4.4	3.5	4.4	4.1	3.7	3.3	3.2	3.5
1950.....	3.6	3.2	3.6	3.5	4.4	4.8	4.7	6.6	5.7	5.2	4.0	3.0	4.4
1951.....	5.2	4.5	4.6	4.5	4.5	4.9	4.2	4.5	4.3	4.4	3.9	3.0	4.4
1952.....	4.4	3.9	3.9	3.7	3.9	4.9	4.4	5.9	5.6	5.2	4.0	3.3	4.4
1953.....	4.4	4.2	4.4	4.3	4.1	5.1	4.1	4.3	4.0	3.3	2.7	2.1	3.9
1954.....	2.8	2.5	2.8	2.4	2.7	3.5	2.9	3.3	3.4	3.6	3.3	2.5	3.0
1955.....	3.3	3.2	3.6	3.5	3.8	4.3	3.4	4.5	4.4	4.1	3.3	2.5	3.7
1956.....	3.3	3.1	3.1	3.3	3.4	4.2	3.3	3.8	4.1	4.2	3.0	2.2	3.4
Total separation													
1948.....	4.3	4.7	4.5	4.7	4.3	4.5	4.4	5.1	5.4	4.5	4.1	4.3	4.6
1949.....	4.6	4.1	4.8	4.8	5.2	4.3	3.8	4.0	4.2	4.1	4.0	3.2	4.3
1950.....	3.1	3.0	2.9	2.8	3.1	3.0	2.9	4.2	4.9	4.3	3.8	3.6	3.5
1951.....	4.1	3.8	4.1	4.6	4.8	4.3	4.4	5.3	5.1	4.7	4.3	3.5	4.4
1952.....	4.0	3.9	3.7	4.1	3.9	3.9	5.0	4.6	4.9	4.2	3.5	3.4	4.1
1953.....	3.8	3.6	4.1	4.3	4.4	4.2	4.3	4.8	5.2	4.5	4.2	4.0	4.3
1954.....	4.3	3.5	3.7	3.8	3.3	3.1	3.1	3.5	3.9	3.3	3.0	3.0	3.5
1955.....	2.9	2.5	3.0	3.1	3.2	3.2	3.4	4.0	4.4	3.5	3.1	3.0	3.3
1956.....	3.6	3.6	3.5	3.4	3.7	3.4	3.2	3.9	4.4	3.5	3.3	2.8	3.5
Quit													
1948.....	2.6	2.5	2.8	3.0	2.8	2.9	2.9	3.4	3.9	2.8	2.2	1.7	2.8
1949.....	1.7	1.4	1.6	1.7	1.6	1.5	1.4	1.8	2.1	1.5	1.2	.9	1.5
1950.....	1.1	1.0	1.2	1.3	1.6	1.7	1.8	2.9	3.4	2.7	2.1	1.7	1.9
1951.....	2.1	2.1	2.5	2.7	2.8	2.5	2.4	3.1	3.1	2.5	1.9	1.4	2.4
1952.....	1.9	1.9	2.0	2.2	2.2	2.2	2.2	3.0	3.5	2.8	2.1	1.7	2.3
1953.....	2.1	2.2	2.5	2.7	2.7	2.6	2.5	2.9	3.1	2.1	1.5	1.1	2.3
1954.....	1.1	1.0	1.0	1.1	1.0	1.1	1.1	1.4	1.8	1.2	1.0	.9	1.1
1955.....	1.0	1.0	1.3	1.5	1.5	1.5	1.6	2.2	2.8	1.8	1.4	1.1	1.6
1956.....	1.4	1.3	1.4	1.5	1.6	1.6	1.5	2.2	2.6	1.7	1.3	1.0	1.6
Discharge													
1948.....	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4
1949.....	.3	.3	.3	.2	.2	.2	.2	.3	.2	.2	.2	.2	.2
1950.....	.2	.2	.2	.2	.3	.3	.3	.4	.4	.3	.3	.3	.3
1951.....	.3	.3	.3	.4	.4	.4	.3	.4	.3	.4	.3	.3	.3
1952.....	.3	.3	.3	.3	.3	.3	.3	.3	.4	.4	.4	.3	.3
1953.....	.3	.4	.4	.4	.4	.4	.4	.4	.4	.4	.3	.2	.4
1954.....	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2
1955.....	.2	.2	.2	.3	.3	.3	.3	.3	.3	.3	.3	.2	.3
1956.....	.3	.3	.3	.3	.3	.3	.2	.3	.3	.3	.3	.2	.3
Layoff													
1948.....	1.2	1.7	1.2	1.2	1.1	1.1	1.0	1.2	1.0	1.2	1.4	2.2	1.3
1949.....	2.5	2.3	2.8	2.8	3.3	2.5	2.1	1.8	1.8	2.3	2.5	2.0	2.4
1950.....	1.7	1.7	1.4	1.2	1.1	.9	.6	.7	.7	.8	1.1	1.3	1.1
1951.....	1.0	.8	.8	1.0	1.2	1.0	1.3	1.4	1.3	1.4	1.7	1.5	1.2
1952.....	1.4	1.3	1.1	1.3	1.1	1.1	2.2	1.0	.7	.7	.7	1.0	1.1
1953.....	.9	.8	.8	.9	1.0	.9	1.1	1.3	1.5	1.8	2.3	2.5	1.3
1954.....	2.8	2.2	2.3	2.4	1.9	1.7	1.6	1.7	1.7	1.6	1.6	1.7	1.9
1955.....	1.5	1.1	1.3	1.2	1.1	1.2	1.3	1.3	1.1	1.2	1.2	1.4	1.2
1956.....	1.7	1.8	1.6	1.4	1.6	1.3	1.2	1.2	1.4	1.3	1.5	1.4	1.5
Miscellaneous, including military													
1948.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1949.....	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
1950.....	.1	.1	.1	.1	.1	.1	.2	.3	.4	.4	.3	.3	.2
1951.....	.7	.6	.5	.5	.4	.4	.4	.4	.4	.4	.4	.3	.5
1952.....	.4	.4	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3
1953.....	.4	.4	.3	.3	.3	.3	.3	.3	.3	.3	.3	.2	.3
1954.....	.3	.2	.2	.2	.2	.2	.2	.3	.3	.2	.1	.2	.2
1955.....	.3	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2
1956.....	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2

¹ Data for the current month are preliminary.

NOTE.—Month-to-month changes in total employment in manufacturing industries as indicated by labor turnover rates are not comparable with the changes shown by the Bureau's employment series for the following reasons:

(1) Accessions and separations are reported for the entire calendar month; the employment and payroll reports, for the most part, refer to a 1-week pay period ending nearest the 15th of the month.

(2) The turnover sample is not so large as that of the employment sample and includes proportionately fewer small plants; certain industries are not covered. The major industries excluded are printing, publishing, and allied industries; canning and preserving fruits, vegetables, and seafoods; women's misses', and children's outerwear; and fertilizers.

(3) Plants are not included in the turnover computations in months, when work stoppages are in progress; the influence of such stoppages is reflected, however, in the employment figures.

Beginning with data for October 1952, components may not add to total separation rate because of rounding.

NOTE.—Information on concepts, methodology, etc., is given in a technical note on Measurement of Labor Turnover, which appeared in the May 1953 Monthly Labor Review.

TABLE B-2: Monthly labor turnover rates in selected industries

[Per 100 employees]

Industry	Total accession rate		Separation rate									
	Dec. 1956	Nov. 1956	Total		Quit		Discharge		Layoff		Misc., incl. military	
			Dec. 1956	Nov. 1956	Dec. 1956	Nov. 1956	Dec. 1956	Nov. 1956	Dec. 1956	Nov. 1956	Dec. 1956	Nov. 1956
<i>Manufacturing</i>												
All manufacturing.....	2.2	3.0	2.8	3.3	1.0	1.3	0.2	0.3	1.4	1.5	0.2	0.2
Durable goods.....	2.3	3.1	2.8	3.3	.9	1.3	.2	.3	1.5	1.5	.2	.2
Nondurable goods.....	1.9	2.8	2.7	3.1	1.0	1.4	.2	.2	1.3	1.4	.1	.2
Ordnance and accessories.....	(1)	2.9	(1)	3.3	(1)	1.1	(1)	.2	(1)	1.8	(1)	.3
Food and kindred products.....	2.3	3.9	4.0	4.2	1.0	1.3	.2	.3	2.7	2.3	.1	.2
Meat products.....	2.3	4.3	4.9	3.8	.6	.9	.2	.3	3.9	2.3	.1	.2
Grain-mill products.....	2.2	2.0	2.2	3.4	.7	1.1	.3	.3	1.0	1.8	.2	.1
Bakery products.....	1.7	2.8	2.6	4.1	1.5	2.0	.2	.4	.8	1.6	.1	.1
Beverages:												
Malt liquors.....	(1)	4.3	(1)	4.7	(1)	.5	(1)	.1	(1)	4.0	(1)	.1
Tobacco manufactures.....	.8	1.8	1.9	2.1	.9	1.4	.2	.2	.7	.4	.1	.1
Cigarettes.....	.7	1.1	.7	1.6	.5	.7	.1	.2	.1	.5	.1	.2
Cigars.....	.9	2.8	3.2	2.7	1.4	2.2	.3	.2	1.4	.3	.1	(2)
Tobacco and snuff.....	.5	.6	1.0	1.6	.5	.6	.1	.1	(2)	.3	.5	.5
Textile-mill products.....	1.8	2.9	3.1	3.4	1.1	1.6	.2	.3	1.6	1.4	.1	.2
Yarn and thread mills.....	2.7	3.3	2.9	2.9	1.2	1.6	.2	.3	1.4	.9	.1	.1
Broad-woven fabric mills.....	2.0	3.0	2.4	3.6	1.1	1.6	.2	.3	1.0	1.5	.1	.2
Cotton, silk, synthetic fiber.....	1.9	2.9	2.3	3.1	1.1	1.7	.2	.3	.9	1.0	.1	.2
Woolen and worsted.....	2.6	4.2	2.5	7.0	.7	1.4	.2	.2	1.6	5.3	.1	.2
Knitting mills.....	1.2	2.4	5.7	3.5	1.4	1.6	.1	.3	4.1	1.6	.1	.1
Full-fashioned hosiery.....	.9	2.1	5.5	2.1	1.1	1.5	.1	.2	4.3	.3	(2)	.1
Seamless hosiery.....	1.4	2.9	2.6	2.3	1.5	1.5	.1	.2	1.0	.6	.1	.1
Knit underwear.....	1.1	1.5	6.9	3.4	1.1	1.4	.1	.3	5.6	1.7	.1	(2)
Dyeing and finishing textiles.....	1.1	2.8	1.7	2.6	.9	1.2	.3	.3	.3	.9	.2	.3
Carpets, rugs, other floor coverings.....	(1)	1.7	(1)	3.0	(1)	1.1	(1)	.4	(1)	1.3	(1)	.2
Apparel and other finished textile products.....	1.9	3.4	2.9	3.7	1.6	2.2	.1	.2	1.1	1.3	.1	.1
Men's and boys' suits and coats.....	2.0	4.4	1.9	4.1	1.0	1.9	.1	.2	.5	2.0	.3	.1
Men's and boys' furnishings and work clothing.....	1.7	2.5	3.0	3.7	1.8	2.1	.2	.2	1.0	1.2	.1	.1
Lumber and wood products (except furniture).....	2.2	3.2	4.9	6.1	.9	2.0	.2	.4	3.6	3.5	.2	.2
Logging camps and contractors.....	4.3	8.0	5.8	13.5	1.1	5.1	.3	.3	4.3	7.8	.1	.2
Sawmills and planing mills.....	1.7	2.1	5.7	4.9	.9	1.5	.1	.4	4.5	2.8	.2	.2
Millwork, plywood, and prefabricated structural wood products.....	2.2	2.0	2.9	5.0	1.0	1.1	.2	.2	1.6	3.5	.2	.2
Furniture and fixtures.....	1.8	2.5	2.7	4.8	1.0	1.6	.3	.4	1.3	2.6	.2	.2
Household furniture.....	1.6	2.5	2.8	5.3	1.1	1.6	.3	.4	1.2	3.1	.2	.2
Other furniture and fixtures.....	2.2	2.3	2.7	3.5	.9	1.4	.2	.4	1.4	1.6	.1	.2
Paper and allied products.....	1.7	2.3	2.0	2.6	.9	1.3	.2	.3	.7	.9	.2	.1
Pulp, paper, and paperboard mills.....	1.2	1.2	1.2	1.4	.5	.7	.1	.2	.4	.4	.2	.2
Paperboard containers and boxes.....	1.7	2.8	2.9	3.9	1.5	2.1	.3	.4	1.0	1.3	.1	.1
Chemicals and allied products.....	1.1	1.6	1.2	1.8	.5	.7	.1	.1	.4	.8	.1	.2
Industrial inorganic chemicals.....	1.5	1.4	1.3	1.8	.7	.7	.2	.1	.3	.8	.1	.2
Industrial organic chemicals.....	1.0	1.2	.7	1.1	.3	.4	.1	.1	.2	.4	.1	.2
Synthetic fibers.....	1.5	1.6	.7	1.2	.2	.3	(2)	(2)	.3	.7	.1	.2
Drugs and medicines.....	1.0	1.2	1.2	1.0	.8	.7	.1	.1	.1	.2	.1	.1
Paints, pigments, and fillers.....	.8	1.5	1.7	1.2	.6	.8	.2	.1	.7	.1	.2	.2
Products of petroleum and coal.....	.7	.7	1.2	1.1	.4	.3	(2)	.1	.7	.6	.2	.2
Petroleum refining.....	.6	.5	.6	.6	.3	.2	(2)	(2)	.2	.2	.2	.2
Rubber products.....	1.6	2.1	1.8	2.6	.8	1.2	.1	.2	.7	.9	.2	.3
Tires and inner tubes.....	1.2	1.5	1.1	1.4	.4	.7	.1	.1	.5	.3	.1	.3
Rubber footwear.....	1.3	2.4	2.2	6.4	1.2	2.6	.1	.2	.7	3.4	.2	.2
Other rubber products.....	2.0	2.4	2.3	3.0	1.1	1.5	.2	.3	.8	.9	.2	.3
Leather and leather products.....	3.8	4.3	3.2	3.8	1.6	1.9	.2	.2	1.0	1.6	.3	.1
Leather: tanned, curried, and finished.....	2.1	2.6	1.9	3.1	.7	.8	.1	.1	.4	2.0	.3	.2
Footwear (except rubber).....	4.1	4.6	3.4	3.9	1.8	2.1	.2	.2	1.1	1.5	.2	.1
Stone, clay, and glass products.....	1.5	1.9	2.3	2.7	.6	1.0	.2	.2	1.3	1.4	.2	.2
Glass and glass products.....	1.3	2.0	2.3	2.9	.5	.8	.1	.2	1.4	1.7	.2	.2
Cement, hydraulic.....	.4	1.2	1.8	2.1	.4	.9	.2	.3	1.0	.7	.2	.3
Structural clay products.....	2.0	1.5	3.6	3.8	.9	1.2	.2	.2	2.3	2.2	.2	.2
Pottery and related products.....	1.3	2.5	2.4	2.9	1.1	1.5	.1	.4	1.0	.8	.1	.2
Primary metal industries.....	1.5	2.0	1.8	2.0	.7	.9	.2	.2	.7	.7	.2	.2
Blast furnaces, steelworks, and rolling mills.....	1.3	1.3	1.2	1.4	.5	.6	.2	.1	.3	.4	.2	.2
Iron and steel foundries.....	1.8	2.3	2.1	2.7	.8	1.2	.3	.4	.9	.9	.2	.2
Gray-iron foundries.....	1.8	2.4	2.0	3.0	.7	1.3	.2	.4	.9	1.2	.2	.1
Malleable-iron foundries.....	2.1	2.1	1.8	2.5	.8	1.4	.4	.3	.5	.6	.1	.1
Steel foundries.....	1.7	2.3	2.4	2.4	.9	1.1	.3	.4	1.0	.6	.2	.2
Primary smelting and refining of non-ferrous metals:												
Primary smelting and refining of copper, lead, and zinc.....	1.8	1.8	1.6	1.7	1.1	1.2	.1	.2	.1	.1	.2	.3
Rolling, drawing, and alloying of non-ferrous metals:												
Rolling, drawing, and alloying of copper.....	1.0	1.5	2.8	1.7	.6	.4	.2	.1	1.6	.9	.3	.2
Nonferrous foundries.....	2.9	4.5	3.0	4.3	1.4	2.1	.4	.7	.9	1.2	.3	.3
Other primary metal industries:												
Iron and steel forgings.....	2.8	3.7	3.1	2.6	.8	1.1	.4	.3	1.7	1.0	.2	.3

See footnotes at end of table.

TABLE B-2: Monthly labor turnover rates in selected industries—Continued

[Per 100 employees]

Industry	Total accession rate		Separation rate									
	Dec. 1956	Nov. 1956	Total		Quit		Discharge		Layoff		Misc., incl. military	
			Dec. 1956	Nov. 1956	Dec. 1956	Nov. 1956	Dec. 1956	Nov. 1956	Dec. 1956	Nov. 1956	Dec. 1956	Nov. 1956
<i>Manufacturing—Continued</i>												
Fabricated metal products (except ordnance, machinery, and transportation equipment).....	2.2	2.9	2.9	3.9	0.9	1.4	0.2	0.3	1.6	2.0	0.2	0.3
Cutlery, handtools, and hardware.....	1.8	2.9	2.5	3.5	1.1	1.6	.3	.4	.9	1.3	.2	.3
Cutlery and edge tools.....	1.1	2.0	1.7	2.9	.7	1.6	.2	.3	.7	1.0	.1	.1
Handtools.....	1.9	3.6	1.7	2.4	1.0	1.4	.3	.3	.2	.5	.2	.2
Hardware.....	2.0	2.9	3.1	4.2	1.3	1.7	.3	.4	1.3	1.7	.3	.4
Heating apparatus (except electric) and plumbers' supplies.....	2.5	1.8	5.5	5.5	.8	1.2	.2	.4	4.1	3.7	.2	.2
Sanitary ware and plumbers' supplies.....	1.1	2.0	6.3	5.3	.7	.8	.1	.4	5.3	3.9	.2	.3
Oil burners, nonelectric heating and cooking apparatus, not elsewhere classified.....	3.3	1.7	5.0	5.6	.9	1.4	.3	.4	3.5	3.6	.2	.2
Fabricated structural metal products.....	2.2	2.9	2.3	2.7	.8	1.1	.2	.3	1.1	1.0	.1	.2
Metal stamping, coating, and engraving.....	2.9	3.5	3.2	4.4	.9	1.5	.3	.3	1.7	2.3	.2	.3
Machinery (except electrical).....	1.7	2.6	1.7	2.3	.7	1.0	.2	.2	.6	.8	.2	.2
Engines and turbines.....	1.1	2.4	2.2	1.6	.6	.9	.2	.2	1.2	.3	.2	.2
Agricultural machinery and tractors.....	3.2	5.9	1.4	3.1	.6	.9	.2	.2	.2	1.6	.4	.3
Construction and mining machinery.....	1.5	1.9	1.3	1.8	.7	1.0	.2	.3	.2	.4	.2	.1
Metalworking machinery.....	1.5	2.1	1.7	1.8	.7	1.1	.2	.2	.5	.4	.2	.2
Machine tools.....	1.5	2.2	1.4	1.5	.7	1.0	.2	.2	.2	.2	.3	.2
Metalworking machinery (except machine tools).....	1.1	1.6	1.6	1.9	.6	.9	.2	.3	.6	.6	.2	.1
Machine-tool accessories.....	1.9	2.7	2.3	2.4	.9	1.5	.3	.3	.9	.5	.2	.1
Special-industry machinery (except metalworking machinery).....	1.4	1.8	1.6	2.4	.8	1.1	.2	.3	.5	.8	.1	.2
General industrial machinery.....	1.7	2.4	1.9	2.8	.8	1.2	.2	.3	.7	1.1	.2	.2
Office and store machines and devices.....	1.9	2.8	1.2	2.1	.7	1.1	.1	.2	.2	.6	.1	.1
Service-industry and household machines.....	1.6	3.0	2.3	3.2	.6	1.0	.2	.2	1.2	1.7	.3	.3
Miscellaneous machinery parts.....	1.8	2.4	1.6	2.1	.7	1.0	.2	.2	.4	.6	.2	.2
Electrical machinery.....	2.6	3.0	3.3	3.2	1.3	1.6	.3	.3	1.6	1.0	.2	.2
Electrical generating, transmission, distribution, and industrial apparatus.....	1.9	2.3	2.2	2.2	1.0	1.1	.2	.2	.9	.7	.2	.2
Communication equipment.....	(1)	3.5	(1)	3.7	(1)	2.1	(1)	.4	(1)	1.1	(1)	.2
Radios, phonographs, television sets, and equipment.....	3.0	4.1	4.7	4.9	1.7	2.5	.4	.5	2.5	1.7	.1	.2
Telephone, telegraph, and related equipment.....	(1)	2.7	(1)	1.8	(1)	1.3	(1)	.2	(1)	.1	(1)	.2
Electrical appliances, lamps, and miscellaneous products.....	4.2	2.9	4.6	3.7	.9	1.3	.3	.3	3.2	1.7	.2	.3
Transportation equipment.....	3.9	5.1	2.9	3.4	1.0	1.3	.2	.2	1.3	1.5	.4	.3
Automobiles.....	4.1	5.9	2.7	3.8	.7	1.0	.2	.2	1.2	2.0	.6	.5
Aircraft and parts.....	2.6	3.3	1.7	2.0	1.0	1.3	.2	.2	.3	.3	.2	.2
Aircraft.....	2.6	3.4	1.7	1.9	1.1	1.4	.2	.2	.3	.2	.2	.2
Aircraft engines and parts.....	2.3	2.7	1.5	1.6	.9	1.1	.1	.2	.3	.2	.2	.2
Aircraft propellers and parts.....	(1)	3.2	(1)	1.4	(1)	1.0	(1)	.2	(1)	(2)	(1)	.1
Other aircraft parts and equipment.....	2.6	4.2	3.1	3.8	1.5	1.8	.4	.5	1.0	1.3	.2	.1
Ship and boat building and repairing.....	(1)	12.6	(1)	8.4	(1)	2.6	(1)	.7	(1)	4.8	(1)	.3
Railroad equipment.....	(1)	3.5	(1)	4.1	(1)	1.1	(1)	.2	(1)	2.4	(1)	.4
Locomotives and parts.....	(1)	2.0	(1)	5.3	(1)	1.0	(1)	.2	(1)	3.1	(1)	1.1
Railroad and street cars.....	4.4	4.2	3.5	3.5	1.0	1.2	.3	.3	2.2	2.0	.1	.1
Other transportation equipment.....	.8	1.9	11.3	12.3	1.0	2.2	.3	.4	9.9	9.5	.1	.1
Instruments and related products.....	1.7	2.0	1.9	2.5	1.0	1.1	.2	.2	.6	1.0	.1	.1
Photographic apparatus.....	(1)	1.0	(1)	1.2	(1)	.6	(1)	.1	(1)	.4	(1)	.1
Watches and clocks.....	(1)	2.2	(1)	5.5	(1)	1.3	(1)	.3	(1)	3.8	(1)	.1
Professional and scientific instruments.....	1.7	2.3	1.8	2.3	1.0	1.1	.2	.2	.5	.8	.1	.1
Miscellaneous manufacturing industries.....	1.9	3.1	7.0	5.6	1.3	2.0	.3	.3	5.2	3.1	.2	.2
Jewelry, silverware, and plated ware.....	1.3	2.1	1.8	3.4	1.0	1.4	.2	.3	.4	1.5	.2	.2
<i>Nonmanufacturing</i>												
Metal mining.....	1.5	3.1	2.9	3.6	.9	2.0	.3	.4	1.5	1.0	.2	.3
Iron mining.....	.6	.6	3.1	3.1	.3	.3	(2)	.1	2.7	2.5	.1	.3
Copper mining.....	1.6	3.1	1.7	3.8	1.1	2.8	.3	.3	.1	.3	.2	.5
Lead and zinc mining.....	1.6	1.9	1.4	2.1	.8	1.3	.1	.1	.4	.5	.1	.2
Anthracite mining.....	(1)	1.6	(1)	1.1	(1)	.9	(1)	(2)	(1)	.1	(1)	.1
Bituminous-coal mining.....	.8	1.0	.6	1.4	.4	.3	(2)	.1	.1	.8	.1	.1
Communication:												
Telephone.....	(1)	1.5	(1)	1.6	(1)	1.2	(1)	(2)	(1)	.3	(1)	.1
Telegraph.....	(1)	1.1	(1)	1.9	(1)	1.1	(1)	(2)	(1)	.6	(1)	.2

¹ Not available.² Less than 0.05.³ Data relate to domestic employees except messengers and those compensated entirely on a commission basis.

NOTE.—See footnote 1 and NOTE on table B-1, p. 390. For industries included in the durable- and nondurable-goods categories, see footnotes 2 and 3, table A-2 (exceptions are contained in the note to table B-1).

C: Earnings and Hours

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees¹

Year and month	Mining																	
	Metal												Coal					
	Total: Metal			Iron			Copper			Lead and zinc			Anthracite			Bituminous		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1955: Average	\$92.42	42.2	\$2.19	\$92.46	40.2	\$2.30	\$95.70	44.1	\$2.17	\$83.82	41.7	\$2.01	\$84.50	33.4	\$2.53	\$96.26	37.6	\$2.56
December	98.04	43.0	2.28	99.36	41.4	2.40	98.99	43.8	2.26	88.62	42.4	2.09	88.23	34.6	2.55	105.73	39.6	2.67
1956: Average	97.52	42.4	2.30	97.44	40.1	2.43	100.95	43.7	2.31	89.67	42.1	2.13	87.58	33.3	2.63	105.94	37.7	2.81
January	98.93	43.2	2.29	98.49	40.7	2.42	102.60	45.2	2.27	88.83	42.3	2.10	91.96	35.1	2.62	104.22	38.6	2.70
February	96.48	42.5	2.27	95.91	40.3	2.38	99.67	44.1	2.26	86.74	41.7	2.08	85.58	33.3	2.57	103.18	38.5	2.68
March	95.11	41.9	2.27	92.34	38.8	2.38	99.21	43.9	2.26	88.62	42.0	2.11	71.32	28.3	2.52	102.38	38.2	2.68
April	96.67	42.4	2.28	96.24	40.1	2.40	99.65	43.9	2.27	90.10	42.5	2.12	80.34	30.9	2.60	105.46	37.8	2.79
May	98.50	43.2	2.28	100.62	42.1	2.39	99.89	44.2	2.26	89.89	42.2	2.13	70.66	29.2	2.42	106.02	38.0	2.79
June	97.36	42.7	2.28	98.23	41.1	2.39	100.32	44.0	2.28	88.17	41.2	2.14	88.63	33.7	2.63	107.82	38.1	2.83
July	96.02	42.3	2.27	89.05	36.2	2.46	100.39	42.9	2.34	90.30	42.0	2.15	92.20	35.6	2.59	102.16	36.1	2.83
August	92.63	40.1	2.31	82.38	33.9	2.43	100.62	43.0	2.34	91.37	42.3	2.16	87.25	33.3	2.62	102.49	37.0	2.77
September	100.54	42.6	2.36	103.41	41.2	2.51	103.84	44.0	2.36	89.40	41.2	2.17	87.88	33.8	2.60	106.12	37.9	2.80
October	97.39	41.8	2.33	97.71	39.4	2.48	101.32	43.3	2.34	89.25	41.9	2.13	94.87	35.4	2.68	110.38	37.8	2.92
November	96.23	41.3	2.33	98.21	39.6	2.48	96.93	41.6	2.33	88.37	41.1	2.15	91.19	33.9	2.69	106.79	36.2	2.95
December	100.85	43.1	2.34	104.25	41.7	2.50	101.82	43.7	2.33	91.58	42.4	2.16	108.04	36.5	2.96	115.33	38.7	2.98
	Mining—Continued									Contract construction								
	Petroleum and natural-gas production (except contract services)			Nonmetallic mining and quarrying			Total: Contract construction			Nonbuilding construction								
										Total: Nonbuilding construction			Highway and street			Other nonbuilding construction		
1955: Average	\$94.19	40.6	\$2.32	\$80.99	44.5	\$1.82	\$95.94	36.9	\$2.60	\$94.87	40.2	\$2.36	\$91.05	41.2	\$2.21	\$98.50	39.4	\$2.50
December	94.13	40.4	2.33	80.96	44.0	1.84	97.99	36.7	2.67	94.95	39.4	2.41	87.47	39.4	2.22	101.12	39.5	2.56
1956: Average	101.68	41.0	2.48	85.63	44.6	1.92	101.65	37.1	2.74	101.59	40.8	2.49	97.39	41.8	2.33	104.94	39.9	2.63
January	99.96	42.0	2.38	80.41	43.0	1.87	95.41	35.6	2.68	93.17	38.5	2.42	85.19	38.9	2.19	98.43	38.3	2.57
February	97.93	40.3	2.43	81.35	43.5	1.87	96.84	36.0	2.69	94.43	38.7	2.44	86.14	38.8	2.22	99.85	38.7	2.58
March	99.38	40.4	2.46	81.27	43.0	1.89	94.50	35.0	2.70	91.88	37.5	2.45	84.90	37.4	2.27	96.38	37.5	2.57
April	103.25	41.3	2.50	83.92	44.4	1.89	98.19	36.5	2.69	94.86	39.2	2.42	88.65	39.4	2.25	100.10	39.1	2.56
May	99.94	40.3	2.48	85.69	45.1	1.90	100.44	37.2	2.70	90.31	40.7	2.44	94.16	41.3	2.28	103.86	40.1	2.50
June	99.60	40.0	2.49	88.59	45.9	1.93	103.25	38.1	2.71	104.90	42.3	2.48	102.49	43.8	2.34	106.75	40.9	2.61
July	106.01	41.9	2.53	88.01	45.6	1.93	103.09	37.9	2.72	105.15	42.4	2.48	102.70	43.7	2.35	107.68	41.1	2.62
August	100.28	40.6	2.47	87.69	45.2	1.94	104.78	38.1	2.75	106.42	42.4	2.51	105.16	44.0	2.39	107.83	41.0	2.63
September	107.70	42.4	2.54	89.77	45.8	1.96	106.37	38.4	2.77	108.28	42.8	2.53	106.12	44.4	2.39	110.27	41.3	2.67
October	101.09	40.6	2.49	89.83	45.6	1.97	106.86	38.3	2.79	108.12	42.4	2.55	106.52	44.2	2.41	109.75	40.8	2.69
November	101.50	40.6	2.50	87.22	44.5	1.96	102.28	36.4	2.81	100.84	39.7	2.54	95.41	40.6	2.35	105.30	39.0	2.70
December	104.83	41.6	2.52	85.46	43.6	1.96	103.49	36.7	2.82	98.67	39.0	2.53	90.78	39.3	2.31	104.10	38.7	2.69
	Building construction																	
	Total: Building construction			General contractors			Total: Special-trade contractors			Plumbing and heating			Painting and decorating			Electrical work		
1955: Average	\$96.03	36.1	\$2.66	\$90.22	35.8	\$2.52	\$100.83	36.4	\$2.77	\$106.68	38.1	\$2.80	\$94.38	34.7	\$2.72	\$116.82	39.2	\$2.98
December	98.19	36.1	2.72	92.11	35.7	2.58	102.93	36.5	2.82	109.42	38.8	2.82	96.26	34.5	2.79	122.00	40.0	3.05
1956: Average	101.92	36.4	2.80	95.04	36.0	2.64	107.16	36.7	2.92	112.31	38.2	2.94	99.81	34.9	2.86	125.22	39.5	3.17
January	96.17	35.1	2.74	88.75	34.4	2.58	101.10	35.6	2.84	109.16	38.3	2.85	94.24	33.9	2.78	120.26	39.3	3.06
February	97.27	35.5	2.74	90.30	35.0	2.58	102.03	35.8	2.85	107.82	37.7	2.86	94.92	33.9	2.80	122.36	39.6	3.09
March	95.15	34.6	2.75	87.98	34.1	2.58	99.81	34.9	2.86	108.58	37.7	2.88	95.26	33.9	2.81	120.12	39.0	3.08
April	99.00	36.0	2.75	92.20	35.6	2.59	103.82	36.3	2.86	108.00	37.5	2.88	97.57	34.6	2.82	120.74	39.2	3.08
May	100.74	36.5	2.76	93.96	36.0	2.61	105.62	36.8	2.87	111.45	38.3	2.91	99.62	35.2	2.83	122.22	39.3	3.11
June	103.42	37.2	2.78	96.42	36.8	2.62	108.38	37.5	2.89	113.00	38.7	2.92	101.24	35.9	2.82	124.66	39.7	3.14
July	103.23	37.0	2.79	96.52	36.7	2.63	107.59	37.1	2.90	113.58	38.5	2.95	100.04	35.1	2.85	124.03	39.5	3.14
August	104.53	37.2	2.81	98.05	37.0	2.65	109.66	37.3	2.94	114.35	38.5	2.97	103.10	35.8	2.88	127.68	39.9	3.20
September	106.22	37.4	2.84	99.06	37.1	2.67	111.30	37.6	2.96	115.03	38.6	2.98	103.24	35.6	2.90	131.78	40.3	3.27
October	106.59	37.4	2.85	99.80	37.1	2.69	112.05	37.6	2.98	115.41	38.6	2.99	104.11	35.9	2.90	130.87	39.9	3.28
November	102.46	35.7	2.87	96.21	35.5	2.71	107.34	35.9	2.99	112.57	37.4	3.01	98.36	33.8	2.91	124.97	38.1	3.28
December	104.26	36.2	2.88	96.39	35.7	2.70	110.17	36.6	3.01	117.87	38.9	3.03	100.45	34.4	2.92	130.22	39.7	3.28
	Special-trade contractors—Continued																	
	Other special-trade contractors			Total: Manufacturing			Durable goods ²			Nondurable goods ³			Total: Ordnance and accessories			Food and kindred products		
1955: Average	\$96.21	35.5	\$2.71	\$76.52	40.7	\$1.88	\$83.21	41.4	\$2.01	\$88.06	39.8	\$1.71	\$83.44	40.7	\$2.05	\$72.10	41.2	\$1.75
December	97.23	35.1	2.77	79.71	41.3	1.93	86.52	42.0	2.06	70.30	40.4	1.74	85.73	41.3	2.10	75.66	41.8	1.81
1956: Average	102.03	35.8	2.85	80.10	40.5	1.98	86.31	41.1	2.10	71.68	39.6	1.81	81.54	41.8	2.19	78.04	41.1	1.85
January	94.58	33.9	2.79	78.55	40.7	1.93	84.87	41.2	2.06	69.82	39.9	1.75	87.56	41.3	2.12	76.36	41.5	1.84
February	98.88	34.6	2.90	78.17	40.5	1.93	84.05	41.0	2.05	69.65	39.8	1.75	88.19	41.6	2.12	74.48	40.7	1.83
March	93.01	33.1	2.81	78.78	40.4	1.95	84.25	40.9	2.06	70.49	39.6	1.78	88.80	41.3	2.15	75.11	40.6	1.85
April	100.04	35.6	2.81	78.99	40.3	1.96	85.49	41.1	2.08	70.17	39.2	1.79	90.29	41.8	2.16	74.37	40.2	1.85
May	101.44	36.1	2.81	79.00	40.1	1.97	84.86	40.8	2.08	70.38	39.1	1.80	90.71	41.8	2.17	75.11	40.6	1.85
June	104.80	36.9	2.84	79.19	40.2	1.97	85.27	40.8	2.09	70.95	39.2	1.81	91.52	41.6	2.20	76.22	41.2	1.85
July	103.94	36.6	2.84	79.00	40.1	1.97	84.25	40.7	2.07	71.71	39.4	1.82	91.74	41.7	2.20	76.22	41.2	1.85
August	105.33	36.7	2.87	79.79	40.3	1.98	85.68	40.8	2.10	71.68	39.6	1.81	90.64	41.2	2.20	75.35	41.	

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month	Manufacturing—Continued																	
	Food and kindred products—Continued																	
	Meat products ⁴			Meatpacking, wholesale			Sausages and casings			Dairy products ⁴			Condensed and evaporated milk			Ice cream and ices		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1955: Average	\$83.16	42.0	\$1.98	\$86.92	42.4	\$2.05	\$80.90	41.7	\$1.94	\$72.65	43.5	\$1.67	\$74.46	45.4	\$1.64	\$74.90	42.8	\$1.75
December	93.01	44.5	2.09	98.52	45.4	2.17	85.85	42.5	2.02	72.42	42.6	1.70	73.81	44.2	1.67	75.78	42.1	1.80
1956: Average	87.99	41.9	2.10	92.00	42.2	2.18	85.28	41.6	2.05	74.30	42.7	1.74	75.95	43.9	1.73	77.46	42.1	1.84
January	91.54	43.8	2.09	96.98	44.9	2.16	84.25	41.5	2.03	73.02	42.7	1.71	75.21	44.5	1.69	75.00	41.9	1.79
February	85.08	41.3	2.06	88.40	41.7	2.12	82.62	40.9	2.02	73.62	42.8	1.72	75.21	44.5	1.69	77.53	42.6	1.82
March	86.11	41.6	2.07	89.67	42.1	2.13	83.03	40.9	2.03	73.44	42.7	1.72	75.31	44.3	1.70	76.26	41.9	1.82
April	83.42	40.3	2.07	86.27	40.5	2.13	81.40	39.9	2.04	73.18	42.3	1.73	75.34	43.8	1.72	75.58	41.3	1.83
May	84.46	40.8	2.07	87.31	40.8	2.14	84.86	41.6	2.04	73.62	42.8	1.72	75.68	44.0	1.72	76.44	42.0	1.82
June	86.94	41.8	2.08	90.07	41.7	2.16	88.37	42.9	2.06	75.86	43.6	1.74	78.82	45.3	1.74	78.87	43.1	1.83
July	86.32	41.5	2.08	89.44	41.6	2.15	87.34	42.4	2.06	75.95	43.4	1.75	77.43	44.5	1.74	78.69	43.0	1.83
August	84.46	41.0	2.06	87.74	41.0	2.14	85.07	41.7	2.04	74.30	42.7	1.74	76.56	44.0	1.74	76.86	42.0	1.83
September	89.45	42.8	2.09	93.74	43.2	2.17	86.31	41.9	2.06	75.93	42.9	1.77	78.59	44.4	1.77	79.42	42.7	1.86
October	88.20	41.8	2.11	92.84	42.2	2.20	83.44	40.7	2.05	74.80	42.5	1.76	75.25	43.0	1.75	78.49	42.2	1.86
November	95.91	43.4	2.21	101.85	43.9	2.32	88.62	42.2	2.10	75.65	42.5	1.78	75.23	42.5	1.77	78.17	41.8	1.87
December	91.96	41.8	2.20	96.64	42.2	2.29	87.99	41.9	2.10	75.54	42.2	1.79	75.65	42.5	1.78	78.81	41.7	1.89
	Canning and preserving ⁴			Seafood, canned and cured			Canned fruits, vegetables, and soups			Grain-mill products ⁴			Flour and other grain-mill products			Prepared feeds		
1955: Average	\$56.65	38.8	\$1.46	\$50.55	32.2	\$1.57	\$58.65	39.9	\$1.47	\$77.18	44.1	\$1.75	\$82.70	44.7	\$1.85	\$74.25	45.0	\$1.65
December	67.83	38.3	1.51	59.85	34.2	1.75	58.74	38.9	1.51	77.40	43.0	1.80	84.93	44.7	1.90	74.12	43.6	1.70
1956: Average	62.33	39.7	1.57	50.33	30.5	1.65	65.99	41.5	1.59	80.29	43.4	1.85	84.92	44.0	1.93	76.83	43.9	1.75
January	59.36	38.8	1.53	56.11	33.2	1.69	61.75	40.1	1.54	78.74	43.5	1.81	84.17	44.3	1.90	75.75	44.3	1.71
February	58.75	38.4	1.53	50.06	30.9	1.62	61.78	39.6	1.56	75.90	42.4	1.79	78.44	42.4	1.85	78.61	43.3	1.70
March	59.63	37.5	1.59	53.57	31.7	1.69	62.86	38.8	1.62	77.35	42.5	1.82	82.03	43.4	1.89	78.79	42.9	1.72
April	59.68	37.3	1.60	54.74	32.2	1.70	63.14	38.5	1.64	78.51	42.9	1.83	81.65	43.2	1.89	76.04	43.7	1.74
May	60.67	38.4	1.58	50.53	29.9	1.69	64.15	39.6	1.62	79.06	43.2	1.83	81.03	43.1	1.88	75.77	43.8	1.73
June	60.06	39.0	1.54	49.59	32.2	1.54	62.88	39.8	1.58	79.79	43.6	1.83	82.40	43.6	1.89	77.33	44.7	1.73
July	61.54	39.7	1.55	49.77	31.3	1.59	64.27	41.2	1.56	80.85	43.7	1.85	82.99	43.0	1.93	78.05	44.6	1.74
August	65.52	42.0	1.56	49.75	30.9	1.61	68.57	43.4	1.58	80.54	43.3	1.86	86.04	43.9	1.96	75.86	43.6	1.74
September	67.35	42.9	1.57	48.84	28.9	1.69	71.39	44.9	1.59	83.73	44.3	1.89	91.80	45.9	2.00	78.94	44.6	1.78
October	65.60	41.0	1.60	50.27	30.1	1.67	70.25	43.1	1.63	83.16	44.0	1.89	89.89	45.4	1.98	78.32	44.0	1.78
November	58.03	37.2	1.56	44.76	26.8	1.67	61.23	39.0	1.57	81.46	43.1	1.89	89.20	44.6	2.00	77.94	43.3	1.80
December	61.34	38.1	1.61	52.56	31.1	1.69	64.04	39.6	1.64	82.51	43.2	1.91	88.31	44.6	1.98	79.35	43.6	1.82
	Bakery products ⁴			Bread and other bakery products			Biscuits, crackers, and pretzels			Sugar ⁴			Cane-sugar refining			Beet sugar		
1955: Average	\$70.35	40.9	\$1.72	\$71.93	41.1	\$1.75	\$62.73	39.7	\$1.58	\$77.17	43.6	\$1.77	\$84.12	42.7	\$1.97	\$73.43	42.2	\$1.74
December	71.40	40.8	1.75	73.16	41.1	1.78	63.83	39.4	1.62	76.79	47.4	1.62	84.04	41.4	2.03	76.44	45.5	1.68
1956: Average	73.49	40.6	1.81	74.89	40.7	1.84	66.00	40.0	1.65	81.35	43.5	1.87	87.36	42.0	2.08	78.94	44.1	1.79
January	71.10	40.4	1.76	72.50	40.5	1.79	65.76	40.1	1.64	78.40	41.7	1.88	85.91	41.5	2.07	73.53	40.4	1.82
February	72.09	40.5	1.78	73.67	40.7	1.81	65.44	39.9	1.64	77.36	40.5	1.91	83.44	40.9	2.04	73.68	39.4	1.87
March	71.33	40.3	1.77	72.72	40.4	1.80	65.11	39.7	1.64	76.61	39.9	1.92	82.21	40.3	2.04	72.19	37.6	1.92
April	71.73	40.3	1.78	73.12	40.4	1.81	65.51	39.7	1.65	79.39	40.3	1.97	84.05	41.2	2.04	76.44	38.8	1.97
May	73.26	40.7	1.80	75.03	41.0	1.83	65.18	39.5	1.65	76.83	39.4	1.95	81.80	40.1	2.04	73.73	38.4	1.92
June	74.03	40.9	1.81	76.04	41.1	1.85	65.84	39.9	1.65	81.14	41.4	1.96	87.35	42.2	2.07	76.33	40.6	1.88
July	74.21	41.0	1.81	75.85	41.0	1.85	67.08	40.9	1.64	84.60	42.3	2.00	93.01	44.5	2.09	75.66	38.6	1.96
August	73.71	40.5	1.82	75.52	40.6	1.86	66.57	40.1	1.66	80.36	41.0	1.96	87.76	42.6	2.06	72.57	37.6	1.93
September	74.85	40.9	1.83	76.30	40.8	1.87	68.72	41.4	1.66	84.00	42.0	2.00	92.22	43.5	2.12	77.60	40.0	1.94
October	74.30	40.6	1.83	76.11	40.7	1.87	66.40	40.0	1.66	78.69	43.0	1.83	93.95	43.9	2.14	71.88	43.3	1.66
November	74.93	40.5	1.85	77.30	40.9	1.89	65.13	39.0	1.67	86.06	48.9	1.76	89.66	41.7	2.15	85.31	49.6	1.72
December	74.34	40.4	1.84	75.92	40.6	1.87	66.98	39.4	1.70	85.03	47.5	1.79	85.86	40.5	2.12	88.64	49.8	1.78
	Confectionery and related products ⁴			Confectionery			Beverages ⁴			Bottled soft drinks			Malt liquors			Distilled, rectified, and blended liquors		
1955: Average	\$58.11	39.8	\$1.46	\$55.98	39.7	\$1.41	\$82.22	40.5	\$2.03	\$63.27	41.9	\$1.51	\$97.84	40.1	\$2.44	\$78.56	38.7	\$2.03
December	59.39	40.4	1.47	57.77	40.4	1.43	82.59	39.9	2.07	64.68	41.4	1.56	98.50	39.4	2.50	75.95	37.6	2.02
1956: Average	61.45	39.9	1.54	59.55	39.7	1.50	85.41	40.1	2.13	64.68	41.2	1.57	103.08	39.8	2.59	82.50	39.1	2.11
January	59.70	39.8	1.50	57.71	39.8	1.45	82.18	39.7	2.07	62.17	40.9	1.52	97.61	39.2	2.49	80.13	38.9	2.06
February	60.25	39.9	1.51	58.51	39.8	1.47	82.78	39.8	2.08	61.86	40.7	1.52	99.04	39.3	2.52	81.16	39.4	2.06
March	59.74	39.3	1.52	58.02	39.2	1.48	84.59	39.9	2.12	63.40	40.9	1.55	100.73	39.5	2.55	80.11	38.7	2.07
April	60.83	39.5	1.54	59.10	39.4	1.50	84.40	40.0	2.11	63.65	40.8	1.56	101.35	39.9	2.54	79.87	38.4	2.08
May	60.92	39.3	1.55	59.19	39.2	1.51	84.82	40.2	2.11	64.33	41.5	1.55	102.14	39.9	2.56	79.31	38.5	2.06
June	61.86	39.4	1.57	60.13	39.3	1.53	87.72	40.8	2.15	66.14	41.6	1.59	106.34	40.9	2.60	79.66	38.3	2.08
July	62.17	39.6	1.57	58.98	38.8	1.52	89.62	41.3	2.17	66.36	42.0	1.58	110.24	41.6	2.65	81.48	38.8	2.10
August	61.54	39.7	1.55	59.65	39.5	1.51	88.13	40.8	2.16	66.83	42.3	1.58	107.33	40.5	2.65	79.46	38.2	2.08
September	64.12	41.1	1.56	62.73	41.0	1.53	85.39	39.9	2.14	65.35	41.1	1.59	102.31	39.5	2.59	80.05	38.3	2.09
October	63.54																	

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees¹—Continued

Year and month	Manufacturing—Continued																	
	Food and kindred products—Continued									Tobacco manufactures								
	Miscellaneous food products ⁴			Corn sirup, sugar, oil, and starch			Manufactured ice			Total: Tobacco manufactures			Cigarettes			Cigars		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1955: Average	\$67.97	41.7	\$1.63	\$83.16	42.0	\$1.98	\$66.28	45.4	\$1.46	\$51.60	38.8	\$1.33	\$67.30	40.3	\$1.67	\$44.27	37.2	\$1.19
1956: Average	70.14	41.5	1.69	84.85	41.8	2.03	67.20	45.1	1.49	53.70	39.2	1.37	71.72	41.7	1.72	46.08	38.4	1.20
1955: December	72.51	41.2	1.76	86.32	41.3	2.09	69.39	44.2	1.57	56.26	38.8	1.45	71.05	40.6	1.75	48.13	37.6	1.28
1956: January	70.21	41.3	1.70	83.02	41.1	2.02	66.30	45.1	1.47	52.96	38.1	1.39	70.45	41.2	1.71	44.65	36.9	1.21
1955: February	70.97	41.5	1.71	83.02	41.1	2.02	67.35	45.2	1.49	50.87	36.6	1.39	61.66	36.7	1.68	46.00	37.4	1.23
1956: March	71.45	41.3	1.73	83.01	41.3	2.01	68.98	44.5	1.55	55.57	37.8	1.47	67.03	39.2	1.71	46.61	36.7	1.27
1955: April	70.18	40.8	1.72	83.22	41.2	2.02	67.89	43.8	1.55	56.47	37.9	1.49	68.34	39.0	1.73	47.10	36.8	1.28
1956: May	71.10	41.1	1.73	84.25	41.5	2.03	67.55	43.3	1.56	58.20	38.8	1.50	72.16	41.0	1.76	47.24	37.2	1.27
1955: June	72.21	41.5	1.74	85.49	41.7	2.05	71.84	44.9	1.60	59.19	39.2	1.51	73.81	41.7	1.77	47.74	37.3	1.28
1956: July	72.22	40.8	1.77	80.70	38.8	2.08	71.71	45.1	1.59	58.59	38.8	1.51	72.34	41.1	1.76	47.74	37.3	1.28
1955: August	73.57	41.1	1.79	90.09	41.9	2.15	69.64	43.8	1.59	55.13	39.1	1.41	72.34	41.1	1.76	47.87	37.4	1.28
1956: September	74.75	41.3	1.81	89.62	41.3	2.17	69.76	43.6	1.60	56.03	40.9	1.37	71.98	40.9	1.76	48.77	38.1	1.28
1955: October	74.75	41.3	1.81	92.42	42.2	2.19	69.28	43.3	1.60	54.25	39.6	1.37	70.35	40.2	1.75	49.41	38.3	1.29
1956: November	75.71	41.6	1.82	90.50	41.9	2.16	71.07	43.6	1.63	55.87	38.8	1.44	72.85	40.7	1.79	50.57	38.6	1.31
1955: December	75.17	41.3	1.82	89.62	41.3	2.17	72.61	45.1	1.61	58.76	39.7	1.48	76.08	41.8	1.82	50.05	38.5	1.30
	Tobacco manufactures—Continued									Textile-mill products								
	Tobacco and snuff			Tobacco stemming and redrying			Total: Textile-mill products			Scouring and combing plants			Yarn and thread mills ⁴			Yarn mills		
1955: Average	\$54.17	37.1	\$1.46	\$42.19	39.8	\$1.06	\$55.74	40.1	\$1.39	\$63.55	41.0	\$1.55	\$50.04	39.4	\$1.27	\$50.04	39.4	\$1.27
1956: Average	55.80	37.7	1.48	42.86	37.6	1.14	58.50	41.2	1.42	66.10	42.1	1.57	53.19	40.6	1.31	53.45	40.8	1.31
1955: December	57.13	37.1	1.54	46.56	38.8	1.20	57.42	39.6	1.45	65.92	41.2	1.60	52.39	39.1	1.34	52.53	39.2	1.34
1956: January	55.65	37.1	1.50	41.99	36.2	1.16	57.37	40.4	1.42	65.63	41.8	1.57	53.06	40.5	1.31	53.32	40.7	1.31
1955: February	53.87	36.4	1.48	40.72	35.1	1.16	57.51	40.5	1.42	66.57	42.4	1.57	52.66	40.2	1.31	53.46	40.5	1.32
1956: March	56.42	36.4	1.55	50.27	37.8	1.33	57.06	39.9	1.43	64.58	41.4	1.56	52.01	39.4	1.32	52.67	39.6	1.33
1955: April	55.96	36.1	1.55	50.63	37.5	1.35	56.20	39.3	1.43	63.11	40.2	1.57	51.47	38.7	1.33	51.74	38.9	1.33
1956: May	57.04	36.8	1.55	52.25	38.7	1.35	56.02	38.9	1.44	65.60	41.0	1.60	50.67	38.1	1.33	50.67	38.1	1.33
1955: June	56.52	36.7	1.54	53.18	39.1	1.36	55.73	38.7	1.44	66.17	41.1	1.61	50.54	38.0	1.33	50.41	37.9	1.33
1956: July	55.39	36.2	1.53	51.05	38.1	1.34	55.73	38.7	1.44	70.84	44.0	1.61	51.19	38.2	1.34	51.05	38.1	1.34
1955: August	57.44	37.3	1.54	45.98	39.3	1.17	56.45	39.2	1.44	68.48	42.8	1.60	51.99	38.8	1.34	51.86	38.7	1.34
1956: September	58.28	37.6	1.55	49.70	43.6	1.14	56.99	39.3	1.45	66.33	41.2	1.61	51.72	38.6	1.34	51.72	38.6	1.34
1955: October	58.28	37.6	1.55	45.65	40.4	1.13	59.20	40.0	1.48	66.67	40.9	1.63	54.12	39.5	1.37	54.25	39.6	1.37
1956: November	58.88	37.5	1.57	44.01	37.3	1.18	60.30	40.2	1.50	67.16	40.7	1.65	55.32	39.8	1.39	56.00	40.0	1.40
1955: December	60.13	38.3	1.57	49.39	39.2	1.26	60.30	40.2	1.50	67.23	41.5	1.62	54.65	39.6	1.38	55.18	39.7	1.39
	Thread mills			Broad-woven fabric mills ⁴			Cotton, silk, synthetic fiber									Woolen and worsted		
							United States			North			South					
1955: Average	\$51.74	39.8	\$1.30	\$54.27	40.5	\$1.34	\$52.79	40.3	\$1.31	\$57.63	40.3	\$1.43	\$51.99	40.3	\$1.29	\$63.38	41.7	\$1.52
1956: Average	52.40	40.0	1.31	57.27	41.8	1.37	56.30	41.7	1.35	59.76	41.5	1.44	55.46	41.7	1.33	65.03	42.5	1.53
1955: December	52.65	39.0	1.35	56.28	40.2	1.40	54.80	40.0	1.37	58.46	39.5	1.48	54.00	40.0	1.35	65.16	41.5	1.57
1956: January	52.80	40.0	1.32	56.31	41.1	1.37	55.35	41.0	1.35	59.04	41.0	1.44	54.53	41.0	1.33	63.95	41.8	1.53
1955: February	52.27	39.9	1.31	56.17	41.0	1.37	55.08	40.8	1.35	58.75	40.8	1.44	54.26	40.8	1.33	64.72	42.3	1.63
1956: March	52.54	39.8	1.32	56.17	40.7	1.38	54.94	40.4	1.36	57.46	39.9	1.44	54.27	40.5	1.34	65.18	42.6	1.53
1955: April	52.40	39.7	1.32	55.07	40.2	1.37	53.87	39.9	1.35	56.74	39.4	1.44	53.20	40.0	1.33	64.83	42.1	1.54
1956: May	51.22	38.8	1.32	55.18	39.7	1.39	53.06	39.3	1.35	57.66	38.7	1.49	52.40	39.4	1.33	66.83	42.3	1.58
1955: June	52.13	38.9	1.34	53.96	39.1	1.38	52.11	38.6	1.35	56.92	38.2	1.49	51.08	38.7	1.32	66.36	42.0	1.58
1956: July	53.45	39.3	1.36	53.68	38.9	1.38	52.11	38.6	1.35	58.80	39.2	1.50	50.82	38.5	1.32	64.53	41.1	1.57
1955: August	54.25	39.6	1.37	54.23	39.3	1.38	52.65	39.0	1.35	57.37	38.5	1.49	51.61	39.1	1.32	64.37	41.0	1.57
1956: September	53.70	39.2	1.37	54.51	39.5	1.38	53.45	39.3	1.36	57.75	38.5	1.50	52.40	39.4	1.33	64.84	41.3	1.57
1955: October	53.76	38.4	1.40	58.46	40.6	1.42	57.51	40.5	1.42	60.10	39.8	1.51	56.84	40.6	1.40	65.76	41.1	1.60
1956: November	54.24	38.2	1.42	59.02	40.7	1.45	58.34	40.8	1.43	59.58	39.2	1.52	58.36	41.1	1.42	64.16	40.1	1.60
1955: December	55.02	39.3	1.40	59.31	40.9	1.45	58.34	40.8	1.43	61.16	40.5	1.51	58.08	40.9	1.42	66.65	41.4	1.61
	Narrow fabrics and small wares			Knitting mills ⁴			Full-fashioned hosiery									Seamless hosiery		
							United States			North			South			United States		
1955: Average	\$56.28	40.2	\$1.40	\$50.81	38.2	\$1.33	\$56.39	38.1	\$1.48	\$54.90	37.6	\$1.46	\$56.68	38.3	\$1.48	\$42.80	36.9	\$1.16
1956: Average	58.63	41.0	1.43	52.52	38.9	1.35	58.95	39.3	1.50	58.31	39.4	1.48	59.19	39.2	1.51	45.58	38.3	1.19
1955: December	55.36	39.7	1.47	53.30	37.8	1.41	59.14	38.4	1.54	59.13	38.9	1.52	59.21	38.9	1.55	46.08	36.0	1.28
1956: January	57.77	40.4	1.43	51.79	37.8	1.37	59.98	39.2	1.53	59.89	39.4	1.52	59.82	39.1	1.53	43.56	36.3	1.20
1955: February	58.06	40.6	1.43	52.88	38.6	1.37	61.29	39.8	1.54	60.44	39.5	1.53	61.45	39.9	1.54	45.38	37.2	1.22
1956: March	57.89	40.2	1.44	53.30	37.8	1.41	60.76	39.2	1.55	58.29	38.6	1.51	61.62	39.5	1.56	44.93	35.1	1.28
1955: April	58.29	40.2	1.45	52.11	36.7	1.42	58.13	37.5	1.55	57.22	37.4	1.53	58.50	37.5	1.56	43.55	33.5	1.30
1956: May	57.28	39.5	1.45	52.82	37.2	1.42	57.97	37.4	1.55	58.14	38.0	1.53	58.03	37.2	1.56	44.51	34.5	1.29
1955: June	58.25	39.9	1.46	52.88	37.5	1.41	57.13	37.1	1.54	57.91	38.1	1.52	56.89	36.7	1.55	45.57	35.6	1.28
1956: July	57.77	39.3	1.47	52.73	37.4	1.41	56.76	37.1	1.53	56.77	38.1	1.49	56.52	36.7	1.54	45.31	35.4	1.28
1955: August	58.31	39.4	1.48	53.58	38.0													

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month		Manufacturing—Continued																				
		Textile-mill products—Continued																				
		Seamless hosiery—Continued						Knit outerwear			Knit underwear			Dyeing and finishing textiles ⁴			Dyeing and finishing textiles (except wool)					
		North			South			Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings			
Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings																	
1955: Average	\$46.34	38.3	\$1.21	\$42.57	36.7	\$1.16	\$53.76	38.4	\$1.40	\$48.46	39.4	\$1.23	\$65.14	42.3	\$1.54	\$64.87	42.4	\$1.53				
December	49.48	39.9	1.24	44.96	38.1	1.18	53.77	37.6	1.43	50.15	39.8	1.26	68.89	43.6	1.58	69.05	43.7	1.58				
1956: Average	49.27	37.9	1.30	45.82	35.8	1.28	56.30	38.3	1.47	49.78	38.0	1.31	65.51	41.2	1.59	65.51	41.2	1.59				
January	47.24	38.1	1.24	43.32	36.1	1.20	52.20	36.5	1.43	49.53	39.0	1.27	65.63	41.8	1.57	65.63	41.8	1.57				
February	47.88	38.0	1.26	44.89	37.1	1.21	53.91	37.7	1.43	50.04	39.4	1.27	66.25	42.2	1.57	66.25	42.2	1.57				
March	47.32	36.4	1.30	44.67	34.9	1.28	55.42	37.7	1.47	51.74	39.2	1.32	64.43	41.3	1.56	64.27	41.2	1.56				
April	48.75	37.5	1.30	42.90	33.0	1.30	54.75	37.5	1.46	50.69	38.4	1.32	63.18	40.5	1.56	63.02	40.4	1.56				
May	49.27	37.9	1.30	43.99	34.1	1.29	56.20	38.3	1.47	50.57	38.6	1.31	61.31	39.3	1.56	60.76	39.2	1.55				
June	49.79	38.3	1.30	45.06	35.2	1.28	56.21	38.5	1.46	49.91	38.1	1.31	64.78	41.0	1.58	64.21	40.9	1.57				
July	49.79	38.6	1.29	44.80	35.0	1.28	57.72	39.0	1.48	48.86	37.3	1.31	64.15	40.6	1.58	63.69	40.5	1.57				
August	49.79	38.6	1.29	46.57	36.1	1.29	58.31	39.4	1.48	49.28	38.2	1.29	64.78	41.0	1.58	64.37	41.0	1.57				
September	51.60	38.8	1.33	46.18	35.8	1.29	56.83	38.4	1.48	50.94	38.3	1.33	64.06	40.8	1.57	63.80	40.9	1.56				
October	52.00	39.1	1.33	48.73	37.2	1.31	58.80	39.2	1.50	49.34	37.1	1.33	69.14	41.9	1.65	69.30	42.0	1.65				
November	51.07	38.4	1.33	49.24	37.3	1.32	58.05	38.7	1.50	49.82	36.9	1.35	70.38	42.4	1.66	70.55	42.5	1.66				
December	50.12	37.4	1.34	49.24	37.3	1.32	55.58	37.3	1.49	48.74	36.1	1.35	69.55	41.9	1.66	69.89	42.1	1.66				
		Carpets, rugs, other floor coverings ⁴			Wool carpets, rugs, and carpet yarn			Hats (except cloth and millinery)			Miscellaneous textile goods ⁴			Felt goods (except women felts and hats) [†]			Lace goods					
1955: Average	\$73.74	41.9	\$1.76	\$71.23	40.7	\$1.75	\$57.88	37.1	\$1.56	\$67.14	41.7	\$1.61	\$74.46	41.6	\$1.79	\$63.69	38.6	\$1.65				
December	76.46	43.2	1.77	75.05	42.4	1.77	61.66	38.3	1.61	69.86	42.6	1.64	77.17	42.4	1.82	64.02	38.8	1.65				
1956: Average	74.34	41.3	1.80	73.62	40.9	1.80	57.70	35.4	1.63	67.47	40.4	1.67	71.15	40.2	1.77	65.26	38.3	1.73				
January	75.47	42.4	1.78	73.92	42.0	1.76	60.16	37.6	1.60	67.57	41.2	1.64	70.30	41.6	1.69	64.90	38.4	1.69				
February	74.76	42.0	1.78	73.69	41.4	1.78	62.37	38.5	1.62	66.02	40.5	1.63	68.00	40.0	1.70	65.28	38.4	1.70				
March	75.00	41.9	1.79	73.16	41.1	1.78	55.17	34.7	1.59	65.69	40.3	1.63	66.02	39.3	1.68	65.84	38.5	1.71				
April	73.98	41.1	1.80	71.91	40.4	1.78	51.95	33.3	1.56	65.20	40.0	1.63	65.46	39.2	1.67	64.33	37.4	1.72				
May	71.60	40.0	1.79	71.20	40.0	1.78	57.32	35.6	1.61	65.11	39.7	1.64	68.78	39.3	1.75	65.77	37.8	1.74				
June	67.06	38.1	1.76	67.97	38.4	1.77	60.09	36.2	1.66	65.51	39.7	1.65	68.08	38.9	1.75	66.05	38.4	1.72				
July	71.56	40.2	1.78	71.68	39.6	1.81	58.03	35.6	1.63	65.18	39.5	1.65	67.20	38.4	1.75	66.64	38.3	1.74				
August	74.64	41.7	1.79	73.44	40.8	1.80	60.09	36.2	1.66	67.37	40.1	1.68	70.27	39.7	1.77	67.23	38.2	1.76				
September	75.89	41.7	1.82	76.18	41.4	1.84	56.91	34.7	1.64	69.12	40.9	1.69	75.66	41.8	1.81	67.86	39.0	1.74				
October	76.68	41.9	1.83	75.81	41.2	1.84	53.79	32.8	1.64	70.62	41.3	1.71	79.18	42.8	1.85	68.11	38.7	1.76				
November	76.49	41.8	1.83	74.85	40.9	1.83	55.61	33.5	1.66	71.10	41.1	1.73	80.09	42.6	1.88	66.02	37.3	1.76				
December	77.28	42.0	1.84	76.54	41.6	1.84	57.27	34.5	1.66	72.66	42.0	1.73	81.03	43.1	1.88	67.61	38.2	1.77				
		Textile-mill products—Continued																				
		Paddings and upholstery filling						Processed waste and recovered fibers			Artificial leather, oilcloth, and other coated fabrics			Cordage and twine			Total: Apparel and other finished textile products			Men's and boys' suits and coats		
1955: Average	\$73.27	43.1	\$1.70	\$51.91	42.2	\$1.23	\$88.78	46.0	\$1.93	\$55.72	39.8	\$1.40	\$49.41	36.6	\$1.35	\$59.86	36.5	\$1.64				
December	75.51	43.9	1.72	51.17	41.6	1.23	96.02	47.3	2.03	59.18	41.1	1.44	50.83	37.1	1.37	62.54	37.9	1.65				
1956: Average	68.17	40.1	1.70	54.37	41.5	1.31	88.00	44.0	2.00	56.99	39.3	1.45	52.27	36.3	1.44	63.30	36.8	1.72				
January	67.37	40.1	1.68	51.75	41.4	1.25	91.86	45.7	2.01	57.74	40.1	1.44	50.37	36.5	1.38	61.22	37.1	1.65				
February	64.30	38.5	1.67	52.45	42.3	1.24	86.68	44.0	1.97	57.31	39.8	1.44	51.61	37.4	1.38	62.32	38.0	1.64				
March	66.36	39.5	1.68	53.54	41.5	1.29	83.61	43.1	1.94	57.86	39.9	1.45	52.48	36.7	1.43	62.29	37.3	1.67				
April	66.63	39.9	1.67	53.41	41.4	1.29	80.54	41.3	1.95	58.00	40.0	1.45	51.77	36.2	1.43	61.62	36.9	1.67				
May	65.35	38.9	1.68	53.02	41.1	1.29	81.12	41.6	1.95	57.13	39.4	1.45	50.69	35.7	1.42	61.42	37.0	1.66				
June	66.53	39.6	1.68	54.13	40.7	1.33	82.26	42.4	1.94	56.26	38.8	1.45	51.12	35.5	1.44	63.18	36.1	1.75				
July	67.89	39.7	1.71	52.53	40.1	1.31	85.41	43.8	1.95	55.58	38.6	1.44	51.91	35.8	1.45	62.11	35.9	1.73				
August	68.57	40.1	1.71	52.93	40.1	1.32	87.96	44.2	1.99	55.83	38.5	1.45	53.29	36.5	1.46	65.33	36.7	1.78				
September	72.56	41.7	1.74	53.33	40.4	1.32	89.89	44.5	2.02	57.82	39.6	1.46	52.92	36.0	1.47	64.97	36.5	1.78				
October	73.27	42.6	1.72	54.95	40.7	1.35	94.60	45.7	2.07	57.09	39.1	1.46	53.87	36.4	1.48	65.16	36.4	1.79				
November	72.07	41.9	1.72	56.71	41.7	1.36	93.11	45.2	2.06	57.87	39.1	1.48	53.07	36.1	1.47	64.25	36.3	1.77				
December	75.50	42.9	1.76	59.46	43.4	1.37	98.49	46.9	2.10	59.60	40.0	1.49	53.72	36.3	1.48	64.61	36.5	1.77				
		Men's and boys' furnishings and work clothing ⁴						Shirts, collars, and nightwear			Separate trousers			Work shirts			Women's outerwear ⁴			Women's dresses		
1955: Average	\$41.92	37.1	\$1.13	\$42.29	37.1	\$1.14	\$43.52	37.2	\$1.17	\$36.29	37.8	\$0.96	\$52.90	35.5	\$1.49	\$53.40	35.6	\$1.50				
December	42.86	37.6	1.14	43.50	37.5	1.16	44.58	38.1	1.17	36.96	38.1	.97	53.91	35.7	1.51	53.66	35.3	1.52				
1956: Average	45.26	36.5	1.24	45.51	36.7	1.24	46.49	36.9	1.26	39.96	36.0	1.11	55.42	35.3	1.57	55.62	35.2	1.58				
January	42.67	37.1	1.15	42.82	36.6	1.17	44.37	37.6	1.18	38.12	38.9	.98	54.62	35.7	1.53	53.81	35.4	1.52				
February	43.36	37.7	1.15	43.38	37.4	1.16	45.46	38.2	1.19	37.73	38.5	.98	56.30	36.8	1.53	55.33	36.4	1.52				
March	45.76	36.9	1.24	45.51	36.7	1.24	47.25	37.8	1.25	42.00	37.5	1.12	56.83	36.2	1.57	57.67	36.5	1.58				
April	45.38	36.3	1.25	44.64	36.0	1.24	46.88	37.5	1.25	41.40	36.0	1.15	55.65	35.9	1.55	59.29	36.6	1.62				
May	44.64	36.0	1.24	43.77	35.3	1.24	47.00	37.3	1.26	41.58	36.8	1.13	53.63	34.6	1.55	55.36	34.6	1.60				
June	44.76	36.1	1.24	44.39	35.8	1.24	47.10	36.8	1.28	39.93	36.3	1.10	53.04	34.0	1.59	57.16	35.5	1.61				
July	45.00	36.0	1.25	44.89	36.2	1.24	46.75	37.1	1.26	39.96	36.0	1.11	55.65	35.0	1.59	53.48	34.5	1.55				
August	45.88	36.7	1.25	46.13	37.2	1.24	46.34	36.2	1.28	40.32	36.0	1.12	57.64	35.8	1.61	57.16	35.5	1.61				
September	46.12	36.6	1.26	47.87	37.4	1.28	45.09	35.5	1.27	40.93	35.9	1.14	54.92									

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month		Manufacturing—Continued																				
		Furniture and fixtures																				
		Total: Furniture and fixtures			Household furniture †			Wood household furniture (except upholstered)			Wood household furniture, upholstered			Mattresses and bed-springs			Office, public-building, and professional furniture †					
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings			
1955: Average	\$67.23	41.5	\$1.62	\$63.76	41.4	\$1.54	\$58.10	42.1	\$1.38	\$99.36	40.8	\$1.70	\$70.99	40.8	\$1.74	\$75.96	42.2	\$1.80				
December	69.37	42.3	1.64	66.41	42.3	1.57	60.34	43.1	1.40	75.05	42.4	1.77	72.50	40.5	1.79	81.10	43.6	1.86				
1956: Average	68.95	40.8	1.69	64.96	40.6	1.60	59.35	41.5	1.43	71.64	39.8	1.80	71.71	39.4	1.82	79.42	41.8	1.90				
January	67.32	40.8	1.65	63.90	40.7	1.57	58.80	42.0	1.40	68.08	38.9	1.75	70.77	39.1	1.81	79.10	42.3	1.87				
February	67.82	41.1	1.65	64.78	41.0	1.58	58.24	41.9	1.39	71.73	40.3	1.78	70.95	39.2	1.81	79.85	42.7	1.87				
March	68.47	41.0	1.67	65.44	40.9	1.60	59.63	41.7	1.43	72.32	40.4	1.79	70.02	38.9	1.80	80.09	42.6	1.88				
April	67.13	40.2	1.67	63.44	39.9	1.59	58.63	41.0	1.43	70.35	39.3	1.79	65.86	37.0	1.78	78.73	42.1	1.87				
May	66.63	39.9	1.67	62.81	39.5	1.59	58.34	40.8	1.43	67.82	38.1	1.78	66.04	37.1	1.78	77.83	41.4	1.88				
June	67.70	40.3	1.68	63.68	39.8	1.60	57.63	40.3	1.43	68.74	38.4	1.79	72.62	39.9	1.82	78.96	42.0	1.88				
July	67.13	40.2	1.67	63.28	39.8	1.59	57.79	40.7	1.42	66.55	37.6	1.77	72.36	40.2	1.80	78.25	41.4	1.89				
August	69.87	41.1	1.70	65.69	40.8	1.61	59.06	41.3	1.43	71.06	39.7	1.79	76.73	41.6	1.83	79.99	42.1	1.90				
September	70.62	41.3	1.71	67.48	41.4	1.63	60.61	41.8	1.45	74.80	41.1	1.82	77.19	41.5	1.86	77.90	40.9	1.89				
October	71.55	41.6	1.72	68.39	41.7	1.64	61.76	42.3	1.46	75.95	41.5	1.83	75.92	40.6	1.87	80.83	42.1	1.92				
November	69.43	40.6	1.71	66.18	40.6	1.63	60.15	41.2	1.46	74.62	41.0	1.82	71.81	38.4	1.87	79.52	41.2	1.93				
December	71.62	41.4	1.73	68.15	41.3	1.65	61.59	41.9	1.47	77.56	41.7	1.86	73.49	39.3	1.87	83.10	42.4	1.96				
Furniture and fixtures—Continued																						
		Wood office furniture			Metal office furniture			Partitions, shelving, lockers, and fixtures			Screens, blinds, and miscellaneous furniture and fixtures			Total: Paper and allied products			Pulp, paper, and paperboard mill					
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings			
1955: Average	\$65.68	42.1	\$1.56	\$34.18	42.3	\$1.99	\$80.78	40.8	\$1.98	\$65.83	41.4	\$1.59	\$78.87	43.1	\$1.83	\$35.94	44.3	\$1.94				
December	74.37	44.8	1.66	89.59	43.7	2.05	81.77	41.3	1.98	65.44	40.9	1.60	81.97	43.6	1.88	89.75	45.1	1.99				
1956: Average	71.05	42.8	1.66	86.74	41.5	2.09	83.85	40.9	2.05	66.09	40.3	1.64	83.03	42.8	1.94	91.05	44.2	2.06				
January	73.87	44.5	1.66	89.22	43.1	2.07	79.80	40.1	1.99	66.42	41.0	1.62	81.46	43.1	1.89	89.60	44.8	2.00				
February	74.48	44.6	1.67	87.96	42.7	2.06	80.40	40.0	2.01	66.91	41.3	1.62	79.85	42.7	1.87	87.32	44.1	1.98				
March	74.59	44.4	1.68	86.92	42.4	2.05	79.20	39.6	2.00	67.16	41.2	1.63	81.27	43.0	1.89	88.80	44.4	2.00				
April	73.75	43.9	1.68	84.86	41.6	2.04	81.81	40.5	2.02	64.80	40.0	1.62	81.32	42.8	1.90	88.40	44.2	2.00				
May	71.45	43.3	1.65	85.90	41.7	2.06	83.03	40.7	2.04	65.36	40.1	1.63	80.98	42.4	1.91	88.68	43.9	2.02				
June	71.28	43.2	1.65	86.32	41.7	2.07	85.28	41.6	2.05	66.02	40.5	1.63	82.41	42.7	1.93	90.61	44.2	2.05				
July	67.39	41.6	1.62	85.69	41.0	2.09	84.05	41.0	2.05	66.26	40.9	1.62	84.28	43.0	1.96	93.21	44.6	2.09				
August	70.79	42.9	1.65	85.28	41.0	2.08	88.62	42.2	2.10	66.18	40.6	1.63	83.92	42.6	1.97	92.19	43.9	2.10				
September	71.31	42.7	1.67	80.94	39.1	2.07	87.15	41.5	2.10	66.90	40.3	1.66	84.71	43.0	1.97	93.05	44.1	2.11				
October	69.76	42.8	1.63	89.88	42.0	2.14	87.78	41.8	2.10	66.40	40.0	1.66	84.94	42.9	1.98	93.28	44.0	2.12				
November	66.83	41.0	1.63	88.81	41.5	2.14	84.45	40.6	2.08	64.91	39.1	1.66	84.74	42.8	1.98	92.86	43.8	2.12				
December	70.46	42.7	1.65	92.43	42.4	2.18	86.74	41.5	2.09	68.11	40.3	1.69	85.57	43.0	1.99	94.15	44.2	2.13				
Paper and allied products—Continued																						
		Paperboard containers and boxes †			Paperboard boxes			Fiber cans, tubes, and drums			Other paper and allied products			Total: Printing, publishing, and allied industries			Newspapers					
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings			
1955: Average	\$73.85	42.2	\$1.75	\$73.60	42.3	\$1.74	\$77.68	41.1	\$1.89	\$69.80	41.3	\$1.69	\$91.42	38.9	\$2.35	\$96.65	36.2	\$2.67				
December	74.62	42.4	1.76	74.38	42.5	1.75	78.09	41.1	1.90	72.73	41.8	1.74	94.25	39.6	2.38	100.81	37.2	2.71				
1956: Average	76.13	41.6	1.83	75.71	41.6	1.82	79.54	41.0	1.94	72.92	41.2	1.77	93.90	38.8	2.42	99.64	35.1	2.76				
January	73.87	41.5	1.78	73.46	41.5	1.77	78.69	41.2	1.91	71.51	41.1	1.74	91.72	38.7	2.37	94.52	35.4	2.67				
February	72.75	41.1	1.77	72.34	41.1	1.76	78.12	40.9	1.91	71.45	41.3	1.73	91.87	38.6	2.38	96.30	35.8	2.69				
March	74.70	41.5	1.80	74.46	41.6	1.79	78.74	40.8	1.93	72.56	41.7	1.74	93.60	39.0	2.40	98.74	36.3	2.72				
April	75.35	41.4	1.82	74.93	41.4	1.81	78.72	41.0	1.92	71.69	41.2	1.74	93.51	38.8	2.41	99.46	36.3	2.74				
May	74.03	40.9	1.81	73.62	40.9	1.80	79.37	40.7	1.95	71.23	40.7	1.75	93.65	38.7	2.42	100.55	36.3	2.77				
June	74.98	41.2	1.82	74.75	41.3	1.81	77.97	40.4	1.93	72.57	41.0	1.77	93.80	38.6	2.43	101.00	36.2	2.79				
July	75.81	41.2	1.84	75.76	41.4	1.83	75.66	39.2	1.93	73.87	41.5	1.78	93.80	38.6	2.43	98.73	35.9	2.75				
August	76.78	41.5	1.85	76.54	41.6	1.84	77.95	40.6	1.92	73.16	41.1	1.78	94.28	38.8	2.43	99.08	35.9	2.76				
September	78.86	42.4	1.86	78.63	42.5	1.85	79.38	40.5	1.96	73.93	41.3	1.79	95.94	39.0	2.46	100.24	35.8	2.80				
October	77.86	42.4	1.86	78.63	42.5	1.85	81.36	41.3	1.97	74.21	41.0	1.81	95.80	39.1	2.45	101.36	36.2	2.80				
November	77.89	42.1	1.85	77.65	42.2	1.84	83.42	41.5	2.01	74.57	41.2	1.81	94.57	38.6	2.45	102.28	36.4	2.81				
December	78.12	42.0	1.86	77.70	42.0	1.85	82.60	41.3	2.00	75.53	41.5	1.82	95.80	39.1	2.45	103.21	36.6	2.82				
		Periodicals			Books			Commercial printing			Lithographing			Greeting cards			Bookbinding and related industries					
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings			
1955: Average	\$92.97	39.9	\$2.33	\$80.40	40.0	\$2.01	\$90.23	40.1	\$2.25	\$91.66	40.2	\$2.28	\$56.68	38.3	\$1.48	\$70.09	39.6	\$1.77				
December	93.60	40.0	2.34	82.21	40.3	2.04	93.30	41.1	2.27	93.20	40.7	2.29	59.36	38.8	1.53	72.90	40.5	1.80				
1956: Average	96.40	40.0	2.41	83.84	40.5	2.07	93.03	40.1	2.32	94.16	39.9	2.36	61.60	38.5	1.60	72.29	39.7	1.83				
January	93.37	39.9	2.34	82.62	40.3	2.05	91.88	40.3	2.28	91.87	39.6	2.32	59.62	38.4	1.55	71.46	39.5	1.80				
February	92.50	39.7	2.33	82.41	40.2	2.05	91.20	40.0	2.28	91.41	39.4	2.32	59.97	38.2	1.57	70.59	39.0	1.81				
March	95.20	40.0	2.38	82.62	40.3	2.05	92.69	40.3	2.30	93.83	40.1	2.34	61.37	38.6	1.59	70.98	39.0	1.82				
April	92.82	39.0	2.38	83.02	40.3	2.06	92.00	40.0	2.30	92.90	39.7	2.34	63.24	38.8	1.63	71.86	39.7	1.81				
May	94.17	39.4	2.39	83.63	40.4	2.07	92.17	39.9	2.31	93.13	39.8	2.34	62.15	38.6	1.61	71.71	39.4	1.82				
June	96.80	40.0	2.42	84.45	40.6	2.08	91.25	39.5	2.31	94.80	40.0	2.37	60.48	37.8	1.60	71.16	39.1	1.82				
July	95.60	40.0	2.39	83.81	40.1	2.09	92.73	39.8	2.33	96.56	40.4	2.39	62.69	38.7	1.62	71.71	39.4	1.82				
August	100.77	41.3	2.44	85.48	40.9	2.09	92.57	39.9	2.32	96.56	40.4	2.39	60.36	38.2	1.58	73.60	40.0	1.84				
September	102.41	40.8	2.51	85.06	40.7	2.09	95.82	40.6	2.36	98.49												

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month	Manufacturing—Continued																	
	Printing, publishing, and allied industries—Continued			Chemicals and allied products														
	Miscellaneous publishing and printing services			Total: Chemicals and allied products			Industrial inorganic chemicals ⁴			Alkalies and chlorine			Industrial organic chemicals ⁴			Plastics, except synthetic rubber		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1955: Average	\$108.78	39.7	\$2.74	\$82.39	41.4	\$1.99	\$89.98	40.9	\$2.20	\$87.67	40.4	\$2.17	\$87.33	41.0	\$2.13	\$88.41	42.3	\$2.09
1956: Average	109.53	39.4	2.78	84.85	41.8	2.03	93.56	41.4	2.26	91.88	41.2	2.23	90.25	41.4	2.18	92.23	42.7	2.16
1955: December	109.37	39.2	2.79	86.73	41.3	2.10	95.35	41.1	2.32	93.02	40.8	2.28	92.25	41.0	2.25	93.88	42.1	2.23
1956: January	108.19	39.2	2.76	84.87	41.4	2.05	93.75	41.3	2.27	91.62	40.9	2.24	90.23	41.2	2.19	90.09	41.9	2.15
1955: February	110.64	39.8	2.78	84.67	41.3	2.05	93.71	41.1	2.28	91.62	40.9	2.24	89.57	40.9	2.19	89.24	41.7	2.14
1956: March	111.44	39.8	2.80	84.46	41.2	2.05	93.48	41.0	2.28	90.76	40.7	2.23	89.54	40.7	2.20	90.50	41.9	2.16
1955: April	108.74	39.4	2.76	85.28	41.2	2.07	93.25	40.9	2.28	91.62	40.9	2.24	90.98	40.8	2.23	91.56	42.0	2.18
1956: May	107.59	39.7	2.78	86.32	41.3	2.09	94.30	41.0	2.30	92.43	40.9	2.26	91.62	40.9	2.24	92.64	42.3	2.19
1955: June	108.03	38.0	2.77	87.14	41.3	2.11	94.71	41.0	2.31	92.84	40.9	2.27	93.34	41.3	2.26	95.02	42.8	2.22
1956: July	109.20	39.0	2.86	87.54	41.1	2.13	94.42	40.7	2.32	92.92	40.4	2.30	93.07	41.0	2.27	93.68	42.2	2.22
1955: August	110.94	39.2	2.83	87.12	40.9	2.13	95.94	41.0	2.34	95.30	40.9	2.33	92.39	40.7	2.27	95.60	42.3	2.26
1956: September	110.94	39.2	2.83	88.18	41.4	2.13	97.88	41.3	2.37	95.94	41.0	2.34	94.12	41.1	2.29	95.91	41.7	2.30
1955: October	107.59	38.7	2.78	87.97	41.3	2.13	96.76	41.0	2.33	95.06	40.8	2.33	93.48	41.0	2.28	95.57	42.1	2.27
1956: November	108.64	38.8	2.80	88.18	41.4	2.13	97.00	41.1	2.36	93.96	40.5	2.32	94.12	41.1	2.29	97.44	42.0	2.32
1955: December	108.81	39.0	2.79	89.02	41.6	2.14	97.70	41.4	2.36	95.94	41.0	2.34	94.76	41.2	2.30	97.86	42.0	2.33
	Synthetic rubber			Synthetic fibers			Explosives			Drugs and medicines			Soap, cleaning and polishing preparations ⁴			Soap and glycerin		
1955: Average	\$97.81	41.8	\$2.34	\$75.36	40.3	\$1.87	\$81.40	40.1	\$2.03	\$75.07	40.8	\$1.84	\$85.07	40.9	\$2.08	\$91.88	40.3	\$2.28
1956: Average	100.98	41.9	2.41	77.36	40.5	1.91	83.82	40.3	2.08	77.42	41.4	1.87	87.33	41.0	2.13	94.54	40.4	2.34
1955: January	104.50	41.8	2.50	78.00	40.0	1.95	87.29	40.6	2.15	78.74	40.8	1.93	89.82	41.2	2.18	98.16	40.9	2.40
1956: February	101.67	41.8	2.43	77.01	39.9	1.93	82.76	39.6	2.09	77.90	41.0	1.90	88.17	41.2	2.14	94.89	40.9	2.32
1955: March	102.51	41.5	2.47	76.03	39.6	1.92	84.00	40.0	2.10	77.71	40.9	1.90	89.64	41.5	2.16	97.17	41.0	2.37
1956: April	102.75	41.6	2.47	76.24	39.5	1.93	85.63	40.2	2.13	77.74	40.7	1.91	89.79	41.0	2.19	97.55	40.6	2.41
1955: May	103.00	41.2	2.50	77.42	39.7	1.95	86.27	40.5	2.13	77.93	40.8	1.91	88.94	40.8	2.18	97.85	40.6	2.41
1956: June	103.41	41.2	2.51	80.40	40.4	1.99	87.74	41.0	2.14	78.34	40.8	1.92	91.52	41.6	2.20	100.43	41.5	2.42
1955: July	103.75	41.5	2.50	79.20	39.8	1.99	86.18	39.9	2.16	78.57	40.5	1.94	90.86	41.3	2.20	100.19	41.4	2.42
1956: August	108.03	42.2	2.56	77.22	39.4	1.96	86.62	40.1	2.16	78.20	40.1	1.95	90.47	41.5	2.18	98.88	41.2	2.40
1955: September	104.90	41.3	2.54	79.19	40.2	1.97	89.57	40.9	2.19	79.17	40.6	1.95	91.10	41.6	2.19	99.12	41.3	2.40
1956: October	107.52	42.0	2.56	78.20	39.9	1.96	89.38	41.0	2.18	79.98	40.6	1.97	90.42	41.1	2.20	98.33	40.8	2.41
1955: November	103.57	41.1	2.52	78.99	40.3	1.96	91.30	41.5	2.20	80.78	40.8	1.98	91.24	41.1	2.22	99.39	40.9	2.43
1956: December	106.81	41.4	2.58	79.38	40.5	1.96	91.74	41.7	2.20	81.19	40.8	1.99	91.88	41.2	2.23	99.63	41.0	2.43
	Paints, pigments, and fillers ⁴			Paints, varnishes, lacquers, and enamels			Gum and wood chemicals			Fertilizers			Vegetable and animal oils and fats ⁴			Vegetable oils		
1955: Average	\$84.18	42.3	\$1.99	\$82.29	42.2	\$1.95	\$71.98	43.1	\$1.67	\$63.75	42.5	\$1.50	\$71.14	45.6	\$1.56	\$65.07	45.5	\$1.43
1956: Average	85.67	42.2	2.03	83.78	42.1	1.99	71.83	42.5	1.69	66.46	42.6	1.56	72.38	47.0	1.54	65.89	47.4	1.39
1955: January	86.74	41.7	2.08	84.25	41.5	2.03	75.86	43.1	1.76	67.94	42.2	1.61	74.70	45.0	1.66	67.80	44.9	1.51
1956: February	84.46	41.4	2.04	82.20	41.1	2.00	73.78	43.4	1.70	64.79	41.8	1.55	71.92	46.4	1.55	64.96	46.4	1.40
1955: March	85.69	41.8	2.05	82.40	41.2	2.00	73.01	43.2	1.69	65.52	42.0	1.56	71.57	45.3	1.58	64.75	45.6	1.42
1956: April	86.07	41.7	2.04	82.20	41.1	2.00	72.93	42.9	1.70	64.45	42.4	1.52	73.37	44.2	1.66	66.58	43.8	1.52
1955: May	84.46	41.4	2.04	82.40	41.2	2.00	75.69	43.5	1.74	68.02	43.6	1.56	73.35	43.4	1.69	66.19	42.7	1.55
1956: June	85.70	41.6	2.06	82.81	41.2	2.01	75.95	43.4	1.75	70.36	43.7	1.61	75.34	43.8	1.72	67.62	42.8	1.58
1955: July	86.53	41.6	2.08	83.21	41.4	2.01	77.51	43.3	1.79	70.13	42.5	1.65	76.65	43.8	1.75	69.37	42.3	1.64
1956: August	87.57	41.7	2.10	83.63	41.4	2.02	77.70	43.9	1.77	69.30	42.0	1.65	78.14	44.4	1.76	70.36	42.9	1.64
1955: September	88.41	41.9	2.11	84.66	41.5	2.04	76.68	42.6	1.80	65.04	39.9	1.63	75.69	43.5	1.74	68.10	42.3	1.61
1956: October	87.78	41.6	2.11	85.49	41.5	2.06	77.15	43.1	1.79	67.82	41.1	1.65	75.14	46.1	1.63	67.89	46.5	1.46
1955: November	88.62	41.8	2.12	86.32	41.7	2.07	77.15	43.1	1.79	68.39	41.7	1.64	75.96	46.6	1.63	70.74	47.8	1.48
1956: December	87.77	41.4	2.12	85.70	41.4	2.07	76.01	42.7	1.78	68.81	41.7	1.65	76.28	46.8	1.63	69.97	47.6	1.47
	Chemicals and allied products—Continued																	
	Animal oils and fats			Miscellaneous chemicals ⁴			Essential oils, perfumes, cosmetics			Compressed and liquefied gases			Total: Products of petroleum and coal			Petroleum refining		
1955: Average	\$81.17	45.6	\$1.78	\$75.07	40.8	\$1.84	\$63.18	39.0	\$1.62	\$87.52	42.9	\$2.04	\$96.76	41.0	\$2.36	\$100.37	40.8	\$2.46
1956: Average	83.62	46.2	1.81	77.64	41.3	1.88	66.00	40.0	1.65	88.99	43.2	2.06	98.40	41.0	2.40	102.09	41.0	2.49
1955: January	84.79	45.1	1.88	78.36	40.6	1.93	66.30	39.0	1.70	90.74	42.4	2.14	104.39	41.1	2.54	108.39	40.9	2.65
1956: February	84.73	46.3	1.83	77.90	41.0	1.90	65.35	38.9	1.68	88.82	42.7	2.08	99.95	41.3	2.42	103.66	41.3	2.51
1955: March	83.14	44.7	1.86	76.36	40.4	1.89	64.18	38.2	1.68	88.62	42.2	2.10	99.72	40.7	2.45	103.68	40.5	2.56
1956: April	84.41	44.9	1.88	77.14	40.6	1.90	65.57	38.8	1.69	88.83	42.5	2.09	103.82	41.2	2.52	107.18	40.6	2.64
1955: May	84.55	44.5	1.90	77.95	40.6	1.92	65.96	38.8	1.70	89.46	42.2	2.12	104.65	41.2	2.54	110.27	41.3	2.67
1956: June	84.79	45.1	1.88	77.76	40.5	1.92	66.13	38.9	1.70	89.68	42.3	2.12	102.97	40.7	2.53	107.73	40.5	2.65
1955: July	85.27	45.6	1.87	77.38	40.3	1.92	64.39	38.1	1.69	90.95	42.5	2.14	104.81	41.1	2.55	108.67	40.7	2.67
1956: August	86.67	46.1	1.88	77.99	40.2	1.94	65.11	38.3	1.70	89.88	42.0	2.14	107.01	41.8	2.56	111.22	41.5	2.68
1955: September	85.05	45.0	1.89	77.57	40.4	1.92	65.86	39.2	1.68	89.45	41.8	2.14	103.89	40.9	2.54	107.73	40.5	2.66
1956: October	85.81	45.4	1.89	79.58	40.6	1.96	66.13	38.9	1.70	92.23	42.5	2.17	108.00	41.7	2.59	111.78	41.4	2.70
1955: November	85.25	44.4	1.92	79.18	40.4	1.96	67.09	39.7	1.6									

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month	Manufacturing—Continued																	
	Products of petroleum and coal—Continued			Rubber products												Leather and leather products		
	Coke, other petroleum, and coal products			Total: Rubber products			Tires and inner tubes			Rubber footwear			Other rubber products			Total: Leather and leather products		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1955: Average	\$86.31	41.9	\$2.06	\$87.57	41.7	\$2.10	\$101.09	41.6	\$2.43	\$70.70	40.4	\$1.75	\$78.35	41.9	\$1.87	\$53.44	37.9	\$1.41
December	86.51	41.0	2.11	89.21	41.3	2.16	99.50	39.8	2.50	74.89	40.7	1.84	83.69	42.7	1.96	55.91	39.1	1.43
1956: Average	90.91	41.7	2.18	87.23	40.2	2.17	100.30	39.8	2.52	71.71	39.4	1.82	78.96	40.7	1.94	56.40	37.6	1.60
January	87.77	41.4	2.12	87.91	40.7	2.16	101.00	40.4	2.50	74.37	40.2	1.85	79.73	41.1	1.94	56.55	39.0	1.45
February	87.56	41.3	2.12	85.81	40.1	2.14	97.71	39.4	2.48	74.74	40.4	1.85	77.95	40.6	1.92	57.67	39.5	1.46
March	92.66	42.9	2.16	84.93	39.5	2.15	97.25	38.9	2.50	71.34	39.2	1.82	76.99	40.1	1.92	56.92	38.2	1.49
April	86.90	40.8	2.13	85.79	39.9	2.15	98.00	39.2	2.50	72.25	39.7	1.82	77.95	40.6	1.92	54.90	36.6	1.60
May	85.17	41.2	2.14	86.18	39.9	2.16	99.65	39.7	2.51	72.25	39.7	1.82	76.99	40.1	1.92	54.75	36.5	1.60
June	92.00	42.2	2.18	84.93	39.5	2.15	98.24	39.3	2.50	70.53	39.4	1.79	76.02	39.8	1.91	55.95	37.3	1.60
July	92.67	43.1	2.15	86.15	39.7	2.17	98.14	39.1	2.51	71.28	39.6	1.80	77.78	40.3	1.93	57.00	38.0	1.60
August	92.42	42.2	2.19	87.64	40.2	2.18	101.20	40.0	2.53	70.35	39.3	1.79	78.76	40.6	1.94	56.40	37.6	1.60
September	96.48	42.5	2.27	89.51	40.5	2.21	102.51	40.2	2.55	71.71	39.4	1.82	81.18	41.0	1.98	55.72	36.9	1.51
October	93.83	41.7	2.25	90.17	40.8	2.21	102.66	40.1	2.56	71.71	39.4	1.82	82.98	41.7	1.99	56.09	36.9	1.52
November	91.98	40.7	2.26	88.29	40.5	2.18	103.53	40.6	2.55	71.55	39.1	1.83	79.98	40.6	1.97	56.09	36.9	1.52
December	91.30	40.4	2.26	92.96	41.5	2.24	109.46	42.1	2.60	73.26	39.6	1.85	82.39	41.4	1.99	57.30	37.7	1.52
	Leather: tanned, curried, and finished			Industrial leather belting and packing			Boot and shoe out stock and findings			Footwear (except rubber)			Luggage			Handbags and small leather goods		
1955: Average	\$72.40	40.0	\$1.81	\$72.45	41.4	\$1.75	\$51.82	38.1	\$1.36	\$19.98	37.3	\$1.34	\$60.28	39.4	\$1.53	\$48.39	38.1	\$1.27
December	75.48	40.8	1.85	74.44	40.9	1.82	54.51	39.5	1.38	53.16	38.8	1.37	61.07	38.9	1.57	49.54	38.4	1.29
1956: Average	74.64	39.7	1.88	72.25	39.7	1.82	53.63	37.5	1.43	53.57	37.2	1.44	62.56	39.1	1.60	51.00	37.5	1.36
January	74.19	40.1	1.85	76.96	41.6	1.85	55.58	39.7	1.40	54.21	39.0	1.39	59.97	38.2	1.57	49.39	37.7	1.31
February	74.19	40.1	1.85	74.26	40.8	1.82	54.74	39.1	1.40	55.98	39.7	1.41	60.83	38.5	1.58	50.70	38.7	1.31
March	74.00	40.0	1.85	69.60	39.1	1.78	52.40	36.9	1.42	55.39	38.2	1.45	60.20	38.1	1.58	50.63	37.5	1.31
April	73.08	39.5	1.85	68.53	38.5	1.78	50.62	35.4	1.43	52.20	36.0	1.45	61.94	39.2	1.58	49.23	36.2	1.35
May	73.84	39.7	1.86	69.30	39.6	1.75	53.28	37.0	1.44	51.91	35.8	1.45	62.09	39.3	1.58	48.36	35.3	1.37
June	73.87	39.5	1.87	70.71	39.5	1.79	54.58	37.9	1.44	53.22	36.7	1.45	62.17	39.6	1.57	50.73	37.3	1.37
July	73.49	39.3	1.87	71.20	40.0	1.78	54.05	37.8	1.43	54.96	37.9	1.45	61.69	38.8	1.59	50.09	37.1	1.37
August	74.26	39.5	1.88	71.64	39.8	1.80	53.77	37.6	1.43	54.17	37.1	1.46	62.64	39.9	1.57	51.68	38.0	1.35
September	75.03	39.7	1.89	73.31	40.5	1.81	53.07	36.6	1.45	52.56	36.0	1.46	64.32	40.2	1.60	51.61	37.4	1.36
October	74.86	39.4	1.90	75.07	40.8	1.84	53.07	36.6	1.45	52.41	35.9	1.46	63.99	39.5	1.62	53.76	38.4	1.48
November	75.64	39.6	1.91	79.38	42.0	1.89	53.14	36.4	1.46	52.71	36.1	1.46	67.03	39.9	1.68	53.30	37.8	1.40
December	76.42	39.8	1.92	74.56	40.3	1.85	55.68	38.4	1.45	54.31	37.2	1.46	64.30	38.5	1.67	53.02	37.6	1.41
	Leather and leather products—Continued			Stone, clay, and glass products														
	Gloves and miscellaneous leather goods			Total: Stone, clay, and glass products			Flat glass			Glass and glassware, pressed or blown ⁴			Glass containers			Pressed and blown glass		
1955: Average	\$46.38	37.1	\$1.25	\$76.78	41.5	\$1.85	\$114.38	43.0	\$2.66	\$74.82	39.8	\$1.88	\$76.00	40.0	\$1.90	\$73.08	39.5	\$1.85
December	48.89	38.8	1.26	79.19	41.9	1.89	118.80	43.2	2.75	77.57	40.4	1.92	77.76	40.5	1.92	77.38	40.3	1.92
1956: Average	48.34	36.9	1.31	80.15	41.1	1.95	113.03	41.1	2.75	79.20	39.6	2.00	80.39	39.6	2.03	77.62	39.6	1.96
January	46.49	36.9	1.26	78.12	40.9	1.91	120.25	43.1	2.79	76.64	39.3	1.95	75.47	38.7	1.95	77.80	40.0	1.94
February	46.75	37.1	1.26	77.90	41.0	1.90	112.48	41.2	2.73	76.80	40.0	1.92	76.61	39.9	1.92	77.20	40.0	1.93
March	48.47	37.0	1.31	78.31	41.0	1.91	110.02	40.3	2.73	78.99	40.3	1.96	80.39	40.6	1.98	77.41	39.9	1.94
April	47.84	36.8	1.30	79.32	41.1	1.93	109.76	40.5	2.71	78.80	39.6	1.99	80.99	39.7	2.04	75.65	39.4	1.92
May	48.34	36.9	1.31	80.51	41.5	1.94	112.19	41.4	2.71	80.20	40.1	2.00	83.44	40.7	2.05	76.44	39.4	1.94
June	48.10	37.0	1.30	80.73	41.4	1.95	110.16	40.8	2.70	80.40	40.0	2.01	82.82	40.4	2.05	76.44	39.4	1.94
July	47.82	36.5	1.31	80.36	41.0	1.96	112.06	41.2	2.72	80.79	39.8	2.03	83.63	40.4	2.07	75.66	38.8	1.95
August	49.74	37.4	1.33	80.95	41.3	1.97	110.02	40.9	2.69	78.79	39.2	2.01	80.94	39.1	2.07	76.04	39.4	1.93
September	49.58	37.0	1.34	80.97	41.1	1.97	111.38	40.8	2.73	75.72	37.3	2.03	73.34	35.6	2.06	79.00	39.9	1.98
October	50.63	37.5	1.35	81.77	41.3	1.98	112.34	41.3	2.72	82.01	40.4	2.03	82.62	40.3	2.05	81.20	40.4	2.01
November	48.37	36.1	1.34	81.79	41.1	1.99	119.23	41.4	2.88	81.60	40.0	2.04	83.21	40.2	2.07	79.80	39.7	2.01
December	49.71	37.1	1.34	82.61	41.1	2.01	119.43	40.9	2.92	82.61	40.1	2.06	83.01	40.1	2.07	81.60	40.0	2.04
	Glass products made of purchased glass			Cement, hydraulic			Structural clay products ⁴			Brick and hollow tile			Floor and wall tile			Sewer pipe		
1955: Average	\$65.35	41.1	\$1.59	\$78.85	41.5	\$1.90	\$69.80	41.3	\$1.69	\$67.94	43.0	\$1.58	\$69.43	39.9	\$1.74	\$70.00	40.7	\$1.72
December	70.72	42.6	1.66	78.69	41.2	1.91	71.80	41.5	1.73	68.64	42.9	1.60	72.18	40.1	1.80	70.07	40.5	1.73
1956: Average	68.71	40.9	1.68	84.04	41.4	2.03	73.21	40.9	1.79	69.97	41.9	1.67	74.15	40.3	1.84	73.26	40.7	1.80
January	68.06	41.5	1.64	79.07	41.4	1.91	70.99	40.8	1.74	66.88	41.8	1.60	72.58	40.1	1.81	68.85	39.8	1.73
February	68.48	41.5	1.65	78.69	41.2	1.91	70.99	40.8	1.74	66.40	41.5	1.60	74.03	40.9	1.81	69.25	39.8	1.74
March	67.32	41.3	1.63	78.69	41.2	1.91	72.57	41.0	1.77	68.81	41.7	1.65	73.85	40.8	1.81	71.69	40.5	1.77
April	66.83	40.5	1.65	78.34	40.8	1.92	73.10	41.3	1.77	71.14	42.6	1.67	74.80	41.1	1.82	67.69	38.9	1.74
May	66.58	40.6	1.64	82.20	41.1	2.00	74.29	41.5	1.79	71.83	42.5	1.69	73.38	40.1	1.83	73.85	42.2	1.75
June	67.80	40.6	1.67	85.49	41.1	2.08	73.93	41.3	1.79	71.40	42.5	1.68	72.80	40.0	1.82	75.48	40.8	1.85
July	67.20	40.0	1.68	87.78	41.8	2.10	73.57	41.1	1.79	71.99	42.6	1.69	74.52	40.5	1.84	76.59	41.4	1.85
August	68.51	40.3	1.70	86.74	41.5	2.09	74.16	41.2	1.80	71.40	42.5	1.68	75.36	40.3	1.87	75.30	40.7	1.85
September	69.02	40.6	1.70	90.53	42.5	2.13	74.62	41.0	1.82	71.40	42.0	1.70	74.74	40.4	1.85	76.		

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month		Manufacturing—Continued																	
		Stone, clay, and glass products—Continued																	
		Clay refractories			Pottery and related products			Concrete, gypsum, and plaster products ⁴			Concrete products			Cut-stone and stone products			Miscellaneous non-metallic mineral products ⁴		
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1955: Average	\$75.08	38.7	\$1.94	\$66.00	37.5	\$1.76	\$78.40	44.8	\$1.75	\$75.15	45.0	\$1.67	\$67.94	42.2	\$1.61	\$81.12	41.6	\$1.95	
December	80.39	39.6	2.03	71.02	39.9	1.78	78.77	44.5	1.77	74.15	44.4	1.67	69.34	42.8	1.62	81.97	41.4	1.98	
1956: Average	80.16	39.1	2.05	70.50	37.5	1.88	80.99	44.5	1.82	78.58	44.9	1.75	69.70	41.0	1.70	82.82	40.8	2.03	
January	80.99	39.7	2.04	67.89	37.3	1.82	76.38	43.4	1.76	72.31	43.3	1.67	66.42	40.5	1.64	80.99	40.7	1.99	
February	81.00	39.9	2.03	69.17	37.8	1.83	78.40	43.8	1.79	75.07	43.9	1.71	67.56	40.7	1.66	80.38	40.8	1.97	
March	80.40	39.8	2.02	70.49	37.9	1.86	78.84	43.8	1.80	76.12	44.0	1.73	67.54	40.2	1.68	80.59	40.7	1.98	
April	81.00	39.9	2.03	71.62	38.3	1.87	80.55	44.5	1.81	77.60	44.6	1.74	69.46	41.1	1.69	82.21	40.9	2.01	
May	80.60	39.9	2.02	70.50	37.7	1.87	82.63	45.4	1.82	80.15	45.8	1.75	70.55	41.5	1.70	82.21	40.9	2.01	
June	80.19	39.5	2.03	69.75	37.1	1.88	83.90	45.6	1.84	81.42	46.0	1.77	70.21	41.3	1.70	82.01	40.6	2.02	
July	74.77	37.2	2.01	67.07	35.3	1.90	82.35	45.0	1.83	81.07	45.8	1.77	69.63	41.2	1.69	79.99	39.6	2.02	
August	78.56	38.7	2.03	71.25	37.9	1.88	83.72	45.5	1.84	81.70	45.9	1.78	70.35	40.9	1.72	82.01	40.4	2.03	
September	79.31	38.5	2.06	72.00	38.3	1.88	82.98	45.1	1.84	81.07	45.8	1.77	70.28	41.1	1.71	83.85	40.9	2.05	
October	80.73	39.0	2.07	71.63	37.5	1.91	82.25	44.7	1.84	80.36	45.4	1.77	72.56	41.7	1.74	84.46	40.8	2.07	
November	81.48	38.8	2.10	73.34	38.4	1.91	80.34	43.9	1.83	77.70	44.4	1.75	70.93	41.0	1.73	86.11	41.2	2.09	
December	82.71	39.2	2.11	73.34	38.4	1.91	80.59	43.8	1.84	78.23	44.2	1.77	70.99	40.8	1.74	87.57	41.7	2.10	
		Stone, clay, and glass products—Continued									Primary metal industries								
		Abrasive products			Asbestos products			Nonclay refractories			Total: Primary metal industries			Blast furnaces, steelworks, and rolling mills ⁴			Blast furnaces, steelworks, and rolling mills, except electro-metallurgical products		
1955: Average	\$37.15	41.5	\$2.10	\$34.67	43.2	\$1.96	\$2.35	38.3	\$2.15	\$92.29	41.2	\$2.24	\$95.99	40.5	\$2.37	\$96.39	40.5	\$2.38	
December	90.07	41.7	2.16	81.16	41.2	1.97	90.85	40.2	2.26	97.21	41.9	2.32	101.60	41.3	2.46	102.01	41.3	2.47	
1956: Average	88.00	40.0	2.20	84.65	41.7	2.03	89.38	39.2	2.28	96.76	41.0	2.36	102.47	40.5	2.53	102.47	40.5	2.53	
January	86.24	40.3	2.14	80.77	41.0	1.97	93.26	40.2	2.32	97.63	41.9	2.33	103.25	41.8	2.47	103.66	41.8	2.48	
February	85.65	40.4	2.12	80.77	41.0	1.97	92.40	40.0	2.31	95.35	41.1	2.32	99.38	40.4	2.46	99.79	40.4	2.47	
March	85.79	39.9	2.15	82.15	41.7	1.97	90.40	40.0	2.26	95.12	41.0	2.32	99.14	40.3	2.46	99.54	40.3	2.47	
April	87.02	40.1	2.17	83.20	41.6	2.00	91.98	40.7	2.26	96.00	41.2	2.33	99.79	40.4	2.47	100.19	40.4	2.48	
May	86.40	40.0	2.16	83.00	41.5	2.00	92.21	40.8	2.26	95.53	41.0	2.33	100.69	40.6	2.48	101.09	40.6	2.49	
June	86.63	39.2	2.21	83.63	41.4	2.02	89.55	39.8	2.25	95.71	40.9	2.34	100.94	40.7	2.48	101.34	40.7	2.49	
July	87.52	39.6	2.21	82.21	40.7	2.02	73.59	33.0	2.23	91.48	40.3	2.27	96.47	38.9	2.48	97.25	38.9	2.50	
August	85.75	38.8	2.21	87.78	42.2	2.08	83.98	38.0	2.21	93.69	39.7	2.36	97.14	38.7	2.51	97.52	38.7	2.52	
September	85.57	38.2	2.24	88.40	42.5	2.08	87.02	38.0	2.29	100.12	41.2	2.43	107.53	41.2	2.61	107.94	41.2	2.62	
October	91.83	40.1	2.29	87.98	42.3	2.08	84.73	37.0	2.29	98.74	40.8	2.42	104.90	40.5	2.59	105.30	40.5	2.60	
November	93.89	41.0	2.29	87.14	42.3	2.06	96.52	40.9	2.36	99.06	40.6	2.44	105.18	40.3	2.61	105.59	40.3	2.62	
December	100.39	42.9	2.34	88.62	42.4	2.09	91.01	39.4	2.31	101.19	41.3	2.45	107.42	41.0	2.62	107.83	41.0	2.63	
		Electrometallurgical products			Iron and steel foundries ⁴			Gray-iron foundries			Malleable-iron foundries			Steel foundries			Primary smelting and refining of non-ferrous metals ⁴		
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1955: Average	\$87.14	41.3	\$2.11	\$84.64	41.9	\$2.02	\$84.00	42.0	\$2.00	\$84.02	41.8	\$2.01	\$87.99	41.7	\$2.11	\$84.45	40.6	\$2.08	
December	87.91	40.7	2.16	88.40	42.5	2.08	85.88	42.1	2.04	86.93	42.2	2.06	95.92	43.6	2.20	88.80	41.3	2.15	
1956: Average	88.66	40.3	2.20	86.72	41.1	2.11	84.46	40.8	2.07	83.63	40.4	2.07	95.63	42.5	2.25	91.46	41.2	2.22	
January	86.88	40.6	2.14	86.32	41.5	2.08	83.23	40.8	2.04	86.32	41.7	2.07	95.04	43.2	2.20	89.64	41.5	2.16	
February	86.88	40.6	2.14	85.70	41.4	2.07	83.23	41.0	2.03	84.26	41.1	2.05	94.16	42.8	2.20	88.34	40.9	2.16	
March	86.88	40.6	2.14	86.53	41.4	2.09	83.64	41.0	2.04	83.55	40.9	2.05	95.24	42.9	2.22	88.99	41.2	2.16	
April	86.65	40.3	2.15	87.36	41.8	2.09	85.07	41.7	2.04	83.23	40.8	2.04	95.22	42.7	2.23	89.86	41.6	2.16	
May	88.73	40.7	2.18	85.70	41.2	2.08	82.62	40.7	2.03	81.00	39.9	2.03	96.10	42.9	2.24	89.62	41.3	2.17	
June	88.91	40.6	2.19	85.27	40.8	2.09	82.42	40.4	2.04	78.38	38.8	2.02	95.87	42.8	2.24	90.45	41.3	2.19	
July	85.53	38.7	2.21	85.26	40.6	2.10	82.41	40.2	2.05	81.19	39.8	2.04	93.66	42.0	2.23	93.41	41.7	2.24	
August	88.80	40.0	2.22	86.30	40.9	2.11	83.84	40.7	2.06	82.80	40.0	2.07	92.80	41.7	2.23	91.39	40.8	2.24	
September	89.15	39.8	2.24	87.54	41.1	2.13	84.25	40.7	2.07	86.50	40.8	2.12	96.99	42.1	2.28	94.85	41.6	2.28	
October	91.08	40.3	2.26	87.94	40.9	2.15	84.84	40.4	2.10	85.67	40.6	2.11	95.87	42.3	2.29	93.75	41.3	2.27	
November	90.27	40.3	2.24	87.26	40.4	2.16	84.59	39.9	2.12	85.44	40.3	2.12	95.30	41.8	2.28	93.30	41.1	2.27	
December	91.53	40.5	2.26	91.10	41.6	2.19	89.01	41.4	2.15	85.86	40.5	2.12	98.87	42.8	2.31	94.35	41.2	2.29	
		Primary smelting and refining of copper, lead, and zinc			Primary refining of aluminum			Secondary smelting and refining of nonferrous metals			Rolling, drawing, and alloying of nonferrous metals ⁴			Rolling, drawing, and alloying of copper			Rolling, drawing, and alloying of aluminum		
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1955: Average	\$81.61	40.6	\$2.01	\$88.88	40.4	\$2.20	\$2.03	42.5	\$1.93	\$89.89	42.2	\$2.13	\$93.31	43.4	2.15	\$86.09	40.8	\$2.11	
December	86.32	41.5	2.08	92.97	40.6	2.29	86.23	42.9	2.01	96.56	43.3	2.23	101.93	45.1	2.26	91.05	41.2	2.21	
1956: Average	89.44	41.6	2.15	95.34	40.4	2.36	86.29	42.3	2.04	93.60	41.6	2.25	95.40	42.4	2.25	90.90	40.4	2.25	
January	87.99	41.9	2.10	91.94	40.5	2.27	85.57	43.0	1.99	97.22	43.4	2.24	104.42	45.8	2.28	89.13	40.7	2.19	
February	85.48	40.9	2.09	93.43	40.8	2.29	86.40	43.2	2.00	96.11	43.1	2.23	101.47	44.9	2.26	89.79	41.0	2.19	
March	86.32	41.3	2.09	93.02	40.8	2.28	84.18	42.3	1.99	95.22	42.7	2.23	98.78	43.9	2.25	90.64	41.2	2.20	
April	87.78	42.0	2.09	93.15	40.5	2.30	85.80	42.9	2.00	95.20	42.5	2.24	99.21	42.3	2.22	89.28	40.4	2.21	
May	87.57	41.7	2.10	93.79	40.6	2.31	82.57	41.7	1.98	92.13	41.5	2.22	93.91	42.3	2.22	89.65	40.2	2.23	
June	87.14	41.3	2.11	94.83	40.7	2.33	82.78	41.6	1.99	91.21	40.9	2.23	91.02	41.0	2.22	89.24	40.2	2.22	
July	92.42	42.2	2.19	94.54	40.4	2													

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month	Manufacturing—Continued																	
	Fabricated metal products (except ordnance, machinery, and transportation equipment)—Continued															Machinery (except electrical)		
	Miscellaneous fabricated metal products ⁴			Metal shipping barrels, drums, kegs, and pails			Steel springs			Bolts, nuts, washers, and rivets			Screw-machine products			Total: Machinery (except electrical)		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1955: Average	\$84.28	43.0	\$1.96	\$90.74	42.4	\$2.14	\$89.25	41.9	\$2.13	\$88.48	43.8	\$2.02	\$82.51	43.2	\$1.91	\$87.36	41.8	\$2.09
December	88.48	43.8	2.02	91.27	41.3	2.21	94.57	42.6	2.22	92.77	44.6	2.08	88.06	44.7	1.97	93.31	43.2	2.16
1956: Average	86.51	42.2	2.05	97.36	42.7	2.28	90.61	41.0	2.21	88.41	42.3	2.09	85.43	42.5	2.01	93.26	42.2	2.21
January	86.83	43.2	2.01	90.91	41.7	2.18	88.88	40.4	2.20	90.67	43.8	2.07	86.88	44.1	1.97	92.66	42.7	2.17
February	86.43	43.0	2.01	91.32	41.7	2.19	88.97	41.0	2.17	89.22	43.1	2.07	86.68	44.0	1.97	92.44	42.6	2.17
March	85.65	42.4	2.02	97.44	43.5	2.24	87.72	40.8	2.15	87.98	42.5	2.07	84.51	42.9	1.97	92.01	42.4	2.17
April	85.45	42.3	2.02	99.90	44.4	2.25	89.38	41.0	2.18	86.93	42.2	2.06	84.74	42.8	1.98	92.65	42.5	2.18
May	84.64	41.9	2.02	100.35	44.8	2.24	88.32	40.7	2.17	86.11	41.6	2.07	84.15	42.5	1.98	92.00	42.2	2.18
June	84.45	41.6	2.03	105.34	45.8	2.30	88.73	40.7	2.18	84.05	41.0	2.05	82.37	41.6	1.98	91.98	42.0	2.19
July	84.04	41.4	2.03	107.87	46.1	2.34	88.07	40.4	2.18	83.23	41.0	2.03	82.60	41.3	2.00	91.74	41.7	2.20
August	84.67	41.3	2.05	95.67	42.1	2.27	86.40	40.0	2.16	85.28	41.0	2.08	83.40	41.7	2.00	92.16	41.7	2.21
September	87.36	42.0	2.08	94.25	40.8	2.31	88.44	40.2	2.20	90.31	42.6	2.12	85.26	42.0	2.03	94.95	42.2	2.25
October	88.62	42.2	2.10	92.40	40.0	2.31	93.71	41.1	2.28	91.38	42.7	2.14	87.13	42.5	2.05	94.73	42.1	2.25
November	88.62	42.0	2.11	95.30	40.9	2.33	92.11	40.4	2.28	89.88	42.0	2.14	86.94	42.0	2.07	94.05	41.8	2.25
December	90.95	42.7	2.13	98.51	42.1	2.34	98.94	42.1	2.35	92.88	43.0	2.16	89.44	43.0	2.08	96.28	42.6	2.26
	Engines and turbines ⁴			Steam engines, turbines, and water wheels			Diesel and other internal combustion engines, not elsewhere classified			Agricultural machinery and tractors ⁴			Tractors			Agricultural machinery (except tractors)		
1955: Average	\$91.08	41.4	\$2.20	\$92.20	39.4	\$2.34	\$90.72	42.0	\$2.16	\$83.84	40.5	\$2.07	\$87.53	40.9	\$2.14	\$79.80	40.1	\$1.99
December	95.40	42.4	2.25	97.75	40.9	2.39	94.79	42.7	2.22	87.53	40.9	2.14	91.24	41.1	2.22	83.64	40.6	2.06
1956: Average	95.45	41.5	2.30	102.41	41.8	2.45	93.98	41.4	2.27	86.80	40.0	2.17	90.27	40.3	2.24	82.58	39.7	2.08
January	93.86	41.9	2.24	94.47	40.2	2.35	93.68	42.2	2.22	88.13	40.8	2.16	92.93	41.3	2.25	83.42	40.3	2.07
February	94.60	42.0	2.25	97.64	41.2	2.37	94.11	42.2	2.23	87.29	40.6	2.15	91.58	40.7	2.25	82.62	40.5	2.04
March	95.60	42.3	2.26	99.96	42.0	2.38	94.98	42.4	2.24	86.67	40.5	2.14	90.35	40.7	2.22	82.81	40.2	2.06
April	95.57	42.1	2.27	98.83	41.7	2.37	94.95	42.2	2.25	85.60	40.0	2.14	88.84	40.2	2.21	81.78	39.7	2.06
May	93.56	41.4	2.26	96.64	41.3	2.34	92.74	41.4	2.24	84.99	39.9	2.13	88.44	40.2	2.20	80.98	39.5	2.05
June	94.62	41.5	2.28	96.88	41.4	2.34	94.21	41.5	2.27	85.60	40.0	2.14	88.62	40.1	2.21	82.40	40.0	2.06
July	94.16	41.3	2.28	97.11	41.5	2.34	93.52	41.2	2.27	85.14	39.6	2.15	88.44	40.2	2.20	81.90	38.9	2.09
August	92.29	40.3	2.29	96.88	40.2	2.41	91.08	40.3	2.26	85.17	39.8	2.14	86.90	39.5	2.20	83.62	40.2	2.08
September	96.00	41.2	2.33	101.57	41.8	2.43	94.30	41.0	2.30	87.47	39.4	2.22	91.83	40.1	2.29	82.43	38.7	2.13
October	97.00	41.1	2.36	106.26	42.0	2.53	93.84	40.8	2.30	86.68	39.4	2.20	92.06	40.2	2.29	80.47	38.5	2.09
November	97.00	41.1	2.36	105.50	41.7	2.53	94.07	40.9	2.30	87.07	39.4	2.21	91.37	39.9	2.29	82.04	38.7	2.12
December	99.90	41.8	2.39	111.46	43.2	2.58	95.82	41.3	2.32	89.15	39.8	2.24	92.63	40.1	2.31	84.71	39.4	2.15
	Construction and mining machinery ⁴			Construction and mining machinery, except for oilfields			Oilfield machinery and tools			Metalworking machinery ⁴			Machine tools			Metalworking machinery (except machine tools)		
1955: Average	\$86.92	42.4	\$2.05	\$87.14	42.3	\$2.06	\$86.90	42.6	\$2.04	\$98.10	43.6	\$2.25	\$95.27	43.7	\$2.18	\$92.02	42.6	\$2.16
December	91.80	43.1	2.13	91.16	43.0	2.12	92.45	43.2	2.14	106.70	45.6	2.34	106.25	46.6	2.28	99.90	44.6	2.24
1956: Average	92.23	42.5	2.17	92.01	42.4	2.17	92.45	42.8	2.16	108.45	45.0	2.41	106.26	45.8	2.32	97.41	43.1	2.26
January	91.80	43.1	2.13	92.66	43.3	2.14	90.31	42.6	2.12	106.91	45.3	2.36	105.80	46.2	2.29	98.34	43.9	2.24
February	92.45	43.2	2.14	93.53	43.5	2.15	90.10	42.5	2.12	107.62	45.6	2.36	105.79	46.4	2.28	99.90	44.4	2.25
March	92.88	43.2	2.15	93.96	43.5	2.16	89.46	42.4	2.11	108.07	45.6	2.37	104.19	45.9	2.27	98.56	44.0	2.24
April	93.10	43.1	2.16	93.74	43.2	2.17	91.16	43.0	2.12	108.77	45.7	2.35	105.80	46.2	2.29	97.67	43.8	2.23
May	93.10	43.1	2.16	93.31	43.0	2.17	92.44	43.4	2.13	108.96	45.4	2.40	105.80	46.0	2.30	97.88	43.5	2.25
June	92.66	42.7	2.17	92.43	42.4	2.18	92.23	43.3	2.13	107.76	44.9	2.40	104.42	45.4	2.30	96.32	43.0	2.24
July	89.24	41.7	2.14	88.15	41.0	2.15	92.87	43.6	2.19	106.80	44.5	2.40	103.28	45.1	2.29	96.73	42.8	2.26
August	90.07	41.7	2.16	88.58	41.2	2.15	93.95	42.9	2.19	107.89	44.4	2.43	103.70	44.7	2.32	94.05	41.8	2.25
September	92.62	42.1	2.20	91.98	42.0	2.19	93.93	42.5	2.21	110.95	45.1	2.46	109.02	46.0	2.37	96.02	43.3	2.27
October	92.84	42.2	2.20	92.40	42.0	2.20	94.37	42.7	2.21	109.27	44.6	2.45	108.32	45.9	2.36	98.21	42.7	2.30
November	91.94	41.6	2.21	91.08	41.4	2.20	93.46	42.1	2.22	106.87	43.8	2.44	107.81	45.3	2.38	97.25	42.1	2.31
December	93.48	42.3	2.21	93.26	42.2	2.21	94.57	42.6	2.22	110.50	45.1	2.45	110.40	46.0	2.40	100.22	43.2	2.32
	Machine-tool accessories			Special-industry machinery (except metal working machinery) ⁴			Food-products machinery			Textile-machinery			Paper-industries machinery			Printing-trades machinery and equipment		
1955: Average	\$102.52	44.0	\$2.33	\$83.38	41.9	\$1.99	\$84.66	41.5	\$2.04	\$74.29	41.5	\$1.79	\$89.00	44.5	\$2.00	\$92.60	41.9	\$2.21
December	110.32	45.4	2.43	88.33	43.3	2.04	88.19	42.4	2.08	76.62	42.1	1.82	97.03	47.1	2.06	100.53	43.9	2.29
1956: Average	114.86	45.4	2.53	89.24	42.7	2.09	89.67	41.9	2.14	76.59	41.4	1.85	96.18	45.8	2.10	102.46	43.6	2.35
January	111.48	45.5	2.45	87.74	42.8	2.05	88.62	42.2	2.10	75.48	41.7	1.81	94.71	46.2	2.05	100.72	43.6	2.31
February	113.13	45.8	2.47	88.36	43.1	2.05	90.74	42.8	2.12	75.66	41.8	1.81	92.62	45.4	2.04	101.87	44.1	2.31
March	114.79	46.1	2.49	88.58	43.0	2.06	90.52	42.7	2.12	75.95	41.5	1.83	94.35	45.8	2.06	101.38	43.7	2.32
April	116.46	46.4	2.51	88.17	42.8	2.06	87.78	41.6	2.11	76.54	41.6	1.84	94.60	45.7	2.07	100.05	43.5	2.30
May	115.67	45.9	2.52	89.23	42.9	2.08	89.04	42.0	2.12	76.18	41.4	1.84	95.89	46.1	2.08	102.93	43.8	2.35
June	115.37	45.6	2.53	88.82	42.7	2.08	87.99	41.7	2.11	75.62	41.1	1.84	98.37	46.4	2.12	102.93	43.8	2.35
July	114.30	45.0	2.54	89.04	42.4	2.10	90.94	42.1	2.16	75.67	40.9	1.85	96.98	46.4	2.09	104.75	44.2	2.37
August	116.94	45.5	2.57	89.25	42.5	2.10	89.45	41.8	2.14	76.63	41.2	1.86	98.12	46.5	2.11	101.24	42.9	2.36
September	119.08	45.8	2.60	90.95	42.9	2.12	89.64	41.5	2.16	78.35	41.9	1.87	100.					

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month		Manufacturing—Continued																	
		Machinery (except electrical)—Continued																	
		General industrial machinery ⁴			Pumps, air and gas compressors			Conveyors and conveying equipment			Blowers, exhaust and ventilating fans			Industrial trucks, tractors, etc.			Mechanical power-transmission equipment		
Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings		
1955: Average	\$86.73	41.9	\$2.07	\$84.45	41.6	\$2.03	\$87.56	41.3	\$2.12	\$80.15	41.1	\$1.95	\$86.92	42.4	\$2.05	\$90.31	42.8	\$2.11	
December	93.09	43.5	2.14	88.62	42.4	2.09	96.14	43.9	2.19	85.67	42.2	2.03	96.04	45.3	2.12	98.12	44.6	2.20	
1956: Average	93.29	42.6	2.19	90.53	42.5	2.13	97.38	42.9	2.27	86.11	41.6	2.07	90.27	41.6	2.14	96.14	43.1	2.22	
January	91.38	42.7	2.14	89.24	42.7	2.09	95.91	43.4	2.21	84.03	41.6	2.02	91.81	42.9	2.14	94.61	43.5	2.21	
February	91.81	42.7	2.15	90.73	43.0	2.11	93.94	42.7	2.20	84.45	41.6	2.03	90.09	42.1	2.14	96.14	43.2	2.19	
March	91.59	42.6	2.15	90.94	43.1	2.11	95.24	42.9	2.22	84.85	41.8	2.03	88.18	41.4	2.13	93.09	42.7	2.18	
April	92.23	42.7	2.16	90.52	42.9	2.11	95.67	42.9	2.23	85.48	41.9	2.04	90.09	41.9	2.15	93.52	42.9	2.18	
May	92.88	42.8	2.17	89.68	42.5	2.11	95.44	42.8	2.23	84.66	41.5	2.04	90.73	42.2	2.15	94.38	42.9	2.20	
June	92.87	42.6	2.18	90.31	42.6	2.12	98.76	43.7	2.26	86.94	41.8	2.08	87.33	41.0	2.13	93.29	42.6	2.19	
July	90.69	41.6	2.18	87.34	41.2	2.12	95.34	42.0	2.27	87.57	41.7	2.10	83.92	39.4	2.13	91.54	41.8	2.19	
August	92.84	42.2	2.20	88.61	41.6	2.13	97.81	42.9	2.28	85.70	41.2	2.08	88.54	40.8	2.17	95.44	42.8	2.23	
September	95.67	42.9	2.23	91.58	42.4	2.16	102.66	43.5	2.36	87.57	41.9	2.09	93.24	42.0	2.22	96.73	42.8	2.26	
October	95.87	42.8	2.24	91.80	42.5	2.16	102.26	43.7	2.34	88.20	41.8	2.11	91.72	41.5	2.21	97.84	43.1	2.27	
November	95.20	42.5	2.24	91.37	42.3	2.16	98.87	42.8	2.31	86.53	41.4	2.09	95.60	42.3	2.26	96.02	42.3	2.27	
December	96.98	43.1	2.25	93.09	42.9	2.17	100.85	43.1	2.34	88.41	41.9	2.09	98.06	43.2	2.27	99.16	43.3	2.29	
		Mechanical stokers, and industrial furnaces and ovens			Office and store machines and devices ⁴			Computing machines and cash registers			Typewriters			Service—industry and household machines ⁴			Domestic laundry equipment		
1955: Average	\$85.70	41.6	\$2.06	\$82.41	40.2	\$2.05	\$88.84	40.2	\$2.21	\$76.19	40.1	\$1.90	\$83.64	40.8	\$2.05	\$85.07	40.9	\$2.08	
December	91.81	42.7	2.15	87.14	41.3	2.11	93.11	41.2	2.26	81.34	41.5	1.96	91.16	42.4	2.15	97.90	43.9	2.23	
1956: Average	90.27	41.6	2.18	88.78	41.1	2.16	96.05	41.4	2.32	82.81	41.2	2.01	85.84	40.3	2.13	89.98	40.9	2.20	
January	87.98	41.5	2.12	86.30	40.9	2.11	92.03	40.9	2.25	79.79	40.5	1.97	89.46	42.0	2.13	90.71	41.8	2.17	
February	92.02	42.6	2.16	85.88	40.7	2.11	92.21	40.8	2.26	79.79	40.5	1.97	87.77	41.4	2.12	92.84	42.2	2.20	
March	89.45	41.8	2.14	85.46	40.5	2.11	91.98	40.7	2.26	79.19	40.2	1.97	85.47	40.7	2.10	87.53	40.9	2.14	
April	90.52	42.3	2.14	87.12	41.1	2.12	93.52	41.2	2.27	79.77	40.7	1.96	87.13	41.1	2.12	87.67	40.4	2.17	
May	91.38	42.5	2.15	87.42	40.9	2.13	94.81	41.4	2.29	78.60	40.1	1.96	83.13	39.4	2.11	84.38	39.8	2.12	
June	91.56	42.0	2.18	87.48	40.5	2.16	94.42	40.7	2.32	79.19	40.2	1.97	84.59	39.9	2.12	83.67	39.1	2.14	
July	88.94	40.8	2.18	90.03	41.3	2.18	99.22	42.4	2.34	80.60	40.5	1.99	85.65	40.4	2.12	87.02	40.1	2.17	
August	91.78	42.1	2.18	87.78	41.1	2.16	96.51	41.6	2.32	81.39	40.9	1.99	84.74	39.6	2.14	86.41	39.1	2.21	
September	93.26	42.2	2.21	92.16	41.7	2.21	100.14	41.9	2.39	86.10	42.0	2.05	87.05	40.3	2.16	92.51	41.3	2.24	
October	91.52	41.6	2.20	92.82	42.0	2.21	99.96	42.0	2.38	87.92	43.1	2.04	85.75	39.7	2.16	91.39	40.8	2.24	
November	90.23	41.2	2.19	91.27	41.3	2.21	96.70	40.8	2.37	89.65	43.1	2.08	86.55	39.7	2.18	92.43	40.9	2.26	
December	93.68	42.2	2.22	92.99	41.7	2.23	99.90	41.8	2.39	86.52	42.0	2.06	88.29	40.5	2.18	94.66	41.7	2.27	
		Commercial laundry, dry-cleaning, and pressing machines			Sewing machines			Refrigerators and air-conditioning units			Miscellaneous machinery parts ⁴			Fabricated pipe, fittings, and valves			Ball and roller bearings		
1955: Average	\$79.19	41.9	\$1.89	\$82.81	40.2	\$2.06	\$84.46	40.8	\$2.07	\$85.88	42.1	\$2.04	\$83.03	40.9	\$2.03	\$90.92	43.5	\$2.09	
December	83.10	42.4	1.96	86.09	40.8	2.11	92.44	42.6	2.17	92.01	43.4	2.12	87.99	42.1	2.09	97.65	45.0	2.17	
1956: Average	80.36	41.0	1.96	88.97	41.0	2.17	86.00	40.0	2.15	89.44	41.6	2.15	88.78	41.1	2.16	89.23	41.5	2.15	
January	83.27	42.7	1.95	86.50	40.8	2.12	91.58	42.4	2.16	90.10	42.5	2.12	87.85	41.4	2.11	92.66	43.3	2.14	
February	80.70	41.6	1.94	88.81	41.5	2.14	87.34	41.2	2.12	88.41	41.9	2.11	86.31	41.1	2.10	92.02	42.8	2.15	
March	82.10	42.1	1.95	89.02	41.6	2.14	84.84	40.4	2.10	87.57	41.5	2.11	87.84	41.2	2.12	87.15	41.5	2.10	
April	81.14	41.4	1.96	89.62	41.3	2.17	88.17	41.2	2.14	89.03	41.8	2.13	89.02	41.6	2.14	88.82	41.7	2.13	
May	80.18	40.7	1.97	88.78	41.1	2.16	82.04	38.7	2.12	87.34	41.2	2.12	87.12	40.9	2.13	84.85	40.6	2.09	
June	79.79	40.5	1.97	88.13	40.8	2.16	84.56	39.7	2.13	87.76	41.2	2.13	87.74	41.0	2.14	85.44	40.3	2.12	
July	80.56	41.1	1.96	93.50	42.5	2.20	84.80	40.0	2.12	86.69	40.7	2.13	85.81	40.1	2.14	85.01	40.1	2.12	
August	80.56	41.1	1.96	87.16	39.8	2.19	85.54	39.6	2.16	87.51	40.7	2.15	87.64	40.2	2.18	84.40	40.0	2.11	
September	81.93	41.8	1.96	89.10	40.5	2.20	86.55	39.7	2.18	91.10	41.6	2.19	91.49	41.4	2.21	89.62	41.3	2.17	
October	79.77	40.7	1.96	88.26	40.3	2.19	84.41	38.9	2.17	91.74	41.7	2.20	91.49	41.4	2.21	92.38	41.8	2.21	
November	80.34	41.2	1.95	88.04	40.2	2.19	85.58	38.9	2.20	91.72	41.5	2.21	91.05	41.2	2.21	92.80	41.8	2.22	
December	83.13	42.2	1.97	88.00	40.0	2.20	88.44	40.2	2.20	94.57	42.6	2.22	93.93	42.5	2.21	94.73	42.1	2.25	
		Machinery (except electrical)—Con.																	
		Electrical machinery																	
		Machine shops (job and repair)			Total: Electrical machinery			Electrical generating, transmission, distribution, and industrial apparatus ⁴			Wiring devices and supplies			Carbon and graphite products (electrical)			Electrical indicating, measuring, and recording instruments		
1955: Average	\$85.45	42.3	\$2.02	\$76.52	40.7	\$1.88	\$80.98	40.9	\$1.98	\$71.15	40.2	\$1.77	\$79.13	41.0	\$1.93	\$74.56	40.3	\$1.85	
December	91.35	43.5	2.10	79.68	41.5	1.92	84.85	41.2	2.03	74.98	41.2	1.82	85.80	42.9	2.00	77.68	41.1	1.89	
1956: Average	90.31	42.2	2.14	80.78	40.8	1.98	87.57	41.5	2.11	76.11	40.7	1.87	84.26	41.1	2.05	79.27	40.8	1.96	
January	90.94	43.1	2.11	78.94	40.9	1.93	84.86	41.6	2.04	74.66	40.8	1.83	84.62	42.1	2.01	77.23	41.3	1.87	
February	88.42	42.2	2.10	78.36	40.6	1.93	84.46	41.4	2.04	75.03	41.0	1.83	82.61	41.1	2.01	77.14	40.6	1.90	
March	88.61	41.9	2.11	78.96	40.7	1.94	84.05	41.2	2.04	74.52	40.5	1.84	83.82	41.7	2.01	76.55	40.5	1.89	
April	89.25	42.3	2.11	80.36	41.0	1.96	87.36	41.8	2.09	76.59	41.4	1.85	83.03	40.9	2.03	80.56	41.1	1.95	
May	89.67	42.1	2.13	80.18	40.7	1.97	86.74	41.5	2.09	76.07	40.9	1.86	83.23	40.8	2.04	79.56	40.8	1.95	
June	89.67	42.1	2.13	79.98	40.6	1.97	87.36	41.6	2.10	75.14	40.4	1.86	83.44	40.9	2.04	82.74	42.0	1.97	
July	89.25	41.9	2.13	79.40	40.1	1.98	87.14	41.3	2.11	75.55	40.4	1.87	84.66	40.7	2.08	78.39	40.2	1.95	
August	89.88	42.0	2.14	80.60	40.5	1.99	87.33	41.0	2.13	74.24	39.7	1.87	83.84	40.5	2.07	79.76	40.9	1.95	
September	91.57	42.2	2.17	83.02	41.1	2.02	90.07	41.7	2.16	77.11	40.8	1.89	85.48						

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month	Manufacturing—Continued																				
	Electrical machinery—Continued																				
	Motors, generators, and motor-generator sets			Power and distribution transformers			Switchgear, switch-board, and industrial controls			Electrical welding apparatus			Electrical appliances			Insulated wire and cable					
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings			
1955: Average	\$85.90	41.1	\$2.09	\$84.23	41.7	\$2.02	\$79.98	40.6	\$1.97	\$92.42	43.8	\$2.11	\$79.17	40.6	\$1.95	\$77.04	42.1	\$1.83			
December	90.30	42.0	2.15	83.23	40.8	2.04	86.09	42.2	2.04	93.53	43.5	2.15	80.16	40.9	1.96	84.42	44.2	1.91			
1956: Average	91.27	41.3	2.21	92.40	42.0	2.20	90.30	42.0	2.15	101.91	44.5	2.29	80.80	40.0	2.02	84.51	42.9	1.97			
January	90.29	41.8	2.16	84.87	41.4	2.05	85.07	41.7	2.04	98.33	44.9	2.19	77.03	39.3	1.96	82.51	43.2	1.91			
February	89.01	41.4	2.15	84.05	41.0	2.05	85.48	41.9	2.04	101.02	44.7	2.26	78.41	39.8	1.97	80.70	42.7	1.89			
March	87.95	41.1	2.14	86.94	41.8	2.08	84.86	41.6	2.04	101.24	44.6	2.27	78.01	39.6	1.97	81.18	42.5	1.91			
April	89.86	41.6	2.16	92.23	42.7	2.16	90.95	42.3	2.15	103.05	45.0	2.29	81.00	40.1	2.02	84.00	43.3	1.94			
May	88.56	41.0	2.16	92.87	42.6	2.18	91.37	42.3	2.16	102.56	44.4	2.32	80.00	39.8	2.01	83.27	42.7	1.95			
June	90.25	41.4	2.18	92.20	42.1	2.19	90.73	42.2	2.15	108.73	45.1	2.30	78.79	39.2	2.01	82.45	42.5	1.94			
July	90.01	41.1	2.19	93.72	42.6	2.20	90.29	41.8	2.16	102.56	44.4	2.31	81.18	39.6	2.05	82.98	41.7	1.99			
August	90.13	40.6	2.22	94.98	42.4	2.24	90.07	41.7	2.16	102.76	43.0	2.32	82.41	40.2	2.05	87.84	43.7	2.01			
September	94.39	41.4	2.28	96.08	42.7	2.25	93.50	42.5	2.20	102.08	44.0	2.32	84.87	41.0	2.07	88.10	43.4	2.03			
October	92.89	41.1	2.26	95.95	41.9	2.29	93.48	42.3	2.21	102.75	44.1	2.33	84.25	40.7	2.07	87.95	42.9	2.05			
November	93.11	41.2	2.26	97.71	42.3	2.31	92.80	41.8	2.22	97.78	42.7	2.29	84.25	40.7	2.07	87.95	42.9	2.05			
December	94.85	41.6	2.28	96.37	41.9	2.30	91.94	41.6	2.21	102.10	44.2	2.31	82.41	40.2	2.05	88.54	43.4	2.04			
	Electrical equipment for vehicles			Electric lamps			Communication equipment [†]			Radios, phonographs, television sets, and equipment			Radio tubes			Telephone, telegraph, and related equipment					
1955: Average	\$83.64	41.2	\$2.03	\$69.37	40.1	\$1.73	\$72.50	40.5	\$1.79	\$69.77	40.1	\$1.74	\$66.40	40.0	\$1.66	\$90.94	43.1	\$2.11			
December	85.90	41.3	2.08	74.82	41.8	1.79	75.17	41.3	1.82	71.46	40.6	1.76	68.38	40.7	1.68	96.57	44.5	2.17			
1956: Average	84.21	40.1	2.10	75.07	40.8	1.84	76.14	40.5	1.88	72.98	40.1	1.82	67.42	39.2	1.72	95.46	43.0	2.22			
January	83.01	40.1	2.07	75.42	41.7	1.80	74.70	40.6	1.84	70.80	40.0	1.77	66.76	39.5	1.69	97.02	43.9	2.21			
February	77.93	38.2	2.04	75.06	41.9	1.80	74.93	40.5	1.85	70.84	39.8	1.78	65.91	39.0	1.69	97.90	44.3	2.21			
March	83.01	40.1	2.07	75.42	41.9	1.80	74.96	40.3	1.86	71.82	39.9	1.80	65.52	39.0	1.68	95.04	43.2	2.20			
April	80.58	39.5	2.04	78.85	42.4	1.86	75.52	40.6	1.86	72.00	40.0	1.80	67.49	39.7	1.70	95.26	43.3	2.20			
May	79.58	39.2	2.03	75.28	40.9	1.84	75.55	40.4	1.87	72.22	39.9	1.81	67.83	39.9	1.70	93.94	42.7	2.20			
June	80.55	39.1	2.06	73.75	40.3	1.83	74.59	40.1	1.86	72.40	40.0	1.81	65.40	38.7	1.69	92.62	42.1	2.20			
July	81.56	39.4	2.07	71.50	39.5	1.81	73.30	39.2	1.87	72.83	39.8	1.83	63.61	37.2	1.71	84.89	39.3	2.16			
August	83.37	39.7	2.10	72.76	40.2	1.81	75.76	40.3	1.88	73.75	40.3	1.83	67.12	38.8	1.73	92.60	41.9	2.21			
September	87.94	40.9	2.15	73.60	40.0	1.84	77.33	40.7	1.90	74.74	40.4	1.85	70.00	40.0	1.75	95.22	42.7	2.23			
October	89.84	41.4	2.17	74.05	39.6	1.87	78.12	40.9	1.91	75.70	40.7	1.86	69.87	39.7	1.76	95.67	42.9	2.23			
November	90.47	41.5	2.18	76.57	40.3	1.90	78.55	40.7	1.93	74.77	40.2	1.86	67.90	38.8	1.75	101.22	44.2	2.29			
December	94.78	42.5	2.23	78.12	40.9	1.91	79.15	40.8	1.94	75.95	40.4	1.88	68.25	39.0	1.75	100.11	44.1	2.27			
	Electrical machinery—Continued												Transportation equipment								
	Miscellaneous electrical products [†]			Storage batteries			Primary batteries (dry and wet)			X-ray and nonradio electronic tubes			Total: Transportation equipment			Automobiles [†]					
1955: Average	\$74.48	40.7	\$1.83	\$85.07	41.7	\$2.04	\$61.07	39.4	\$1.55	\$82.62	40.9	\$2.02	\$93.44	41.9	\$2.23	\$97.78	42.7	\$2.29			
December	79.46	41.6	1.91	90.50	43.3	2.09	64.08	39.8	1.61	86.31	41.1	2.10	95.53	41.9	2.28	98.09	42.1	2.33			
1956: Average	78.14	40.7	1.92	86.69	40.7	2.13	64.64	39.9	1.62	88.15	41.0	2.15	94.71	41.0	2.31	95.11	43.0	2.36			
January	77.93	40.8	1.91	85.28	41.0	2.08	63.52	39.7	1.60	83.20	40.0	2.08	91.35	40.6	2.25	90.97	39.9	2.28			
February	77.55	40.6	1.91	82.58	39.7	2.08	65.77	40.6	1.62	88.18	41.4	2.13	89.38	39.9	2.24	87.55	38.4	2.28			
March	76.92	40.7	1.89	83.82	40.3	2.08	64.32	40.2	1.60	88.61	41.6	2.13	90.90	40.4	2.25	89.67	39.5	2.27			
April	76.70	40.8	1.88	83.21	40.2	2.07	64.88	40.3	1.61	87.34	41.2	2.12	91.76	40.6	2.26	90.97	39.9	2.28			
May	76.36	40.4	1.89	82.99	39.9	2.08	64.40	40.0	1.61	88.38	41.3	2.14	89.89	39.6	2.27	85.73	37.6	2.28			
June	76.67	40.3	1.90	83.77	39.7	2.11	64.16	40.1	1.60	87.56	41.3	2.12	91.37	39.9	2.29	88.47	38.3	2.31			
July	76.38	40.2	1.90	83.77	39.7	2.11	63.20	40.0	1.58	86.67	40.5	2.14	93.84	40.8	2.30	92.97	39.9	2.33			
August	76.95	40.5	1.90	86.71	40.9	2.12	63.36	39.6	1.60	88.56	41.0	2.16	94.25	40.8	2.31	93.30	39.7	2.35			
September	78.55	40.7	1.93	88.99	41.2	2.16	64.39	39.5	1.63	88.15	41.0	2.15	97.88	41.3	2.37	99.47	40.6	2.45			
October	81.95	41.6	1.97	93.93	42.5	2.21	66.00	40.0	1.65	88.78	41.1	2.16	99.48	41.8	2.38	102.83	41.8	2.46			
November	82.19	41.3	1.99	94.30	42.1	2.24	65.74	39.6	1.66	89.60	41.1	2.18	100.86	42.2	2.39	106.14	42.8	2.48			
December	83.01	41.3	2.01	94.13	42.4	2.22	66.23	39.9	1.66	89.10	40.5	2.20	105.46	43.4	2.43	112.45	44.8	2.51			
	Motor vehicles, bodies, parts, and accessories						Truck and bus bodies			Trailers (truck and automobile)			Aircraft and parts [†]			Aircraft			Aircraft engines and parts		
1955: Average	\$98.87	42.8	\$2.31	\$81.77	41.3	\$1.98	\$84.44	41.8	\$2.02	\$89.62	41.3	\$2.17	\$80.62	41.3	\$2.17	\$88.97	41.0	\$2.17			
December	99.17	42.2	2.35	76.24	38.9	1.96	86.74	41.5	2.09	93.26	42.2	2.21	91.54	41.8	2.19	96.73	42.8	2.26			
1956: Average	95.91	40.3	2.38	81.00	40.1	2.02	82.50	40.0	2.07	95.57	42.1	2.27	94.66	41.7	2.27	97.13	42.6	2.28			
January	91.77	39.9	2.30	79.00	40.1	1.97	81.89	39.7	2.05	92.82	42.0	2.21	91.32	41.7	2.19	96.08	42.7	2.25			
February	88.09	38.3	2.30	80.78	40.8	1.98	83.03	40.5	2.05	92.82	42.0	2.21	91.74	41.7	2.20	94.55	42.4	2.23			
March	90.23	39.4	2.29	80.78	40.8	1.98	84.25	40.7	2.07	92.57	41.7	2.22	91.94	41.6	2.21	92.99	41.7	2.23			
April	91.54	39.8	2.30	80.78	40.8	1.98	82.00	40.0	2.05	93.83	41.7	2.25	94.02	41.6	2.26	92.35	41.6	2.22			
May	86.02	37.4	2.30	81.20	40.0	2.03	84.65	40.5	2.09	94.47	41.8	2.26	94.43	41.6	2.27	93.18	41.6	2.24			
June	88.77	38.1	2.33	82.22	40.5	2.03	82.19	39.9	2.06	94.66	41.7	2.27	93.75	41.3	2.27	94.89	41.8	2.27			
July	93.77	39.9	2.35	80.60	39.9	2.02	81.39	39.7	2.05	95.95	41.9	2.29	95.49	41.7	2.29	96.22	42.2	2.28			
August	93.85	39.6	2.37	83.44	40.9	2.04	82.62	40.3	2.05	97.06	42.2	2.30	96.60	42.0	2.30	97.55	42.6	2.29			
September	100.94	40.7	2.48	81.80	40.1	2.04	84.00	40.0	2.10	97.71	42.3	2.31	96.60	42.0	2.30	99.76	43.0	2.32			
October																					

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month		Manufacturing—Continued																																			
		Transportation equipment—Continued																																			
		Aircraft propellers and parts			Other aircraft parts and equipment			Ship and boat building and repairing ⁴			Shipbuilding and repairing			Boatbuilding and repairing			Railroad equipment ⁴																				
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings																		
1955: Average	\$90.25	41.4	\$2.18	\$90.49	41.7	\$2.17	\$83.53	39.4	\$2.12	\$86.41	39.1	\$2.21	\$70.12	40.3	\$1.74	\$90.68	40.3	\$2.25																			
December	95.40	42.4	2.25	96.10	42.9	2.24	86.15	39.7	2.17	89.67	39.5	2.27	71.10	40.4	1.76	96.41	41.2	2.34																			
1956: Average	96.95	42.9	2.26	98.01	42.8	2.29	88.75	39.8	2.23	91.87	39.6	2.32	73.75	40.3	1.83	95.99	40.5	2.37																			
January	92.77	41.6	2.23	95.18	42.3	2.25	84.63	39.0	2.17	87.85	38.7	2.27	71.15	40.2	1.77	94.77	40.5	2.34																			
February	92.38	41.8	2.21	95.20	42.5	2.24	85.28	39.3	2.17	89.31	39.0	2.29	71.10	40.4	1.76	94.13	40.4	2.33																			
March	91.91	41.4	2.22	94.33	42.3	2.23	86.68	39.4	2.20	90.09	39.0	2.31	73.21	40.9	1.79	95.53	41.0	2.33																			
April	93.44	41.9	2.23	95.82	42.4	2.26	87.16	39.8	2.19	90.46	39.5	2.29	74.03	40.9	1.81	95.88	40.8	2.35																			
May	95.42	42.6	2.24	97.38	42.9	2.27	88.26	40.3	2.19	92.00	40.0	2.30	74.70	41.5	1.80	94.54	40.4	2.34																			
June	94.92	42.0	2.26	99.36	43.2	2.30	89.02	40.1	2.22	92.40	40.0	2.31	73.31	40.5	1.81	95.27	40.2	2.37																			
July	97.13	42.6	2.28	96.87	42.3	2.29	88.80	40.0	2.22	91.83	40.1	2.29	72.50	39.4	1.84	97.17	41.0	2.37																			
August	96.50	42.7	2.26	98.21	42.7	2.30	90.17	39.8	2.26	92.34	39.8	2.32	75.79	40.1	1.89	89.71	38.5	2.33																			
September	98.27	43.1	2.28	99.72	42.8	2.33	90.35	39.8	2.27	93.77	39.9	2.35	73.87	39.5	1.87	97.68	40.7	2.40																			
October	97.81	42.9	2.28	99.76	43.0	2.32	90.12	39.7	2.27	93.06	39.6	2.35	75.60	40.0	1.89	97.01	40.5	2.41																			
November	99.62	43.5	2.29	101.32	43.3	2.34	89.86	38.9	2.31	92.73	38.8	2.39	74.07	39.4	1.88	94.61	39.5	2.38																			
December	103.84	44.0	2.36	104.08	44.1	2.36	93.60	40.0	2.34	97.04	40.1	2.42	74.82	39.8	1.88	99.31	40.7	2.44																			
Year and month		Instruments and related products																																			
		Transportation equipment—Continued									Instruments and related products																										
		Locomotives and parts			Railroad and street-cars			Other transportation equipment			Total: Instruments and related products			Laboratory, scientific, and engineering instruments			Mechanical measuring and controlling instruments																				
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings																		
1955: Average	\$94.69	41.9	\$2.26	\$87.81	39.2	\$2.24	\$77.83	41.4	\$1.88	\$77.93	40.8	\$1.97	\$88.99	41.2	\$2.16	\$79.15	40.8	\$1.94																			
December	98.18	42.5	2.31	95.11	40.3	2.36	76.92	40.7	1.89	80.73	41.4	1.95	91.10	41.6	2.19	83.40	41.7	2.00																			
1956: Average	99.64	42.4	2.35	93.06	39.1	2.38	78.17	40.5	1.93	82.01	40.8	2.01	94.95	42.2	2.25	83.44	40.9	2.04																			
January	99.49	42.7	2.33	91.03	38.9	2.34	77.55	40.6	1.91	79.97	40.8	1.96	91.52	41.6	2.20	82.60	41.3	2.00																			
February	99.10	42.9	2.31	90.48	38.5	2.35	77.38	40.3	1.92	80.38	40.8	1.97	92.80	41.8	2.22	82.82	41.0	2.02																			
March	100.28	43.6	2.30	92.28	39.1	2.36	78.53	40.9	1.93	81.98	41.1	1.98	93.91	42.3	2.22	84.45	41.6	2.03																			
April	99.96	42.9	2.33	92.75	39.3	2.36	78.55	40.7	1.93	81.19	40.8	1.99	93.91	42.3	2.22	83.84	41.3	2.03																			
May	100.66	43.2	2.33	90.24	38.4	2.35	77.59	40.2	1.99	80.79	40.6	1.99	92.99	41.7	2.23	82.62	40.5	2.04																			
June	102.82	43.2	2.38	89.30	38.0	2.35	80.20	40.3	1.95	81.41	40.5	2.01	95.40	42.4	2.25	81.80	40.1	2.04																			
July	101.01	42.8	2.36	93.38	39.4	2.37	78.00	40.0	1.94	82.21	40.7	2.02	96.02	42.3	2.27	82.01	40.2	2.04																			
August	94.89	40.9	2.32	85.88	36.7	2.34	77.60	40.0	1.94	83.64	41.0	2.04	98.01	42.8	2.29	85.49	41.1	2.08																			
September	100.86	42.2	2.39	94.95	39.4	2.41	79.15	40.8	1.94	83.64	41.0	2.04	97.33	42.5	2.29	85.49	41.1	2.08																			
October	97.82	41.1	2.38	97.84	40.1	2.44	78.72	41.0	1.92	83.64	40.8	2.05	95.11	41.9	2.27	85.49	41.3	2.07																			
November	97.10	40.8	2.38	91.63	38.5	2.38	76.61	39.9	1.92	83.64	40.8	2.05	95.11	41.9	2.27	85.49	41.3	2.07																			
December	102.06	42.0	2.43	97.11	39.8	2.44	77.02	38.9	1.98	84.67	41.1	2.06	97.94	42.4	2.31	85.07	40.9	2.08																			
Year and month		Instruments and related products—Continued																																			
		Instruments and related products—Continued												Miscellaneous manufacturing industries																							
		Optical instruments and lenses			Surgical, medical, and dental instruments			Ophthalmic goods			Photographic apparatus			Watches and clocks			Total: Miscellaneous manufacturing industries																				
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings																		
1955: Average	\$78.36	40.6	\$1.93	\$69.02	40.6	\$1.70	\$62.52	40.6	\$1.54	\$85.49	41.1	\$2.08	\$69.20	40.0	\$1.73	\$67.40	40.6	\$1.66																			
December	81.99	41.2	1.99	70.69	41.1	1.72	66.52	42.1	1.58	89.44	41.6	2.15	71.56	40.2	1.78	70.04	41.2	1.70																			
1956: Average	83.03	40.5	2.05	71.33	40.3	1.77	64.64	40.4	1.60	91.46	41.2	2.22	71.13	39.3	1.81	70.70	40.4	1.75																			
January	81.81	40.7	2.01	70.58	40.8	1.73	62.40	40.0	1.66	89.40	41.2	2.17	70.17	39.2	1.79	69.66	40.5	1.72																			
February	81.20	40.4	2.01	70.99	40.8	1.74	64.53	41.1	1.57	89.40	41.2	2.17	70.13	39.4	1.78	69.43	40.6	1.71																			
March	80.80	40.2	2.01	70.47	40.5	1.74	65.35	41.1	1.59	88.54	40.8	2.17	69.03	39.4	1.77	69.89	40.4	1.73																			
April	82.62	40.9	2.02	70.82	40.7	1.74	65.19	41.0	1.59	89.82	41.2	2.18	69.60	39.1	1.77	70.47	40.5	1.74																			
May	82.41	40.2	2.05	70.53	40.3	1.75	64.96	40.6	1.60	89.60	41.1	2.18	69.09	38.6	1.79	69.95	40.2	1.74																			
June	82.00	40.0	2.05	70.00	40.0	1.75	66.26	40.9	1.62	89.84	41.4	2.17	69.87	38.6	1.81	69.77	40.1	1.74																			
July	83.02	40.3	2.06	70.75	40.2	1.76	64.80	40.0	1.62	91.62	40.9	2.24	70.05	38.7	1.81	68.90	39.6	1.74																			
August	84.05	40.8	2.06	71.51	40.4	1.77	63.28	39.8	1.59	92.29	41.2	2.24	72.25	39.7	1.82	69.95	40.2	1.74																			
September	84.25	40.7	2.07	72.50	40.5	1.79	64.40	40.0	1.61	93.34	41.3	2.26	72.47	39.6	1.83	70.53	40.3	1.75																			
October	84.25	40.7	2.07	72.04	39.8	1.81	64.00	40.0	1.60	93.75	41.3	2.27	73.75	40.3	1.83	72.04	40.7	1.77																			
November	84.23	40.3	2.09	73.75	40.3	1.83	64.64	39.9	1.62	93.30	41.1	2.27	71.21	38.7	1.84	71.33	40.3	1.77																			
December	84.65	40.5	2.09	73.12	40.4	1.81	65.93	40.2	1.64	96.67	42.4	2.28	72.34	39.1	1.85	73.21	40.9	1.79																			
Year and month		Miscellaneous manufacturing industries																																			
		Jewelry, silverware, and plated ware ⁴						Jewelry and findings						Silverware and plated ware						Musical instruments and parts						Toys and sporting goods ⁴						Games, toys, dolls, and children's vehicles					
		Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings																		
		1955: Average	\$71.40	42.0	\$1.70	\$67.04	41.9	\$1.60	\$79.95	42.3	\$1.89	\$75.07	40.8	\$1.84	\$80.52	39.3	\$1.54	\$60.28	39.4	\$1.53																	
December	74.91	43.3	1.73	71.01	43.3	1.64	84.20	43.4	1.94	79.19	41.9	1.89	81.15	39.2	1.56	59.52	38.4	1.55																			
1956: Average	75.57	41.8	1.76	69.22	41.7	1.66	83.78	42.1	1.99	80.34	41.2	1.95	82.72	39.2	1.60	62.17	39.1	1.59																			
January	71.99	42.1	1.71	68.10	42.3	1.61	80.06	41.7	1.92	77.27	41.1	1.88	81.78	39.1	1.58	60.67	38.4	1.58																			
February	72.16	42.2	1.71	68.10	42.3	1.61	81.90	42.0	1.95	77.83	41.4	1.88	82.65	39.4	1.59	62.01	39.0	1.59																			
March	72.73	41.8	1.74	68.88	42.0	1.64	80.73	41.4	1.95	79.65	41.7	1.91	82.56	39.1	1.60	61.37	38.6	1.59																			
April	72.63	41.5	1.75	69.39	41.8	1.66	79.95	41.0	1.95	78.91	41.1	1.92	81.85	38.9	1.59	61.85	38.9	1.59																			
May	72.92	41.2	1.77	70.30	41.6	1.69	78.78	40.4	1.95	78.34	40.8	1.92	80.99	38.6	1.58	61.30	38.8	1.58																			

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month	Manufacturing—Continued															Transportation and public utilities		
	Miscellaneous manufacturing industries—Continued															Class I railroads ⁴		
	Sporting and athletic goods			Pens, pencils, other office supplies			Costume jewelry, buttons, notions			Fabricated plastic products			Other manufacturing industries					
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1955: Average	\$60.92	39.3	\$1.55	\$62.88	41.1	\$1.53	\$60.15	40.1	\$1.50	\$72.80	41.6	\$1.75	\$70.30	40.4	\$1.74	\$81.71	41.9	\$1.95
December	63.83	40.4	1.58	65.16	41.5	1.57	63.86	41.2	1.55	73.81	41.7	1.77	73.98	41.1	1.80	82.12	41.9	1.96
1956: Average	63.27	39.3	1.61	67.16	41.2	1.63	62.49	39.3	1.59	75.76	41.4	1.83	74.37	40.2	1.85	86.73	41.3	2.10
January	63.04	39.9	1.58	62.31	40.2	1.55	63.02	40.4	1.56	72.62	40.8	1.78	73.93	40.4	1.83	86.73	41.3	2.10
February	63.44	39.9	1.59	64.68	41.2	1.57	62.71	40.2	1.56	72.39	40.9	1.77	73.89	40.6	1.82	89.89	42.4	2.12
March	64.08	39.8	1.61	65.67	41.3	1.59	62.25	39.4	1.58	73.87	41.5	1.78	73.38	40.1	1.83	87.78	41.8	2.10
April	62.40	39.0	1.60	65.85	40.9	1.61	63.60	39.5	1.61	74.88	41.6	1.80	75.11	40.6	1.85	86.51	41.0	2.11
May	60.90	38.3	1.59	66.17	41.1	1.61	63.67	39.3	1.62	74.16	41.2	1.80	74.56	40.3	1.85	88.41	42.3	2.09
June	61.76	38.6	1.60	67.24	41.0	1.64	61.62	39.0	1.58	74.21	41.0	1.81	74.77	40.2	1.86	87.78	41.6	2.11
July	61.82	38.4	1.61	65.93	40.2	1.64	60.13	38.3	1.57	74.21	41.0	1.81	73.87	39.5	1.87	85.67	40.6	2.11
August	63.90	39.2	1.63	66.01	41.0	1.61	59.75	38.3	1.56	75.58	41.3	1.83	74.56	40.3	1.85	88.83	42.5	2.09
September	65.11	39.7	1.64	65.69	40.3	1.63	60.61	39.1	1.55	78.73	42.1	1.87	74.59	40.1	1.86	87.10	40.7	2.14
October	65.04	39.9	1.63	70.98	42.0	1.69	62.95	39.1	1.61	78.77	41.9	1.88	74.59	40.1	1.86	89.46	42.6	2.10
November	65.27	39.8	1.64	69.39	41.8	1.66	63.08	38.7	1.63	77.61	41.5	1.87	73.23	39.8	1.84	92.20	42.1	2.19
December	67.73	40.8	1.66	70.81	42.4	1.67	64.08	39.8	1.61	78.21	41.6	1.88	75.14	40.4	1.86			

Year and month	Transportation and public utilities—Continued															Other public utilities		
	Communication															Total: Gas and electric utilities		
	Local railways and buslines			Telephone ⁴			Switchboard operating employees ⁵			Line construction, installation, and maintenance employees ⁷			Telegraph					
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1955: Average	\$80.60	43.1	\$1.87	\$72.07	39.6	\$1.82	\$59.72	37.8	\$1.58	\$101.85	43.9	\$2.32	\$78.54	42.0	\$1.87	\$86.52	41.2	\$2.10
December	83.03	43.7	1.90	73.84	39.7	1.86	59.68	37.3	1.60	105.28	44.8	2.35	78.96	42.0	1.88	89.01	41.4	2.15
1956: Average	84.48	43.1	1.96	73.66	39.6	1.86	61.66	38.3	1.61	100.69	43.4	2.32	83.39	42.3	1.97	91.69	41.3	2.22
January	81.60	42.5	1.92	73.28	39.4	1.86	59.41	36.9	1.61	102.93	43.8	2.35	78.40	41.7	1.88	89.42	41.4	2.16
February	82.60	42.8	1.93	71.94	39.1	1.84	59.20	37.0	1.60	99.33	43.0	2.31	78.21	41.7	1.89	88.37	41.1	2.15
March	83.23	42.9	1.94	71.94	39.1	1.84	59.15	37.2	1.59	98.87	42.8	2.31	79.38	42.0	1.89	90.45	41.3	2.19
April	83.27	42.7	1.95	72.34	39.1	1.85	59.36	37.1	1.60	100.25	43.4	2.32	80.94	42.6	1.90	90.42	41.1	2.20
May	84.83	43.5	1.95	72.15	39.0	1.85	59.20	37.0	1.60	100.22	43.2	2.32	85.87	42.3	2.03	91.69	41.3	2.22
June	85.85	43.8	1.96	73.10	39.3	1.86	60.75	37.5	1.62	102.46	43.3	2.32	85.24	42.2	2.02	92.32	41.4	2.23
July	85.73	43.3	1.98	74.21	39.9	1.86	61.34	38.1	1.61	102.75	44.1	2.33	85.24	42.2	2.02	92.32	41.4	2.23
August	85.30	43.3	1.97	72.89	39.4	1.85	60.16	37.6	1.60	100.25	43.4	2.31	86.28	42.5	2.03	91.88	41.2	2.23
September	85.14	43.0	1.98	74.21	39.9	1.86	61.34	38.1	1.61	102.08	44.0	2.32	85.26	42.0	2.03	92.74	41.4	2.24
October	85.54	43.2	1.98	74.03	39.8	1.86	61.66	38.3	1.61	100.92	43.5	2.32	85.26	42.0	2.03	92.66	41.0	2.26
November	85.97	43.2	1.99	77.08	41.0	1.88	65.61	40.5	1.62	102.96	44.0	2.34	84.03	41.6	2.02	94.21	41.5	2.27
December	86.37	43.4	1.99	75.83	39.7	1.91	61.55	37.3	1.65	104.75	44.2	2.37	84.03	41.6	2.02	94.39	41.4	2.28

Year and month	Transportation and public utilities—Continued															Wholesale and retail trade								
	Other public utilities—Continued															Wholesale trade			Retail trade (except eating and drinking places)			General merchandise stores		
	Electric light and power utilities			Gas utilities			Electric light and gas utilities combined																	
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings						
1955: Average	\$88.17	41.2	\$2.14	\$82.62	40.9	\$2.02	\$87.57	41.5	\$2.11	\$77.55	40.6	\$1.91	\$58.50	39.0	\$1.50	\$41.65	35.3	\$1.18						
December	90.67	41.4	2.19	85.28	41.4	2.06	89.84	41.4	2.17	79.56	40.8	1.95	58.71	39.4	1.49	43.04	37.1	1.16						
1956: Average	93.38	41.5	2.25	86.30	40.9	2.11	93.11	41.2	2.26	81.20	40.4	2.01	60.45	38.5	1.57	43.40	35.0	1.24						
January	91.08	41.4	2.20	84.05	41.0	2.05	90.69	41.6	2.18	79.58	40.6	1.96	59.44	38.6	1.54	43.05	35.0	1.23						
February	90.64	41.2	2.20	83.03	40.7	2.04	90.03	41.3	2.18	78.99	40.3	1.96	59.29	38.5	1.54	42.58	34.9	1.22						
March	91.72	41.5	2.21	83.22	40.4	2.06	90.61	41.0	2.21	80.00	40.2	1.99	59.14	38.4	1.54	42.11	34.8	1.21						
April	92.57	41.7	2.22	84.03	40.4	2.08	92.96	41.5	2.24	80.80	40.2	2.01	59.90	38.4	1.56	42.90	34.6	1.24						
May	91.91	41.4	2.22	85.26	40.6	2.10	92.48	41.1	2.25	81.00	40.3	2.01	59.75	38.3	1.56	42.66	34.4	1.24						
June	93.18	41.6	2.24	86.28	40.7	2.12	93.56	41.4	2.26	81.41	40.3	2.02	61.15	38.7	1.58	44.10	35.0	1.26						
July	94.69	41.9	2.26	86.48	40.6	2.13	93.56	41.4	2.26	82.22	40.5	2.03	62.17	39.1	1.59	44.73	35.5	1.26						
August	94.24	41.7	2.26	86.28	40.7	2.12	92.62	40.8	2.27	81.41	40.3	2.02	61.78	39.1	1.58	44.50	35.6	1.25						
September	94.21	41.5	2.27	88.99	41.2	2.16	94.16	41.3	2.28	82.82	40.6	2.04	61.22	38.5	1.59	43.97	34.9	1.26						
October	94.58	41.3	2.29	89.84	41.4	2.17	92.92	40.4	2.30	82.62	40.5	2.04	60.74	38.2	1.59	43.60	34.6	1.26						
November	95.26	41.6	2.29	89.86	41.6	2.16	96.00	41.2	2.33	82.82	40.4	2.05	60.42	38.0	1.59	42.63	34.1	1.25						
December	95.68	41.6	2.30	89.62	41.3	2.17	96.17	41.1	2.34	83.85	40.9	2.05	59.68	38.5	1.55	43.92	36.0	1.22						

Year and month	Wholesale and retail trade—Continued																	
	Retail trade—Continued																	
	Department stores and general mail-order houses			Food and liquor stores			Automotive and accessories dealers			Apparel and accessories stores			Other retail trade					
													Furniture and appliance stores			Lumber and hardware supply stores		
Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings				
1955: Average	\$47.52	36.0	\$1.32	\$61.72	38.1	\$1.62	\$79.64	44.0	\$1.81	\$46.82	35.2	\$1.33	\$66.94	42.1	\$1.59	\$69.82	43.1	\$1.62
December	50.44	38.5	1.31	62.16	37.9	1.64	79.64	44.0	1.81	48.87	36.2	1.35	71.38	43.0	1.66	70.46	42.7	1.65
1956: Average	48.77	35.6	1.37	63.38	37.5	1.69	81.47	43.8	1.86	47.68	34.8	1.37	69.30	42.0	1.65	72.68	42.5	1.71
January	48.42	35.4	1.36	61.92	37.3	1.66	79.10	43.7	1.81	47.06	34.6	1.36	67.39	41.6	1.62	69.72	42.0	1.66
February	48.06	35.6	1.35	61.92	37.3	1.66	78.92	43.6	1.81	46.15	34.7	1.33	66.56	41.6	1.60	69.55	41.9	1.66
March	47.57	35.5	1.34	61.92	37.3	1.66	80.15	43.8	1.83	45.09	33.9	1.33	67.62	42.0	1.61	70.56	42.0	1.68
April	48.36	35.3	1.37	62.50	37.2	1.68	81.03	43.8	1.85	46.17	34.2	1.35	67.78	42.1	1.64	72.85	42.6	1.71
May	48.22	35.2	1.37	62.87	37.2	1.69	81.10	43.6	1.86	46.								

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees ¹—Continued

Year and month	Finance, insurance, and real estate ²			Service and miscellaneous									
	Banks and trust companies	Security dealers and exchanges	Insurance carriers	Hotels, year-round ³			Personal services						Motion picture production and distribution ⁴
							Laundries			Cleaning and dyeing plants			
	Avg. wkly. earnings	Avg. wkly. earnings	Avg. wkly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings
1955: Average.....	\$59.28	\$102.13	\$73.29	\$41.09	41.5	\$0.99	\$40.70	40.3	\$1.01	\$47.40	39.5	\$1.20	\$94.89
December.....	60.83	99.24	74.94	42.02	41.6	1.01	41.31	40.5	1.02	47.92	39.6	1.21	94.61
1956: Average.....	62.00	97.18	77.54	42.13	40.9	1.03	42.32	40.3	1.05	49.90	39.6	1.26	90.80
January.....	61.72	99.09	75.78	41.61	41.2	1.01	41.51	40.3	1.03	47.34	38.8	1.22	93.21
February.....	61.61	97.51	75.62	41.41	41.0	1.01	40.90	40.1	1.02	47.21	38.7	1.22	86.55
March.....	61.75	98.83	76.20	41.20	41.2	1.00	41.70	40.1	1.04	47.07	39.0	1.23	87.49
April.....	61.89	103.73	76.52	41.71	41.3	1.01	42.12	40.5	1.04	49.83	39.9	1.25	92.94
May.....	61.51	100.53	77.08	42.02	40.8	1.03	42.54	40.9	1.04	51.91	41.2	1.26	93.46
June.....	61.53	98.19	77.39	42.43	40.8	1.04	42.95	40.9	1.05	51.69	40.7	1.27	89.50
July.....	62.11	94.75	78.32	42.23	41.0	1.03	42.42	40.4	1.05	49.90	39.6	1.26	90.25
August.....	61.79	96.23	77.77	42.43	40.8	1.04	43.90	39.9	1.05	48.39	38.1	1.27	92.02
September.....	61.93	94.07	78.10	42.22	40.6	1.04	42.61	40.2	1.06	50.94	39.8	1.28	92.96
October.....	62.55	92.87	78.21	42.74	40.7	1.05	42.61	40.2	1.06	50.82	39.7	1.28	90.11
November.....	62.35	94.98	78.92	42.63	40.6	1.05	42.29	39.9	1.06	50.56	39.5	1.28	95.76
December.....	62.96	98.86	80.26	43.35	40.9	1.06	42.80	40.0	1.07	49.92	39.0	1.28	94.98

¹ Data are based upon reports from cooperating establishments covering both full- and part-time employees who worked during, or received pay for, any part of the pay period ending nearest the 15th of the month. For mining, manufacturing, laundries, and cleaning and dyeing plants, data refer to production and related workers only. For the remaining industries, unless otherwise noted, data relate to nonsupervisory employees and working supervisors.

Data for the most recent month are subject to revision without notation; revised figures for earlier months will be identified by asterisks the first month they are published.

² See footnote 2, table A-2.

³ See footnote 3, table A-2.

⁴ Italicized titles which follow are components of this industry.

⁵ Figures for class I railroads (excluding switching and terminal companies) are based upon monthly data summarized in the M-300 report by the Interstate Commerce Commission and relate to all employees who received pay during the month, except executives, officials, and staff assistants (ICC Group I). Beginning with January 1956, class I railroads include only those having annual operating revenues of \$3,000,000 or more. This class formerly included all railroads having annual operating revenues of \$1,000,000 or more.

⁶ Data relate to employees in such occupations in the telephone industry as

switchboard operators, service assistants, operating-room instructors, and pay-station attendants. During 1956 such employees made up 40 percent of the total number of nonsupervisory employees in telephone establishments reporting hours and earnings data.

⁷ Data relate to employees in such occupations in the telephone industry as central office craftsmen; installation and exchange repair craftsmen; line, cable, and conduit craftsmen; and laborers. During 1956 such employees made up 27 percent of the total number of nonsupervisory employees in telephone establishments reporting hours and earnings data.

⁸ Data on average weekly hours and average hourly earnings are not available.

⁹ Money payments only; additional value of board, room, uniforms, and tips not included.

¹⁰ New series; beginning with January 1956, data are not comparable with those for earlier years.

SEE footnote 1, p. 375.

NOTE.—Information on concepts, methodology, etc., is given in a technical note on Hours and Earnings in Non-agricultural Industries, which appeared in the April 1954 Monthly Labor Review.

TABLE C-2: Gross average weekly earnings of production workers in selected industries, in current and 1947-49 dollars ¹

Year	Manufacturing		Bituminous-coal mining		Laundries		Year and month	Manufacturing		Bituminous-coal mining		Laundries	
	Current	1947-49	Current	1947-49	Current	1947-49		Current	1947-49	Current	1947-49	Current	1947-49
1939: A average	\$23.86	\$40.17	\$23.88	\$40.20	\$17.64	\$29.70	1955: December	\$79.71	\$69.49	\$105.73	\$92.18	\$41.31	\$36.02
1940: A average	25.20	42.07	24.71	41.25	17.93	29.93	1956: January	78.55	68.54	104.22	90.94	41.61	36.22
1941: A average	29.58	47.03	30.86	49.06	18.69	29.71	February	78.17	68.21	103.18	90.03	40.90	35.69
1942: A average	36.65	52.58	35.02	50.24	20.34	29.18	March	78.78	68.68	102.38	89.26	41.70	36.36
1943: A average	43.14	58.80	41.02	56.24	23.08	31.19	April	78.99	68.75	105.46	91.78	42.12	36.66
1944: A average	46.08	61.28	45.27	60.18	25.95	34.51	May	79.00	68.46	106.02	91.87	42.54	36.86
1945: A average	44.39	57.72	43.82	57.95	27.73	36.06	June	79.00	68.15	107.82	92.79	42.95	36.96
1946: A average	43.82	52.54	43.82	52.54	30.20	36.21	July	79.19	67.52	102.16	87.32	42.42	36.26
1947: A average	49.97	52.32	49.97	52.32	32.71	34.25	August	79.79	68.31	102.49	87.75	41.90	35.87
1948: A average	54.14	52.07	54.14	52.07	34.23	33.30	September	81.40	69.51	106.12	90.62	42.61	36.39
1949: A average	54.92	53.95	54.92	53.95	34.98	34.36	October	82.21	69.85	110.38	93.78	42.61	36.20
1950: A average	59.33	57.71	59.33	57.71	35.47	34.50	November	82.22	69.80	106.79	90.65	42.29	35.90
1951: A average	64.71	58.30	64.71	58.30	37.81	34.06	December ²	84.05	71.23	115.33	97.74	42.80	36.27
1952: A average	67.97	59.89	67.97	59.89	38.63	34.04							
1953: A average	71.69	62.67	71.69	62.67	39.69	34.69							
1954: A average	71.86	62.60	71.86	62.60	40.10	34.93							
1955: A average	76.52	66.83	76.52	66.83	40.70	35.55							
1956: A average	80.19	69.01	80.19	69.01	42.32	36.42							

¹ These series indicate changes in the level of average weekly earnings prior to and after adjustment for changes in purchasing power as measured by the Bureau's Consumer Price Index, the years 1947-49 being the base period.

² Preliminary.
SEE footnote 1, p. 375.

TABLE C-3: Average weekly earnings, gross and net spendable, of production workers in manufacturing industries, in current and 1947-49 dollars ¹

Year	Gross average weekly earnings		Net spendable average weekly earnings				Year and month	Gross average weekly earnings		Net spendable average weekly earnings			
			Worker with no dependents		Worker with 3 dependents					Worker with no dependents		Worker with 3 dependents	
	Amount	Index (1947-49=100)	Current	1947-49	Current	1947-49		Amount	Index (1947-49=100)	Current	1947-49	Current	1947-49
1939: A average	\$23.86	45.1	\$23.58	\$39.70	\$23.62	\$39.76	1955: December	\$79.71	150.5	\$65.64	\$57.23	\$73.00	\$63.64
1940: A average	25.20	47.6	24.69	41.22	24.95	41.65	1956: January	78.55	148.3	64.74	56.49	72.07	62.89
1941: A average	29.58	55.9	28.05	44.59	29.28	46.55	February	78.17	147.6	64.44	56.23	71.77	62.63
1942: A average	36.65	69.2	31.77	45.58	36.28	52.05	March	78.78	148.8	64.92	56.60	72.25	62.99
1943: A average	43.14	81.5	36.01	48.66	41.39	55.93	April	78.99	149.2	65.08	56.64	72.42	63.03
1944: A average	46.08	87.0	38.29	50.92	44.06	58.59	May	79.00	149.2	65.09	56.40	72.43	62.76
1945: A average	44.39	83.8	36.97	48.08	42.74	55.58	June	79.19	149.6	65.24	56.14	72.58	62.46
1946: A average	43.82	82.8	37.72	45.23	43.20	51.80	July	79.00	149.2	65.09	55.63	72.43	61.91
1947: A average	49.97	94.4	42.76	44.77	48.24	50.51	August	79.79	150.7	65.71	56.26	73.06	62.55
1948: A average	54.14	102.2	47.43	46.14	53.17	51.72	September	81.40	153.7	66.97	57.19	74.37	63.51
1949: A average	54.92	103.7	48.09	47.24	53.83	52.88	October	82.21	155.3	67.62	57.45	75.03	63.75
1950: A average	59.33	112.0	51.09	49.70	57.21	55.65	November	82.22	155.3	67.63	57.41	75.04	63.70
1951: A average	64.71	122.2	54.04	48.68	61.28	55.21	December ²	84.05	158.7	69.10	58.56	76.54	64.86
1952: A average	67.97	128.4	55.66	49.04	63.62	56.05							
1953: A average	71.69	135.4	58.54	51.17	66.58	58.20							
1954: A average	71.86	135.7	59.55	51.87	66.78	58.17							
1955: A average	76.52	144.5	63.15	55.15	70.45	61.53							
1956: A average	80.19	151.4	66.02	56.82	73.38	63.15							

¹ Net spendable average weekly earnings are obtained by deducting from gross average weekly earnings, Federal social security and income taxes for which the worker is liable. The amount of income tax liability depends, of course, on the number of dependents supported by the worker as well as on the level of his gross income. Net spendable earnings have, therefore, been computed for 2 types of income-receivers: (1) A worker with no dependents; (2) A worker with 3 dependents. See footnote 1, table C-2.

The computations of net spendable earnings for both the worker with no dependents and the worker with 3 dependents are based upon the gross average weekly earnings for all production workers in manufacturing industries without direct regard to marital status and family composition. The primary value of the spendable series is that of measuring relative changes in disposable earnings for 2 types of income-receivers.

² Preliminary.
SEE footnote 1, p. 375.

NOTE.—Information on concepts, methodology, etc., is contained in a technical note on the Calculation and Use of the Net Spendable Earnings Series (Revised May 1954), which is available upon request to the Bureau of Labor Statistics.

TABLE C-4: Average hourly earnings, gross and excluding overtime, of production workers in manufacturing industries ¹

Year	Manufacturing			Durable goods		Nondurable goods		Year and month	Manufacturing			Durable goods		Nondurable goods	
	Gross amount	Excluding overtime		Gross	Excluding overtime	Gross	Excluding overtime		Gross amount	Excluding overtime		Gross	Excluding overtime	Gross	Excluding overtime
		Amount	Index (1947-49=100)							Amount	Index (1947-49=100)				
1941: Average	\$0.729	\$0.702	54.5	\$0.808	\$0.770	\$0.640	\$0.625	1955: December	\$1.93	\$1.85	143.6	\$2.06	\$1.97	\$1.74	\$1.68
1942: Average	.853	.805	62.5	.947	.881	.723	.698	1956: January	1.93	1.87	145.2	2.06	1.98	1.75	1.70
1943: Average	.961	.894	69.4	1.059	.976	.803	.763	February	1.93	1.86	144.4	2.05	1.98	1.75	1.70
1944: Average	1.019	.947	73.5	1.117	1.029	.861	.814	March	1.95	1.88	146.0	2.06	1.99	1.78	1.73
1945: Average	1.023	1.963	74.8	1.111	1.042	.904	.858	April	1.96	1.90	147.5	2.08	2.00	1.79	1.74
1946: Average	1.086	1.051	81.6	1.156	1.122	1.015	.981	May	1.97	1.90	147.5	2.08	2.01	1.80	1.75
1947: Average	1.237	1.198	93.0	1.292	1.250	1.171	1.133	June	1.97	1.91	148.3	2.09	2.02	1.81	1.76
1948: Average	1.350	1.310	101.7	1.410	1.366	1.278	1.241	July	1.97	1.90	147.5	2.07	2.01	1.82	1.77
1949: Average	1.401	1.367	106.1	1.469	1.434	1.325	1.292	August	1.98	1.91	148.3	2.10	2.03	1.81	1.75
1950: Average	1.465	1.415	109.9	1.537	1.480	1.378	1.337	September	2.00	1.93	149.8	2.14	2.06	1.82	1.76
1951: Average	1.59	1.53	118.8	1.67	1.60	1.48	1.43	October	2.02	1.94	150.6	2.15	2.06	1.83	1.78
1952: Average	1.67	1.61	125.0	1.77	1.70	1.54	1.49	November	2.03	1.96	152.2	2.16	2.08	1.85	1.79
1953: Average	1.77	1.71	132.8	1.87	1.80	1.61	1.56	December ²	2.05	1.97	153.0	2.18	2.08	1.86	1.80
1954: Average	1.81	1.76	136.6	1.92	1.86	1.66	1.61								
1955: Average	1.88	1.82	141.3	2.01	1.93	1.71	1.66								
1956: Average	1.98	1.91	148.3	2.10	2.02	1.81	1.75								

¹ Overtime is defined as work in excess of 40 hours per week and paid for at time and one-half. The computation of average hourly earnings excluding overtime makes no allowance for special rates of pay for work done on holidays. These data are based on the application of adjustment factors to gross average hourly earnings, as described in Eliminating Premium Overtime From

Hourly Earnings in Manufacturing, Monthly Labor Review, May 1950; reprint Serial No. R. 2020.
² 11-month average; August 1945 excluded because of V-J holiday period.
³ Preliminary.
 See footnote 1, p. 375.

TABLE C-5: Indexes of aggregate weekly man-hours in industrial and construction activity ¹

[1947-49=100]

Industry	1956												1955	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.		Dec.	1956
Total ³	112.1	112.2	114.9	114.5	112.9	106.5	110.9	108.5	108.2	106.6	107.4	108.1	112.3	110.2	108.4
Mining division	84.8	82.3	84.1	85.6	83.7	76.1	84.7	81.7	81.8	80.4	80.9	82.0	82.9	82.3	80.3
Contract construction division	135.5	144.4	157.3	159.8	159.9	154.4	154.4	140.0	128.1	114.0	113.0	112.0	124.3	139.4	126.7
Manufacturing division	110.6	109.6	110.9	109.9	108.1	101.7	106.4	105.8	107.1	107.3	108.4	109.3	112.6	107.9	107.7
Durable goods	121.6	119.7	119.6	116.8	114.6	107.3	115.6	115.6	117.5	116.2	117.4	119.0	122.5	116.8	116.2
Ordnance and accessories	382.7	371.9	373.6	371.8	355.0	368.7	374.6	377.3	381.0	374.1	385.8	389.3	389.3	375.6	413.2
Lumber and wood products (except furniture)	79.1	83.0	88.6	91.2	95.0	90.7	92.4	87.6	83.9	80.1	83.3	83.6	87.9	86.5	90.5
Furniture and fixtures	108.9	106.7	110.9	109.8	107.6	101.1	103.4	102.6	104.9	108.0	109.5	108.8	113.8	106.9	106.2
Stone, clay, and glass products	110.2	111.4	113.3	111.1	112.8	109.7	113.5	112.8	111.4	109.6	108.1	108.2	112.4	110.9	108.6
Primary metal industries	115.6	113.1	113.7	114.3	106.7	73.8	112.6	112.8	115.2	114.3	115.4	117.8	117.9	110.5	110.0
Fabricated metal products (except ordnance, machinery, and transportation equipment)	121.7	119.9	121.3	117.3	111.9	106.9	113.6	114.1	117.0	116.3	117.4	118.8	123.7	116.3	118.0
Machinery (except electrical)	118.1	114.7	114.9	115.0	113.1	112.8	116.0	116.5	118.6	117.3	117.2	116.3	116.4	116.0	106.4
Electrical machinery	145.4	146.8	146.6	142.8	138.7	133.4	137.1	138.5	139.8	133.4	134.5	136.3	140.6	139.7	130.8
Transportation equipment	157.2	147.9	137.6	124.4	125.7	127.3	126.5	128.1	135.1	136.6	138.7	146.9	154.0	136.0	146.3
Instruments and related products	125.0	124.4	125.2	124.4	122.3	119.2	120.8	121.5	122.6	121.2	121.6	121.2	123.1	122.4	117.9
Miscellaneous manufacturing industries	105.4	108.6	111.7	108.5	105.3	97.7	102.7	102.9	103.4	104.2	105.3	103.0	109.0	104.9	104.1
Nondurable goods	97.4	97.6	100.4	101.7	100.3	95.0	95.4	94.1	94.7	96.7	97.6	97.6	100.8	97.4	97.5
Food and kindred products	88.9	93.4	101.4	110.7	105.7	95.5	91.0	85.4	82.3	82.9	82.6	84.9	90.3	91.9	91.0
Tobacco manufactures	95.3	97.1	107.8	114.6	99.7	74.5	77.7	76.6	74.6	76.5	81.6	89.9	97.8	88.6	91.5
Textile-mill products	79.8	80.2	80.2	78.5	78.4	75.2	78.3	79.0	80.3	82.5	84.3	84.3	86.8	80.1	83.0
Apparel and other finished textile products	105.2	104.5	105.8	103.3	105.2	97.2	99.2	99.5	102.9	109.1	112.4	107.4	110.6	104.3	104.9
Paper and allied products	118.3	117.4	117.9	118.6	117.4	116.4	116.8	115.1	115.6	115.5	114.1	115.8	119.0	116.5	114.4
Printing, publishing, and allied industries	117.3	115.1	116.3	114.7	112.9	111.0	111.9	111.7	112.2	112.2	110.3	109.9	114.0	113.1	108.6
Chemicals and allied products	108.7	107.9	108.5	108.2	106.3	105.8	108.1	109.3	111.0	110.4	109.0	109.1	110.1	108.6	107.0
Products of petroleum and coal	94.4	94.6	94.7	97.3	96.4	94.0	94.9	92.5	93.5	93.7	91.5	93.3	93.0	94.1	94.5
Rubber products	112.9	101.1	112.9	109.7	106.6	103.8	103.6	108.3	109.7	109.6	113.1	117.5	119.9	109.4	113.3
Leather and leather products	91.2	88.9	89.1	89.3	93.6	92.4	91.7	87.5	89.4	97.0	101.7	99.1	99.5	92.7	95.0

¹ Aggregate man-hours are for the weekly pay period ending nearest the 15th of the month and do not represent totals for the month. For mining and manufacturing industries, data refer to production and related workers. For contract construction, the data relate to construction workers.

² Preliminary.
³ Includes only the divisions shown.
 See footnote 1, p. 375.

TABLE C-6: Gross average weekly hours and average overtime hours of production workers in manufacturing, by major industry group ¹

Year and month	Total: Manufacturing			Durable goods														
				Total: Durable goods					Ordinance and accessories			Lumber and wood products (except furniture)			Furniture and fixtures			Stone, clay, and glass products
	Gross average wkly. hours	Overtime hours		Gross average wkly. hours	Overtime hours		Gross average wkly. hours	Overtime hours		Gross average wkly. hours	Overtime hours		Gross average wkly. hours	Overtime hours		Gross average wkly. hours	Overtime hours	
		Average	Per cent of gross		Average	Per cent of gross		Average	Per cent of gross		Average	Per cent of gross		Average	Per cent of gross		Average	Per cent of gross
1956: Average	40.5	2.8	6.9	41.1	3.1	7.5	41.8	2.9	6.9	40.3	3.3	8.2	40.8	2.8	6.9	41.1	3.6	8.8
January	40.7	3.0	7.4	41.2	3.1	7.5	41.3	2.6	6.3	40.2	3.5	8.7	40.8	3.0	7.4	40.9	3.5	8.6
February	40.5	2.8	6.9	41.0	3.0	7.3	41.6	2.5	6.0	40.0	3.5	8.8	41.1	3.0	7.3	41.0	3.6	8.8
March	40.4	2.7	6.7	40.9	2.9	7.1	41.3	2.8	6.8	39.6	3.1	7.8	41.0	2.9	7.1	41.0	3.5	8.5
April	40.3	2.7	6.7	41.1	2.9	7.1	41.8	2.8	6.7	39.9	3.1	7.8	40.2	2.5	6.2	41.1	3.6	8.8
May	40.1	2.6	6.5	40.8	2.8	6.9	41.8	2.8	6.7	40.1	3.0	7.5	39.9	2.4	6.0	41.5	3.7	8.9
June	40.2	2.7	6.7	40.8	2.9	7.1	41.6	2.7	6.5	40.5	3.5	8.6	40.3	2.5	6.2	41.4	3.7	8.9
July	40.1	2.6	6.5	40.7	2.8	6.9	41.7	2.9	7.0	40.3	3.2	8.2	40.2	2.4	6.0	41.0	3.7	9.0
August	40.3	2.7	6.7	40.8	2.9	7.1	41.2	2.6	6.3	41.4	3.6	8.7	41.1	2.9	7.1	41.3	3.7	9.0
September	40.7	3.1	7.6	41.4	3.3	8.0	42.1	3.5	8.3	40.9	3.6	8.8	41.3	3.2	7.7	41.1	3.6	8.8
October	40.7	3.1	7.6	41.4	3.3	8.0	42.3	3.4	8.0	40.8	3.1	7.6	41.6	3.2	7.7	41.3	3.7	9.0
November	40.5	3.0	7.4	41.2	3.3	8.0	42.0	3.1	7.4	40.0	2.9	7.3	40.6	2.7	6.7	41.1	3.6	8.8
December ²	41.0	3.1	7.6	41.9	3.4	8.1	42.7	3.4	8.0	40.0	3.0	7.5	41.4	3.0	7.2	41.1	3.3	8.0
Durable goods—Continued																		
Primary metal industries			Fabricated metal products			Machinery (except electrical)			Electrical machinery			Transportation equipment			Instruments and related products			
1956: Average	41.0	2.8	6.8	41.2	3.1	7.5	42.2	3.7	8.8	40.8	2.6	6.4	41.0	2.9	7.1	40.8	2.3	5.6
January	41.9	3.5	8.4	40.9	2.9	7.1	42.7	4.0	9.4	40.9	2.9	7.1	40.6	2.4	5.9	40.8	2.3	5.6
February	41.1	2.8	6.8	41.1	2.9	7.1	42.6	3.9	9.2	40.6	2.5	6.2	39.9	2.3	5.8	41.0	2.3	5.6
March	41.0	2.8	6.8	41.0	2.9	7.1	42.4	3.8	9.0	40.7	2.4	5.9	40.4	2.3	5.7	40.8	2.4	5.9
April	41.2	2.8	6.8	41.1	2.9	7.1	42.5	3.8	8.9	41.0	2.7	6.6	40.6	2.4	5.9	41.1	2.5	6.1
May	41.0	2.8	6.8	40.8	2.7	6.6	42.2	3.6	8.5	40.7	2.5	6.1	39.6	2.1	5.3	40.8	2.4	5.9
June	40.9	2.9	7.1	41.0	2.9	7.1	42.0	3.6	8.6	40.6	2.4	5.9	39.9	2.2	5.5	40.6	2.2	5.4
July	40.3	2.8	6.9	40.8	2.7	6.6	41.7	3.4	8.2	40.1	2.0	5.0	40.8	2.5	6.1	40.5	2.1	5.2
August	39.7	2.3	5.8	40.7	2.9	7.1	41.7	3.4	8.2	40.5	2.5	6.2	40.8	2.7	6.6	40.7	2.2	5.4
September	41.2	3.1	7.5	41.7	3.5	8.4	42.2	3.8	9.0	41.1	2.9	7.1	41.3	3.4	8.2	41.0	2.5	6.1
October	40.8	2.5	6.1	41.9	3.6	8.6	42.1	3.7	8.8	41.2	3.1	7.5	41.8	3.8	9.1	41.0	2.4	5.9
November	40.6	2.6	6.4	41.4	3.3	8.0	41.8	3.5	8.4	41.0	2.9	7.1	42.2	4.5	10.7	40.8	2.3	5.6
December ²	41.3	2.7	6.5	42.1	3.6	8.6	42.6	3.7	8.7	41.2	2.8	6.8	43.4	4.6	10.6	41.1	2.4	5.8
Durable goods—Con.																		
Miscellaneous manufacturing industries			Total: Nondurable goods			Food and kindred products			Tobacco manufactures			Textile-mill products			Apparel and other finished textile products			
1956: Average	40.4	2.6	6.4	39.6	2.5	6.3	41.1	3.3	8.0	38.8	1.1	2.8	39.6	2.6	6.6	36.3	1.2	3.3
January	40.5	2.7	6.7	39.9	2.7	6.8	41.5	3.5	8.4	38.1	1.2	3.1	40.4	3.0	7.4	36.5	1.3	3.6
February	40.6	2.7	6.7	39.8	2.5	6.3	40.7	3.0	7.4	36.6	.7	1.9	40.5	2.9	7.2	37.4	1.5	4.0
March	40.4	2.5	6.2	39.6	2.5	6.3	40.6	2.9	7.1	37.8	.8	2.1	39.9	2.7	6.8	36.7	1.3	3.5
April	40.5	2.5	6.2	39.2	2.4	6.1	40.2	2.8	7.0	37.9	.9	2.4	39.3	2.4	6.1	36.2	1.1	3.0
May	40.2	2.5	6.2	39.1	2.3	5.9	40.6	3.1	7.6	38.8	1.1	2.8	38.9	2.3	5.9	35.7	1.0	2.8
June	40.1	2.3	5.7	39.2	2.4	6.1	41.2	3.5	8.5	39.2	1.3	3.3	38.7	2.1	5.4	35.8	1.0	2.8
July	39.6	2.2	5.6	39.4	2.5	6.3	41.2	3.4	8.3	38.8	1.1	2.8	38.7	2.1	5.4	35.5	.9	2.5
August	40.2	2.6	6.5	39.6	2.5	6.3	41.4	3.3	8.0	39.1	1.0	2.6	39.2	2.3	5.9	36.5	1.2	3.3
September	40.3	2.8	6.9	39.8	2.8	7.0	42.2	3.9	9.2	40.9	1.3	3.2	39.3	2.4	6.1	36.0	1.1	3.1
October	40.7	3.1	7.6	39.8	2.7	6.8	41.3	3.5	8.5	39.6	1.0	2.5	40.0	2.8	7.0	36.4	1.3	3.6
November	40.3	2.8	6.9	39.6	2.7	6.8	41.3	3.7	9.0	38.8	1.1	2.8	40.2	2.9	7.2	36.1	1.3	3.6
December ²	40.9	2.9	7.1	39.8	2.6	6.5	41.0	3.2	7.8	39.7	1.5	3.8	40.2	2.7	6.7	36.3	1.2	3.3
Nondurable goods—Continued																		
Paper and allied products			Printing, publishing, and allied industries			Chemicals and allied products			Products of petroleum and coal			Rubber products			Leather and leather products			
1956: Average	42.8	4.6	10.7	38.8	3.2	8.2	41.3	2.3	5.6	41.1	2.0	4.9	40.2	2.8	7.0	37.6	1.4	3.7
January	43.1	4.7	10.9	38.7	2.8	7.2	41.4	2.3	5.6	41.3	2.0	4.8	40.7	3.5	8.6	39.0	2.0	5.1
February	42.7	4.4	10.3	38.6	2.8	7.3	41.3	2.2	5.3	40.7	1.7	4.2	40.1	2.7	6.7	39.5	2.2	5.6
March	43.0	4.8	11.2	39.0	3.1	7.9	41.2	2.2	5.3	41.2	2.2	5.3	39.5	2.3	5.8	38.2	1.8	4.7
April	42.8	4.5	10.5	38.8	3.1	8.0	41.2	2.3	5.6	41.2	2.0	4.9	39.9	2.5	6.3	36.6	1.3	3.6
May	42.4	4.3	10.1	38.7	3.0	7.8	41.3	2.2	5.3	40.7	1.8	4.4	39.9	2.4	6.0	36.5	1.1	3.0
June	42.7	4.5	10.5	38.6	3.0	7.8	41.3	2.3	5.6	41.1	2.2	5.4	39.5	2.3	5.8	37.3	1.1	2.9
July	43.0	4.8	11.2	38.6	3.0	7.8	41.1	2.3	5.6	41.8	2.4	5.7	39.7	2.5	6.3	38.0	1.2	3.2
August	42.6	4.6	10.8	38.8	3.2	8.2	40.9	2.2	5.4	40.9	2.1	5.1	40.2	2.8	7.0	37.6	1.2	3.2
September	43.0	4.8	11.2	39.0	3.7	9.5	41.4	2.4	5.8	41.7	2.3	5.5	40.5	3.0	7.4	36.9	1.1	3.0
October	42.9	4.8	11.2	39.1	3.6	9.2	41.3	2.2	5.3	40.8	2.0	4.9	40.8	3.4	8.3	36.9	1.2	3.3
November	42.8	4.7	11.0	38.6	3.2	8.3	41.4	2.2	5.3	40.9	1.9	4.6	40.5	2.8	6.9	36.9	1.2	3.3
December ²	43.0	4.6	10.7	39.1	3.4	8.7	41.6	2.2	5.3	41.0	1.7	4.1	41.5	3.2	7.7	37.7	1.3	3.4

¹ Covers premium overtime hours of production and related workers during the pay period ending nearest the 15th of the month. Overtime hours are those for which premiums were paid because the hours were in excess of the number of hours of either the straight-time workday or workweek. Weekend

and holiday hours are included only if premium wage rates were paid. Hours for which only shift differential, hazard, incentive, or other similar types of premiums were paid are excluded. These data are not available prior to 1956. ² Preliminary.

TABLE C-7: Hours and gross earnings of production workers in manufacturing industries for selected States and areas ¹

Year and month	Alabama									Arizona						Arkansas		
	State			Birmingham			Mobile ²			State			Phoenix			State		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1954: Average	\$55.91	39.1	\$1.43	\$71.68	39.6	\$1.81	\$66.90	40.3	\$1.66	\$80.93	41.5	\$1.95	\$79.17	40.6	\$1.95	\$51.00	40.8	\$1.25
1955: Average	60.34	40.5	1.49	78.34	40.8	1.92	69.55	40.2	1.73	83.62	41.6	2.01	80.60	40.5	1.99	53.41	41.4	1.29
1955: December	63.29	41.1	1.54	82.00	41.0	2.00	71.23	40.7	1.75	88.18	42.6	2.07	85.49	41.1	2.08	54.23	41.4	1.31
1956: January	63.49	40.7	1.56	85.08	41.1	2.07	69.02	40.3	1.73	87.99	42.1	2.09	85.90	41.1	2.09	53.97	41.2	1.31
February	61.84	39.9	1.65	82.42	40.6	2.03	68.73	39.5	1.74	87.15	41.9	2.08	84.87	41.2	2.06	54.00	40.6	1.33
March	63.99	39.5	1.62	82.41	40.2	2.05	75.40	41.2	1.83	87.15	41.9	2.08	83.64	40.8	2.05	56.30	40.5	1.39
April	64.55	39.6	1.63	84.67	41.3	2.05	73.75	40.3	1.83	89.04	42.0	2.12	83.84	40.5	2.07	56.02	40.3	1.39
May	60.53	38.3	1.56	74.26	39.5	1.88	73.78	40.1	1.84	90.31	42.6	2.12	85.70	41.4	2.07	56.43	40.6	1.39
June	61.46	38.9	1.58	74.45	39.6	1.88	78.55	40.7	1.93	89.89	42.4	2.15	89.68	42.5	2.11	56.54	40.1	1.41
July	59.90	38.4	1.56	74.00	40.0	1.90	77.39	40.1	1.93	91.38	42.5	2.15	89.89	42.2	2.13	56.56	40.4	1.40
August	62.88	39.3	1.60	75.25	38.2	1.97	78.78	40.4	1.95	88.80	41.3	2.15	86.09	40.8	2.11	54.94	40.1	1.37
September	67.47	40.4	1.67	88.81	41.5	2.14	82.17	41.5	1.98	92.62	42.1	2.20	92.01	42.4	2.17	57.67	40.9	1.41
October	67.30	40.3	1.67	86.90	40.8	2.13	76.03	39.6	1.92	93.06	42.3	2.20	86.33	39.6	2.18	57.53	40.8	1.41
November	66.92	39.6	1.69	87.48	40.5	2.16	76.25	39.1	1.95	92.86	42.4	2.19	89.44	41.6	2.15	56.94	40.1	1.42
December	68.57	40.1	1.71	86.67	40.5	2.14	87.52	42.9	2.04	93.51	42.7	2.19	90.72	42.0	2.16	57.20	40.0	1.43
Arkansas—Con.									California									
Little Rock—North Little Rock			State			Fresno			Los Angeles—Long Beach			Sacramento			San Bernardino—Riverside—Ontario			
1954: Average	\$49.13	40.6	\$1.21	\$81.05	39.9	\$2.03	\$70.37	37.8	\$1.86	\$81.03	40.3	\$2.01	\$77.07	38.5	\$2.00	\$78.52	40.0	\$1.96
1955: Average	52.20	41.1	1.27	85.24	40.5	2.11	73.45	38.1	1.93	85.60	40.9	2.09	80.88	39.2	2.06	81.09	40.0	2.03
1955: December	52.48	41.0	1.28	87.32	40.7	2.15	77.63	39.9	1.95	87.81	41.3	2.13	79.38	37.4	2.12	84.76	40.4	2.10
1956: January	50.96	39.5	1.29	86.47	40.1	2.16	76.57	38.6	1.98	86.80	40.7	2.13	82.51	38.3	2.16	84.43	40.1	2.11
February	51.99	40.3	1.29	86.77	40.3	2.15	77.03	39.9	1.98	87.05	40.8	2.13	83.82	38.4	2.18	85.58	40.5	2.11
March	53.60	40.0	1.34	86.93	40.1	2.17	76.09	39.1	1.95	86.93	40.5	2.15	85.56	39.1	2.19	84.94	40.0	2.12
April	54.81	40.3	1.36	88.16	40.1	2.21	73.67	37.2	1.98	88.47	40.6	2.18	82.21	38.8	2.12	85.45	40.1	2.13
May	55.08	40.5	1.36	88.67	40.1	2.23	80.25	39.3	2.04	89.64	40.8	2.20	87.45	39.0	2.24	87.25	40.1	2.17
June	55.49	40.8	1.36	89.28	40.5	2.22	78.08	39.1	2.00	89.64	40.8	2.20	93.59	40.2	2.33	87.37	40.6	2.15
July	54.67	40.2	1.36	89.96	41.2	2.21	80.44	40.4	1.99	90.86	41.1	2.21	90.09	41.6	2.17	86.62	39.9	2.17
August	54.94	40.1	1.37	90.96	41.2	2.23	77.17	38.6	2.00	91.18	41.0	2.22	112.66	48.8	2.31	90.57	40.9	2.22
September	55.76	40.7	1.37	92.07	41.2	2.24	79.26	39.9	1.99	91.97	41.3	2.23	104.10	46.4	2.24	91.94	41.0	2.24
October	56.72	41.1	1.38	92.42	41.3	2.24	74.68	37.4	2.00	92.61	41.2	2.25	95.11	40.6	2.35	91.03	40.6	2.24
November	56.43	40.6	1.39	91.99	40.7	2.26	74.68	37.4	2.00	92.61	41.2	2.25	95.11	40.6	2.35	91.03	40.6	2.24
December	57.11	40.5	1.41	93.17	40.8	2.28	76.64	38.1	2.01	94.01	41.5	2.26	94.34	40.0	2.36	91.62	40.6	2.26
California—Continued									Colorado									
San Diego			San Francisco—Oakland			San Jose			Stockton			State			Denver			
1954: Average	\$81.31	39.8	\$2.04	\$82.90	39.1	\$2.12	\$76.55	40.1	\$1.92	\$75.48	39.1	\$1.93	\$72.94	40.3	\$1.81	\$73.16	40.2	\$1.82
1955: Average	86.72	40.7	2.13	86.98	39.6	2.20	82.19	40.7	2.02	77.75	39.4	1.97	76.92	40.7	1.89	77.74	40.7	1.91
1955: December	90.28	42.1	2.15	88.75	39.4	2.25	85.68	40.3	2.12	79.76	38.9	2.05	79.32	41.1	1.93	80.97	41.1	1.97
1956: January	86.69	40.5	2.14	88.25	39.2	2.25	86.50	39.9	2.17	82.66	39.3	2.10	79.60	40.0	1.99	80.20	40.3	1.99
February	85.51	40.2	2.13	87.79	39.0	2.25	83.99	39.4	2.13	80.79	38.5	2.10	79.60	40.2	1.98	78.21	39.7	1.97
March	87.73	40.9	2.15	90.12	39.5	2.28	81.49	38.4	2.12	82.11	39.1	2.10	79.20	39.8	1.99	79.20	39.8	1.99
April	88.07	40.8	2.16	90.37	39.5	2.29	83.03	39.0	2.13	81.31	38.9	2.09	81.40	40.7	2.00	81.00	40.5	2.00
May	91.11	41.0	2.22	91.10	39.5	2.31	86.47	40.1	2.16	76.82	37.0	2.08	82.61	41.1	2.01	83.43	41.1	2.03
June	95.08	42.4	2.25	93.03	40.0	2.33	88.52	40.3	2.19	81.37	38.8	2.10	83.22	41.2	2.02	80.60	39.9	2.02
July	93.02	41.6	2.24	91.52	39.4	2.32	87.07	42.0	2.07	87.48	41.7	2.10	80.77	41.0	1.97	84.67	41.3	2.05
August	92.88	41.3	2.25	92.15	40.3	2.29	89.41	44.3	2.02	84.65	41.9	2.02	85.46	42.1	2.03	83.64	41.2	2.03
September	94.18	41.8	2.25	95.32	40.7	2.34	89.76	43.6	2.06	89.50	43.6	2.05	82.22	40.5	2.03	84.46	41.0	2.06
October	94.71	41.7	2.27	94.95	40.4	2.35	88.67	42.5	2.09	89.81	43.5	2.07	81.61	40.4	2.02	84.26	41.1	2.05
November	96.24	42.4	2.27	93.61	39.3	2.38	92.41	40.8	2.27	79.66	37.3	2.14	84.46	41.4	2.04	85.28	41.2	2.07
December	99.11	43.6	2.27	95.35	39.5	2.41	93.54	40.5	2.31	83.67	38.8	2.16	86.32	41.7	2.07	85.49	41.3	2.07
Connecticut									New York									
State			Bridgeport			Hartford			New Britain			New Haven			Stamford			
1954: Average	\$72.76	40.2	\$1.81	\$75.17	40.2	\$1.87	\$77.23	41.3	\$1.87	\$70.84	39.8	\$1.78	\$69.03	39.9	\$1.73	\$79.98	40.6	\$1.97
1955: Average	78.21	41.6	1.88	81.51	41.8	1.95	81.90	42.0	1.95	77.56	41.7	1.86	72.50	40.5	1.79	81.40	40.1	2.03
1955: December	83.42	43.0	1.94	86.43	43.0	2.01	88.31	43.5	2.03	82.21	43.0	1.91	77.70	42.0	1.85	86.53	41.6	2.08
1956: January	82.49	42.3	1.95	86.66	42.9	2.02	87.90	43.3	2.03	82.60	42.8	1.93	75.26	40.9	1.84	85.49	41.3	2.07
February	82.29	42.2	1.95	86.03	42.8	2.01	86.68	42.7	2.03	82.29	42.2	1.95	75.11	40.6	1.85	84.57	41.2	2.06
March	81.32	41.7	1.95	86.29	42.3	2.04	85.67	42.2	2.03	81.54	41.6	1.96	76.36	40.4	1.89	85.28	41.0	2.08
April	81.93	41.8	1.96	85.48	41.9	2.04	87.72	43.0	2.04	82.15	41.7	1.97	77.46	41.2	1.90	83.79	39.9	2.10
May	81.54	41.6	1.96	85.49	41.7	2.05	87.95	42.9	2.05	80.95	41.3	1.96	78.85	41.5	1.92	83.16	39.6	2.10
June	80.56	41.1	1.96	84.46	41.4	2.04	86.29	42.3	2.04	79.17	40.6	1.95	78.34	40.8	1.92	83.16	39.6	2.10
July	81.18	41.0	1.98	84.46	41.2	2.05	87.54	42.7	2.05	78.60	40.1	1.96	77.74	40.7	1.95	84.46	40.1	2.13
August	81.18	41.0	1.98	85.28	41.4	2.06	84.46	41.2	2.05	78.59	40.3	1.98	79.13	41.0	1.93	87.31	40.8	2.14
September	83.40	41.7	2.00	85.91	41.5	2.07	87.98	42.5	2.07	81.77	41.3	1.95	78.24	39.5	1.93	88.60	41.4	2.14
October	84.84	42.0	2.0															

TABLE C-7: Hours and gross earnings of production workers in manufacturing industries for selected States and areas ¹—Continued

Year and month	Connecticut—Con.			Delaware						District of Columbia			Florida					
	Waterbury			State ²			Wilmington ²			Washington			State			Jacksonville		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1954: Average	\$72.36	40.2	\$1.80	\$68.51	39.6	\$1.73	\$81.61	40.2	\$2.03	-----	-----	-----	\$56.44	41.5	\$1.36	-----	-----	-----
1955: Average	\$80.37	42.3	1.90	74.70	40.6	1.84	87.97	41.3	2.13	\$81.60	40.2	\$2.03	58.10	41.5	1.40	-----	-----	-----
1955: December	87.71	44.3	1.98	78.53	40.9	1.92	91.12	41.8	2.18	86.11	41.4	2.08	59.92	42.2	1.42	\$61.93	39.7	\$1.56
1956: January	85.73	43.3	1.98	75.66	39.2	1.93	86.90	39.5	2.20	81.14	39.2	2.07	59.92	41.9	1.43	62.71	40.2	1.56
February	84.08	42.9	1.96	77.99	40.2	1.94	87.89	40.5	2.17	81.77	39.5	2.07	59.76	41.5	1.44	62.96	39.6	1.59
March	82.80	42.9	1.93	78.99	40.3	1.96	87.89	40.5	2.17	82.99	39.9	2.08	62.28	41.8	1.49	63.34	39.1	1.62
April	84.15	42.5	1.98	79.15	40.8	1.94	88.70	40.5	2.19	83.79	39.9	2.10	61.31	40.6	1.51	65.07	39.2	1.66
May	81.58	41.2	1.98	78.17	40.5	1.93	89.87	40.3	2.23	85.03	40.3	2.11	62.32	41.0	1.52	68.54	40.8	1.68
June	80.18	40.7	1.97	79.84	41.8	1.91	91.13	40.5	2.25	84.84	40.4	2.10	62.88	41.1	1.53	69.05	41.1	1.68
July	81.19	40.8	1.99	75.81	39.9	1.90	89.95	39.8	2.26	81.93	39.2	2.09	63.55	41.0	1.55	67.43	39.9	1.69
August	80.39	40.6	1.98	76.78	40.2	1.88	87.86	39.4	2.23	81.90	39.0	2.10	63.02	40.4	1.56	66.30	39.7	1.67
September	82.20	41.1	2.00	78.31	41.0	1.91	89.33	39.7	2.25	86.62	40.1	2.16	63.43	40.4	1.57	67.66	39.8	1.70
October	82.00	41.0	2.00	79.59	40.4	1.97	90.57	39.9	2.27	86.15	39.7	2.17	64.21	40.9	1.57	72.14	41.7	1.73
November	82.82	41.0	2.02	85.69	41.8	2.05	96.10	41.6	2.31	85.32	39.5	2.16	63.70	41.1	1.55	72.62	41.5	1.75
December	83.23	41.0	2.03	89.88	42.8	2.10	101.29	43.1	2.35	86.80	40.0	2.17	65.10	42.0	1.55	73.85	42.2	1.75
Florida—Continued				Georgia						Idaho								
Miami				Tampa-St. Petersburg			State			Atlanta ³			Savannah			State		
1954: Average	-----	-----	-----	\$56.03	41.2	\$1.36	\$49.66	39.1	\$1.27	\$63.04	39.9	\$1.58	\$66.04	41.8	\$1.58	\$78.28	41.2	\$1.90
1955: Average	-----	-----	-----	57.53	40.8	1.41	54.00	40.3	1.34	68.54	40.8	1.68	70.22	42.3	1.66	81.54	41.6	1.96
1955: December	\$61.35	40.9	\$1.50	60.61	41.8	1.45	56.86	41.2	1.38	71.28	41.2	1.73	73.27	43.1	1.70	85.97	43.2	1.99
1956: January	60.89	39.8	1.53	60.62	42.1	1.44	55.61	40.3	1.38	68.06	39.8	1.71	70.73	42.1	1.68	83.20	41.6	2.00
February	61.71	40.6	1.52	59.04	41.0	1.44	55.46	39.9	1.39	69.37	40.1	1.73	70.56	42.0	1.68	79.80	40.3	1.98
March	62.83	40.8	1.54	61.98	41.6	1.49	56.09	39.5	1.42	67.72	39.6	1.71	72.66	42.0	1.73	83.18	41.8	1.99
April	63.49	40.7	1.56	60.30	40.2	1.50	56.49	39.5	1.43	69.48	39.7	1.75	71.97	41.6	1.73	80.20	39.9	2.01
May	62.93	40.6	1.55	59.40	39.6	1.50	55.91	39.1	1.43	69.52	39.5	1.76	71.69	41.2	1.74	86.32	40.7	2.07
June	63.90	40.7	1.57	61.71	40.6	1.52	56.20	39.3	1.43	69.48	39.7	1.75	75.23	42.5	1.77	89.24	42.7	2.09
July	64.31	40.7	1.58	61.91	40.2	1.54	56.02	38.9	1.44	69.65	39.8	1.75	79.10	42.3	1.87	88.74	43.5	2.04
August	63.52	40.2	1.58	60.28	39.4	1.53	57.02	39.6	1.44	70.70	40.4	1.75	78.08	42.9	1.82	89.04	42.0	2.12
September	61.93	39.7	1.56	61.54	39.7	1.55	57.71	39.8	1.45	71.73	40.3	1.78	75.89	41.7	1.82	85.46	40.5	2.11
October	64.46	40.8	1.58	63.36	40.1	1.58	59.20	40.0	1.48	72.76	40.2	1.81	76.68	41.9	1.83	82.39	39.8	2.07
November	63.99	40.5	1.58	64.06	40.8	1.57	61.26	40.3	1.52	77.49	41.0	1.89	77.28	42.0	1.84	83.23	41.0	2.03
December	65.12	40.7	1.60	65.25	41.3	1.58	61.81	40.4	1.53	79.07	41.4	1.91	77.93	41.9	1.86	81.81	40.3	2.03
Illinois				Indiana						Iowa								
State				Chicago			Peoria			Rockford			State			State		
1954: Average	\$76.34	40.0	\$1.91	\$78.92	39.8	\$1.98	\$78.29	39.9	\$1.96	\$80.42	42.5	\$1.89	\$76.17	39.6	\$1.93	\$71.01	40.4	\$1.76
1955: Average	82.27	41.2	2.00	85.78	41.2	2.08	87.69	41.8	2.10	90.26	45.1	2.00	83.47	41.2	2.03	75.73	41.1	1.84
1955: December	86.10	41.9	2.05	89.77	42.0	2.14	88.89	41.3	2.15	96.14	46.1	2.09	87.89	41.9	2.10	78.81	41.6	1.89
1956: January	85.42	41.2	2.07	89.15	41.3	2.16	89.58	41.3	2.17	94.90	45.8	2.07	87.39	41.5	2.11	78.62	41.3	1.90
February	84.61	40.9	2.07	88.07	41.0	2.15	87.26	40.5	2.15	94.86	45.4	2.09	84.24	40.4	2.09	77.22	40.8	1.89
March	85.20	41.1	2.07	88.95	41.2	2.16	86.61	40.4	2.14	94.80	45.3	2.09	85.37	40.7	2.10	77.07	40.7	1.90
April	84.87	40.8	2.08	88.78	40.9	2.17	85.14	39.7	2.14	95.24	45.3	2.10	84.54	40.3	2.10	76.48	40.2	1.91
May	85.19	40.8	2.09	88.69	40.8	2.17	87.91	40.8	2.15	93.45	44.8	2.09	84.39	40.2	2.10	76.25	39.9	1.91
June	85.38	40.8	2.09	89.21	40.8	2.19	89.53	41.4	2.17	88.24	42.9	2.06	85.81	40.5	2.12	76.75	40.1	1.91
July	84.17	40.4	2.08	87.23	40.5	2.15	88.12	40.9	2.15	85.84	41.9	2.05	82.83	40.2	2.06	74.95	39.0	1.92
August	84.77	40.6	2.09	88.57	40.4	2.19	86.66	40.1	2.16	87.61	42.7	2.05	84.99	40.0	2.12	76.38	40.2	1.90
September	88.18	41.3	2.14	93.25	41.6	2.24	90.83	40.7	2.23	90.36	43.2	2.09	88.60	41.4	2.14	80.76	40.8	1.98
October	87.75	41.1	2.14	92.11	41.2	2.24	89.97	40.5	2.22	91.99	43.8	2.10	89.46	41.1	2.18	80.43	40.6	1.98
November	88.70	41.2	2.15	92.53	41.2	2.25	91.21	40.6	2.25	93.48	44.1	2.12	89.80	40.9	2.20	81.77	40.7	2.01
December	89.66	41.4	2.17	93.99	41.5	2.26	91.45	40.6	2.25	94.99	44.2	2.15	91.34	41.3	2.21	82.93	40.9	2.03
Iowa—Continued				Kansas						Kentucky								
Des Moines				State			Topeka			Wichita			State			Louisville		
1954: Average	\$75.50	39.2	\$1.93	\$78.47	41.8	\$1.88	\$71.90	41.8	\$1.72	\$82.36	41.9	\$1.97	\$66.17	39.8	\$1.66	-----	-----	-----
1955: Average	80.84	39.8	2.03	80.81	41.9	1.93	79.36	42.7	1.86	84.29	41.8	2.02	71.75	41.0	1.75	\$79.36	41.0	\$1.94
1955: December	84.46	40.5	2.08	83.60	42.4	1.97	78.81	41.2	1.91	86.32	41.9	2.06	74.95	41.6	1.80	83.19	41.5	2.00
1956: January	85.72	40.8	2.10	82.62	42.0	1.97	78.56	40.6	1.93	87.16	42.3	2.06	71.20	40.2	1.77	80.74	41.0	1.97
February	82.80	40.3	2.05	81.41	41.4	1.97	74.54	39.0	1.91	86.10	41.6	2.07	71.95	40.3	1.78	80.06	40.4	1.98
March	81.47	39.6	2.06	82.10	41.6	1.97	78.36	40.6	1.93	85.75	41.7	2.06	72.70	39.8	1.83	80.78	40.6	1.99
April	82.28	39.2	2.07	83.40	41.9	1.99	80.11	41.2	1.95	85.53	41.6	2.06	74.28	40.1	1.85	82.66	40.7	2.03
May	81.45	39.5	2.08	81.76	41.5	1.97	80.28	41.7	1.93	85.46	41.7	2.05	74.16	40.0	1.85	82.12	40.9	2.01
June	81.19	39.1	2.08	82.94	41.9	1.98	78.86	41.0	1.92	84.40	41.4	2.04	74.52	40.1	1.86	81.79	40.3	2.03
July	75.22	36.0	2.09	83.72	41.8	2.00	80.26	41.6	1.93	86.86	41.8	2.08	72.69	39.7	1.83	81.78	40.0	2.04
August	84.43	39.9	2.12	83.47	41.2	2.03	78.07	40.2	1.94	87.32	40.9	2.13	75.67	40.6	1.86	84.90	40.8	2.08
September	87.60	40.2	2.18	86.30	42.0	2.05	82.76	41.4	2.00	90.08	42.0	2.14	76.70	40.7	1.88	85.50	41.0	2.08
October	85.90	39.5	2.17	85.51	41													

TABLE C-7: Hours and gross earnings of production workers in manufacturing industries for selected States and areas¹—Continued

Year and month	Louisiana									Maine								
	State			Baton Rouge			New Orleans			State			Lewiston			Portland		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1954: Average	\$65.25	41.3	\$1.58	\$91.84	41.0	\$2.24	\$65.60	40.0	\$1.64	\$56.52	39.9	\$1.42	\$52.25	38.0	\$1.37	\$61.11	40.7	\$1.50
1955: Average	69.55	41.9	1.66	95.47	40.8	2.34	68.40	40.0	1.71	58.98	40.6	1.45	54.19	39.4	1.38	63.19	41.2	1.53
1955: December	71.38	43.0	1.66	98.36	41.5	2.37	69.43	40.6	1.71	63.28	42.2	1.50	54.76	39.7	1.38	67.20	42.5	1.58
1956: January	71.97	41.6	1.73	99.31	40.7	2.44	69.95	40.2	1.74	61.49	41.0	1.50	56.44	39.7	1.42	65.67	41.2	1.61
February	71.58	40.9	1.75	99.96	40.8	2.45	68.71	38.6	1.78	62.86	41.8	1.50	55.43	38.8	1.43	67.15	41.7	1.69
March	75.17	41.3	1.82	102.66	40.9	2.51	74.21	41.0	1.81	62.07	40.8	1.52	55.43	38.8	1.43	67.50	41.3	1.63
April	74.62	41.0	1.82	102.25	40.9	2.50	71.60	40.0	1.79	61.87	40.1	1.54	51.06	35.8	1.43	67.83	41.3	1.64
May	74.66	40.8	1.83	101.84	40.9	2.49	74.15	40.3	1.84	62.20	40.1	1.55	52.60	35.9	1.47	68.75	41.9	1.64
June	74.89	40.7	1.84	103.00	41.2	2.50	72.83	39.8	1.83	62.25	40.1	1.55	54.29	37.2	1.46	67.01	41.7	1.61
July	76.86	41.1	1.87	108.79	40.9	2.66	74.61	39.9	1.87	63.08	40.2	1.57	56.11	38.5	1.46	72.48	43.2	1.68
August	75.11	40.6	1.85	103.83	40.4	2.57	74.37	40.2	1.85	65.17	42.2	1.55	55.56	38.1	1.46	67.87	41.2	1.65
September	76.63	41.2	1.86	107.46	39.8	2.70	74.52	40.5	1.84	63.79	40.2	1.59	55.51	37.7	1.47	68.62	40.5	1.69
October	75.99	41.3	1.84	106.23	40.7	2.61	75.44	41.0	1.84	65.63	41.1	1.60	54.05	37.3	1.45	69.97	41.7	1.68
November	76.74	42.4	1.81	105.26	40.8	2.58	75.67	40.9	1.85	64.31	39.9	1.61	51.89	35.3	1.47	68.33	40.3	1.69
December	76.91	41.8	1.84	103.68	40.5	2.56	75.60	40.0	1.89	66.40	41.3	1.61	55.22	38.0	1.45	71.99	42.1	1.71
	Maryland									Massachusetts								
	State			Baltimore			State			Boston			Fall River			New Bedford		
1954: Average	\$68.58	39.8	\$1.72	\$72.71	40.1	\$1.82	\$65.55	39.4	\$1.67	\$68.54	39.3	\$1.74	\$52.06	37.7	\$1.38	\$55.01	38.3	\$1.44
1955: Average	74.52	40.9	1.82	78.89	41.1	1.92	69.09	40.4	1.71	71.48	40.0	1.79	54.96	38.8	1.42	58.53	39.5	1.48
1955: December	77.88	41.2	1.89	82.56	41.6	1.99	72.10	41.2	1.75	74.44	40.9	1.82	53.72	38.1	1.41	58.46	39.5	1.48
1956: January	77.48	40.7	1.91	81.71	41.0	1.99	71.63	40.7	1.76	74.34	40.4	1.84	54.81	38.6	1.42	56.06	38.4	1.46
February	77.61	40.7	1.91	82.06	41.1	2.00	71.40	40.8	1.75	73.93	40.4	1.83	54.57	38.7	1.41	58.95	39.3	1.50
March	77.49	40.4	1.92	81.54	40.8	2.00	70.98	40.1	1.77	72.86	39.6	1.84	53.36	36.8	1.45	58.05	38.7	1.50
April	78.37	40.7	1.93	82.43	41.0	2.01	71.56	40.2	1.78	74.59	40.1	1.86	53.71	37.3	1.44	57.38	38.0	1.51
May	78.59	40.7	1.93	82.54	40.9	2.02	71.42	39.9	1.79	74.99	40.1	1.87	51.50	34.8	1.48	56.46	36.9	1.53
June	79.38	41.0	1.94	83.70	41.1	2.04	70.71	39.5	1.79	74.05	39.6	1.87	49.98	34.0	1.47	55.33	36.4	1.52
July	77.03	40.7	1.89	81.95	41.1	1.99	71.06	39.7	1.79	74.26	39.5	1.88	53.87	36.9	1.46	56.46	36.9	1.53
August	78.00	40.7	1.92	83.48	40.8	2.05	72.00	40.0	1.80	75.58	40.2	1.88	53.94	37.2	1.45	57.61	37.9	1.52
September	79.56	41.0	1.94	85.30	41.5	2.06	73.75	40.3	1.83	77.55	40.6	1.91	55.35	37.4	1.48	58.28	37.6	1.55
October	80.57	40.9	1.97	85.84	41.3	2.08	73.42	39.9	1.84	76.81	39.8	1.93	55.87	37.0	1.51	58.56	37.3	1.57
November	82.14	41.0	2.00	87.02	41.4	2.10	73.26	39.6	1.85	76.63	39.5	1.94	57.13	39.4	1.45	59.03	37.6	1.57
December	82.54	40.8	2.02	86.89	41.2	2.11	75.33	40.5	1.86	79.38	40.5	1.96	55.88	37.5	1.49	60.37	38.7	1.56
	Massachusetts—Continued									Michigan								
	Springfield—Holyoke			Worcester			State			Detroit			Flint			Grand Rapids		
1954: Average	\$71.33	40.2	\$1.77	\$70.65	39.4	\$1.79	\$87.84	40.8	\$2.15	\$91.85	40.5	\$2.27	\$94.79	42.6	\$2.23	\$81.37	41.2	\$1.98
1955: Average	75.31	41.1	1.83	78.45	41.3	1.90	94.84	42.3	2.24	97.64	41.8	2.34	105.94	44.7	2.37	84.82	41.6	2.04
1955: December	77.98	41.7	1.87	84.77	42.6	1.99	96.05	42.0	2.29	98.53	41.4	2.38	107.74	44.3	2.43	87.14	42.2	2.07
1956: January	78.21	41.6	1.88	83.58	42.0	1.99	92.29	40.8	2.26	96.93	40.9	2.37	91.93	39.9	2.30	83.84	40.7	2.06
February	77.00	41.4	1.86	82.59	41.5	1.99	89.65	39.6	2.26	93.53	39.2	2.39	90.35	39.3	2.30	85.20	41.0	2.08
March	77.08	41.0	1.88	81.99	41.2	1.99	92.41	40.8	2.27	97.23	40.8	2.38	92.36	40.0	2.31	87.27	41.5	2.10
April	77.08	41.0	1.88	82.19	41.3	1.99	92.59	40.7	2.28	98.36	40.9	2.41	91.38	39.8	2.30	85.03	40.9	2.08
May	77.71	40.9	1.90	82.20	41.1	2.00	89.79	39.4	2.28	95.51	39.5	2.42	81.01	35.5	2.28	82.99	39.5	2.10
June	76.57	40.3	1.90	82.41	41.0	2.01	91.20	39.6	2.30	96.32	39.3	2.45	92.08	39.1	2.36	84.82	40.2	2.11
July	77.93	40.8	1.91	78.76	40.6	1.94	93.83	40.6	2.31	100.12	40.8	2.45	96.23	40.4	2.38	85.61	40.4	2.12
August	78.72	41.0	1.92	81.20	40.4	2.01	94.35	40.6	2.32	101.84	40.9	2.49	96.28	40.3	2.39	87.34	40.7	2.15
September	81.93	41.8	1.96	84.05	41.0	2.05	99.16	41.3	2.40	107.89	41.8	2.58	102.89	40.3	2.55	90.33	41.4	2.18
October	81.36	41.3	1.97	83.85	40.9	2.05	100.12	41.7	2.40	106.51	41.8	2.55	108.63	42.8	2.54	92.27	42.0	2.20
November	81.38	41.1	1.98	81.97	39.6	2.07	100.02	41.5	2.41	106.13	41.9	2.53	113.97	44.8	2.54	87.40	40.0	2.19
December	83.00	41.5	2.00	83.64	40.6	2.06	106.73	43.6	2.45	114.29	44.3	2.58	121.45	44.8	2.10	89.98	41.2	2.18
	Michigan—Continued									Minnesota								
	Lansing			Muskegon			Saginaw			State			Duluth			Minneapolis—St. Paul		
1954: Average	\$92.85	41.9	\$2.23	\$81.15	38.9	\$2.09	\$83.23	40.7	\$2.05	\$74.03	40.6	\$1.82	\$74.62	39.2	\$1.90	\$76.14	40.2	\$1.89
1955: Average	106.76	45.2	2.36	88.11	41.0	2.15	92.09	42.4	2.17	78.30	41.3	1.90	79.00	39.3	2.01	80.59	40.9	1.97
1955: December	111.89	45.8	2.44	93.23	42.3	2.20	89.42	41.0	2.18	81.91	42.0	1.95	80.77	39.0	2.07	84.24	41.5	2.03
1956: January	93.47	40.2	2.33	89.64	40.8	2.20	86.73	40.3	2.15	81.73	41.6	1.97	84.14	39.2	2.15	83.58	41.2	2.03
February	95.98	41.0	2.34	88.26	40.1	2.20	85.79	39.7	2.16	80.21	40.9	1.96	85.81	39.4	2.18	81.61	40.6	2.01
March	94.98	41.1	2.31	87.58	40.1	2.18	86.40	40.0	2.16	80.27	40.7	1.97	83.50	39.6	2.11	81.74	40.4	2.02
April	92.69	40.6	2.28	88.38	40.1	2.20	86.51	40.2	2.15	80.27	40.6	1.98	84.19	39.8	2.11	81.87	40.5	2.02
May	85.23	37.4	2.28	87.28	39.6	2.20	80.53	37.7	2.14	80.06	40.5	1.98	82.42	39.2	2.10	82.09	40.3	2.04
June	91.56	39.5	2.32	86.11	39.3	2.19	88.19	40.4	2.18	79.79	40.5	1.97	83.94	39.9	2.10	81.94	40.2	2.04
July	94.92	40.1	2.37	88.16	39.5	2.23	88.86	40.5	2.19	79.48	40.4	1.97	76.46	38.1	2.01	83.30	40.6	2.05
August	94.92	40.1	2.37	87.26	39.7	2.20	86.41	39.6	2.18	79.06	40.2	1.97	82.18	38.7	2.12	83.60	40.6	2.06
September	101.06	40.9	2.47	91.17	40.5	2.25	86.45	38.8	2.23	79.94	40.5	1.98	79.35	37.9	2.10	83.73	40.4	2.07

TABLE C-7: Hours and gross earnings of production workers in manufacturing industries for selected States and areas¹—Continued

Year and month	Mississippi						Missouri									Montana		
	State			Jackson			State			Kansas City			St. Louis			State		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1954: Average.....	\$48.14	40.8	\$1.18	\$50.90	40.4	\$1.26	\$67.63	39.0	\$1.73	\$75.02	39.8	\$1.88	\$73.13	39.3	\$1.86	\$79.20	39.9	\$1.99
1955: Average.....	49.80	41.5	1.20	54.25	41.1	1.32	71.24	39.9	1.79	80.71	40.9	1.97	78.20	40.1	1.95	85.66	41.3	2.08
1955: December.....	51.24	42.0	1.22	58.92	44.3	1.33	74.22	40.5	1.83	83.83	41.8	2.00	81.54	40.8	2.00	89.50	41.9	2.14
1956: January.....	49.65	40.7	1.22	57.11	42.3	1.35	73.78	40.0	1.84	80.75	40.5	1.99	81.63	40.6	2.01	91.79	42.0	2.19
February.....	49.04	40.2	1.22	54.00	40.6	1.33	72.63	39.9	1.82	81.36	40.7	1.99	79.93	40.0	2.00	90.22	41.0	2.20
March.....	52.54	39.8	1.32	56.72	41.4	1.37	73.69	39.8	1.85	79.88	39.8	1.99	80.77	40.0	2.02	89.66	41.2	2.18
April.....	52.80	39.7	1.33	59.20	42.9	1.38	73.68	39.4	1.87	80.08	39.8	2.00	81.30	40.0	2.04	91.49	41.3	2.22
May.....	53.33	40.1	1.33	59.78	42.7	1.40	73.69	39.2	1.88	79.97	39.7	2.00	81.36	39.8	2.05	90.74	41.0	2.21
June.....	52.93	39.5	1.34	61.19	42.2	1.45	74.58	39.5	1.89	80.71	39.9	2.01	82.15	40.0	2.06	92.42	41.8	2.21
July.....	54.14	40.4	1.34	61.01	41.5	1.47	75.28	39.8	1.89	79.43	39.4	2.01	83.49	40.2	2.08	91.21	40.6	2.25
August.....	55.35	41.0	1.35	61.92	43.0	1.44	75.05	39.4	1.90	80.63	39.6	2.03	82.77	39.9	2.07	94.32	42.1	2.24
September.....	54.68	40.5	1.35	62.93	43.1	1.46	77.72	40.0	1.94	81.57	39.9	2.05	85.55	40.5	2.11	93.82	42.8	2.19
October.....	53.86	39.6	1.36	61.76	42.3	1.46	79.26	40.0	1.98	85.44	40.9	2.08	87.29	40.7	2.14	89.79	40.8	2.20
November.....	53.04	39.0	1.36	62.88	42.2	1.49	78.80	40.0	1.97	87.12	41.2	2.10	87.77	40.9	2.15	91.23	41.2	2.22
December.....																		
	Nebraska						Nevada			New Hampshire						New Jersey		
	State			Omaha			State			State			Manchester			State		
1954: Average.....	\$67.64	41.8	\$1.62	\$70.64	41.4	\$1.71	\$86.43	40.2	\$2.15	\$57.46	39.9	\$1.44	\$53.68	37.8	\$1.42	\$74.43	39.8	\$1.87
1955: Average.....	71.83	42.2	1.70	76.68	42.8	1.79	86.97	39.0	2.23	60.12	40.9	1.47	55.87	38.8	1.44	79.16	40.7	1.94
1955: December.....	76.84	42.8	1.79	85.29	44.8	1.90	89.38	39.2	2.28	62.85	41.9	1.50	58.55	40.1	1.46	82.32	41.2	2.00
1956: January.....	77.27	42.5	1.82	84.64	43.9	1.93	86.79	37.9	2.29	62.82	41.6	1.51	58.69	40.2	1.46	81.32	40.5	2.01
February.....	72.50	41.0	1.77	77.50	41.5	1.87	83.98	36.2	2.32	63.12	41.8	1.51	58.95	40.1	1.47	81.56	40.7	2.00
March.....	72.42	40.8	1.77	77.37	41.4	1.87	87.78	38.0	2.31	61.97	40.5	1.53	57.07	38.3	1.49	81.45	40.5	2.01
April.....	70.92	40.1	1.77	76.83	41.4	1.86	91.76	37.4	2.44	62.37	40.5	1.54	55.62	38.0	1.49	82.70	40.8	2.03
May.....	73.07	41.2	1.77	77.72	41.6	1.87	91.72	37.9	2.42	62.47	40.3	1.55	57.00	38.0	1.50	82.30	40.5	2.03
June.....	75.04	42.4	1.77	80.08	42.5	1.89	92.58	38.1	2.43	62.47	40.3	1.55	56.25	37.5	1.50	82.46	40.4	2.04
July.....	73.56	41.8	1.76	78.24	41.8	1.87	95.23	38.4	2.48	63.80	40.9	1.56	57.60	38.4	1.50	82.53	40.2	2.05
August.....	74.75	41.9	1.78	78.86	41.8	1.89	95.75	38.3	2.50	63.40	40.9	1.56	58.05	38.7	1.50	82.20	40.0	2.06
September.....	77.79	42.8	1.82	82.76	42.9	1.93	94.72	37.5	2.51	63.65	40.8	1.56	57.15	38.1	1.50	83.59	40.5	2.06
October.....	76.14	42.2	1.80	80.95	42.2	1.92	95.25	38.1	2.50	63.59	40.5	1.57	57.53	38.1	1.51	84.53	40.7	2.08
November.....	79.55	42.5	1.87	85.87	43.1	1.99	93.86	38.0	2.47	63.83	40.4	1.58	57.23	37.9	1.51	85.27	40.7	2.10
December.....	78.54	41.9	1.88	83.27	42.0	1.98	97.78	38.8	2.52	64.94	41.1	1.58	59.43	39.1	1.52	86.42	40.9	2.11
	New Jersey—Continued									New Mexico								
	Newark-Jersey City ⁴			Paterson ⁴			Perth Amboy ⁴			Trenton			State			Albuquerque		
1954: Average.....	\$75.55	39.7	\$1.90	\$75.05	40.5	\$1.85	\$75.44	40.0	\$1.89	\$72.03	39.6	\$1.82	\$78.28	41.2	\$1.90	\$74.39	41.1	\$1.81
1955: Average.....	80.02	40.6	1.97	79.07	41.4	1.91	81.22	41.0	1.98	78.32	40.9	1.91	80.78	40.8	1.98	76.36	40.4	1.89
1955: December.....	84.45	41.5	2.03	81.79	41.6	1.97	83.11	40.9	2.03	81.89	41.4	1.98	82.62	40.7	2.03	82.82	41.0	2.02
1956: January.....	83.44	40.7	2.05	80.23	40.6	1.98	82.53	40.3	2.05	78.88	39.9	1.98	84.87	41.0	2.07	83.98	42.2	1.99
February.....	82.42	40.4	2.04	81.53	41.2	1.98	81.80	40.1	2.04	80.75	40.7	1.98	86.09	40.8	2.11	81.40	40.5	2.01
March.....	82.54	40.4	2.04	82.34	41.4	1.99	82.69	40.1	2.06	80.52	40.3	2.00	87.15	41.9	2.08	84.65	41.7	2.03
April.....	83.84	40.8	2.05	82.69	41.1	2.01	85.16	41.1	2.07	82.24	41.1	2.00	86.53	41.6	2.08	84.42	42.0	2.01
May.....	83.47	40.5	2.06	82.01	40.8	2.01	84.70	40.9	2.07	80.84	40.5	2.00	87.56	41.3	2.12	83.64	41.2	2.03
June.....	83.30	40.3	2.07	82.42	40.8	2.02	83.46	40.3	2.07	79.32	39.5	2.01	84.05	41.0	2.05	81.56	41.4	1.97
July.....	82.72	40.0	2.07	82.42	40.7	2.02	85.91	40.6	2.12	80.12	40.2	1.99	86.10	41.0	2.10	83.60	40.8	2.00
August.....	84.36	40.4	2.09	82.17	40.7	2.02	84.89	40.1	2.12	78.76	39.6	1.99	81.80	40.9	2.00	83.23	40.8	2.04
September.....	85.02	40.6	2.09	83.56	40.9	2.04	86.41	40.8	2.12	84.21	40.8	2.06	85.07	40.9	2.08	84.46	41.2	2.05
October.....	84.52	40.5	2.09	86.32	41.7	2.07	86.57	40.7	2.13	83.46	40.3	2.07	85.49	41.3	2.07	84.66	40.7	2.08
November.....	86.41	40.8	2.12	86.53	41.5	2.09	86.79	40.5	2.14	83.14	40.3	2.06	86.30	40.9	2.11	86.11	41.2	2.09
December.....	87.78	41.0	2.14	86.69	41.4	2.09	88.30	40.9	2.16	83.10	41.1	2.10	88.60	41.4	2.14	88.20	42.2	2.09
	New York																	
	State			Albany-Schenecady-Troy			Binghamton			Buffalo			Elmira			Nassau and Suffolk Counties ⁴		
1954: Average.....	\$71.50	38.8	\$1.84	\$76.08	39.6	\$1.92	\$65.62	37.7	\$1.74	\$82.96	40.3	\$2.06	\$73.67	40.4	\$1.82	\$83.21	41.0	\$2.03
1955: Average.....	75.17	39.5	1.90	81.66	40.5	2.02	70.02	39.2	1.79	89.39	41.2	2.17	76.10	40.5	1.88	83.56	40.6	2.06
1955: December.....	78.08	40.1	1.95	85.46	41.1	2.08	72.69	40.0	1.82	94.00	41.9	2.24	78.74	41.0	1.92	86.60	41.6	2.08
1956: January.....	77.12	39.5	1.95	83.25	40.2	2.07	71.60	39.8	1.80	91.59	41.0	2.23	76.45	39.8	1.92	87.18	41.5	2.10
February.....	77.39	39.6	1.96	83.26	39.9	2.09	73.06	40.1	1.82	90.82	40.8	2.23	77.56	40.8	1.90	87.00	41.4	2.10
March.....	77.30	39.4	1.96	83.72	40.0	2.09	72.86	39.8	1.83	91.43	40.8	2.24	76.39	39.9	1.91	85.91	40.8	2.11
April.....	77.73	39.6	1.96	85.57	40.5	2.11	71.64	39.0	1.84	91.41	40.8	2.24	77.71	40.4	1.93	89.35	42.1	2.12
May.....	77.41	39.3	1.97	85.57	40.5	2.11	74.00	39.6	1.87	91.32	40.5	2.25	76.27	39.8	1.92	89.54	42.3	2.11
June.....	77.91	39.3	1.98	86.94	40.6	2.14	72.87	39.3	1.85	93.13	41.0	2.27	76.55	40.0	1.91	87.09	40.2	2.17
July.....	78.99	39.5	2.00	86.22	40.6	2.12	73.97	39.4	1.88	92.46	40.8	2.27	76.91	39.9	1.93	90.70	41.8	2.17
August.....	79.43	39.6	2.01	85.42	39.4	2.17	75.33	39.9	1.89	94.42	41.2	2.29	77.07	39.8	1.94	89.61	41.1	2.18
September.....	80.01	39.7	2.02	83.71	40.8	2.18	75.63	39.8	1.90	97.06	41.4	2.34	80.12	41.1	1.95	90.23	41.2	2.19
October.....	80.7																	

TABLE C-7: Hours and gross earnings of production workers in manufacturing industries for selected States and areas¹—Continued

Year and month	New York—Continued																	
	New York-North-eastern New Jersey			New York City ⁴			Rochester			Syracuse			Utica-Rome			Westchester County ⁴		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1954: Average	\$72.18	38.6	\$1.87	\$68.66	37.4	\$1.84	\$76.51	40.0	\$1.91	\$74.43	40.3	\$1.85	\$69.03	39.5	\$1.75	\$71.58	39.2	\$1.82
1955: Average	75.26	39.2	1.92	71.65	38.0	1.89	81.00	40.6	1.99	80.08	41.3	1.94	73.44	40.7	1.80	74.24	40.0	1.85
1955: December	77.81	39.7	1.96	73.63	38.4	1.92	85.28	41.4	2.06	84.61	42.2	2.00	79.37	42.1	1.89	75.74	40.1	1.89
1956: January	77.22	39.0	1.98	72.97	37.7	1.93	84.30	41.0	2.06	83.28	41.6	2.00	78.77	41.6	1.89	73.61	38.7	1.90
February	77.62	39.2	1.98	74.06	38.1	1.94	83.90	40.9	2.05	81.25	41.0	1.98	78.33	41.4	1.89	76.58	40.0	1.91
March	77.81	39.1	1.99	74.09	37.9	1.95	83.62	40.5	2.06	81.79	41.2	1.98	78.68	41.6	1.89	76.67	39.9	1.92
April	78.61	39.5	1.99	73.93	38.2	1.94	84.11	40.7	2.07	83.00	41.4	2.01	77.52	41.0	1.89	78.91	40.4	1.95
May	77.81	39.1	1.99	73.37	37.8	1.94	83.89	40.6	2.07	81.19	40.6	2.00	77.18	41.0	1.88	78.43	40.3	1.95
June	77.80	38.9	2.00	73.53	37.7	1.95	84.64	40.7	2.08	81.83	41.0	2.00	77.27	41.0	1.89	78.62	40.2	1.95
July	79.58	39.2	2.03	75.56	37.9	1.99	86.15	40.7	2.12	82.56	41.6	1.99	78.55	41.1	1.91	78.65	39.8	1.98
August	79.58	39.2	2.03	75.66	38.0	1.99	86.33	40.6	2.13	82.65	41.2	2.01	77.51	40.9	1.89	80.69	40.9	1.97
September	79.37	39.1	2.03	74.71	37.7	1.98	87.83	41.0	2.14	85.81	42.2	2.03	78.11	41.0	1.91	80.31	40.3	2.00
October	80.17	39.3	2.04	75.94	38.1	1.99	87.86	40.9	2.14	86.93	41.9	2.07	77.90	40.9	1.91	83.13	40.7	2.04
November	81.18	39.6	2.05	76.23	38.2	1.99	87.94	40.9	2.15	86.48	41.6	2.08	79.27	41.3	1.92	86.53	41.8	2.06
December	82.18	39.7	2.07	77.07	38.3	2.01	87.93	40.8	2.15	86.60	41.6	2.08	82.20	41.9	1.96	87.16	41.8	2.09
	North Carolina									North Dakota						Ohio		
	State			Charlotte			Greensboro-High Point			State			Fargo			State		
1954: Average	\$47.88	38.3	\$1.25	\$52.66	40.2	\$1.31	\$47.73	37.0	\$1.29	\$67.55	44.3	\$1.52	\$69.70	41.9	\$1.66	\$78.88	39.6	\$1.99
1955: Average	51.46	40.2	1.28	55.89	41.4	1.35	50.42	38.2	1.32	68.45	44.4	1.54	77.65	44.9	1.71	86.74	41.1	2.11
1955: December	54.65	41.4	1.32	58.51	42.4	1.38	53.33	39.5	1.35	70.91	43.0	1.65	78.21	43.1	1.81	91.33	41.9	2.18
1956: January	53.73	40.4	1.33	57.82	41.6	1.39	52.60	38.6	1.36	76.50	44.5	1.72	88.60	46.1	1.92	90.74	41.5	2.19
February	53.87	40.5	1.33	57.82	41.3	1.40	53.31	39.2	1.36	72.35	42.9	1.69	78.33	42.3	1.85	89.16	41.1	2.17
March	55.07	40.2	1.37	58.77	41.1	1.43	52.72	38.2	1.38	74.84	43.7	1.71	78.84	42.3	1.86	88.65	40.8	2.17
April	53.70	39.2	1.37	58.34	40.8	1.43	50.87	36.6	1.39	75.23	43.8	1.72	80.13	43.3	1.85	89.31	40.9	2.18
May	53.84	39.3	1.37	56.77	39.7	1.43	51.99	37.4	1.39	74.01	43.7	1.69	76.65	42.6	1.80	88.08	40.3	2.19
June	53.70	39.2	1.37	57.89	40.2	1.44	52.58	38.1	1.38	72.02	42.9	1.68	82.20	44.4	1.85	89.93	40.8	2.20
July	53.18	39.1	1.36	56.06	39.2	1.43	52.30	37.9	1.38	75.74	44.5	1.70	82.87	44.6	1.86	88.73	40.6	2.19
August	53.86	39.6	1.36	57.74	40.1	1.44	52.82	38.0	1.39	76.37	44.5	1.72	82.22	44.3	1.86	89.47	40.5	2.21
September	54.00	40.0	1.35	58.29	40.2	1.45	53.38	38.4	1.39	73.49	42.5	1.73	74.51	41.1	1.81	93.30	41.4	2.25
October	55.89	40.5	1.38	61.27	41.4	1.48	54.95	38.7	1.42	76.15	43.3	1.76	79.91	42.9	1.86	93.58	41.4	2.26
November	56.96	40.4	1.41	60.53	40.9	1.48	55.38	39.0	1.42	77.98	43.2	1.81	86.56	44.2	1.96	92.66	41.0	2.26
December	57.37	40.4	1.42	62.43	41.9	1.49	57.31	39.8	1.44	76.68	42.7	1.80	80.19	41.6	1.93	95.59	41.7	2.29
	Ohio—Continued																	
	Akron			Canton			Cincinnati			Cleveland			Columbus			Dayton		
1954: Average							\$74.89	40.5	\$1.85	\$81.70	39.8	\$2.05						
1955: Average	\$88.98	39.2	\$2.27				80.60	41.2	1.96	90.37	41.7	2.17				\$94.26	42.1	\$2.24
1955: December	91.96	39.4	2.33				83.90	42.2	1.99	96.45	42.8	2.25				100.07	43.0	2.33
1956: January	91.03	39.0	2.33	\$93.36	41.8	\$2.23	82.06	41.2	1.99	95.08	42.1	2.26	\$83.63	41.1	\$2.03	99.13	42.6	2.33
February	90.84	39.1	2.32	88.07	40.0	2.20	81.31	41.1	1.98	94.56	42.0	2.25	83.08	40.8	2.04	95.93	41.7	2.30
March	88.19	37.9	2.33	88.67	40.1	2.21	82.53	41.4	1.99	93.50	41.7	2.24	83.22	40.9	2.03	93.01	40.7	2.29
April	90.57	38.8	2.33	88.73	40.0	2.22	83.48	41.6	2.01	93.42	41.6	2.25	83.44	40.4	2.07	94.94	41.2	2.30
May	89.96	38.6	2.33	88.12	39.8	2.21	83.10	41.3	2.01	92.02	40.9	2.25	83.86	40.5	2.07	90.20	39.3	2.30
June	90.46	38.9	2.33	91.16	40.7	2.24	84.07	41.3	2.04	93.16	41.1	2.27	85.24	41.0	2.08	96.25	41.0	2.35
July	92.73	39.2	2.37	86.14	39.9	2.16	83.05	40.8	2.04	92.36	41.2	2.24	84.52	40.2	2.10	97.49	41.1	2.37
August	87.06	37.1	2.35	90.34	40.6	2.23	85.01	41.6	2.04	94.73	41.6	2.28	86.39	40.8	2.12	97.34	41.3	2.36
September	93.56	38.7	2.42	93.43	40.4	2.31	87.07	42.1	2.07	97.37	41.8	2.33	87.25	40.3	2.13	100.96	42.0	2.40
October	94.12	39.2	2.40	93.66	40.4	2.32	87.65	42.1	2.08	97.94	42.0	2.33	87.25	40.8	2.14	99.60	41.4	2.41
November	93.76	39.7	2.36	91.95	39.6	2.32	87.21	41.8	2.09	98.37	42.0	2.34	86.01	40.8	2.13	96.88	40.5	2.39
December	97.75	40.6	2.41	94.07	40.3	2.33	88.75	42.1	2.11	99.57	42.3	2.35	87.90	40.5	2.15	101.33	41.7	2.43
	Ohio—Continued									Oklahoma						Oregon		
	Toledo			Youngstown			State			Oklahoma City			Tulsa			State		
1954: Average							\$72.04	41.4	\$1.74	\$69.76	42.8	\$1.63	\$78.12	40.9	\$1.91	\$83.81	38.8	\$2.16
1955: Average							73.87	41.5	1.78	70.47	42.2	1.67	81.64	41.6	1.96	88.25	39.1	2.26
1955: December							76.26	41.9	1.82	75.50	42.9	1.76	84.00	42.0	2.00	89.73	39.2	2.29
1956: January	\$90.47	40.1	\$2.26	\$102.76	42.0	\$2.45	77.15	41.7	1.85	75.08	43.4	1.73	84.03	41.6	2.02	90.63	39.3	2.31
February	89.25	39.7	2.25	98.14	40.5	2.42	76.18	41.4	1.84	72.33	42.3	1.71	84.04	41.4	2.03	89.81	39.1	2.30
March	90.57	40.1	2.26	97.28	40.3	2.41	76.07	40.9	1.86	73.25	42.1	1.74	81.20	40.4	2.01	89.24	38.9	2.29
April	90.84	40.2	2.26	98.58	40.6	2.43	78.09	41.1	1.90	72.76	42.3	1.72	83.84	40.7	2.06	92.98	39.5	2.35
May	91.50	40.2	2.28	96.59	39.7	2.43	77.90	41.0	1.90	73.85	42.2	1.75	83.64	40.6	2.06	92.04	39.0	2.36
June	91.38	40.0	2.28	101.89	41.0	2.49	79.65	41.7	1.91	74.62	42.4	1.76	83.64	40.6	2.06	90.71	39.2	2.31
July	91.60	40.0	2.29	94.86	41.1	2.31	78.66	41.4	1.90	75.58	42.7	1.77	84.05	41.0	2.05	89.86	38.7	2.32
August	91.30	39.9	2.29	95.78	39.1	2.45	78.84	40.8	1.92	74.58	41.9	1.78	84.85	40.6	2.09	92.26	39.7	2.32
September	94.45	40.4	2.34	107.33	41.3	2.60	80.48	41.7	1.93	77.33	43.2	1.79	86.27	40.5	2.13	90.48	39.0	2.32
October	94.22	40.2	2.34	105.66	41.4	2.55	80.67	41.8	1.93	77.58	43.1	1.80	89.24	41.7	2.14	88.55	38.4	2.31
November	91.27	39.2	2.															

TABLE C-7: Hours and gross earnings of production workers in manufacturing industries for selected States and areas¹—Continued

Year and month	Oregon—Continued						Pennsylvania											
	Portland			State			Allentown-Bethlehem-Easton			Erie			Harrisburg			Lancaster		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1954: Average	\$77.44	38.3	\$2.02	\$69.48	38.6	\$1.80	\$64.11	36.8	\$1.74	\$74.49	39.9	\$1.87	\$59.45	37.2	\$1.60	\$63.07	40.2	\$1.57
1955: Average	82.00	38.9	2.11	75.20	40.0	1.88	71.59	38.8	1.85	80.62	41.6	1.94	65.93	39.2	1.68	66.91	41.2	1.62
1955: December	83.46	38.8	2.15	78.67	40.7	1.93	76.14	39.8	1.91	82.05	41.5	1.98	70.75	40.5	1.75	70.47	41.8	1.69
1956: January	83.63	38.7	2.16	79.22	40.4	1.96	76.90	39.6	1.94	84.25	42.4	2.00	68.87	39.2	1.76	70.72	41.6	1.70
February	84.75	39.0	2.17	78.31	40.2	1.95	75.21	39.5	1.90	84.44	42.2	2.01	70.30	39.1	1.80	70.23	41.0	1.71
March	85.11	38.9	2.19	78.84	40.1	1.97	74.96	39.0	1.92	84.91	42.2	2.03	69.67	38.6	1.81	70.11	41.0	1.71
April	86.80	39.4	2.20	79.56	40.1	1.98	75.82	38.9	1.95	85.08	42.1	2.02	72.07	39.6	1.84	68.94	40.6	1.70
May	92.02	38.7	2.33	79.92	40.0	2.00	77.81	39.2	1.99	85.13	42.1	2.03	71.75	39.4	1.82	68.65	40.6	1.69
June	89.02	37.8	2.36	80.28	39.9	2.01	76.73	38.5	1.99	85.91	42.3	2.02	67.37	39.4	1.71	67.68	40.0	1.69
July	86.07	38.7	2.22	76.81	39.8	1.93	73.58	39.9	1.85	84.33	41.5	2.03	72.10	39.4	1.83	69.08	40.4	1.71
August	88.44	39.5	2.24	79.20	39.6	2.00	78.97	38.9	2.03	86.51	42.2	2.05	74.96	40.3	1.86	71.28	41.2	1.73
September	86.70	39.3	2.21	81.80	40.1	2.04	83.22	40.4	2.06	87.78	42.2	2.08	74.96	40.3	1.86	72.28	41.3	1.75
October	85.19	38.9	2.19	83.02	40.3	2.06	80.96	39.3	2.06	90.52	42.7	2.11	74.03	39.8	1.86	73.28	41.4	1.77
November	85.49	38.3	2.23	83.23	40.2	2.07	83.18	39.8	2.09	89.46	42.0	2.13	75.83	39.7	1.91	73.28	41.4	1.77
December	87.95	38.9	2.26	84.25	40.7	2.07	84.40	40.0	2.11	90.09	42.1	2.14	75.83	39.7	1.91	72.57	41.0	1.77
Pennsylvania—Continued																		
Year and month	Philadelphia			Pittsburgh			Reading			Scranton			Wilkes-Barre-Hazleton			York		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1954: Average	\$74.12	39.3	\$1.89	\$80.37	38.6	\$2.08	\$63.31	38.0	\$1.67	\$54.13	37.8	\$1.43	\$50.44	36.9	\$1.37	\$62.11	40.1	\$1.55
1955: Average	78.15	40.2	1.94	89.99	40.5	2.22	68.36	39.7	1.72	55.57	38.3	1.45	62.03	37.7	1.38	65.15	40.9	1.59
1955: December	81.46	41.1	1.98	94.88	41.2	2.30	71.77	40.5	1.77	57.99	39.5	1.47	53.52	37.8	1.42	68.89	41.5	1.66
1956: January	80.80	40.4	2.00	97.00	41.4	2.34	72.34	40.3	1.80	57.26	38.9	1.47	54.05	38.2	1.42	66.50	40.9	1.63
February	80.80	40.4	2.00	94.34	40.7	2.32	71.45	40.3	1.77	59.25	39.5	1.50	54.29	37.7	1.44	68.18	41.5	1.64
March	81.33	40.4	2.01	94.38	40.7	2.34	71.14	39.9	1.78	59.02	38.6	1.53	55.32	37.3	1.48	68.64	41.1	1.67
April	81.93	40.5	2.02	95.86	41.0	2.34	71.96	40.0	1.80	58.29	38.1	1.53	54.72	37.0	1.48	68.67	40.9	1.68
May	81.72	40.1	2.04	95.67	40.9	2.34	71.98	40.1	1.80	59.12	37.9	1.56	54.65	36.9	1.48	68.55	41.0	1.67
June	82.90	40.4	2.05	96.45	40.8	2.36	72.50	39.9	1.82	60.25	38.4	1.57	55.09	36.7	1.50	69.46	41.2	1.69
July	82.17	40.2	2.04	90.74	39.8	2.28	73.16	40.2	1.82	58.98	38.2	1.54	55.39	37.1	1.49	67.39	40.4	1.67
August	83.60	40.6	2.06	90.09	38.5	2.34	73.20	40.0	1.83	60.84	39.0	1.56	55.58	37.3	1.49	68.21	40.6	1.68
September	84.85	40.6	2.09	96.88	40.2	2.41	72.83	39.8	1.83	61.00	39.1	1.56	55.33	36.4	1.52	67.43	39.9	1.69
October	85.65	40.4	2.12	99.06	40.6	2.44	74.07	40.7	1.82	61.46	38.7	1.58	56.32	37.3	1.51	69.80	41.3	1.69
November	84.44	40.4	2.09	98.33	40.3	2.44	74.52	40.5	1.84	62.57	39.6	1.58	58.37	38.4	1.52	70.04	41.2	1.70
December	86.50	40.8	2.12	101.93	41.1	2.48	74.52	40.5	1.84	62.63	38.9	1.61	57.56	37.8	1.52	71.04	41.3	1.72
Rhode Island																		
Year and month	State			Providence			South Carolina						South Dakota					
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	State		Charleston		State		Sioux Falls					
1954: Average	\$60.44	39.5	\$1.53	\$61.10	40.2	\$1.52	\$49.64	39.4	\$1.26	\$52.00	39.1	\$1.33	\$67.39	43.8	\$1.54	\$73.84	45.3	\$1.63
1955: Average	62.47	40.3	1.55	63.33	40.6	1.56	53.30	41.0	1.30	56.56	40.4	1.40	72.49	45.3	1.60	80.55	47.9	1.68
1955: December	65.64	41.0	1.60	66.40	41.5	1.60	55.59	41.8	1.33	55.98	39.7	1.41	77.58	46.3	1.68	90.55	51.4	1.76
1956: January	64.93	40.7	1.59	66.01	41.0	1.61	55.21	41.2	1.34	56.80	40.0	1.42	79.91	47.4	1.69	90.61	51.4	1.76
February	65.37	40.8	1.60	65.85	40.9	1.61	54.53	41.0	1.33	56.26	39.9	1.41	78.05	46.0	1.70	87.40	49.2	1.78
March	65.00	40.2	1.62	64.49	40.0	1.61	55.21	40.3	1.37	60.38	40.8	1.48	75.86	44.6	1.70	83.43	47.3	1.76
April	65.79	40.4	1.63	66.02	40.5	1.63	55.07	40.2	1.37	58.65	39.9	1.47	72.36	43.0	1.68	77.25	43.3	1.78
May	65.49	39.8	1.65	66.00	40.0	1.65	54.12	39.5	1.37	61.86	40.7	1.52	73.00	43.6	1.67	78.38	44.3	1.77
June	65.31	39.6	1.65	64.71	39.7	1.64	53.72	39.7	1.36	60.05	40.3	1.49	76.42	45.4	1.68	83.26	46.9	1.78
July	65.57	39.3	1.67	66.33	40.2	1.65	54.79	39.6	1.38	64.40	40.5	1.59	74.66	44.5	1.68	81.44	46.0	1.77
August	65.53	38.9	1.68	64.85	39.3	1.65	54.80	40.0	1.37	62.00	40.0	1.55	71.71	43.0	1.67	75.37	43.0	1.75
September	66.00	39.4	1.67	66.73	40.2	1.66	55.35	40.4	1.37	62.71	40.2	1.56	76.38	44.5	1.72	85.49	47.6	1.80
October	66.24	38.9	1.70	67.26	39.8	1.69	57.08	40.2	1.42	60.84	39.0	1.56	79.33	46.4	1.71	88.10	49.6	1.78
November	66.14	38.5	1.72	67.09	39.7	1.69	58.34	40.8	1.43	63.36	40.1	1.58	80.85	47.0	1.72	88.73	49.9	1.78
December	68.12	40.0	1.70	68.85	40.5	1.70	58.49	40.9	1.43	64.80	40.5	1.60	81.61	45.2	1.81	95.92	49.8	1.93
Tennessee																		
Year and month	State			Chattanooga			Knoxville			Memphis			Nashville			Texas		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1954: Average	\$57.71	39.8	\$1.45	\$57.48	39.1	\$1.47	\$66.47	39.1	\$1.70	\$64.06	41.6	\$1.54	\$59.20	40.0	\$1.48	\$72.04	41.4	\$1.74
1955: Average	60.64	40.7	1.49	62.37	40.5	1.54	69.20	40.0	1.73	69.01	42.6	1.62	62.02	40.8	1.52	75.78	42.1	1.80
1955: December	62.78	41.3	1.52	65.83	41.4	1.59	71.68	40.5	1.77	72.33	42.8	1.69	64.17	41.4	1.55	78.07	42.2	1.85
1956: January	62.42	40.8	1.53	65.03	40.9	1.59	71.68	40.5	1.77	69.89	41.6	1.68	64.32	41.5	1.55	77.19	41.5	1.86
February	62.12	40.6	1.53	64.55	40.6	1.59	72.39	40.9	1.77	69.46	41.1	1.69	64.43	41.3	1.56	77.00	41.4	1.86
March	62.96	40.1	1.57	64.40	40.0	1.61	73.49	40.6	1.81	68.71	40.9	1.68	64.64	40.4	1.60	78.28	41.2	1.90
April	62.88	39.8	1.58	64.96	40.1	1.62	72.98	40.1	1.82	68.54	40.8	1.68	65.85	40.4	1.63	79.10	41.2	1.92
May	62.73	39.7	1.58	64.24	39.9	1.61	72.98	40.1	1.82	69.19	40.7	1.70	65.69	40.8	1.61	78.74	40.8	1.93
June	63.12	39.7	1.59	64.38	39.5	1.63	71.89	39.5	1.82	68.85	40.5	1.70	65.60	41.0	1.60	80.12	41.3	1.94
July	63.04	39.4	1.60	63.14	38.5	1.64	71.21</											

TABLE C-7: Hours and gross earnings of production workers in manufacturing industries for selected States and areas¹—Continued

Year and month	Utah						Vermont						Virginia					
	State			Salt Lake City			State			Burlington			Springfield			State		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1954: Average	\$73.42	39.9	\$1.84	\$74.89	40.7	\$1.84	\$59.83	40.7	\$1.47	\$59.25	39.5	\$1.50	\$71.63	40.7	\$1.76	\$56.66	39.9	\$1.42
1955: Average	77.60	40.0	1.94	77.52	40.8	1.90	63.57	42.1	1.51	58.95	40.1	1.47	78.01	43.1	1.81	59.30	40.9	1.45
1955: December	81.40	40.7	2.00	79.90	41.4	1.93	66.15	42.7	1.55	58.21	40.2	1.45	85.62	45.0	1.90	61.57	41.6	1.48
1956: January	83.82	40.3	2.08	80.77	41.0	1.97	65.97	42.4	1.56	57.80	40.0	1.45	83.73	44.2	1.89	60.49	40.6	1.49
February	80.99	39.7	2.04	78.61	39.7	1.98	66.42	42.6	1.56	54.46	39.6	1.43	83.16	44.3	1.88	60.64	40.7	1.49
March	83.21	40.2	2.07	80.60	40.3	2.00	67.20	42.4	1.59	56.60	39.5	1.43	83.41	43.8	1.90	61.81	40.4	1.53
April	85.47	40.7	2.10	83.01	41.3	2.01	67.53	42.3	1.60	56.22	39.5	1.42	85.87	44.1	1.95	61.51	40.2	1.53
May	84.46	40.8	2.07	82.01	40.8	2.01	67.67	42.2	1.60	56.55	39.4	1.44	84.56	43.6	1.94	61.91	40.2	1.54
June	84.03	40.4	2.08	83.63	41.4	2.02	68.10	42.4	1.61	59.94	40.3	1.49	84.34	43.4	1.94	61.91	40.2	1.54
July	76.83	39.4	1.95	83.63	41.4	2.02	67.68	42.3	1.60	61.10	41.1	1.49	85.65	44.4	1.93	61.75	40.1	1.54
August	75.14	37.2	2.02	83.23	41.0	2.03	66.88	41.9	1.60	62.67	41.8	1.50	83.29	43.3	1.92	61.35	40.1	1.53
September	83.63	41.4	2.02	86.10	42.0	2.05	67.52	41.9	1.61	60.87	40.3	1.51	83.99	42.9	1.96	62.22	40.4	1.54
October	82.53	39.3	2.10	83.84	41.1	2.04	68.21	42.0	1.62	65.18	42.4	1.54	83.57	42.4	1.97	62.27	40.7	1.53
November	86.92	41.0	2.12	85.08	41.1	2.07	66.67	40.9	1.63	65.71	41.8	1.57	81.82	41.5	1.97	63.80	40.9	1.56
December	87.67	40.4	2.17	85.06	40.7	2.09	69.21	42.1	1.65	68.44	43.7	1.57	84.66	42.6	1.99	64.46	40.8	1.58
Virginia—Continued						Washington												
Norfolk-Portsmouth			Richmond			State			Seattle			Spokane			Tacoma			
1954: Average	\$62.12	40.6	\$1.53	\$60.25	39.9	\$1.51	\$81.31	39.0	\$2.09	\$78.53	38.4	\$2.04	\$81.28	39.9	\$2.04	\$80.08	39.1	\$2.05
1955: Average	66.56	41.6	1.60	65.19	41.0	1.59	84.68	39.1	2.17	82.20	38.6	2.13	87.62	40.7	2.16	82.23	38.9	2.12
1955: December	68.30	41.9	1.63	68.62	42.1	1.63	87.09	39.3	2.22	84.73	39.1	2.17	91.56	40.8	2.24	82.04	38.2	2.15
1956: January	64.15	39.6	1.62	66.74	41.2	1.62	87.46	39.1	2.23	84.88	38.9	2.18	88.60	40.1	2.21	83.15	38.5	2.16
February	64.31	39.7	1.62	64.48	39.8	1.62	85.49	38.4	2.23	83.22	38.3	2.17	89.68	40.1	2.24	82.81	38.0	2.18
March	64.80	40.0	1.62	67.32	40.8	1.65	86.26	38.7	2.23	84.98	39.0	2.18	88.70	39.9	2.22	84.69	38.5	2.20
April	65.04	39.9	1.63	67.89	40.9	1.66	88.02	39.0	2.26	85.12	38.8	2.19	89.34	40.1	2.23	83.58	37.7	2.22
May	66.75	40.7	1.64	67.56	40.7	1.66	88.47	39.1	2.26	85.74	38.8	2.21	89.31	39.3	2.27	86.53	39.1	2.22
June	65.84	39.9	1.65	68.88	41.0	1.68	90.03	39.5	2.28	86.24	38.9	2.22	91.97	39.9	2.31	87.49	38.8	2.25
July	65.18	39.5	1.65	68.71	40.9	1.68	89.69	39.2	2.29	89.05	39.2	2.27	93.20	40.2	2.32	84.76	37.7	2.25
August	65.57	39.5	1.66	67.56	40.7	1.66	89.48	39.3	2.28	88.41	39.3	2.25	90.76	39.5	2.30	87.13	39.7	2.20
September	72.07	41.9	1.72	68.06	41.0	1.66	88.74	39.1	2.27	85.53	38.3	2.24	97.67	40.9	2.39	87.13	39.7	2.20
October	69.36	40.8	1.70	68.30	40.9	1.67	89.38	39.1	2.29	87.19	38.4	2.27	92.29	39.6	2.33	86.55	39.0	2.22
November	72.62	41.5	1.75	71.38	41.5	1.72	89.55	38.7	2.31	89.09	39.0	2.28	94.58	40.8	2.37	83.80	37.1	2.26
December	73.74	41.9	1.76	72.41	42.1	1.72	91.67	39.5	2.32	91.36	39.8	2.30	95.30	40.0	2.40	87.87	39.1	2.25
West Virginia						Wisconsin												
State			Charleston			State			Kenosha			La Crosse			Madison			
1954: Average	\$70.64	38.6	\$1.83	\$87.91	39.6	\$2.22	\$74.79	40.8	\$1.83	\$77.98	39.1	\$1.99	\$75.58	40.0	\$1.89	\$78.61	40.1	\$1.96
1955: Average	75.45	39.5	1.91	93.09	40.3	2.31	80.61	42.0	1.92	87.90	41.2	2.13	78.92	40.0	1.97	83.66	40.3	2.07
1955: December	79.39	40.3	1.97	97.10	40.8	2.38	85.06	42.6	2.00	101.58	44.6	2.28	82.95	41.2	2.02	96.01	43.1	2.23
1956: January	79.19	39.4	2.01	96.96	40.4	2.40	83.75	41.7	2.01	77.80	35.7	2.18	74.82	37.6	1.99	93.18	41.9	2.22
February	78.61	39.7	1.98	95.91	40.3	2.38	84.21	42.0	2.01	84.90	39.4	2.16	79.84	40.0	2.00	89.60	41.3	2.17
March	79.40	39.9	1.99	95.11	40.3	2.36	84.82	42.1	2.02	84.71	39.5	2.15	78.19	39.6	1.98	88.99	41.0	2.17
April	79.60	39.8	2.00	97.44	40.6	2.40	84.12	41.7	2.02	78.76	37.1	2.12	80.50	40.6	1.98	88.67	40.5	2.16
May	79.20	39.6	2.00	98.77	41.5	2.38	83.59	41.5	2.02	78.05	36.6	2.14	79.32	40.2	1.97	87.68	40.7	2.16
June	80.39	39.6	2.03	98.70	41.3	2.39	83.64	41.6	2.01	84.40	39.3	2.15	81.30	40.9	2.00	88.39	41.0	2.16
July	78.92	38.5	2.05	98.74	40.8	2.42	82.43	41.6	1.98	81.95	38.0	2.15	81.68	40.9	2.07	88.29	40.8	2.16
August	78.98	39.1	2.02	98.01	40.5	2.42	82.08	41.4	1.98	83.97	39.1	2.15	78.92	40.0	1.97	88.62	40.3	2.20
September	82.73	39.4	2.10	95.92	39.8	2.41	83.84	42.0	2.00	90.67	40.6	2.23	83.54	41.4	2.02	90.88	40.8	2.23
October	81.97	39.6	2.07	98.73	40.3	2.45	86.12	41.9	2.06	88.90	40.0	2.22	82.86	40.6	2.04	92.43	40.1	2.31
November	82.18	39.7	2.07	98.82	40.5	2.44	84.22	40.8	2.07	58.28	26.9	2.17	83.32	40.6	2.05	102.90	43.9	2.35
December	82.99	39.9	2.08	101.11	41.1	2.46	88.32	42.0	2.10	93.94	41.4	2.27	85.30	41.2	2.07	102.26	43.5	2.35
Wisconsin—Continued						Wyoming												
Milwaukee			Racine			State			Casper									
1954: Average	\$81.22	40.0	\$2.03	\$78.64	39.9	\$1.97	\$84.03	40.4	\$2.08	\$95.30	38.9	\$2.45						
1955: Average	87.42	41.2	2.12	84.55	41.2	2.05	83.23	41.0	2.03	99.80	40.9	2.44						
1955: December	90.81	41.7	2.18	86.91	41.5	2.10	84.25	40.7	2.07	97.66	39.7	2.46						
1956: January	91.60	41.6	2.20	87.94	41.5	2.12	90.72	42.0	2.16	108.54	42.9	2.53						
February	92.38	41.8	2.21	87.91	41.0	2.14	87.34	39.7	2.20	106.13	40.2	2.64						
March	93.12	41.9	2.22	87.23	40.9	2.13	89.72	39.7	2.26	105.06	40.1	2.62						
April	92.75	41.5	2.23	86.02	40.6	2.12	89.10	39.6	2.25	106.25	40.4	2.63						
May	92.50	41.4	2.24	84.42	40.0	2.11	90.94	40.6	2.24	105.59	40.3	2.62						
June	91.97	41.1	2.24	82.14	39.2	2.10	87.91	39.6	2.22	107.06	40.4	2.65						
July	93.51	41.6	2.25	82.86	39.3	2.11	90.72	40.5	2.24	110.09	41.7	2.64						
August	92.71	41.2	2.25	83.47	39.9	2.09	87.67	40.4	2.17	104.15	39.6	2.63						
September	94.08	41.3	2.28	85.60	40.5	2.11	90.76	40.7	2.23	106.92	40.5	2.64						
October	94.37	41.3	2.28	86.68	40.6	2.13	88.99	41.2	2.16	109.18	41.2	2.65						
November	92.87	40.5	2.29	86.59	40.4	2.14	89.42	41.4	2.16	104.00	40.0	2.60						
December	96.67	41.6	2.32	87.72	40.3	2.18												

D: Consumer and Wholesale Prices

TABLE D-1: Consumer Price Index ¹—United States city average: All items and major groups of items

[1947-49=100]

Year and month	All items	Food	Apparel	Housing	Transportation	Medical care	Personal care	Reading and recreation	Other goods and services
1947: Average	95.5	95.9	97.1	95.0	90.6	94.9	97.6	95.5	96.1
1948: Average	102.8	104.1	103.5	101.7	100.9	100.9	101.3	100.4	100.5
1949: Average	101.8	100.0	99.4	103.3	108.5	104.1	101.1	104.1	103.4
1950: Average	102.8	101.2	98.1	106.1	111.3	106.0	101.1	103.4	105.2
1951: Average	111.0	112.6	106.9	112.4	118.4	111.1	110.5	106.5	109.7
1952: Average	113.5	114.6	105.8	114.6	126.2	117.2	111.8	107.0	115.4
1953: Average	114.4	112.8	104.8	117.7	129.7	121.3	112.8	108.0	118.2
1954: Average	114.8	112.6	104.3	119.1	128.0	125.2	113.4	107.0	120.1
1955: Average	114.5	110.9	103.7	120.0	126.4	128.0	115.3	106.6	120.2
1956: Average	116.2	111.7	105.5	121.7	128.7	132.6	120.0	108.1	122.0
1953: January	113.9	113.1	104.6	116.4	129.3	119.4	112.4	107.8	115.9
February	113.4	111.5	104.6	116.6	129.1	119.3	112.5	107.5	115.8
March	113.6	111.7	104.7	116.8	129.3	119.5	112.4	107.7	117.5
April	113.7	111.5	104.6	117.0	129.4	120.2	112.5	107.9	117.9
May	114.0	112.1	104.7	117.1	129.4	120.7	112.8	108.0	118.0
June	114.5	113.7	104.6	117.4	129.4	121.1	112.6	107.8	118.2
July	114.7	113.8	104.4	117.8	129.7	121.5	112.6	107.4	118.3
August	115.0	114.1	104.3	118.0	130.6	121.8	112.7	107.6	118.4
September	115.2	113.8	105.3	118.4	130.7	122.6	112.9	107.8	118.5
October	115.4	113.6	105.5	118.7	130.7	122.8	113.2	108.6	119.7
November	115.0	112.0	105.5	118.9	130.1	123.3	113.4	108.9	120.2
December	114.9	112.3	105.3	118.9	128.9	123.6	113.6	108.9	120.3
1954: January	115.2	113.1	104.9	118.8	130.5	123.7	113.7	108.7	120.3
February	115.0	112.6	104.7	118.9	129.4	124.1	113.9	108.0	120.2
March	114.8	112.1	104.3	119.0	129.0	124.4	114.1	108.2	120.1
April	114.6	112.4	104.1	118.5	129.1	124.9	112.9	106.5	120.2
May	115.0	113.3	104.2	118.9	129.1	125.1	113.0	106.4	120.1
June	115.1	113.8	104.2	118.9	128.9	125.1	112.7	106.4	120.1
July	115.2	114.6	104.0	119.0	126.7	125.2	113.3	107.0	120.3
August	115.0	113.9	103.7	119.2	126.6	125.5	113.4	106.6	120.2
September	114.7	112.4	104.3	119.5	126.4	125.7	113.5	106.5	120.1
October	114.5	111.8	104.6	119.5	125.0	125.9	113.4	106.9	120.1
November	114.6	111.1	104.6	119.5	127.6	126.1	113.8	106.8	120.0
December	114.3	110.4	104.3	119.7	127.3	126.3	113.6	106.6	119.9
1955: January	114.3	110.6	103.3	119.6	127.6	126.5	113.7	106.9	119.9
February	114.3	110.8	103.4	119.6	127.4	126.8	113.5	106.4	119.8
March	114.3	110.8	103.2	119.6	127.3	127.0	113.5	106.6	119.8
April	114.2	111.2	103.1	119.5	125.3	127.3	113.7	106.6	119.8
May	114.2	111.1	103.3	119.4	125.5	127.5	113.9	106.5	119.9
June	114.4	111.3	103.2	119.7	125.8	127.6	114.7	106.2	119.9
July	114.7	112.1	103.2	119.9	125.4	127.9	115.5	106.3	120.3
August	114.5	111.2	103.4	120.0	125.4	128.0	115.8	106.3	120.4
September	114.9	111.6	104.6	120.4	125.3	128.2	116.6	106.7	120.6
October	114.9	110.8	104.6	120.8	126.6	128.7	117.0	106.7	120.6
November	115.0	109.8	104.7	120.9	128.5	129.8	117.5	106.8	120.6
December	114.7	109.5	104.7	120.8	127.3	130.2	117.9	106.8	120.6
1956: January	114.6	109.2	104.1	120.6	126.8	130.7	118.5	107.3	120.8
February	114.6	108.8	104.6	120.7	126.9	130.9	118.9	107.5	120.9
March	114.7	109.0	104.8	120.7	126.7	131.4	119.2	107.7	121.2
April	114.9	109.6	104.8	120.8	126.4	131.6	119.5	108.2	121.4
May	115.4	111.0	104.8	120.9	127.1	131.9	119.6	108.2	121.5
June	116.2	113.2	104.8	121.4	126.8	132.0	119.9	107.6	121.8
July	117.0	114.8	105.3	121.8	127.7	132.7	120.1	107.7	122.2
August	116.8	113.1	105.5	122.2	128.5	133.3	120.3	107.9	122.1
September	117.1	113.1	106.5	122.5	128.6	134.0	120.5	108.4	122.7
October	117.7	113.1	106.8	122.8	132.6	134.1	120.8	108.5	123.0
November	117.8	112.9	107.0	123.0	133.2	134.5	121.4	109.0	123.2
December	118.0	112.9	107.0	123.5	133.1	134.7	121.8	109.3	123.3
1957: January	118.2	112.8	106.4	123.8	133.6	135.3	122.1	109.9	123.8

¹ The Consumer Price Index measures the average change in prices of goods and services purchased by urban wage-earner and clerical-worker families. Data for 46 large, medium-size, and small cities are combined for the United States average.

For a description of the index, see BLS Bull. 1168, Techniques of Preparing Major BLS Statistical Series, Ch. 9.

Historical tabulations of indexes for the United States city average and for 20 individual large cities are available upon request.

TABLE D-2: Consumer Price Index¹—United States city average: Food, apparel, housing, and their subgroups

[1947-49=100]

Year and month	Food						Apparel					Housing						
	Total food ²	Food at home					Total	Men's and boys'	Women's and girls'	Foot-wear	Other apparel ⁴	Total ⁵	Rent	Gas and electricity	Solid fuels and fuel oil	House-furnishings	House-hold operation	
		Total food at home	Cereals and bakery products	Meats, poultry, and fish	Dairy products	Fruits and vegetables												Other foods at home ³
1947: Average.....	95.9	95.9	94.0	93.5	96.7	97.6	100.1	97.1	97.3	98.0	94.5	(6)	95.0	94.4	97.6	88.8	97.2	97.2
1948: Average.....	104.1	104.1	103.4	106.1	106.3	100.5	102.5	103.5	102.7	103.8	103.2	108.6	101.7	100.7	100.0	104.4	103.2	102.6
1949: Average.....	100.0	100.0	102.7	100.5	96.9	101.9	97.5	99.4	100.0	98.1	102.4	93.2	103.3	105.0	102.5	106.8	99.6	100.1
1950: Average.....	101.2	101.2	104.5	104.9	95.9	97.6	101.2	98.1	99.5	94.8	104.0	92.0	106.1	108.8	102.7	110.5	100.3	101.2
1951: Average.....	112.6	112.6	114.0	117.2	107.0	106.7	114.6	106.9	107.7	102.2	117.7	101.6	112.4	113.1	103.1	116.4	111.2	109.0
1952: Average.....	114.6	114.6	116.8	116.2	111.5	117.2	109.3	105.8	108.2	100.9	115.3	92.1	114.6	117.9	104.5	118.7	108.5	111.8
1953: Average.....	112.8	112.5	119.1	109.9	109.6	113.5	112.2	104.8	107.4	99.7	115.2	92.1	117.7	124.1	106.6	123.9	107.9	115.3
1954: Average.....	112.6	111.9	121.9	108.0	106.1	111.9	114.8	104.3	106.8	98.9	116.4	90.7	119.1	128.5	107.9	123.5	106.1	117.4
1955: Average.....	110.9	109.7	123.9	101.6	105.9	113.5	111.5	103.7	105.7	98.0	117.7	90.6	120.0	130.3	110.7	125.2	104.1	119.1
1956: Average.....	111.7	110.2	125.6	97.1	108.7	119.0	112.8	105.5	107.4	98.7	123.9	91.4	121.7	132.7	111.8	130.7	103.0	122.9
1953: January.....	113.1	112.9	117.7	110.9	111.6	116.7	109.7	104.6	107.1	99.7	114.3	92.0	116.4	121.1	105.9	123.3	107.7	113.4
1953: February.....	111.5	111.1	117.6	107.7	110.7	115.9	107.3	104.6	107.3	99.3	114.6	92.3	116.6	121.5	106.1	123.3	108.0	113.5
1953: March.....	111.7	111.3	117.7	107.4	110.3	115.5	109.1	104.7	107.3	99.6	114.5	92.4	116.8	121.7	106.5	124.4	108.0	114.0
1953: April.....	111.5	111.1	118.0	106.8	109.0	115.0	110.4	104.6	107.3	99.4	114.8	92.1	117.0	122.1	106.5	123.6	107.8	114.3
1953: May.....	112.1	111.7	118.4	109.2	107.8	115.2	110.3	104.7	107.4	99.4	115.1	92.5	117.1	123.0	106.6	121.8	107.6	114.7
1953: June.....	113.7	113.7	118.9	111.3	107.5	121.7	110.9	104.6	107.2	99.2	115.3	92.3	117.4	123.3	106.4	121.8	108.0	115.4
1953: July.....	113.8	113.8	119.1	112.0	108.3	118.2	112.3	104.4	107.4	98.9	115.0	92.2	117.8	123.8	106.4	123.7	108.1	115.7
1953: August.....	114.1	114.1	119.5	114.1	109.1	112.7	114.4	104.3	107.3	99.7	115.0	92.0	118.0	125.1	106.9	123.9	107.4	115.8
1953: September.....	113.8	113.5	120.3	113.5	109.6	106.6	116.7	105.3	107.5	100.5	115.3	92.5	118.4	126.0	106.9	124.6	108.1	116.0
1953: October.....	113.6	113.3	120.4	111.1	110.1	107.7	117.4	105.5	107.6	100.8	115.8	92.3	118.7	126.8	107.0	125.7	108.1	116.6
1953: November.....	112.0	111.4	120.6	107.0	110.5	107.4	114.8	105.5	107.8	100.7	116.2	91.3	118.9	127.3	107.3	125.9	108.3	116.9
1953: December.....	112.3	111.7	120.9	107.8	110.3	109.2	113.5	105.5	107.6	100.5	116.1	90.9	118.9	127.6	107.2	125.3	108.1	117.0
1954: January.....	113.1	112.6	121.2	110.2	109.7	110.8	113.5	104.9	107.4	99.8	116.2	90.4	118.8	127.8	107.1	125.7	107.2	117.2
1954: February.....	112.6	112.0	121.3	109.7	109.0	108.0	114.0	104.7	107.4	99.5	116.1	90.4	118.9	127.9	107.5	125.2	107.2	117.3
1954: March.....	112.1	111.4	121.2	109.5	108.0	107.8	112.3	104.3	107.2	99.0	116.1	90.0	119.0	128.0	107.6	125.8	107.2	117.5
1954: April.....	112.4	111.8	121.1	110.5	104.6	110.0	113.6	104.1	107.1	98.4	116.1	90.4	118.5	128.2	107.6	123.9	106.1	116.9
1954: May.....	113.3	112.8	121.3	111.0	103.5	114.6	114.5	104.2	107.3	98.5	115.9	90.9	118.9	128.3	107.7	120.9	105.9	117.2
1954: June.....	113.8	113.3	121.3	111.1	102.9	117.1	115.2	104.2	107.0	98.5	116.3	91.0	118.9	128.3	107.6	120.9	105.8	117.2
1954: July.....	114.6	114.2	121.6	109.7	104.3	120.1	117.3	104.0	106.6	98.2	116.5	90.8	119.0	128.5	107.8	121.1	105.7	117.2
1954: August.....	113.9	113.3	122.3	107.6	105.1	114.7	119.6	103.7	106.4	97.7	116.9	90.7	119.2	128.6	107.8	121.9	105.4	117.3
1954: September.....	112.4	111.6	122.6	106.7	105.8	110.5	116.0	104.3	106.4	99.0	116.5	90.9	119.5	128.8	107.9	122.4	106.0	117.4
1954: October.....	111.8	110.9	122.7	103.9	106.7	111.1	115.7	104.6	106.4	99.6	116.7	91.1	119.5	129.0	108.5	123.8	105.6	117.6
1954: November.....	111.1	110.1	123.1	103.5	106.6	109.6	113.7	104.6	106.5	99.5	117.0	91.2	119.5	129.2	108.7	124.2	105.4	117.8
1954: December.....	110.4	109.2	123.3	102.2	106.8	108.4	112.0	104.3	106.5	99.0	116.9	91.1	119.7	129.4	109.1	125.5	105.4	117.7
1955: January.....	110.6	109.4	123.4	102.4	106.4	110.6	111.3	103.3	105.5	97.6	116.7	90.5	119.6	129.5	109.4	126.1	104.6	117.7
1955: February.....	110.8	109.6	123.8	102.5	106.1	110.7	112.1	103.4	105.6	97.7	116.6	90.6	119.6	129.7	109.9	126.2	104.8	117.7
1955: March.....	110.8	109.7	123.9	102.3	105.4	112.0	111.9	103.2	105.6	97.4	116.7	90.4	119.6	130.0	110.3	126.2	104.6	117.9
1955: April.....	111.2	110.1	123.9	103.0	104.6	117.5	109.4	103.1	105.5	97.1	116.9	90.2	119.5	129.9	110.3	125.7	104.5	118.1
1955: May.....	111.1	110.0	123.8	102.1	104.0	120.2	108.4	103.3	105.7	97.3	117.4	90.3	119.4	130.3	110.9	122.5	103.7	119.0
1955: June.....	111.3	110.3	124.0	103.8	104.1	119.5	107.7	103.2	105.6	97.2	117.4	90.1	119.7	130.4	110.7	122.7	103.8	119.2
1955: July.....	112.1	111.1	124.2	103.7	104.7	121.9	109.2	103.2	105.7	96.9	117.5	90.5	119.9	130.4	110.8	123.2	103.6	119.4
1955: August.....	111.2	110.0	124.1	102.9	105.7	111.3	112.6	103.4	105.5	97.4	117.6	90.5	120.0	130.5	110.8	123.8	103.2	119.5
1955: September.....	111.6	110.4	124.0	103.5	106.5	110.2	114.1	104.6	105.8	99.5	118.1	91.0	120.4	130.5	111.2	125.2	103.6	119.8
1955: October.....	110.8	109.4	123.9	100.9	107.5	108.5	113.9	104.6	106.0	99.5	118.4	91.0	120.8	130.8	111.2	126.3	104.4	120.1
1955: November.....	109.8	108.2	123.9	97.1	107.8	109.0	113.1	104.7	106.0	99.3	119.2	91.0	120.9	130.9	111.5	126.7	104.5	120.5
1955: December.....	109.5	107.9	123.9	94.6	107.7	110.7	113.7	104.7	106.1	99.1	119.8	91.1	120.8	131.1	111.5	128.0	103.4	120.7
1956: January.....	109.2	107.5	123.9	93.3	107.3	112.6	112.8	104.1	106.0	97.9	120.4	90.7	120.6	131.4	111.7	129.5	102.0	121.2
1956: February.....	108.8	107.1	124.3	93.6	107.3	113.3	109.6	104.6	106.5	98.3	121.3	91.0	120.7	131.5	111.7	130.0	102.5	121.4
1956: March.....	109.0	107.3	124.4	92.8	106.9	114.8	110.7	104.8	106.6	98.3	121.9	91.1	120.7	131.6	111.7	130.6	103.1	121.6
1956: April.....	109.6	107.9	124.5	94.0	106.4	116.7	110.8	104.8	106.5	98.1	123.0	91.1	120.8	131.7	111.8	129.7	102.7	122.1
1956: May.....	111.0	109.5	124.7	95.5	107.5	121.5	110.9	104.8	107.0	97.9	122.8	91.1	120.9	132.2	111.8	127.9	102.6	122.4
1956: June.....	113.2	112.1	125.2	98.0	107.7	131.4	111.1	104.8	107.5	97.5	123.1	91.1	121.4	132.5	111.7	128.4	102.8	122.6
1956: July.....	114.8	113.8	125.8	99.3	108.7	135.2	112.8	105.3	107.7	98.0	124.2	91.4	121.8	133.2	111.7	128.7	102.8	123.0
1956: August.....	113.1	111.8	126.3	99.9	109.2	120.7	113.9	105.5	107.7	98.1	124.8	91.5	122.2	133.2	112.1	129.5	102.6	123.4
1956: September.....	113.1	111.7	126.6	101.3	109.8	114.8	115.4	106.5	108.3	99.6	126.0	92.0	122.5	133.4	112.2	130.5	103.3	123.7
1956: October.....	113.1	111.7	126.8	100.8	110.7	113.9	115.8	106.8	108.2	100.1	126.2	92.1	122.8	133.4	112.0	132.9	103.6	124.2
1956: November.....	112.9	111.3	127.0	98.8	111.1	115.8	115.2	107.0	108.4	100.4	126.2	92.1	123.0	133.8	111.8	134.3	103.8	124.5
1956: December.....	112.9	111.2	127.4	98.0	111.3	117.4	114.2	107.0	108.6	100.3	126.4	92.2	123.5	134.2	112.0	136.1	104.1	124.8
1957: January.....	112.8	111.1	128.0	99.0	111.2	116.9	112.7	106.4	108.4	98.9	126.7	91.9	123.8	134.2	112.3	138.9	104.0	125.4

¹ See footnote 1 to table D-1.² In addition to subgroups shown here, total food includes restaurant meals and other food bought and eaten away from home. Before 1953, food away from home was represented in the index by food bought to be consumed at home.³ Includes eggs, fats and oils, sugar and sweets, beverages (nonalcoholic), and other miscellaneous foods.⁴ Includes yard goods, diapers, and miscellaneous items.⁵ In addition to subgroups shown here, total housing includes the purchase price of homes and other homeowner costs.⁶ Not available.

TABLE D-3: Consumer Price Index ¹—All items indexes for selected dates, by city

[1947-49=100]

City	Jan. 1957	Dec. 1956	Nov. 1956	Oct. 1956	Sept. 1956	Aug. 1956	July 1956	June 1956	May 1956	Apr. 1956	Mar. 1956	Feb. 1956	Jan. 1956	June 1950
United States city average ¹	118.2	118.0	117.8	117.7	117.1	116.8	117.0	116.2	115.4	114.9	114.7	114.6	114.6	101.8
Atlanta, Ga.....	(3)	119.5	(3)	(3)	118.9	(3)	(3)	118.0	(3)	(3)	116.8	(3)	(3)	(3)
Baltimore, Md.....	(3)	119.5	(3)	(3)	117.5	(3)	(3)	116.6	(3)	(3)	115.2	(3)	(3)	101.6
Boston, Mass.....	119.0	(3)	(3)	119.3	(3)	(3)	117.8	(3)	(3)	115.2	(3)	(3)	114.6	102.8
Chicago, Ill.....	121.0	121.0	121.0	121.1	120.3	120.0	120.5	119.5	118.6	118.1	117.7	118.3	118.1	102.8
Cincinnati, Ohio.....	(3)	117.5	(3)	(3)	117.1	(3)	(3)	116.3	(3)	(3)	114.3	(3)	(3)	101.2
Cleveland, Ohio.....	(3)	(3)	120.0	(3)	(3)	119.1	(3)	(3)	117.3	(3)	(3)	115.7	(3)	(3)
Detroit, Mich.....	120.5	120.2	120.6	120.0	119.7	119.6	120.2	118.7	118.0	117.4	116.9	116.4	116.3	102.8
Houston, Tex.....	(3)	(3)	119.7	(3)	(3)	118.2	(3)	(3)	116.8	(3)	(3)	116.6	(3)	103.8
Kansas City, Mo.....	119.8	(3)	(3)	118.9	(3)	(3)	117.6	(3)	(3)	116.4	(3)	(3)	115.5	(3)
Los Angeles, Calif.....	119.6	119.4	119.1	118.5	117.8	117.4	118.1	117.4	116.9	116.3	116.1	115.8	116.0	101.3
Minneapolis, Minn.....	119.4	(3)	(3)	117.4	(3)	(3)	117.7	(3)	(3)	115.6	(3)	(3)	116.1	102.1
New York, N. Y.....	115.6	115.5	115.6	115.7	115.1	114.4	114.6	113.8	113.0	112.3	112.2	112.1	112.1	100.9
Philadelphia, Pa.....	118.8	118.6	118.2	118.6	118.4	117.9	117.9	116.8	116.2	116.0	115.8	114.7	114.6	101.6
Pittsburgh, Pa.....	118.8	(3)	(3)	118.2	(3)	(3)	117.3	(3)	(3)	115.2	(3)	(3)	(3)	113.6
Portland, Oreg.....	120.1	(3)	(3)	119.5	(3)	(3)	118.6	(3)	(3)	116.4	(3)	(3)	116.3	(3)
St. Louis, Mo.....	(3)	119.1	(3)	(3)	118.1	(3)	(3)	117.0	(3)	(3)	115.7	(3)	(3)	101.1
San Francisco, Calif.....	(3)	121.6	(3)	(3)	119.0	(3)	(3)	117.9	(3)	(3)	116.8	(3)	(3)	100.9
Scranton, Pa.....	(3)	(3)	114.9	(3)	(3)	113.5	(3)	(3)	112.1	(3)	(3)	111.1	(3)	(3)
Seattle, Wash.....	(3)	(3)	120.2	(3)	(3)	118.8	(3)	(3)	117.1	(3)	(3)	116.2	(3)	(3)
Washington, D. C.....	(3)	(3)	115.9	(3)	(3)	115.7	(3)	(3)	114.4	(3)	(3)	113.4	(3)	(3)

¹ See footnote 1 to table D-1. Indexes measure time-to-time changes in prices of goods and services purchased by urban wage-earner and clerical-worker families. They do not indicate whether it costs more to live in one city than in another.

² A average of 46 cities.

³ Indexes are computed monthly for 5 cities and once every 3 months on a rotating cycle for the 15 remaining cities.

TABLE D-4: Consumer Price Index¹—Food and its subgroups, by city

[1947-49=100]

City	Total food ²			Food at home								
				Total food at home			Cereals and bakery products			Meats, poultry, and fish		
	Jan. 1957	Dec. 1956	Jan. 1956	Jan. 1957	Dec. 1956	Jan. 1956	Jan. 1957	Dec. 1956	Jan. 1956	Jan. 1957	Dec. 1956	Jan. 1956
United States city average ³	112.8	112.9	109.2	111.1	111.2	107.5	128.0	127.4	123.9	99.0	98.0	93.3
Atlanta, Ga.....	111.2	111.1	108.2	109.9	109.8	106.2	119.0	119.2	117.8	101.9	99.7	95.2
Baltimore, Md.....	114.9	114.8	110.5	111.1	111.0	107.9	126.9	126.6	121.2	100.8	99.3	94.8
Boston, Mass.....	112.1	111.9	108.4	109.6	109.3	105.8	126.8	126.3	122.1	98.2	97.0	93.8
Chicago, Ill.....	109.5	109.8	106.5	107.5	107.6	104.4	120.4	121.3	118.9	92.3	90.8	87.0
Cincinnati, Ohio.....	113.8	113.9	110.3	112.0	112.1	108.6	124.5	124.8	123.8	100.9	99.8	93.1
Cleveland, Ohio.....	111.0	110.8	107.1	109.1	108.7	105.3	122.1	121.7	118.9	95.8	95.7	90.9
Detroit, Mich.....	114.7	114.7	110.6	112.8	112.7	108.8	122.6	120.2	119.1	96.1	95.1	91.5
Houston, Tex.....	111.9	111.4	107.0	110.1	109.6	105.5	120.9	119.8	117.6	95.6	93.3	88.9
Kansas City, Mo.....	109.0	109.2	104.9	106.7	107.1	102.9	124.0	123.8	120.3	95.3	93.8	86.9
Los Angeles, Calif.....	116.4	116.0	111.5	113.1	112.6	108.3	132.9	131.4	128.0	101.5	100.5	94.6
Minneapolis, Minn.....	112.6	112.3	111.2	111.3	111.1	110.4	129.0	129.2	125.4	94.6	93.2	91.1
New York, N. Y.....	112.3	112.6	109.1	110.4	111.0	107.3	131.4	131.1	128.7	100.5	100.6	96.6
Philadelphia, Pa.....	115.5	115.2	110.5	113.7	113.4	109.0	130.8	130.6	123.1	101.8	100.6	95.0
Pittsburgh, Pa.....	114.9	114.6	109.4	113.0	112.9	108.3	127.5	125.0	124.9	98.4	97.4	90.6
Portland, Ore.....	115.5	115.4	110.2	113.4	113.5	108.9	130.0	130.1	124.6	100.4	98.3	93.4
St. Louis, Mo.....	115.0	114.5	110.2	111.0	110.4	107.8	123.6	122.7	118.8	97.1	94.6	90.6
San Francisco, Calif.....	116.3	116.3	112.3	114.9	114.9	111.0	138.9	138.2	130.7	104.3	103.5	100.1
Scranton, Pa.....	109.8	110.0	106.2	109.0	109.2	105.3	125.5	124.9	119.3	99.0	97.7	90.8
Seattle, Wash.....	115.4	115.5	110.7	114.1	114.3	109.5	137.1	136.7	127.6	99.1	97.7	93.9
Washington, D. C.....	113.7	113.1	110.4	111.8	111.1	108.5	128.9	127.7	121.6	98.8	96.5	91.6

City	Food at home—Continued								
	Dairy products			Fruits and vegetables			Other foods at home ⁴		
	Jan. 1957	Dec. 1956	Jan. 1956	Jan. 1957	Dec. 1956	Jan. 1956	Jan. 1957	Dec. 1956	Jan. 1956
United States city average ³	111.2	111.3	107.3	116.9	117.4	112.6	112.7	114.2	112.8
Atlanta, Ga.....	112.8	112.5	108.8	116.9	119.8	113.6	106.7	107.4	105.5
Baltimore, Md.....	112.5	112.5	108.8	111.3	112.1	112.5	113.0	114.2	111.9
Boston, Mass.....	115.2	116.5	108.9	112.9	111.8	106.6	105.3	105.8	106.8
Chicago, Ill.....	110.7	111.2	107.6	113.7	114.1	108.6	117.4	119.2	118.4
Cincinnati, Ohio.....	114.2	114.2	110.3	112.8	114.3	112.8	118.6	119.6	118.0
Cleveland, Ohio.....	108.4	108.3	105.0	113.1	110.0	107.0	116.6	118.2	115.8
Detroit, Mich.....	112.5	112.8	105.1	127.0	128.1	123.6	115.0	116.4	113.9
Houston, Tex.....	112.7	112.4	109.9	120.1	120.9	113.0	112.6	113.7	111.0
Kansas City, Mo.....	108.0	108.2	107.5	110.6	114.5	108.3	106.4	107.0	105.3
Los Angeles, Calif.....	105.3	105.4	102.7	123.7	122.1	114.3	112.7	114.0	112.7
Minneapolis, Minn.....	107.8	108.5	110.7	123.0	120.9	120.9	119.6	121.5	121.8
New York, N. Y.....	109.6	109.7	104.6	112.3	113.7	107.4	112.2	113.6	113.5
Philadelphia, Pa.....	116.0	116.1	110.1	118.8	118.2	115.0	112.0	112.8	112.4
Pittsburgh, Pa.....	113.6	113.8	109.5	116.6	118.6	109.9	122.2	123.0	121.9
Portland, Ore.....	113.9	114.1	108.6	118.0	118.8	115.4	115.8	117.3	113.4
St. Louis, Mo.....	102.8	102.4	100.9	122.8	122.8	121.5	121.1	122.9	121.2
San Francisco, Calif.....	113.3	113.2	105.4	120.5	121.4	119.1	112.0	112.7	111.5
Scranton, Pa.....	108.6	108.8	107.7	110.2	112.3	108.1	109.8	111.1	110.6
Seattle, Wash.....	116.6	116.4	110.8	123.0	123.5	119.3	112.0	114.5	110.7
Washington, D. C.....	115.9	116.0	113.1	113.0	111.9	114.6	113.3	114.3	112.9

¹ See footnote 1 to table D-1.² See footnote 2 to table D-2.³ A average of 46 cities.⁴ See footnote 3 to table D-2.

TABLE D-5: Consumer Price Index—Average retail prices and indexes of selected foods

Commodity	Average price, Jan. 1957	Indexes (1947-49=100) (unless otherwise specified)													
		Jan. 1957	Dec. 1955	Nov. 1956	Oct. 1956	Sept. 1956	Aug. 1956	July 1956	June 1956	May 1956	Apr. 1956	Mar. 1956	Feb. 1956	Jan. 1956	June 1950
Cereals and bakery products:	<i>Unit Cents</i>														
Flour, wheat.....5 pounds.....	53.8	111.9	111.2	110.7	110.5	110.5	110.9	111.1	111.5	111.0	110.5	110.4	110.2	110.2	101.7
Biscuit mix.....20 ounces.....	26.8	95.7	95.6	95.6	95.5	95.3	95.2	95.2	95.2	95.1	95.4	95.6	95.8	95.8	(?)
Corn meal.....pound.....	12.6	111.2	111.4	111.0	111.1	111.4	111.8	111.9	111.3	110.3	110.6	110.5	110.6	110.3	93.1
Rice.....do.....	17.2	92.2	92.2	92.1	92.2	92.9	93.1	93.0	92.9	92.7	92.9	93.2	93.3	93.3	84.3
Rollod oats.....20 ounces.....	20.9	128.5	120.2	119.5	119.2	119.2	119.3	119.0	119.0	119.0	118.9	118.7	118.7	118.7	100.2
Corn flakes.....12 ounces.....	22.7	133.4	132.6	130.2	129.2	128.5	128.5	128.4	128.2	128.2	128.1	128.1	128.1	128.2	106.6
Bread.....pound.....	18.4	138.2	137.5	137.2	137.1	136.6	136.0	134.9	133.7	133.0	132.9	132.6	132.5	132.3	103.8
Soda crackers.....do.....	27.6	107.3	108.7	108.6	107.8	107.7	107.8	107.7	107.5	106.8	105.5	107.3	107.0	107.4	(?)
Vanilla cookies.....7 ounces.....	24.3	125.4	125.3	125.1	125.0	124.8	124.6	124.1	123.8	123.7	123.6	123.0	122.9	122.1	103.3
Meats, poultry, and fish:															
Meats		101.2	100.3	101.3	103.5	103.8	101.3	99.8	99.1	95.5	93.6	91.6	92.7	92.5	107.6
Beef and veal.....		97.1	98.6	101.2	103.5	102.7	98.0	94.4	93.1	91.8	90.5	89.9	91.5	93.1	113.0
Round steak.....pound.....	88.7	107.7	109.0	113.3	117.2	117.5	111.8	106.7	104.2	102.1	100.2	98.8	100.9	103.0	116.0
Chuck roast.....do.....	49.0	88.8	93.0	96.2	98.1	96.1	89.0	83.6	83.1	82.1	80.1	79.8	81.3	83.7	109.7
Rib roast.....do.....	72.3	108.5	110.2	113.3	115.1	113.8	106.4	102.8	100.9	98.9	97.7	97.3	99.3	101.1	112.1
Hamburger.....do.....	39.0	80.4	80.6	81.4	82.3	81.1	79.9	79.0	78.1	77.7	77.5	77.2	77.8	79.2	111.5
Veal cutlets.....do.....	114.7	124.5	122.0	122.0	122.6	122.6	120.7	120.0	120.2	119.9	118.9	119.4	122.0	119.8	116.0
Pork.....		98.5	95.6	95.2	98.5	99.8	98.6	98.2	97.4	90.9	88.5	84.7	85.7	83.5	97.3
Pork chops, center cut.....pound.....	79.7	109.7	106.9	109.1	116.0	120.9	117.3	118.1	118.7	106.3	100.4	92.6	95.2	89.2	107.6
Bacon, sliced.....do.....	64.4	88.6	84.4	83.5	84.9	83.3	81.9	80.6	78.0	74.6	74.2	72.8	74.4	75.0	83.7
Ham, whole.....do.....	62.0	95.4	94.3	91.8	92.6	95.1	96.7	96.5	96.6	92.4	91.4	88.9	87.0	85.5	95.7
Lamb, leg.....do.....	67.7	98.2	98.9	102.3	101.4	103.0	102.2	103.5	108.5	103.5	94.9	92.6	93.5	93.1	111.6
Other meats:															
Frankfurters.....do.....	52.5	86.6	86.0	86.2	86.1	85.9	85.2	85.4	85.2	84.9	84.7	84.7	84.6	85.5	(?)
Luncheon meat.....12-ounce can.....	42.5	87.9	86.8	85.9	84.9	83.6	83.6	83.5	83.6	83.8	83.8	84.2	84.3	85.1	(?)
Poultry, frying chickens		75.9	74.7	75.1	76.7	78.7	81.4	84.7	80.7	82.1	81.6	83.3	83.7	81.9	96.1
Ready-to-cook.....pound.....	45.4														
Fish		109.5	108.9	108.3	108.3	108.1	108.0	107.6	108.0	108.4	108.5	109.2	108.8	109.6	98.8
Fish, fresh or frozen.....		107.3	106.7	105.8	105.7	105.6	105.3	104.7	105.1	105.5	104.9	105.3	105.4	106.0	104.6
Ocean perch, fillet, frozen.....pound.....	42.2														
Haddock, fillet, frozen.....do.....	46.0														
Salmon, pink.....16-ounce can.....	62.2	129.5	129.0	128.6	128.0	126.9	126.5	125.9	125.2	124.3	123.6	122.8	122.6	122.6	87.9
Tuna fish, chunk.....6-6½-ounce can.....	31.9	92.7	92.4	92.2	92.6	92.7	92.9	93.1	93.9	94.9	96.5	98.4	97.1	98.4	(?)
Dairy products:															
Milk, fresh, grocery.....		117.2	117.2	117.0	116.5	115.3	114.2	113.6	112.0	111.8	110.2	111.3	111.9	112.1	92.7
Homogenized, with vitamin D added quart.....	23.3														
Milk, fresh, delivered.....		121.4	121.5	121.4	120.9	119.8	119.0	118.6	116.9	116.9	115.3	116.2	116.8	116.9	94.1
Homogenized, with vitamin D added quart.....	24.8														
Ice cream.....pint.....	29.1	96.5	96.3	96.2	95.9	96.0	95.7	95.5	95.2	94.9	95.1	95.0	95.2	94.8	(?)
Butter.....pound.....	74.3	94.0	94.6	94.3	92.9	91.5	91.1	90.9	90.9	90.7	89.4	89.5	89.6	89.6	89.0
Cheese, American process.....do.....	57.3	108.8	108.8	108.5	108.5	108.7	108.9	108.5	108.4	108.5	108.2	108.1	108.1	108.0	95.6
Milk, evaporated.....14½-ounce can.....	14.3	105.3	105.2	105.1	105.1	105.0	104.5	103.9	103.4	101.8	101.8	101.7	101.6	101.4	91.1
All fruits and vegetables:															
Frozen fruits and vegetables		100.3	100.4	101.1	102.5	104.1	104.5	104.7	104.1	103.5	103.6	103.9	102.9	102.3	(?)
Strawberries.....10 ounces.....	28.6	88.4	88.2	85.0	88.8	89.5	90.4	92.3	93.3	92.6	92.6	92.3	92.6	93.2	(?)
Orange juice concentrate.....6 ounces.....	19.2	104.4	104.8	106.3	108.0	109.8	109.7	109.0	107.0	106.4	106.4	107.6	105.7	102.9	(?)
Peas, green.....10 ounces.....	20.1	103.0	103.3	103.8	104.5	108.2	109.2	110.0	109.5	109.0	108.6	108.1	107.4	108.6	(?)
Beans, green.....do.....	22.8	94.8	94.3	94.2	96.5	95.0	95.2	95.5	96.3	95.8	96.6	96.9	96.7	97.3	(?)
Fresh fruits and vegetables		120.0	120.4	117.4	114.1	115.5	124.9	148.4	142.5	126.8	119.3	116.3	114.1	113.3	106.4
Apples.....pound.....	14.7	126.3	123.5	113.9	111.5	128.0	136.9	157.0	155.0	141.9	129.2	119.0	116.9	113.5	126.6
Bananas.....do.....	17.2	106.8	107.5	107.8	106.1	104.8	103.2	101.2	106.5	105.1	96.1	102.8	107.0	104.4	103.4
Oranges.....dozen.....	54.2	118.1	122.6	130.1	151.0	148.1	139.5	142.7	130.8	118.9	109.4	108.7	109.5	108.9	104.6
Lemons.....pound.....	21.0	113.4	110.3	109.8	108.3	106.6	100.4	102.3	94.1	94.8	96.0	95.9	99.1	104.9	(?)
Lemons.....each.....	11.4	113.4	114.6	121.6	(*)	(*)	(*)	(*)	(*)	109.0	96.6	93.9	95.0	97.0	(?)
Grapefruit.....pound.....	(*)	(*)	(*)	(*)	(*)	91.2	89.6	111.4	(*)	(*)	(*)	(*)	(*)	(*)	(?)
Peaches.....pound.....	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(?)
Strawberries.....pint.....	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	91.7	85.2	122.2	(*)	(*)	(*)	(?)
Grapes, seedless.....pound.....	(*)	(*)	(*)	(*)	74.5	68.4	75.6	104.9	(*)	(*)	(*)	(*)	(*)	(*)	(?)
Watermelons.....do.....	(*)	(*)	(*)	(*)	(*)	(*)	62.4	77.1	99.0	(*)	(*)	(*)	(*)	(*)	(?)
Potatoes.....10 pounds.....	56.4	106.3	101.2	99.4	97.6	108.9	146.4	218.6	174.4	150.6	126.3	108.2	103.7	98.3	98.1
Sweet potatoes.....pound.....	13.2	118.2	113.4	105.5	106.9	117.6	136.1	138.4	121.8	112.5	106.9	107.2	105.7	106.3	98.6
Onions.....do.....	7.7	91.5	89.9	84.6	89.2	106.0	159.6	186.4	148.2	107.8	94.2	92.0	93.5	97.4	91.6
Carrots.....do.....	14.0	110.5	109.4	108.3	106.2	110.9	108.8	108.5	107.9	101.8	97.8	102.4	110.8	124.0	87.7
Lettuce.....head.....	18.5	129.1	145.4	167.8	125.4	111.0	102.8	96.9	112.0	111.1	106.4	103.2	96.2	95.1	95.1
Celery.....pound.....	17.0	117.2	101.3	92.0	84.7	86.0	92.8	99.6	99.6	90.6	96.7	90.1	89.8	89.7	(?)
Cabbage.....do.....	8.3	120.4	107.1	97.1	100.3	104.1	107.4	116.3	125.6	115.9	124.3	115.6	119.9	140.4	97.1
Tomatoes.....do.....	31.9	113.7	122.8	94.5	74.8	59.2	77.2	106.9	118.8	101.7	121.1	151.1	116.9	120.0	112.8
Beans, green.....do.....	27.4	129.4	130.3	110.9	102.1	86.3	81.4	101.5	134.0	132.3	121.4	126.4	157.3	149.9	76.9
Canned fruits and vegetables		107.7	108.3	108.8	108.9	108.7	108.8	108.6	108.0	107.6	107.3	106.9	106.5	106.1	89.7
Orange juice.....46-ounce can.....	38.4	122.6	124.9	126.4	126.4	124.2	123.4	118.6	117.5	116.6	114.9	113.5	111.7	(?)	
Peaches.....#2½ can.....	34.4	109.7	109.7	109.9	110.1	110.5	111.1	112.1	111.8	111.6	111.3	110.9	111.2	111.2	85.7
Pineapple.....#2 can.....	34.0	109.7	109.8	109.3	109.1	109.0	108.9	109.1	109.1	108.7	108.3	107.9	107.8	102.4	85.6
Fruit cocktail.....#303 can.....	25.9	100.0	100.2	100.7	101.0	101.1	100.9	100.8	100.5	100.6	100.7	100.7	101.0	101.5	(?)
Corn, cream style.....do.....	17.2</														

TABLE D-5: Consumer Price Index—Average retail prices and indexes of selected foods—Continued

Commodity	Average price, Jan. 1957	Indexes (1947-49=100) (unless otherwise specified)													
		Jan. 1957	Dec. 1956	Nov. 1956	Oct. 1956	Sept. 1956	Aug. 1956	July 1956	June 1956	May 1956	Apr. 1956	Mar. 1956	Feb. 1956	Jan. 1956	June 1950
Other foods at home:															
Partially prepared foods:	<i>Unit</i>	<i>Cents</i>													
Soup, tomato ²	11-ounce can	12.3	98.2	97.8	97.6	97.3	97.7	99.0	98.7	98.6	98.5	98.6	98.6	98.7	(?)
Beans with pork ¹	16-ounce can	14.7	104.0	103.2	102.4	102.8	103.2	103.2	103.4	103.3	102.5	102.2	103.1	103.0	(?)
Condiments and sauces:															
Pickles, sweet ¹	7½ ounces	27.1	99.3	99.0	98.5	98.6	99.4	99.0	98.5	98.4	98.7	98.8	98.6	98.7	99.1
Catsup, tomato ¹	14 ounces	23.2	102.4	102.4	102.3	102.1	102.4	102.2	102.0	101.9	101.5	101.4	101.0	100.3	100.0
Beverages:															
Coffee.....	1-pound can	108.2	201.0	201.8	203.7	203.7	202.1	196.9	195.8	189.1	185.9	185.4	184.6	178.1	176.9
Tea bags ¹	package of 16	23.5	122.2	121.9	121.1	120.9	121.0	121.0	120.8	120.7	120.8	121.1	120.7	120.6	123.4
Cola drink ¹	carton, 36 ounces	33.3	115.0	114.3	114.2	114.2	113.9	113.8	113.6	112.7	112.4	112.3	111.6	111.4	111.4
Fats and oils:															
Shortening, hydrogenated	3-pound can	99.1	86.6	85.3	84.6	84.2	84.2	84.4	84.4	84.6	83.9	82.2	80.4	79.6	79.6
Margarine, colored	1-pound	30.2	79.0	77.3	76.6	76.2	76.4	76.4	76.2	76.2	76.5	75.6	73.7	73.1	72.8
Lard.....	do	22.1	81.9	79.2	76.9	75.9	74.4	73.6	72.9	73.5	73.2	69.8	69.1	69.2	69.8
Salad dressing.....	1-pint	36.3	97.0	96.4	95.6	94.6	94.8	95.4	95.5	94.9	94.1	93.1	92.5	92.2	92.2
Peanut butter ¹	1-pound	53.6	109.7	109.9	109.9	110.0	109.9	109.9	110.1	109.8	109.7	109.7	110.1	110.0	110.6
Sugar and sweets:															
Sugar.....	5 pounds	54.3	111.5	110.9	110.6	110.3	109.9	109.7	109.6	109.3	109.0	109.0	108.9	108.8	108.8
Corn syrup ¹	24 ounces	24.5	104.5	103.7	103.4	103.1	102.5	101.5	100.9	100.6	100.5	100.5	100.5	100.5	100.7
Grape jelly ¹	12 ounces	26.9	113.2	113.4	113.8	113.4	112.2	111.6	111.6	110.7	110.8	110.5	110.0	109.5	109.2
Chocolate bar ¹	1 ounce	4.5	100.0	100.0	100.1	100.1	99.9	100.0	100.0	100.0	99.8	99.9	100.0	100.1	100.4
Eggs, grade A, large.....	dozen	53.6	77.0	83.8	87.7	90.7	89.9	86.5	83.4	80.8	82.2	83.5	85.1	84.9	96.8
Miscellaneous foods:															
Gelatin, flavored ¹	3-4 ounces	8.7	102.4	101.3	100.6	99.0	98.8	99.4	99.3	99.2	99.0	98.1	98.9	99.0	99.1

*Priced only in season.

¹ December 1952=100.² Not available.³ May 1953=100.⁴ January 1953=100.⁵ July 1953=100.⁶ April 1953=100.⁷ June 1953=100.⁸ Vegetable soup priced from December 1952 through July 1956; tomato soup substituted August 1956.

† Revised.

NOTE.—The United States average retail food prices and indexes appearing in table D-5 are based on prices collected monthly in 46 cities for use in the calculation of the food component of the Consumer Price Index. Average retail food prices for each of 20 large cities are published

monthly and are available upon request. Prices for the 26 medium-size and small cities are not published on an individual city basis. Item indexes for the period December 1952 through April 1955, which were not published in the Monthly Labor Review, are available upon request.

TABLE D-6: Indexes of wholesale prices,¹ by major groups

[1947-49=100]

Year and month	All commodities	Farm products	Processed foods	All commodities other than farm and foods	Textile products and apparel	Hides, skins, leather, and leather products	Fuel, power, and lighting materials	Chemicals and allied products	Rubber and rubber products	Lumber and wood products	Pulp, paper, and allied products	Metals and metal products	Machinery and motive products	Furniture and other household durables	Nonmetallic minerals—structural	Tobacco manufactures and bottled beverages	Miscellaneous products
1947	96.4	100.0	98.2	95.3	100.1		90.9	101.4	99.0	93.7	98.6	91.3	92.5	95.6	93.9	97.2	100.8
1948	104.4	107.3	106.1	103.4	104.4	102.1	107.1	103.8	102.1	107.2	102.9	103.9	100.9	101.4	101.7	100.5	103.1
1949	99.2	92.8	95.7	101.3	95.5	96.9	101.9	94.8	98.9	99.2	98.5	104.8	106.6	103.1	104.4	102.3	96.1
1950	103.1	97.5	99.8	105.0	99.2	104.6	103.0	96.3	120.5	113.9	100.9	110.3	108.6	105.3	106.9	103.5	96.6
1951	114.8	113.4	111.4	115.9	110.6	120.3	106.7	110.0	148.0	123.9	119.6	122.3	119.0	114.1	113.6	109.4	104.9
1952	111.6	107.0	108.8	113.2	99.8	97.2	106.6	104.5	134.0	120.3	116.5	123.0	121.5	112.0	113.6	111.8	108.3
1953	110.1	97.0	104.6	114.0	97.3	98.5	109.5	105.7	125.0	120.2	118.1	126.9	123.0	114.2	118.2	115.7	97.8
1954	110.3	95.6	105.3	114.5	95.2	94.2	108.1	107.0	126.9	118.0	116.3	128.0	124.6	115.4	120.9	120.6	102.5
1955	110.7	89.6	101.7	117.0	95.3	93.8	107.9	106.6	143.8	123.6	119.3	136.6	128.4	115.9	124.2	121.6	92.0
1953:																	
January	109.9	99.6	105.5	113.1	98.8	97.3	107.8	103.6	127.3	120.5	115.8	124.0	121.5	112.7	114.6	111.9	103.0
February	109.6	97.9	105.2	113.1	98.5	98.0	108.1	103.6	126.2	121.1	115.3	124.6	121.6	112.9	114.6	111.9	101.2
March	110.0	99.8	104.1	113.4	97.5	98.1	108.4	104.2	125.7	121.7	115.1	125.5	121.8	113.1	115.1	114.8	101.7
April	109.4	97.3	103.2	113.2	97.4	97.9	107.4	105.5	124.8	122.2	115.3	125.0	122.0	113.9	116.9	114.8	98.5
May	109.8	97.8	104.3	113.6	97.6	100.4	107.1	105.5	125.4	121.8	115.4	125.7	122.4	114.1	117.2	114.8	99.7
June	109.5	95.4	103.3	113.9	97.4	101.0	108.3	105.6	125.0	121.5	115.8	126.9	122.9	114.3	118.1	114.9	95.8
July	110.9	97.9	105.5	114.8	97.5	100.0	111.1	106.2	124.6	121.1	115.8	129.3	123.4	114.7	119.4	115.6	95.3
August	110.6	96.4	104.8	114.9	97.5	99.9	111.0	106.3	123.5	120.4	116.2	129.4	123.7	114.8	119.6	115.6	96.4
September	111.0	98.1	106.6	114.7	96.9	99.7	110.9	106.7	124.0	119.2	116.9	128.5	124.0	114.9	120.7	116.2	94.7
October	110.2	95.3	104.7	114.6	96.5	97.1	111.2	106.7	124.2	118.1	117.5	127.9	124.1	114.8	120.7	118.1	94.4
November	109.8	93.7	103.8	114.5	96.2	97.1	111.2	107.2	124.3	117.3	117.3	127.9	124.2	114.9	120.8	118.1	93.2
December	110.1	94.4	104.3	114.6	95.8	95.6	111.1	107.1	124.8	117.4	117.1	127.5	124.3	115.0	120.8	118.1	100.1
1954:																	
January	110.9	97.8	106.2	114.6	96.1	95.3	110.8	107.2	124.8	117.0	117.0	127.2	124.4	115.2	120.9	118.2	101.1
February	110.5	97.7	104.8	114.4	95.3	94.9	110.5	107.5	124.6	116.8	117.1	126.2	124.5	115.1	121.0	118.0	102.8
March	110.5	98.4	105.3	114.2	95.0	94.7	109.2	107.4	124.9	116.7	116.6	126.3	124.5	115.0	121.0	117.9	104.9
April	111.0	99.4	105.9	114.5	94.7	94.6	108.6	107.2	125.0	116.2	116.3	126.8	124.4	115.6	120.8	121.5	110.3
May	110.9	97.9	106.8	114.5	94.8	96.0	108.2	107.1	125.1	116.1	115.8	127.1	124.4	115.5	119.3	121.4	109.2
June	110.0	94.8	105.0	114.2	94.9	95.6	107.8	106.8	126.1	116.3	115.8	127.1	124.3	115.4	119.1	121.4	105.1
July	110.4	96.2	106.5	114.3	95.1	94.9	106.2	106.7	126.8	119.1	116.2	128.0	124.3	115.3	120.4	121.4	103.9
August	110.5	95.8	106.4	114.4	95.3	94.0	106.9	106.8	126.4	119.1	116.3	128.6	124.3	115.3	120.5	121.5	102.3
September	110.0	93.6	105.5	114.4	95.3	93.0	106.9	106.8	126.9	119.3	116.3	129.1	124.4	115.3	121.7	121.5	99.1
October	109.7	93.1	103.7	114.5	95.4	92.4	106.9	106.9	128.5	119.8	116.3	129.7	124.3	115.6	121.9	121.5	96.7
November	110.0	93.2	103.8	114.8	95.2	92.8	107.4	107.0	131.4	119.9	116.0	129.9	125.3	115.6	121.8	121.4	97.0
December	109.5	89.9	103.5	114.9	95.2	91.8	107.5	107.0	132.0	120.0	115.9	129.8	125.7	115.7	121.8	121.4	98.0
1955:																	
January	110.1	92.5	103.8	115.2	95.2	91.9	108.5	107.1	136.8	120.3	116.3	130.1	125.8	115.5	122.0	121.4	97.0
February	110.4	93.1	103.2	115.7	95.2	92.3	108.7	107.1	140.6	121.2	116.6	131.5	126.1	115.4	121.8	121.6	97.1
March	110.0	92.1	101.6	115.6	95.3	92.2	108.5	106.8	138.0	121.4	116.8	131.9	126.1	115.1	121.9	121.6	95.6
April	110.5	94.2	102.5	115.7	95.0	93.2	107.4	107.1	138.3	122.4	117.4	132.9	126.3	115.1	122.3	121.6	94.0
May	109.9	91.2	102.1	115.5	95.0	92.9	107.0	106.8	138.0	123.5	117.7	132.5	126.7	115.1	123.2	121.6	91.3
June	110.3	91.8	103.9	115.6	95.2	92.9	106.8	106.8	140.3	123.7	118.3	132.6	127.1	115.2	123.7	121.6	89.1
July	110.5	89.5	103.1	115.5	95.3	93.7	106.4	106.0	143.4	124.1	119.0	136.7	127.5	115.5	125.3	121.6	90.8
August	110.9	88.1	101.9	117.5	95.3	93.8	107.2	105.9	148.7	125.1	119.7	139.5	128.5	116.0	126.1	121.7	89.8
September	111.7	89.3	101.5	118.5	95.4	94.0	108.0	106.0	151.7	125.7	120.5	141.9	130.0	116.4	126.4	121.7	90.3
October	111.6	86.8	100.2	119.0	95.4	95.3	108.0	106.5	147.8	125.4	122.8	142.4	131.4	116.9	126.8	121.7	91.5
November	111.2	84.1	98.8	119.4	95.6	96.4	108.6	106.6	150.6	125.0	123.2	142.9	132.5	117.2	125.2	121.7	88.0
December	111.3	82.9	98.2	119.8	95.6	96.7	109.3	106.6	151.0	125.1	123.6	143.9	133.0	117.3	125.4	121.7	88.8
1956:																	
January	111.9	84.1	98.3	120.4	95.7	96.7	111.0	106.3	148.4	126.3	124.8	145.1	133.3	118.0	127.0	121.7	89.6
February	112.4	86.0	99.0	120.6	96.0	97.1	111.2	106.4	147.1	126.7	125.4	145.1	133.9	118.2	127.1	121.7	88.7
March	112.8	86.6	99.2	121.0	95.9	97.7	110.9	106.5	146.2	128.0	126.8	146.5	134.7	118.1	127.9	121.7	88.2
April	113.6	88.0	100.4	121.6	95.1	100.6	110.6	106.9	145.0	128.5	127.4	147.7	135.7	118.0	128.6	121.7	92.1
May	114.4	90.9	102.4	121.7	94.9	100.0	110.8	106.9	143.5	128.0	127.3	146.8	136.5	118.0	128.6	121.6	96.1
June	114.2	91.2	102.3	121.5	94.9	100.2	110.5	107.1	142.8	127.3	127.4	145.8	136.8	118.1	128.9	121.6	92.9
July	114.0	90.0	102.2	121.4	94.9	100.1	110.7	107.3	143.3	126.6	127.7	144.9	136.9	118.3	130.6	121.7	91.3
August	114.7	89.1	102.6	122.5	94.8	100.0	110.9	107.3	146.9	125.2	127.9	150.2	137.7	119.1	130.8	122.5	91.1
September	115.5	90.1	104.0	123.1	94.8	100.2	111.1	107.1	145.7	123.6	127.9	151.9	139.7	119.7	131.1	122.8	89.9
October	115.6	88.4	103.6	123.6	95.3	99.7	111.7	107.7	145.8	122.0	128.1	152.2	141.1	121.0	131.5	123.1	89.2
November	115.9	87.9	103.6	124.2	95.4	99.8	111.2	108.2	146.9	121.5	127.8	152.1	143.4	121.1	131.2	123.5	91.2
December	*116.3	*88.9	103.1	*124.7	95.6	*99.2	*114.0	108.3	147.9	*121.0	*128.0	*152.3	*143.6	*121.2	131.3	123.6	*91.7
1957:																	
January	116.9	89.3	104.3	125.2	95.8	98.4	115.9	108.7	144.6	121.4	128.6	152.4	143.9	121.8	131.9	124.0	93.2

¹ For a description of the Wholesale Price Index, see BLS Bull. 1168, Techniques of Preparing Major BLS Statistical Series, Ch. 10. Historical tabulations of indexes of wholesale prices are available upon request.

² Preliminary.
* Revised.

TABLE D-7: Indexes of wholesale prices, by group and subgroup of commodities¹

[1947-49=100]

Commodity group	Jan. 1957 ²	Dec. 1956	Nov. 1956	Oct. 1956	Sept. 1956	Aug. 1956	July 1956	June 1956	May 1956	Apr. 1956	Mar. 1956	Feb. 1956	Jan. 1956	June 1950
All commodities.....	116.9	*116.3	115.9	115.6	115.5	114.7	114.0	114.2	114.4	113.6	112.8	112.4	111.9	100.2
Farm products.....	89.3	*88.9	87.9	88.4	90.1	89.1	90.0	91.2	90.9	88.0	86.6	86.0	84.1	94.5
Fresh and dried fruits and vegetables.....	100.7	102.6	104.3	97.6	95.3	94.8	111.8	120.2	111.8	101.8	106.5	98.2	105.0	89.8
Grains.....	89.5	88.8	87.9	84.0	90.7	88.8	88.4	86.9	90.5	89.5	84.5	82.9	81.5	89.6
Livestock and live poultry.....	73.9	71.7	68.6	73.0	75.7	76.0	72.9	74.8	74.4	70.8	67.5	67.7	63.0	99.8
Plant and animal fibers.....	102.9	101.3	100.8	100.0	98.4	98.2	104.3	106.1	105.9	105.8	105.5	105.7	101.9	107.3
Fluid milk.....	98.3	*99.0	98.8	97.2	96.1	95.1	94.4	92.7	92.7	89.9	90.5	94.0	93.9	81.6
Eggs.....	65.7	74.3	79.3	87.4	91.2	77.7	82.1	78.7	80.2	79.9	85.0	81.3	85.9	70.6
Hay, hayseeds, and oilseeds.....	86.6	*85.4	84.0	78.6	76.5	80.1	80.6	87.5	90.1	86.7	82.5	80.4	78.9	87.6
Other farm products.....	148.8	*147.9	147.4	149.9	152.9	151.1	149.2	147.1	144.4	143.4	143.7	145.8	139.7	122.4
Processed foods.....	104.3	103.1	103.6	103.6	104.0	102.6	102.2	102.3	102.4	100.4	99.2	99.0	98.3	96.8
Cereal and bakery products.....	115.8	115.4	115.8	115.3	114.6	114.5	114.8	115.3	115.5	115.6	115.4	115.1	115.1	96.5
Meats, poultry, and fish.....	84.8	*81.5	82.7	85.7	89.3	85.1	83.7	83.1	82.1	79.3	74.6	76.1	75.7	102.4
Dairy products and ice cream.....	112.5	*112.6	113.6	110.9	109.7	108.9	107.9	108.0	107.9	105.9	106.1	106.1	106.1	90.0
Canned and frozen fruits and vegetables.....	105.6	*105.6	106.4	106.4	106.8	107.3	109.3	109.7	109.3	109.0	108.6	108.9	108.1	98.0
Sugar and confectionery.....	113.1	112.3	111.8	110.8	110.0	109.8	110.0	109.5	109.6	105.3	109.6	109.3	109.4	94.7
Packaged beverage materials.....	196.3	196.3	201.6	201.6	201.5	196.1	196.1	196.1	187.4	187.4	192.8	183.8	176.6	136.9
Animal fats and oils.....	84.3	*84.5	74.4	75.5	72.7	72.2	65.5	66.2	71.9	67.9	63.1	64.2	59.1	63.9
Crude vegetable oils.....	73.8	*72.0	70.4	65.9	59.4	60.3	65.1	70.8	78.6	77.2	74.1	67.0	61.3	67.9
Refined vegetable oils.....	78.5	73.9	74.0	70.2	66.0	67.5	67.5	75.5	81.9	80.6	80.4	73.9	69.4	67.4
Vegetable oil end products.....	89.6	*89.4	86.2	83.7	83.3	85.4	85.7	88.4	92.3	85.7	84.8	80.4	78.7	79.2
Other processed foods.....	95.0	95.7	95.7	95.3	95.9	96.1	97.1	97.4	97.5	97.8	97.4	97.7	98.1	106.6
All commodities other than farm and foods.....	125.2	*124.7	124.2	123.6	123.1	122.5	121.4	121.5	121.7	121.6	121.0	120.6	120.4	102.2
Textile products and apparel.....	95.8	95.6	95.4	95.3	94.8	94.8	94.9	94.9	94.9	95.1	95.9	96.0	95.7	93.3
Cotton products.....	92.3	92.7	92.8	92.7	91.5	91.9	92.3	92.7	93.1	93.7	94.1	94.3	93.8	90.0
Wool products.....	109.2	107.7	106.1	104.8	103.9	103.4	103.1	102.9	102.9	102.5	102.1	102.7	102.6	105.3
Manmade fiber textile products.....	82.0	80.5	80.3	80.9	80.4	80.3	80.4	80.2	80.3	80.6	84.5	84.8	84.2	91.3
Silk products.....	122.8	122.8	122.7	123.6	120.1	121.0	122.0	124.7	125.0	121.0	119.5	119.5	120.5	88.8
Apparel.....	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.7	99.4	99.5	99.7	99.5	99.5	92.7
Other textile products.....	76.8	78.7	76.2	75.3	74.7	72.2	70.5	70.0	70.3	71.1	72.0	71.6	71.4	96.3
Hides, skins, leather, and leather products.....	98.4	*99.2	99.8	99.7	100.2	100.0	100.1	100.2	100.0	100.6	97.7	97.1	96.7	99.1
Hides and skins.....	52.1	53.8	59.0	57.8	63.3	60.4	60.4	61.2	59.0	61.9	58.3	58.2	56.6	94.3
Leather.....	88.2	90.9	90.6	90.8	90.8	90.9	91.6	91.7	92.9	94.6	90.9	89.9	89.5	98.2
Footwear.....	120.8	120.8	120.8	120.7	120.5	120.5	120.5	120.5	120.0	119.9	116.5	115.8	115.7	102.7
Other leather products.....	97.9	*98.3	98.6	98.6	98.5	98.9	98.8	99.1	99.2	98.9	98.3	98.1	97.7	95.2
Fuel, power, and lighting materials.....	115.9	*114.0	111.2	111.7	111.1	110.9	110.7	110.5	110.8	110.6	110.9	111.2	111.0	102.4
Coal.....	123.6	123.5	122.0	121.0	114.4	113.8	112.9	112.3	111.9	111.7	110.1	109.9	109.9	104.8
Coke.....	159.1	156.3	156.3	156.3	156.3	152.9	145.4	145.4	145.4	145.4	145.4	145.4	145.4	115.6
Gas.....	119.9	*119.9	111.1	111.1	110.3	109.4	109.7	111.3	115.4	117.5	122.7	122.0	121.1	94.8
Electricity.....	94.3	94.3	94.3	94.9	94.9	94.9	93.8	93.8	93.2	93.2	94.3	94.3	94.3	101.3
Petroleum and products.....	124.4	120.9	117.5	118.3	118.4	118.3	118.8	118.3	118.3	117.5	116.8	117.5	117.2	103.1
Chemicals and allied products.....	108.7	108.3	108.2	107.7	107.1	107.3	107.3	107.1	106.9	106.9	106.5	106.4	106.3	92.1
Industrial chemicals.....	123.5	*122.5	122.5	122.6	121.9	122.1	122.1	121.1	120.8	120.9	120.0	119.9	120.0	96.3
Prepared paint.....	124.1	124.1	123.6	122.4	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	117.0	98.0
Paint materials.....	99.0	*99.5	99.4	98.8	97.9	98.3	98.6	99.4	101.2	101.6	101.4	100.4	98.6	86.8
Drugs and pharmaceuticals.....	92.6	92.5	92.3	91.9	91.9	92.2	92.2	92.1	92.1	91.9	91.9	92.0	92.6	91.3
Fats and oils, inedible.....	58.7	59.4	57.8	55.8	55.4	53.8	53.7	55.1	60.3	58.1	55.0	54.4	55.6	48.8
Mixed fertilizer.....	110.2	*109.3	109.6	109.5	109.6	109.7	108.5	107.9	107.9	108.1	107.9	108.2	108.2	101.2
Fertilizer materials.....	105.9	105.7	105.7	104.1	104.5	106.0	105.7	108.7	109.1	112.4	112.8	113.0	113.1	98.5
Other chemicals and allied products.....	104.5	104.4	104.2	103.6	103.4	103.8	103.8	103.8	102.4	102.4	102.3	102.3	102.3	91.1
Rubber and rubber products.....	144.6	147.9	146.9	145.8	145.7	146.9	143.3	142.8	143.5	145.0	146.2	147.1	148.4	109.5
Crude rubber.....	145.1	151.1	147.0	141.9	142.2	149.9	143.9	137.5	139.5	144.2	149.4	153.5	160.0	129.0
Tires and tubes.....	148.2	153.4	153.4	153.4	153.4	153.4	149.3	151.8	151.8	151.8	151.8	151.8	151.8	106.1
Other rubber products.....	139.9	139.7	139.5	139.5	139.1	138.0	136.0	136.0	136.7	137.9	137.9	137.9	137.8	103.6
Lumber and wood products.....	121.4	*121.0	121.5	122.0	123.6	125.2	126.6	127.3	128.0	128.5	128.0	126.7	126.3	112.4
Lumber.....	122.6	*122.5	123.1	123.6	125.2	127.1	128.5	129.6	130.4	130.6	129.9	128.2	127.6	113.5
Millwork.....	128.8	128.5	128.5	128.6	129.2	129.5	129.7	129.5	129.2	129.2	128.9	129.1	129.2	110.9
Plywood.....	97.1	94.6	94.8	96.1	99.2	99.2	103.3	101.0	102.7	106.9	107.5	107.5	107.5	101.7
Pulp, paper, and allied products.....	128.6	*128.0	127.8	128.1	127.9	127.9	127.7	127.4	127.3	127.4	126.8	125.4	124.8	95.9
Woodpulp.....	118.0	118.0	118.0	118.0	118.0	118.0	118.0	118.0	118.0	118.0	116.8	116.8	116.8	90.6
Wastepaper.....	77.3	78.3	77.3	92.5	97.5	112.1	112.4	114.3	116.4	127.4	142.6	142.6	133.9	79.0
Paper.....	139.3	139.2	139.2	139.1	138.9	138.2	138.2	137.0	136.2	136.2	136.2	135.0	134.6	103.3
Paperboard.....	136.2	136.2	136.2	136.3	136.4	136.5	136.5	136.5	136.4	134.5	130.6	130.7	130.7	97.2
Converted paper and paperboard products.....	125.6	124.5	124.3	124.3	123.8	123.7	123.2	123.2	123.2	123.2	122.7	120.6	119.9	93.2
Building paper and board.....	141.1	138.1	138.1	138.1	138.1	138.1	138.1	138.1	138.1	138.1	133.3	133.3	133.3	106.3
Metals and metal products.....	152.4	*152.3	152.1	152.2	151.9	150.2	144.9	145.8	146.8	147.7	146.5	145.1	145.1	108.8
Iron and steel.....	164.3	163.3	162.5	161.1	161.5	159.4	149.9	149.5	150.8	151.0	149.4	149.1	149.4	113.1
Nonferrous metals.....	148.6	*149.6	149.7	154.1	154.8	155.4	152.5	158.0	160.0	163.2	162.0	157.1	156.6	101.8
Metal containers.....	147.5	147.5	147.5	143.4	143.4	141.9	141.2	141.2	141.2	137.9	137.9	137.9	137.9	109.0
Hardware.....	160.1	*160.2	160.1	159.8	158.8	158.2	155.2	154.7	154.0	153.9	152.8	151.6	151.5	111.1
Plumbing equipment.....	133.4	133.9	133.9	133.9	133.9	134.1	134.1	134.1	135.0	133.9	133.1	133.1	133.1	103.2
Heating equipment.....	122.3	122												

TABLE D-7: Indexes of wholesale prices, by group and subgroup of commodities¹—Continued

[1947-49=100]

Commodity group	Jan. 1957 ²	Dec. 1956	Nov. 1956	Oct. 1956	Sept. 1956	Aug. 1956	July 1956	June 1956	May 1956	Apr. 1956	Mar. 1956	Feb. 1956	Jan. 1956	June 1950
Machinery and motive products.....	143.9	*143.6	143.4	141.1	139.7	137.7	136.9	136.8	136.5	135.7	134.7	133.9	133.3	106.3
Agricultural machinery and equipment.....	131.9	*131.2	130.8	129.5	127.4	126.9	126.8	126.6	126.5	126.1	126.1	126.8	126.8	108.3
Construction machinery and equipment.....	156.2	*155.9	155.5	154.7	151.5	149.4	147.8	146.8	146.6	144.8	143.5	143.5	143.2	103.1
Metalworking machinery and equipment.....	163.3	*163.3	163.0	161.4	159.6	157.1	155.2	155.2	154.5	153.8	151.9	151.2	150.7	108.8
General purpose machinery and equipment.....	155.1	*154.6	154.0	153.0	151.6	149.1	146.4	145.6	146.0	144.0	142.6	141.7	141.4	107.0
Miscellaneous machinery.....	142.3	142.2	142.0	140.4	138.9	137.2	136.6	135.5	135.2	134.3	134.0	133.7	133.6	105.0
Electrical machinery and equipment.....	146.0	*145.4	145.2	143.2	142.0	138.0	137.4	137.6	137.0	135.6	133.6	133.2	132.4	102.1
Motor vehicles.....	134.3	134.3	134.2	130.8	129.4	129.1	129.1	129.1	129.1	129.1	129.0	127.5	126.7	106.7
Furniture and other household durables.....	121.8	121.2	121.1	121.0	119.7	119.1	118.3	118.1	118.0	118.0	118.1	118.2	118.0	103.1
Household furniture.....	121.8	121.2	121.2	120.8	120.4	119.5	119.2	118.1	118.0	117.8	117.5	117.3	117.4	101.8
Commercial furniture.....	146.9	146.9	146.9	146.8	146.8	145.9	138.8	138.5	138.5	138.5	138.3	138.3	137.3	106.2
Floor covering.....	134.9	131.9	131.9	131.8	131.9	131.6	131.4	130.5	130.5	130.5	130.5	130.5	130.5	109.1
Household appliances.....	106.5	*105.9	106.5	106.5	105.5	105.0	104.4	105.1	105.0	105.2	105.3	105.7	105.6	100.1
Television, radio receivers, and phonographs.....	93.5	*93.3	93.5	93.5	93.7	93.2	92.9	92.4	92.6	92.8	93.3	93.3	93.1	(9)
Other household durable goods.....	146.8	146.7	145.0	145.0	140.2	139.7	139.3	139.3	139.2	139.1	139.2	139.2	138.6	106.8
Nonmetallic minerals—structural.....	131.9	131.3	131.2	131.5	131.1	130.8	130.6	128.9	128.6	128.6	127.9	127.1	127.0	105.4
Flat glass.....	135.7	135.7	135.7	135.7	135.7	135.7	135.0	131.8	131.1	131.1	131.1	131.1	131.1	105.6
Concrete ingredients.....	134.5	131.7	131.6	131.6	130.7	130.7	130.6	130.4	130.1	130.0	130.0	129.9	129.7	105.7
Concrete products.....	125.6	125.3	125.3	125.0	124.8	123.4	123.0	121.9	121.7	121.7	121.1	121.1	121.1	104.5
Structural clay products.....	150.5	*150.5	150.3	150.1	150.1	150.1	149.3	146.5	146.1	146.0	145.9	145.6	145.3	110.5
Gypsum products.....	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	102.3
Prepared asphalt roofing.....	111.2	114.4	114.4	117.5	117.5	117.5	117.9	111.9	111.9	111.9	106.5	99.6	99.6	98.9
Other nonmetallic minerals.....	124.3	124.3	124.3	124.3	123.6	123.8	123.8	123.1	122.8	123.4	122.3	123.0	122.1	105.7
Tobacco manufactures and bottled beverages.....	124.0	123.6	123.5	123.1	122.8	122.5	121.7	121.6	121.6	121.7	121.7	121.7	121.7	101.4
Cigarettes.....	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	102.8
Cigars.....	104.2	104.2	104.2	104.2	104.2	104.2	104.2	104.2	104.2	104.2	104.2	104.2	104.2	100.6
Other tobacco manufactures.....	126.0	126.0	122.5	122.5	122.5	122.5	122.5	122.5	122.5	122.5	122.5	122.5	122.5	103.3
Alcoholic beverages.....	119.0	118.1	118.1	117.2	116.9	116.2	114.6	114.6	114.6	114.7	114.7	114.7	114.7	100.9
Nonalcoholic beverages.....	148.7	148.7	148.7	148.7	148.4	148.4	148.4	148.1	148.1	148.1	148.1	148.1	148.1	100.8
Miscellaneous products.....	93.2	*91.7	91.2	89.2	89.9	91.1	91.3	92.9	96.1	92.1	88.2	88.7	89.6	96.9
Toys, sporting goods, small arms, and ammunition.....	117.5	*116.9	116.8	116.7	116.6	116.3	115.7	115.8	115.8	115.8	115.7	115.8	115.8	104.8
Manufactured animal feeds.....	74.4	72.6	71.9	68.2	69.6	72.1	72.8	75.9	81.8	74.4	67.2	68.2	69.9	93.7
Notions and accessories.....	96.7	96.6	96.5	96.5	96.5	95.8	95.7	95.7	95.7	95.4	93.9	92.5	92.5	88.7
Jewelry, watches, and photographic equipment.....	107.6	105.4	105.2	105.2	104.8	104.8	104.8	104.8	105.0	105.0	104.8	104.8	104.4	96.6
Other miscellaneous products.....	126.1	*125.4	125.1	124.7	124.8	124.7	124.4	123.2	123.1	123.1	123.1	123.3	123.9	105.4

¹ See footnote 1 to table D-6.² Preliminary.

* Not available.

* Revised.

TABLE D-8: Indexes of wholesale prices, by economic sectors¹

[1947-49=100]

Commodity group	1957		1956										1950	
	Jan. ²	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	June
All commodities.....	116.9	*116.3	115.9	115.6	115.5	114.7	114.0	114.2	114.4	113.6	112.8	112.4	111.9	100.2
Crude materials for further processing.....	97.2	*96.6	94.9	95.0	96.7	96.4	95.0	95.7	96.6	95.4	93.4	93.3	91.5	99.5
Crude foodstuffs and feedstuffs.....	86.4	*85.0	83.4	84.4	87.2	86.8	85.4	86.2	86.4	83.4	80.8	80.7	77.8	95.8
Crude nonfood materials except fuel.....	115.2	*115.9	114.3	112.6	113.1	113.1	111.5	111.9	114.3	116.6	115.5	115.2	115.8	106.2
Crude nonfood materials, except fuel, for manufacturing.....	114.5	*115.5	113.7	111.9	112.5	112.5	110.8	111.2	113.8	116.3	115.2	114.8	115.5	106.3
Crude nonfood materials, except fuel, for construction.....	134.5	*131.7	131.6	131.6	130.7	130.7	130.6	130.4	130.1	130.0	130.0	129.9	129.7	105.7
Crude fuel.....	120.5	*120.4	116.5	116.0	111.5	110.9	110.4	110.6	111.9	112.6	113.1	112.7	112.4	102.8
Crude fuel for manufacturing.....	120.1	*120.0	116.3	115.8	111.3	110.7	110.2	110.5	111.7	112.3	112.6	112.2	111.9	102.8
Crude fuel for nonmanufacturing industry.....	121.1	*121.0	116.8	116.2	111.8	111.1	110.7	110.9	112.3	112.9	113.9	113.5	113.2	102.9
Intermediate materials, supplies, and components	124.9	124.2	123.8	123.6	123.0	122.6	121.3	121.7	122.2	121.7	121.0	120.3	120.0	101.1
Intermediate materials and components for manufacturing.....	126.4	125.9	125.7	125.6	124.8	124.2	122.6	123.1	123.4	123.1	122.6	121.9	121.3	100.3
Intermediate materials for food manufacturing.....	101.1	100.1	99.8	98.3	97.0	96.7	97.3	98.7	100.5	98.1	98.1	96.7	95.3	90.4
Intermediate materials for nondurable manufacturing.....	105.4	105.0	104.8	104.7	104.0	104.0	104.1	104.0	104.2	104.3	104.3	104.3	104.1	94.2
Intermediate materials for durable manufacturing.....	152.1	151.1	151.1	151.9	151.7	150.6	146.1	147.1	147.3	147.4	146.8	145.7	145.0	110.2
Components for manufacturing.....	147.5	147.9	147.9	146.7	145.2	143.3	142.0	142.3	141.1	139.3	138.4	137.9	137.9	104.0
Materials and components for construction.....	133.1	133.0	133.1	133.4	133.2	132.8	131.4	131.5	131.8	132.3	131.3	130.3	129.9	106.7
Processed fuels and lubricants.....	111.9	*109.9	106.4	107.1	107.3	107.1	106.5	106.2	106.1	105.8	106.0	106.2	105.8	99.5
Processed fuels and lubricants for manufacturing.....	110.2	*108.5	105.4	105.9	106.0	105.7	104.9	104.6	104.5	104.4	104.8	104.9	104.5	98.4
Processed fuels and lubricants for nonmanufacturing industry.....	115.0	*112.3	108.3	109.2	109.5	109.5	109.4	108.9	108.8	108.3	108.1	108.5	108.2	101.5
Containers, nonreturnable.....	133.0	132.6	132.3	131.1	129.3	128.5	127.9	127.9	127.9	127.1	126.8	125.5	125.1	99.6
Supplies.....	113.7	113.0	112.7	111.3	111.0	111.3	111.1	112.0	113.6	111.8	109.4	109.1	109.3	99.1
Supplies for manufacturing.....	135.3	*135.3	135.3	135.1	133.6	132.7	132.2	132.0	132.4	132.1	132.1	131.3	131.1	105.4
Supplies for nonmanufacturing industry.....	104.0	102.9	102.5	100.5	100.7	101.7	101.6	103.0	105.5	102.5	99.2	99.1	99.5	96.4
Manufactured animal feeds.....	75.7	73.6	72.6	68.3	69.5	72.4	73.3	77.0	82.3	75.7	68.2	69.3	71.2	93.4
Other supplies.....	120.4	120.0	119.9	119.3	118.9	118.7	117.9	118.0	118.1	118.0	117.3	116.4	115.9	98.0
Finished goods (goods to users, including raw foods and fuels).....	116.7	*116.2	116.2	115.6	115.3	114.1	114.0	114.0	113.6	112.7	112.3	112.0	111.8	99.7
Consumer finished goods.....	109.9	*109.3	109.4	109.1	109.1	108.1	108.3	108.2	108.0	107.0	106.8	106.5	106.4	98.0
Consumer foods.....	102.2	101.8	102.7	103.0	103.7	101.4	102.1	102.2	101.5	99.1	98.4	98.0	98.0	95.7
Consumer crude foods.....	91.0	94.6	97.2	96.5	96.7	91.5	109.3	100.3	97.6	92.1	96.8	96.6	96.6	81.9
Consumer processed foods.....	104.4	103.3	103.9	104.3	105.2	103.4	102.8	102.7	102.4	100.5	98.9	99.0	98.1	98.3
Consumer other nondurable.....	111.8	*111.0	110.3	110.3	110.0	109.8	109.7	109.6	109.6	109.6	109.6	109.7	109.5	98.0
Consumer durable goods.....	122.8	*122.4	122.3	120.7	119.8	119.5	119.2	119.1	119.1	119.1	119.0	118.5	118.3	103.5
Producer finished goods.....	144.3	*144.0	143.8	141.9	140.6	138.4	137.2	137.1	136.6	135.8	134.7	134.1	133.3	106.2
Producer goods for manufacturing industries.....	148.7	*148.5	148.2	146.2	145.2	143.3	141.6	141.2	140.5	139.6	138.1	137.2	136.3	106.3
Producer goods for nonmanufacturing industries.....	140.5	*140.2	140.0	138.3	136.7	134.9	133.5	133.7	133.3	132.6	132.0	131.6	130.8	106.1

¹ For a description of these indexes, see New BLS Economic Sector Indexes of Wholesale Prices, Monthly Labor Review, December 1955 (p. 1448).

² Preliminary.
*Revised.

TABLE D-9: Indexes of wholesale prices¹ for special commodity groupings

[1947-49=100]

Commodity group	1957		1956										1950	
	Jan. ²	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	June
All foods.....	102.1	101.6	102.4	102.3	102.8	100.7	101.8	102.3	101.9	99.4	99.0	98.0	98.0	95.0
All fish.....	121.6	116.1	118.4	112.5	114.3	114.6	114.6	109.7	111.7	108.6	113.1	113.7	122.3	92.4
Special metals and metal products.....	147.4	147.3	147.1	146.3	145.7	144.4	140.5	141.2	141.9	142.5	141.6	140.3	140.1	108.3
Metalworking machinery.....	172.7	*172.4	172.2	172.0	171.0	167.1	163.9	163.7	162.6	161.1	158.8	158.0	157.3	109.8
Machinery and equipment.....	149.1	*148.6	148.3	146.7	145.2	142.3	141.1	140.9	140.6	139.3	137.8	137.4	136.8	106.1
Agricultural machinery (including tractors).....	131.9	*131.1	130.7	129.2	127.1	126.6	126.7	126.4	126.3	125.8	125.8	126.7	126.7	108.4
Total tractors.....	138.2	137.2	137.2	136.5	134.3	133.2	132.2	131.1	131.0	130.0	129.2	129.2	129.2	107.5
Steel mill products.....	172.1	169.9	169.9	169.8	169.8	169.8	169.8	159.2	159.1	158.2	158.2	158.2	157.0	114.9
Building materials.....	130.7	130.5	130.8	131.0	131.0	131.5	130.6	130.6	130.8	131.3	130.5	129.6	129.4	107.5
Soaps.....	100.9	*100.4	100.2	100.2	100.2	100.2	100.6	100.6	98.9	98.7	98.7	99.0	99.0	80.9
Synthetic detergents.....	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	91.1	91.1	91.1	91.1	91.1	82.9
Refined petroleum products.....	124.6	120.6	116.8	117.6	117.7	117.7	118.3	117.7	117.7	116.9	115.9	116.6	116.2	102.1
East Coast petroleum.....	120.6	117.5	114.3	116.8	116.0	116.0	115.2	113.9	113.0	112.9	112.2	114.1	113.8	98.1
Mid-continent petroleum.....	121.9	119.7	118.3	118.3	119.9	119.9	119.9	119.9	120.2	117.0	116.2	116.0	114.8	101.8
Gulf Coast petroleum.....	130.1	121.2	117.2	119.1	118.0	117.5	118.6	118.6	118.6	118.6	119.4	119.4	119.3	109.7
Pacific Coast petroleum.....	127.0	127.0	116.2	114.6	114.6	115.7	118.9	116.2	116.8	119.5	114.0	117.1	117.8	94.1
Pulp, paper and products, excl. bldg. paper.....	128.3	127.7	127.6	127.8	127.6	127.7	127.4	127.2	127.0	127.1	126.6	125.2	124.6	95.6
Bituminous coal, domestic sizes.....	123.9	*123.9	123.7	122.9	116.4	114.4	111.4	109.8	107.1	107.1	114.0	116.6	116.7	106.8
Lumber and wood products, excl. millwork.....	120.3	*120.0	120.5	121.1	122.9	124.6	126.2	127.0	127.9	128.6	128.0	126.4	126.0	112.6
All commodities except farm products.....	121.5	*120.9	120.6	120.1	119.7	119.0	118.0	118.1	118.3	117.9	117.2	116.8	116.5	101.2

¹ See footnote 1, table D-6.

² Preliminary.

*Revised.

E: Work Stoppages

TABLE E-1: Work stoppages resulting from labor-management disputes ¹

Month and year	Number of stoppages		Workers involved in stoppages		Man-days idle during month or year	
	Beginning in month or year	In effect during month	Beginning in month or year	In effect during month	Number	Percent of estimated working time
1935-39 (average).....	2,862		1,130,000		16,900,000	0.27
1947-49 (average).....	3,573		2,380,000		39,700,000	.46
1945.....	4,750		3,470,000		38,000,000	.47
1946.....	4,985		4,600,000		116,000,000	1.43
1947.....	3,693		2,170,000		34,600,000	.41
1948.....	3,419		1,960,000		34,100,000	.37
1949.....	3,606		3,030,000		50,500,000	.59
1950.....	4,843		2,410,000		38,800,000	.44
1951.....	4,737		2,220,000		22,900,000	.23
1952.....	5,117		3,540,000		59,100,000	.57
1953.....	5,091		2,400,000		28,300,000	.26
1954.....	3,468		1,530,000		22,600,000	.21
1955.....	4,320		2,650,000		28,200,000	.26
1956 ²	3,800		1,900,000		33,000,000	.30
1956: January ²	250	350	85,000	190,000	2,000,000	.22
February ²	250	350	70,000	190,000	2,200,000	.25
March ²	250	350	50,000	175,000	2,000,000	.21
April ²	350	450	140,000	210,000	1,500,000	.17
May ²	450	550	190,000	280,000	2,800,000	.29
June ²	350	500	115,000	235,000	2,100,000	.23
July ²	400	550	620,000	710,000	13,600,000	1.47
August ²	350	550	125,000	725,000	3,200,000	.31
September ²	325	550	150,000	215,000	1,500,000	.18
October ²	325	525	130,000	190,000	1,000,000	.10
November ²	200	375	150,000	210,000	1,500,000	.16
December ²	150	300	40,000	100,000	800,000	.09
1957: January ²	225	325	60,000	80,000	550,000	.06

¹ All work stoppages known to the Bureau of Labor Statistics and its various cooperating agencies, involving six or more workers and lasting a full day or shift or longer, are included in this report. Figures on "workers involved" and "man-days idle" cover all workers made idle for as long as one

shift in establishments directly involved in a stoppage. They do not measure the indirect or secondary effects on other establishments or industries whose employees are made idle as a result of material or service shortages.

² Preliminary.

F: Building and Construction

TABLE F-1: Expenditures for new construction ¹

[Value of work put in place]

Type of construction	Expenditures (in millions of dollars)														
	1957		1956										1956	1955	
	Feb. ²	Jan. ³	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Total	Total
Total new construction ⁴	2,883	3,051	3,370	3,800	4,133	4,264	4,304	4,242	4,105	3,780	3,421	3,071	2,821	44,258	42,991
Private construction.....	2,083	2,188	2,472	2,666	2,766	2,843	2,882	2,862	2,786	2,600	2,424	2,260	2,088	30,825	30,572
Residential building (nonfarm).....	934	1,017	1,202	1,313	1,365	1,415	1,440	1,442	1,417	1,319	1,232	1,116	998	15,339	16,595
New dwelling units.....	820	900	1,060	1,145	1,195	1,240	1,260	1,260	1,235	1,150	1,090	1,000	895	13,510	14,990
Additions and alterations.....	77	79	102	126	129	135	139	139	142	132	109	86	73	1,352	1,266
Nonhousekeeping ⁵	37	38	40	42	41	40	41	43	40	37	33	30	30	1,447	1,339
Nonresidential building (nonfarm) ⁶	696	719	768	794	793	788	788	787	760	705	665	655	648	8,801	7,612
Industrial.....	264	268	270	271	274	276	276	270	263	252	239	226	225	2,399	2,399
Commercial.....	234	244	272	288	287	288	293	300	290	266	252	257	252	3,296	3,043
Office buildings and ware- houses.....	116	121	128	131	130	127	123	114	106	102	98	97	101	1,362	1,136
Stores, restaurants, and garages.....	118	123	144	157	157	161	170	186	184	164	154	160	151	1,934	1,907
Other nonresidential building.....	198	207	226	235	232	224	219	217	207	187	174	172	171	2,440	2,170
Religious.....	65	68	73	75	76	74	71	67	62	56	53	53	55	773	734
Educational.....	41	43	46	48	49	49	49	48	46	42	40	39	40	537	492
Hospital and institutional ⁷	34	33	32	31	31	30	28	26	25	24	24	25	25	327	351
Social and recreational.....	23	24	25	27	27	27	27	25	23	21	19	18	17	274	239
Miscellaneous.....	35	39	50	54	49	44	44	51	51	44	38	37	34	529	354
Farm construction.....	96	91	90	103	122	148	161	159	150	139	121	109	101	1,500	1,600
Public utilities.....	346	350	402	445	474	480	481	462	448	427	398	373	334	5,065	4,604
Railroad.....	31	32	34	36	41	40	39	39	38	36	35	33	29	430	374
Telephone and telegraph.....	75	75	75	80	85	85	90	85	85	80	80	75	70	960	805
Other public utilities.....	240	243	293	329	348	355	352	338	325	311	283	265	235	3,675	3,425
All other private ⁸	11	11	10	11	12	12	12	12	11	10	8	7	7	120	161
Public construction.....	800	863	898	1,134	1,367	1,421	1,422	1,380	1,319	1,180	997	811	733	13,433	12,419
Residential building ⁹	29	28	27	30	30	25	24	24	26	23	23	19	21	292	263
Nonresidential building (other than military facilities).....	304	331	311	338	373	382	392	379	359	335	314	301	284	4,061	4,227
Industrial.....	35	40	33	36	42	40	43	38	38	32	29	31	33	431	721
Educational.....	194	211	200	210	226	231	236	231	221	216	205	195	187	2,548	2,442
Hospital and institutional.....	22	23	23	28	32	31	27	26	25	23	23	23	19	309	331
Other nonresidential.....	53	57	55	64	73	79	82	83	74	62	57	52	45	773	733
Military facilities ¹⁰	86	93	108	118	140	144	142	135	134	115	104	89	82	1,398	1,297
Highways.....	205	220	250	420	575	615	605	590	555	485	355	225	200	5,100	4,520
Sewer and water.....	93	100	100	110	120	121	125	122	115	109	102	92	77	1,275	1,085
Miscellaneous public service enter- prises ¹¹	26	29	32	36	42	47	49	48	42	39	38	31	23	452	279
Conservation and development.....	44	48	56	66	69	68	67	65	62	58	47	42	36	675	593
All other public ¹²	13	14	14	16	18	19	18	17	16	16	14	12	10	180	155

¹ Joint estimates of the Bureau of Labor Statistics, U. S. Department of Labor, and the Business and Defense Services Administration, U. S. Department of Commerce. Estimated construction expenditures represent the monetary value of the volume of work accomplished during the given period of time. These figures should be differentiated from permit valuation data reported in the tabulations for building permit activity (tables F-3, F-4, and F-5) and the data on value of contract awards reported in table F-2.

² Preliminary.

³ Revised.

⁴ Includes major additions and alterations.

⁵ Includes hotels, dormitories, and tourist courts and cabins.

⁶ Expenditures by privately owned public utilities for nonresidential building are included under "Public utilities."

⁷ Includes Federal contributions toward construction of private nonprofit hospital facilities under the National Hospital Program.

⁸ Covers privately owned sewer and water facilities, roads and bridges, and miscellaneous nonbuilding items such as parks and playgrounds.

⁹ Includes nonhousekeeping public residential construction as well as housekeeping units.

¹⁰ Covers all construction, building as well as nonbuilding (except for production facilities, which are included in public industrial building).

¹¹ Covers primarily publicly owned airports, electric light and power systems, and local transit facilities.

¹² Covers public construction not elsewhere classified, such as parks, playgrounds, and memorials.

TABLE F-2: Contract awards: Public construction, by ownership and type of construction ¹

Ownership and type of construction ²	Value (in millions of dollars)														
	1956												1955	1956	1955
	Dec.	Nov. ³	Oct. ³	Sept. ³	Aug. ³	July ³	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Total	Total
All public construction.....	807.7	769.6	830.1	751.9	836.4	1,093.8	1,099.2	859.4	932.1	878.4	648.1	807.8	936.7	10,314.5	9,009.9
Federally owned.....	160.1	119.0	143.5	116.3	111.6	178.5	340.4	169.7	220.2	178.8	119.6	114.6	185.2	1,972.3	1,556.0
Residential building.....	3.6	1.2	.5	1.8	1.0	.4	12.0	9.3	9.9	7.6	12.7	3.0	33.5	63.0	61.4
Nonresidential building.....	50.8	57.3	97.6	37.4	63.9	46.3	176.0	84.0	119.7	88.3	39.8	48.3	81.9	909.4	855.5
Educational.....	1.4	.9	6.7	.3	.7	2.3	4.8	.5	2.9	3.0	(4)	.2	10.9	23.7	21.6
Hospital and institutional.....	1.1	.5	6.8	.5	1.7	3.4	5.2	10.9	3.5	4.5	.3	5.5	.7	43.9	77.5
Administrative and general.....	3.8	3.0	5.1	4.1	3.5	6.3	22.1	17.5	6.5	8.4	4.2	2.8	6.2	87.3	66.7
Other nonresidential building.....	44.5	52.9	79.0	32.5	58.0	34.3	143.9	55.1	106.8	72.4	35.3	39.8	64.1	754.5	719.7
Airfield building.....	3.0	6.4	1.8	5.6	3.9	4.1	8.8	6.6	4.4	8.4	7.2	11.9	4.9	72.1	103.8
Industrial.....	16.3	22.6	46.6	10.5	43.1	14.1	54.4	26.8	45.2	41.9	7.0	9.9	32.8	338.4	333.9
Troop housing.....	11.7	4.7	20.3	7.2	1.8	6.1	40.1	1.2	8.1	1.6	9.0	10.9	6.3	122.7	54.1
Warehouses.....	3.6	1.2	2.0	3.8	1.6	4.5	4.0	4.9	32.6	2.5	1.3	1.2	4.7	63.2	84.0
All other.....	9.9	18.0	8.3	5.4	7.6	5.5	36.6	15.6	16.5	18.0	10.8	5.9	15.4	158.1	143.9
Airfields.....	28.0	21.6	4.7	5.2	7.5	6.1	17.7	7.7	17.2	7.5	17.1	15.4	24.6	155.7	157.4
Conservation and development.....	62.6	26.5	27.9	55.7	22.6	54.8	41.7	28.7	53.3	66.9	29.2	41.1	23.8	511.0	271.9
Highway.....	7.1	8.8	9.3	10.0	5.8	8.6	17.4	6.6	4.8	2.9	8.4	2.2	3.8	91.9	58.5
Electric power.....	3.9	2.1	1.6	1.6	2.9	58.3	64.3	28.2	5.0	2.1	5.5	2.0	8.9	177.5	43.5
All other federally owned.....	4.1	1.5	1.9	4.6	7.9	4.0	11.3	5.2	10.3	3.5	6.9	2.6	8.7	63.8	77.8
State and locally owned.....	647.6	650.6	686.6	635.6	724.8	915.3	758.8	689.7	711.9	699.6	528.5	693.2	751.5	8,342.2	7,453.9
Residential building.....	13.8	17.6	23.0	31.7	12.3	21.4	22.7	21.1	18.3	38.8	22.0	10.5	11.7	253.2	210.1
Nonresidential building.....	272.3	253.7	253.4	260.0	286.7	284.4	287.5	295.1	296.8	279.4	186.0	254.9	286.7	3,210.2	2,851.4
Educational.....	211.5	189.3	175.0	173.7	192.9	199.2	184.1	205.9	204.1	215.4	145.1	192.8	236.1	2,289.0	2,107.2
Hospital and institutional.....	14.0	15.5	28.8	43.6	15.6	24.2	28.0	34.3	25.0	12.4	9.4	35.5	13.4	286.3	195.3
Administrative and general.....	22.9	21.0	27.7	16.1	54.2	26.1	40.1	21.8	30.6	32.6	17.4	10.3	23.2	320.8	263.0
Other nonresidential building.....	23.9	27.9	21.9	26.6	24.0	34.9	35.3	33.1	37.1	19.0	14.1	16.3	14.0	314.1	285.9
Highway.....	240.5	278.1	269.1	223.6	271.9	349.3	305.1	249.1	265.3	279.0	234.3	246.3	320.7	3,211.6	2,933.5
Sewerage systems.....	49.1	36.2	50.3	54.7	74.9	49.3	60.1	45.0	51.3	42.9	30.5	114.6	53.2	658.9	501.9
Water supply facilities.....	31.7	29.0	43.4	29.9	28.9	76.2	44.0	33.3	38.3	30.6	26.7	29.1	35.2	441.1	393.6
Utilities.....	33.6	28.6	28.4	20.9	30.2	118.2	27.7	31.6	23.1	11.2	20.0	29.1	32.4	402.6	433.8
Electric power.....	11.2	17.9	17.8	9.0	15.1	103.6	8.6	7.9	12.4	2.6	5.7	15.4	11.9	227.2	247.4
Other utilities.....	22.4	10.7	10.6	11.9	15.1	14.6	19.1	23.7	10.7	8.6	14.3	13.7	20.5	175.4	186.4
All other State and locally owned.....	6.6	7.4	19.0	14.8	19.9	16.5	11.7	14.5	18.8	17.7	9.0	8.7	11.6	164.6	129.6

¹ Prepared jointly by the Bureau of Labor Statistics, U. S. Department of Labor, and the Business and Defense Services Administration, U. S. Department of Commerce. Includes major force account projects started, principally by TVA and State highway departments.

² Types not shown separately are included in the appropriate "other" category.

³ Includes revisions in federally owned components.

⁴ Less than \$50,000.

TABLE F-3: Building permit activity: Valuation, by private-public ownership, class of construction, and type of building¹

Class of construction, ownership, and type of building	Valuation (in millions of dollars)									
	1956							1955	1956	1955 ²
	Dec.	Nov.	Oct. ²	Sept.	Aug.	July	June	Dec.	Total	Total
All building construction	1,048.4	1,337.2	1,652.8	1,440.6	1,732.7	1,716.7	1,841.9	1,093.0	18,740.2	18,939.0
Private	924.2	1,191.1	1,483.0	1,308.9	1,501.3	1,559.3	1,594.8	956.1	16,872.6	17,264.3
Public	124.2	146.1	169.8	131.7	141.4	157.5	247.1	136.9	1,867.6	1,674.7
New residential building	527.5	677.9	878.5	772.7	969.8	896.6	973.9	605.4	10,272.8	11,696.1
New dwelling units (housekeeping only)	518.6	670.0	863.5	761.4	946.9	887.1	964.4	595.9	10,130.8	11,535.1
Privately owned	512.7	663.9	836.6	746.9	942.4	881.0	938.3	584.1	9,955.9	11,338.5
1-family	453.9	609.1	774.9	688.4	869.6	824.3	879.3	544.5	9,211.3	10,643.1
2-family	11.8	15.6	17.8	16.4	18.6	18.4	18.7	11.6	214.5	208.4
3- and 4-family	5.4	7.2	9.8	7.6	7.7	6.9	6.5	4.3	87.9	84.0
5-or-more family	41.5	31.9	34.1	34.4	46.4	31.4	33.7	23.8	442.1	451.0
Publicly owned	5.9	6.1	26.9	14.6	4.5	6.1	26.1	11.8	174.9	148.7
Nonhousekeeping buildings	8.9	7.9	14.9	11.3	22.9	9.5	9.5	9.5	142.1	161.1
New nonresidential buildings	411.2	525.5	607.6	525.3	581.0	636.7	694.8	389.9	6,634.9	5,593.7
Commercial buildings	135.8	153.1	177.1	163.4	187.6	192.8	214.9	118.6	2,076.3	1,858.7
Amusement buildings	5.3	10.6	8.9	10.2	7.5	12.7	10.7	4.7	113.4	99.4
Commercial garages	4.0	4.7	5.8	3.6	5.1	7.0	6.8	4.1	60.0	66.7
Gasoline and service stations	10.7	13.9	17.2	15.4	15.5	13.6	15.2	9.6	165.4	140.0
Office buildings	57.3	56.1	44.0	57.5	67.1	78.4	97.1	33.4	733.7	553.4
Stores and other mercantile buildings	58.5	67.8	101.2	76.7	92.4	81.1	85.1	66.9	1,003.7	999.1
Community buildings	145.2	175.5	208.5	180.9	190.5	208.9	215.8	133.7	2,222.0	1,946.2
Educational buildings	99.6	120.6	125.0	106.6	102.6	110.7	149.6	96.2	1,406.5	1,242.3
Institutional buildings	16.3	24.3	41.5	32.2	47.5	52.6	26.8	13.2	364.6	307.7
Religious buildings	29.2	30.6	42.0	42.1	40.4	45.6	39.3	24.3	450.8	396.2
Garages, private residential	6.4	13.8	23.4	22.4	23.9	21.8	20.6	6.2	201.9	187.6
Industrial buildings	59.7	105.5	122.9	97.7	105.2	125.2	120.6	59.6	1,254.3	830.4
Public buildings	19.9	28.3	26.7	21.4	24.4	30.6	67.2	26.2	323.9	306.6
Public utilities buildings	28.4	27.4	29.9	23.2	32.4	37.1	34.2	31.5	326.7	273.1
All other nonresidential buildings	15.9	21.8	19.1	16.3	15.9	20.3	21.4	14.1	229.9	191.0
Additions, alterations, and repairs	109.8	133.8	166.7	142.5	181.9	183.4	173.1	97.6	1,832.5	1,649.1

¹ These statistics on building construction authorized by local building permits measure building activity in all localities having building-permit systems—rural nonfarm as well as urban. Such localities (over 7,000) include about 80 percent of the nonfarm population of the country, according to the 1950 Census. The data cover both federally and nonfederally owned projects. Figures on the amount of construction contracts awarded for Federal projects and for public housing (Federal, State, and local) in permit issuing places are added to the valuation data (estimated cost entered by builders on building-permit applications) for privately owned projects;

construction undertaken by State and local governments is reported by local officials. No adjustment has been made in the building-permit data to reflect the fact that permit valuations generally understate the actual cost of construction, nor for lapsed permits or the lag between permit issuance or contract-awarded dates and start of construction. Therefore, they should not be considered as representing the volume of building construction started. Components may not always equal totals because of rounding.

² Revised.

TABLE F-4: Building permit activity: Valuation, by class of construction and geographic region¹

Class of construction and geographic region	Valuation (in millions of dollars)									
	1956							1955	1956	1955 ²
	Dec.	Nov.	Oct. ²	Sept.	Aug.	July	June	Dec.	Total	Total
All building construction ¹	1,048.4	1,337.2	1,652.8	1,440.6	1,732.7	1,716.7	1,841.9	1,093.0	18,740.2	18,939.0
Northeast	242.6	287.3	346.8	337.6	363.5	341.5	437.1	237.8	4,041.3	4,129.6
North Central	258.0	386.2	537.3	446.6	548.2	555.7	566.8	287.9	5,669.4	5,715.4
South	272.0	319.1	386.3	335.0	398.2	394.1	401.9	293.7	4,451.1	4,667.7
West	275.9	344.5	382.4	321.4	422.8	425.4	436.0	273.6	4,578.5	4,426.2
New dwelling units (housekeeping only)	518.6	670.0	863.5	761.4	946.9	887.1	964.4	595.9	10,130.8	11,535.1
Northeast	116.8	147.6	192.6	188.5	194.5	187.3	224.6	132.5	2,191.6	2,500.1
North Central	127.1	193.1	267.2	255.5	306.4	291.3	319.6	145.7	3,135.8	3,488.5
South	132.6	149.7	202.5	171.5	214.8	200.1	198.6	160.2	2,345.6	2,700.9
West	142.1	179.7	201.2	166.0	231.2	208.3	221.6	157.4	2,457.7	2,845.7
New nonresidential buildings	411.2	525.5	607.6	525.3	581.0	636.7	694.8	389.9	6,634.9	5,593.7
Northeast	99.2	111.3	115.9	133.8	124.1	113.9	172.4	81.3	1,430.5	1,233.8
North Central	99.0	157.5	213.2	146.8	186.9	209.6	197.2	114.7	1,991.3	1,748.7
South	108.3	130.0	138.6	125.1	140.0	156.0	166.0	103.8	1,578.9	1,455.4
West	104.7	126.7	140.0	119.6	141.8	173.2	169.2	90.1	1,634.2	1,155.9
Additions, alterations, and repairs	109.8	133.8	166.7	142.5	181.9	183.4	173.1	97.6	1,832.5	1,649.1
Northeast	24.1	27.3	34.1	33.3	42.7	39.2	38.2	21.8	393.7	364.9
North Central	30.1	34.0	53.2	40.6	52.3	52.0	47.5	25.9	510.2	449.2
South	29.4	37.3	41.6	36.0	45.8	50.2	44.5	26.1	484.4	451.1
West	26.1	35.2	37.8	32.5	41.1	42.0	42.9	23.9	444.4	383.9

¹ See footnote 1, table F-3.

Revised.

² Includes new nonhousekeeping residential building, not shown separately.

TABLE F-5: Building permit activity: Valuation, by metropolitan-nonmetropolitan location and State¹

State and location	Valuation (in millions of dollars)											
	1956									1955	1955 ²	1954
	Nov.	Oct. ³	Sept. ³	Aug.	July	June	May	Apr.	Mar.	Nov.	Total	Total
All States.....	1,337.2	1,652.8	1,440.6	1,732.7	1,716.7	1,841.9	1,902.1	1,863.0	1,677.1	1,323.4	18,939.0	16,485.8
Metropolitan areas ³	1,029.4	1,204.1	1,101.4	1,350.2	1,330.7	1,453.6	1,504.3	1,441.7	1,302.8	1,028.1	15,108.9	13,180.7
Nonmetropolitan areas.....	307.8	358.7	339.2	382.5	386.0	388.3	397.8	421.3	374.3	295.3	3,830.1	3,305.1
Alabama.....	14.7	14.3	14.1	14.2	15.6	14.5	17.0	13.9	15.1	12.1	166.5	135.8
Arizona.....	16.3	19.7	12.4	18.0	16.7	18.4	19.3	12.2	15.7	12.8	165.8	145.1
Arkansas.....	3.7	4.5	5.3	5.3	4.3	5.0	5.7	5.7	6.0	4.1	54.3	77.4
California.....	242.0	255.6	205.7	291.6	314.1	281.9	286.7	269.8	314.9	217.9	3,065.1	2,569.5
Colorado.....	22.3	41.2	16.8	23.7	17.9	28.8	20.7	25.5	22.8	20.7	280.6	245.3
Connecticut.....	37.1	33.0	29.8	34.6	30.9	41.1	37.9	37.6	22.0	29.0	359.1	320.4
Delaware.....	9.0	7.8	3.2	6.2	3.8	6.3	5.0	5.2	3.7	3.5	62.0	49.5
District of Columbia.....	4.4	17.9	8.9	3.6	6.1	4.5	5.5	3.1	5.4	1.6	87.7	76.8
Florida.....	65.7	77.5	61.7	79.3	72.9	75.0	73.8	69.1	70.1	57.0	746.9	650.9
Georgia.....	17.2	19.2	20.2	23.7	24.2	23.2	26.7	20.0	24.6	30.3	276.7	267.8
Idaho.....	3.3	3.3	4.3	3.7	3.1	3.6	6.3	4.4	3.9	3.1	36.5	30.5
Illinois.....	92.6	118.8	106.9	117.3	119.5	125.0	138.6	138.5	137.4	81.2	1,261.6	986.7
Indiana.....	30.7	40.1	34.1	51.2	38.4	41.0	45.2	39.9	30.8	32.8	381.0	340.6
Iowa.....	13.0	21.6	16.7	15.6	14.9	18.9	21.4	21.1	16.2	12.2	180.1	141.4
Kansas.....	14.2	13.3	11.4	10.3	13.0	10.9	13.2	14.6	20.4	10.9	195.4	168.8
Kentucky.....	10.6	11.2	13.9	15.6	22.3	14.1	20.0	19.4	13.0	10.8	189.3	170.8
Louisiana.....	14.9	21.7	19.7	24.2	21.5	20.5	30.5	27.6	27.8	19.4	292.6	215.6
Maine.....	2.7	2.7	3.9	2.8	3.9	4.5	4.6	2.8	1.4	3.1	29.8	30.2
Maryland.....	28.0	36.4	26.5	49.1	33.7	40.1	46.1	39.5	41.6	30.6	494.4	405.4
Massachusetts.....	39.5	42.5	47.2	40.0	46.4	39.2	45.1	50.2	36.9	29.1	445.1	393.0
Michigan.....	72.8	114.2	81.4	112.6	113.9	98.2	124.5	119.4	89.3	71.8	1,130.4	1,010.2
Minnesota.....	21.7	30.8	40.2	38.1	36.2	41.0	51.9	46.0	26.2	25.9	403.3	358.1
Mississippi.....	3.5	4.1	5.2	4.1	5.1	3.8	5.0	6.2	4.9	3.1	50.3	62.4
Missouri.....	19.4	29.9	22.4	30.3	27.7	28.4	26.6	37.4	31.5	22.6	336.4	304.6
Montana.....	2.3	3.2	5.9	3.2	4.2	5.5	5.0	3.4	5.6	2.1	41.7	39.7
Nebraska.....	5.6	8.7	6.2	8.3	10.2	8.0	7.2	8.9	7.8	5.2	100.0	78.0
Nevada.....	3.7	3.0	5.7	3.0	2.6	3.1	3.9	5.1	6.1	6.3	75.3	82.0
New Hampshire.....	3.1	4.4	2.9	3.8	3.6	3.8	6.2	4.2	2.0	2.6	41.2	27.6
New Jersey.....	54.1	73.6	62.8	68.8	64.0	72.4	83.8	90.9	70.1	63.7	832.3	687.7
New Mexico.....	7.2	6.5	7.0	7.1	6.6	5.9	6.8	6.1	5.7	4.7	85.7	72.3
New York.....	96.9	120.8	129.6	140.9	116.4	166.6	133.8	167.3	111.5	113.3	1,489.9	1,416.2
North Carolina.....	14.9	16.7	14.4	20.4	20.4	17.5	29.5	19.1	21.3	13.0	216.4	182.2
North Dakota.....	1.8	3.5	4.0	6.0	3.9	6.6	5.0	7.1	.9	2.2	35.6	29.8
Ohio.....	78.8	111.1	83.5	116.1	136.0	139.8	132.0	119.8	101.1	87.9	1,216.0	985.8
Oklahoma.....	15.9	9.4	13.0	13.4	12.0	13.5	13.9	11.4	11.6	7.9	149.2	137.4
Oregon.....	11.9	13.4	16.3	17.5	16.9	21.1	23.9	16.9	14.5	8.1	157.2	150.9
Pennsylvania.....	48.7	65.5	55.1	67.2	67.8	93.9	84.1	94.9	63.3	70.2	871.9	734.8
Rhode Island.....	4.6	3.6	3.5	4.9	8.1	14.1	4.4	4.7	2.9	4.5	49.0	44.7
South Carolina.....	4.7	6.8	5.1	5.4	6.5	6.0	7.7	6.5	6.6	6.5	94.6	67.3
South Dakota.....	1.6	4.5	3.2	2.6	3.3	5.3	4.5	4.7	3.4	1.9	36.9	32.7
Tennessee.....	17.0	15.7	15.5	16.5	24.4	19.1	20.3	21.4	19.9	14.6	219.6	209.9
Texas.....	64.9	76.1	71.9	75.2	78.1	75.1	84.3	77.1	88.4	65.9	1,024.6	946.4
Utah.....	9.0	8.1	12.6	14.8	8.7	13.1	12.0	11.3	12.0	9.2	113.7	105.1
Vermont.....	.6	.6	2.8	.6	.5	1.5	1.9	.7	.3	.7	11.3	9.3
Virginia.....	24.8	40.7	31.2	36.1	37.3	55.5	58.0	45.0	46.1	29.3	475.2	420.9
Washington.....	25.7	24.8	32.7	37.4	32.8	51.7	35.9	39.2	46.3	21.8	381.0	375.5
West Virginia.....	5.2	6.2	5.1	5.8	5.9	7.9	6.2	6.0	4.7	4.0	67.4	65.1
Wisconsin.....	34.0	40.9	36.6	39.7	38.9	43.6	52.6	59.6	35.6	31.3	438.8	401.5
Wyoming.....	.8	3.4	2.0	2.7	1.8	3.1	2.1	2.2	3.0	.9	18.6	23.2

¹ See footnote 1, table F-3.

² Revised.

³ Comprised of 168 Standard Metropolitan Areas used in 1950 Census.

TABLE F-6: Number of new permanent nonfarm dwelling units started, by ownership and location, and construction cost ¹

Period	Number of new dwelling units started									Estimated construction cost (in thousands) ²		
	Total	Privately owned	Publicly owned	Location ³					Total	Privately owned	Publicly owned	
				Metropolitan places	Nonmetropolitan places	North-east	North Central	South				West
1950 ⁴	1,396,000	1,352,200	43,800	1,021,600	374,400	(2)	(2)	(2)	(2)	\$11,788,595	\$11,418,371	\$370,224
1951	1,091,300	1,020,100	71,200	776,800	314,500	(2)	(2)	(2)	(2)	9,800,892	9,186,123	614,769
1952	1,127,000	1,068,500	58,500	794,900	332,100	(2)	(2)	(2)	(2)	10,208,983	9,706,276	502,707
1953	1,103,800	1,068,300	35,500	803,500	300,300	(2)	(2)	(2)	(2)	10,488,003	10,181,185	306,818
1954	1,220,400	1,201,700	18,700	896,900	323,500	243,100	325,800	359,700	291,800	12,478,237	12,309,200	169,037
1955	1,328,900	1,309,500	19,400	975,800	353,100	273,100	356,000	389,000	310,800	14,544,647	14,345,829	198,818
1956 ⁵	1,120,800	1,097,200	23,600	779,500	341,300	(2)	(2)	(2)	(2)	13,116,907	12,853,287	263,620
1953: First quarter	324,300	315,000	9,300	238,100	86,200	(2)	(2)	(2)	(2)	2,346,213	2,183,710	162,503
Second quarter	285,000	280,700	4,300	207,800	77,200	(2)	(2)	(2)	(2)	3,083,256	3,000,120	83,136
Third quarter	237,400	234,500	2,900	173,200	64,200	(2)	(2)	(2)	(2)	2,777,607	2,739,288	38,319
Fourth quarter	236,800	232,200	4,600	174,300	62,500	(2)	(2)	(2)	(2)	2,250,927	2,258,087	22,840
1954: January	66,400	65,100	1,300	49,700	16,700	13,000	13,300	22,500	17,600	2,240,448	2,199,446	41,002
February	75,200	73,900	1,300	53,500	21,700	13,300	16,200	26,100	19,600	618,313	605,951	12,362
March	95,200	93,200	2,000	71,100	24,100	21,100	23,200	29,000	21,900	701,934	690,790	11,174
Second quarter	332,700	326,500	6,200	244,000	88,700	67,300	98,400	90,900	76,100	3,454,571	3,398,898	55,673
April	107,700	106,500	1,200	79,400	28,300	21,700	31,100	29,300	25,600	1,106,809	1,095,557	11,252
May	108,500	107,400	1,100	77,100	31,400	21,600	32,900	30,000	24,000	1,137,562	1,128,751	8,811
June	116,500	112,600	3,900	87,500	29,000	24,000	34,400	31,600	26,500	1,210,200	1,174,590	35,610
Third quarter	346,000	339,300	6,700	252,800	93,200	72,500	97,800	99,900	75,800	3,590,366	3,528,471	61,895
July	116,000	112,900	3,100	87,500	28,500	25,300	33,300	32,200	25,200	1,213,311	1,182,830	30,481
August	114,300	113,000	1,300	82,600	31,700	24,800	32,600	31,700	25,200	1,186,019	1,175,766	10,253
September	115,700	113,400	2,300	82,700	33,000	22,400	31,900	36,000	25,400	1,191,036	1,169,875	21,161
Fourth quarter	304,900	303,700	1,200	225,800	79,100	55,900	76,900	91,300	80,800	3,192,852	3,182,385	10,467
October	110,700	110,500	200	80,400	30,300	21,600	30,100	31,800	27,200	1,160,300	1,158,338	1,962
November	103,600	103,300	300	75,700	27,900	19,000	26,800	31,500	26,300	1,083,449	1,080,578	2,871
December	90,600	89,900	700	69,700	20,900	15,300	20,000	28,000	27,300	949,103	943,469	5,634
1955: First quarter	291,300	288,000	3,300	221,800	69,500	53,100	63,400	95,900	78,900	3,076,198	3,043,959	32,239
January	87,600	87,300	300	68,100	19,500	16,000	15,600	30,600	25,400	892,794	890,092	2,702
February	89,900	87,900	2,000	66,900	23,000	13,500	19,700	32,400	24,300	954,570	934,585	19,985
March	113,800	112,800	1,000	86,800	27,000	23,600	28,100	32,900	29,200	1,228,834	1,219,282	9,552
Second quarter	404,400	397,000	7,400	295,400	109,000	89,700	116,600	109,600	88,500	4,416,285	4,349,159	67,126
April	132,000	130,500	1,500	96,800	35,200	28,600	37,300	35,700	30,400	1,434,395	1,421,309	13,086
May	137,600	135,100	2,500	97,900	37,900	30,300	40,000	37,400	29,900	1,502,901	1,479,773	23,128
June	134,800	131,400	3,400	98,900	35,900	30,800	39,300	36,500	28,200	1,478,989	1,448,077	30,912
Third quarter	362,200	357,800	4,400	263,300	98,900	75,300	108,000	99,400	79,500	4,025,441	3,981,182	44,259
July	122,600	121,900	700	88,300	34,300	27,000	35,600	32,700	27,300	1,372,150	1,363,902	9,058
August	124,700	122,300	2,400	91,500	33,200	24,900	38,000	34,800	27,000	1,369,948	1,346,848	23,100
September	114,900	113,600	1,300	83,500	31,400	23,400	34,400	31,900	25,200	1,283,343	1,271,242	12,101
Fourth quarter	271,200	266,700	4,500	195,800	75,400	55,500	68,000	84,000	63,700	3,026,723	2,971,529	55,194
October	105,800	104,800	1,000	76,500	29,300	23,500	29,400	28,500	24,400	1,178,809	1,168,229	10,580
November	89,200	88,400	800	64,600	24,600	17,700	23,000	27,800	20,700	993,986	985,891	8,095
December	76,200	73,500	2,700	54,700	21,500	14,300	15,600	27,700	18,600	853,928	817,409	36,519
1956: First quarter	251,900	244,600	7,300	183,800	68,100	45,700	58,200	83,300	64,700	2,847,118	2,761,446	85,672
January	75,000	73,700	1,300	54,300	20,700	12,400	15,700	27,300	19,600	812,162	800,665	11,497
February	78,300	77,000	1,300	57,600	20,700	14,400	16,400	26,800	20,700	885,855	871,700	14,155
March	98,600	93,900	4,700	71,900	26,700	18,900	26,100	29,200	24,400	1,149,101	1,089,081	60,020
Second quarter	332,400	325,300	7,100	228,200	104,200	72,300	98,100	93,100	68,900	3,923,942	3,844,192	79,750
April	111,300	109,900	1,400	76,100	35,200	23,400	33,600	31,000	23,300	1,308,933	1,293,488	15,445
May	113,700	110,800	2,900	77,600	36,100	24,700	33,300	32,800	22,900	1,346,513	1,312,890	33,623
June	107,400	104,600	2,800	74,500	32,900	24,200	31,200	29,300	22,700	1,268,496	1,237,814	30,682
Third quarter	298,900	292,900	6,000	202,900	96,000	61,800	86,700	87,000	63,400	3,534,804	3,471,787	63,017
July	101,100	99,000	2,100	69,700	31,400	21,800	29,900	27,700	21,700	1,201,352	1,179,265	22,086
August	103,900	103,200	700	70,900	33,000	20,800	29,200	30,700	23,200	1,227,269	1,222,281	4,988
September	93,900	90,700	3,200	62,300	31,600	19,200	27,600	28,600	18,500	1,106,183	1,070,240	35,943
Fourth quarter	237,600	234,400	3,200	164,600	73,000					2,811,043	2,775,862	35,181
October ⁷	93,600	91,200	2,400	64,900	28,700	20,100	26,200	27,500	19,800	1,104,981	1,078,142	26,839
November ⁸	80,000	79,600	400	54,500	25,500	(2)	(2)	(2)	(2)	951,652	947,240	4,412
December ⁴	64,000	63,600	400	45,200	18,800	(2)	(2)	(2)	(2)	754,410	750,480	3,930
1957: First quarter	65,000	62,200	2,800	45,800	19,200	(2)	(2)	(2)	(2)	761,635	727,740	33,895

¹ The data shown here do not include temporary units, conversions, dormitory accommodations, trailers, or military barracks. They do include prefabricated housing, if permanent.

These estimates are based on (1) monthly building-permit reports (adjusted for lapsed permits and for lag between permit issuance and the start of construction), (2) continuous field surveys in non-permit-issuing places, and (3) reports of public construction contract awards.

Beginning with January 1954 data, the estimating techniques for the privately owned segment of the housing starts series were revised to combine (1) a monthly reporting system expanded to include almost all building-permit-issuing localities (accounting for nearly 80 percent of total nonfarm population), with (2) a newly designed sample of counties that permits more efficient operations and a greater degree of accuracy than previously. The new series is continuous with statistics for earlier dates except that the urban and rural-nonfarm distribution shown previously is replaced by metropolitan-nonmetropolitan and regional estimates. Data on type of structure (1-family versus rental-type structures) are continued from the old to the new series, and are available on request.

The error in the total private nonfarm estimate due to sampling in the nonpermit segment is such that for an estimate of 100,000 starts the chances are 19 out of 20 that a complete enumeration of all nonpermit areas would result in a total private nonfarm figure between 98,000 and 102,000. For metropolitan-nonmetropolitan or regional components, the relative error is somewhat larger.

² Data by urban and rural-nonfarm classification for periods before January 1954 are available upon request. Annual metropolitan-nonmetropolitan location data not available before 1950; monthly figures not available before 1953; regional data not available before January 1954.

³ Private construction costs are based on permit valuation, adjusted for understatement of costs shown on permit applications. Public construction costs are based on contract values or estimated construction costs for individual projects.

⁴ Housing peak year.

⁵ Preliminary.

⁶ Not yet available.

⁷ Revised.

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