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This Issue in Brief . . .

EARLY IN 1949 two types of adjustments in the trends of employment and production in certain industries became discernible. *READJUSTMENTS IN CONSUMER-GOODS INDUSTRIES* (p. 273) traces the trends in employment, man-hours, length of workweek, and turn-over which reflect the changed patterns. These factors indicated that a downward readjustment had begun long before nonfarm employment reached its all-time high late in 1948. The first industries to thus react were in the "luxury" class: entertainment, furs, jewelry, and liquors; but the readjustments (in the form of decreased employment or lowered prices, or both), were not great and did not affect the economy in general. A stronger effect accompanied the 1947 return to prewar seasonal patterns in such industries as textiles, apparel, shoes, radios, furniture, and rubber tires. By early 1949 there was a contraseasonal decline of about 850,000 workers in manufacturing employment, concentrated largely in consumer-goods industries, between September and January. The reports of lay-offs, short workweeks, shut-downs, and price reductions covered such consumer durables as washing machines, heating equipment, and refrigerators, in addition to textiles and apparel.

Another type of employment problem is described in *GREAT BRITAIN: EMPLOYMENT POLICIES AND PRODUCTION* (p. 278). Contrary to expectation, reconversion unemployment, even while a 4-million-person demobilization program was in process, never reached serious proportions. The problem as it then affected the British economy became one of shifting and expanding the labor force and increasing its output. Specialized (and knotty) problems emerged: e. g., provision of housing, manning the mines, adding shifts to industries critical to the export program. Ultimately (late 1947) it became necessary to reinstate certain controls. As expedients, 171,000 displaced persons were recruited from Europe and an intensive campaign was carried on to

induce women to enter the labor market. The labor force having about reached its potential, efforts are now concentrated on methods to increase productivity through more efficient processes, work methods, and work habits.

So far as economic policy for the United States is concerned, three recent pronouncements are worthy of note. *THE ECONOMIC REPORTS OF THE PRESIDENT AND THE CEA* (p. 290) is a summary of the annual reports to the Congress required by the Employment Act of 1946 and of the President's State of the Union Message. A portion of the Council of Economic Advisers' report discusses the general noninterference policy of the Government in arriving at the labor contract. This expression of national policy in labor-management relations leads to questions as to prerogatives of the parties to labor-management negotiations. *OBLIGATIONS AND RIGHTS UNDER COLLECTIVE BARGAINING* (p. 294) takes up the specific problems of management functions and union rights and responsibilities. It is based on an analysis of more than 15,000 collective agreements. Many traditional "prerogatives" of management are now subject to collective bargaining and their scope, at any one time, depends upon the degree of mutual confidence held by union and management. Items found in agreements frequently define and delimit management's right with respect to transfers, promotions, discipline, schedules, removal of establishment, subcontract.

An exceedingly complex contract analysis is found in *WAGE CHRONOLOGY NO. 4: BITUMINOUS COAL MINES, 1933-48* (p. 303), covering complicated changes in wage rates, the introduction of pay for travel time, holiday and vacation pay, and health and welfare benefits. Contract analysis can be practiced most easily by trade-unions themselves. This is one of the *PRACTICAL USES OF TRADE-UNION RECORDS* (p. 300), a summary of a paper presented at the 1948 meeting of the American Statistical Association. At least equally important, in the viewpoint of the author, however, is the examination of union records for membership distribution (geographically and industrially) and characteristics, dues collection patterns, and the growth, standing, and turn-over of membership. Financial records are useful in making comparative per capita cost studies for various items of expenditure.

The Labor Month in Review

LESSENING OF BUSINESS activity from postwar peaks, a trend which has been observable in individual industries for a number of months, appeared to become more widespread during February 1949. This tendency, combined with seasonal contraction in some industries, caused a significant decrease in nonagricultural employment between early January and early February. At the same time unemployment increased by over a half million to more than 3 million. Total employment, however, was as high as it was a year ago, and most of the basic heavy industries continued to operate near peak rates.

The net result of wholesale-price movements during the month was relatively minor. A sharp drop in farm and food prices in the early part of February was recovered by the month's end. Consumers' food prices were also lower. As a result of recent declines in consumers' prices, downward wage adjustments were made necessary for employees of a few companies, notably General Motors, whose union contracts tie wage rates to changes in the consumers' price index. In a number of other cases, wage increases were negotiated during February. No strikes of national importance occurred during the month.

Unemployment at Postwar High

Unemployment increased by 550,000 from early January to early February, bringing the number of jobless to about 3.2 million, according to the Census Bureau's monthly report. The number of persons without jobs is now somewhat larger than at any time since early 1942, but still low in relation to total employment. The unemployed in early February were 5.3 percent of the civilian labor force, compared with 4.4 percent a year ago 12.9 percent in February 1941. The rise in unemployment appeared, on the basis of weekly Unemployment Compensation claims reports, to be losing momentum by the end of the month.

Part of the unemployment increase was due to bad weather and other seasonal factors, with con-

struction, lumbering, and transportation particularly affected. In the latter two industries, layoffs were probably more than seasonal. In industries such as textiles, coal mining, furniture, appliances, and paper, curtailed production as a result of declining demand also caused layoffs. There is undoubtedly a general easing of the demand for goods after more than 3 years of high production, but for the immediate future the normal spring expansion in outdoor industries will tend to reduce the number of unemployed.

Total employment dropped somewhat between January and February, but was still about the level of a year ago. A further decline in factory employment, a trend since last September, was an important factor in the drop of nearly half a million nonagricultural workers. This was partially offset by a rise of a quarter million on farms. Nonfarm employment, at 50.2 million, was about 200,000 below last year's figure, but considerably above any previous February.

Price Changes Small

While prices for individual commodities fluctuated considerably during the month, the level of the Bureau's wholesale-price index at the end of February was practically unchanged from the beginning of the month. Prices of farm products were 1 percent higher and foods, about 1.5 percent, but prices of commodities other than farm and food products on the average were almost 1 percent lower. Textile prices declined 1 percent. Fuel and lighting materials and products in the miscellaneous category were down a little more than 1 percent. Building materials were fractionally higher, but for the first time in many months metals and metal products declined slightly.

The sharp break in the prices of farm commodities in the early part of February 1948 was repeated on a smaller scale in the same period this year. Prices of some important farm products fell well below support levels at times. By the end of the month, however, the general levels of farm and food prices were somewhat higher than they were at the end of January.

The Bureau's consumers' price index decreased 0.3 percent between December 15 and January 15, marking the fourth consecutive month of decline. At 170.9 percent of the 1935-39 average, the index was 1.2 percent higher than a year ago and 28.2 percent above the June 1946 level. In contrast to the preceding 3 months, lower prices for apparel

and housefurnishings, rather than lower food prices, were chiefly responsible for the average decrease from mid-December to mid-January.

Apparel and housefurnishings prices dropped 1.9 and 1.1 percent, respectively, over the month. January sales accounted for lower prices for most apparel items, particularly men's overcoats and topcoats, business shirts, shorts, and pajamas; women's coats, wool and rayon street dresses, and nylon hose; children's apparel; and cotton and rayon yard goods. January sales were also reflected in the lower index for housefurnishings. Reduced prices were reported for sheets, curtains, all items of furniture, and electric washing machines and refrigerators. Many articles featured in January sales were of standard quality, available in an adequate assortment, on which sale prices were in effect long enough to be accessible to consumers generally.

Prices of foods averaged only 0.1 percent lower. The crop losses resulting from freezing weather in the winter fruit and vegetable areas caused a rise of nearly 9 percent in prices of fresh produce, offsetting substantial declines in prices of meats, eggs, and fats.

Rents rose an average of 0.2 percent, increases being reported in all cities surveyed.

Preliminary reports for February indicate further declines in food prices, particularly meats, enough to cause another decline in the over-all index.

Wage Changes

The economic setting of wage negotiations is more varied than a year ago. In the textile industry, union wage demands which were submitted to arbitration were turned down on the basis of the economic outlook in the industry. Wage raises were negotiated recently in many industries, particularly in public utilities, paper, printing, metalworking, and air transportation. In the mass-production industries, including electrical equipment, rubber, steel, and automobiles, the unions announced that they would seek wage increases and other benefits. Certain employers in these industries, as in similar circumstances last year, indicated that these demands would not be granted.

The wages and salaries of about 340,000 employees of the General Motors Corp. were reduced for the 3-month period beginning in March. This action was the result of the agreements

between the corporation and the United Auto Workers (CIO) and the United Electrical Workers (CIO) to make quarterly wage changes on the basis of changes in the Bureau of Labor Statistics consumers' price index. About 270,000 production workers will receive 2 cents an hour less, and 68,000 salary workers will receive a total of \$10 less during the 3-month period. This is still 1 cent above the rate effective in May 1948, when the contract was signed. Additional union contracts with automatic escalator clauses have recently affected workers in a few other companies, including 25,000 employees of the International Shoe Co., where wage adjustments are based upon relatively small changes in the consumers' price index.

Weekly earnings of factory workers declined slightly from December to January to an average of \$54.77, as a result of a shortening of the average workweek. The loss in pay due to the decline in hours more than offset the small increase in hourly earnings.

The workweek in manufacturing, which averaged 39.6 hours in January 1949, against 40.0 hours in December 1948, was shorter than in any month since January 1941. Most of the decline took place in the nondurable goods industries in which average weekly hours dropped to 38.6. In this group of industries, the shortest workweek since the end of the war was reported for textiles, apparel, food, tobacco, and paper. The average workweek in the durable goods industries also declined slightly in January to 40.5 hours, 0.4 hour below the January 1948 level. This decline occurred despite a substantial rise in hours worked in automobile assembly plants.

Industrial Relations

Time lost due to work stoppages resulting from industrial disputes during February does not appear to have been significantly different than the 800,000 man-days reported for the previous month. The only strikes which attracted attention during the month were local in character.

About 11,000 operating employees of the Philadelphia Transportation Co., which runs the city's public transportation system, went on strike on February 11. The union originally asked for a wage increase of 25 cents an hour; the company's offer was 2 cents. After tying up Philadelphia's transportation for about 10 days, the dispute was settled with an increase of 8 cents an hour.

Readjustments in Consumer-Goods Industries

Declines in Employment, Man-Hours, and Workweek
and Rise in Lay-Off Rates, Have Affected
Textiles, Apparel, Shoes, and Selected Consumers' Durables

SYDNEY NETREBA¹

WITH THE COMPLETION OF RECONVERSION early in 1946 and with purchasing power and accumulated backlogs of demand at unprecedented levels, production and employment in nonagricultural industries began a general rise which continued until the end of 1948. Nonfarm employment reached an all-time high of 46.1 million in December, with manufacturing attaining a postwar high of 16.7 million somewhat earlier. Despite this over-all trend, the rapidly increasing volume of consumer goods and services started a movement toward certain "readjustments," which first became evident in 1947. Among the first industries to feel the impact of declining demand were those dealing in luxury items, such as entertainment, furs, jewelry, and liquors. Readjustments in these activities, which took the form of decreased employment or lowered prices, or both, were relatively small and had no visible effect on the general economic situation.

The second type of adjustment to changes in postwar demand in 1947 took the form of a reappearance in several consumer-goods industries of prewar seasonal patterns in production and employment. Textiles, apparel, shoes, radios, furniture, and rubber tires showed declines in employment and weekly hours during the spring and early summer months and a sharp pick-up in the fall and winter. By the end of 1947, it was

evident that the radio manufacturing and rubber-tire industries were readjusted to somewhat lower levels of demand by employment reduction. The textile, apparel, shoe, and furniture industries, however, had resumed their upward trend, reaching new employment peaks in February and March 1948. These were followed by spring and summer seasonal decreases, which affected the shoe industry with particular severity. The expected upturn appeared in August, but proved to be short-lived. Reversing the usual seasonal pattern, employment in cotton, woolen and worsted textiles, and shoe manufacturing turned downward in September and declined further in October and November. These employment declines were accompanied by even sharper reductions in the length of the workweek.

Probably the most important employment development in late 1948 was the contraseasonal decline in manufacturing employment during the last quarter. Between September and December, these industries dropped about 450,000 workers, in contrast to an increase of 100,000 during the same period of 1947. In January 1949, employment declined by another 400,000, bringing the total well below the level a year ago. This reduction was largely concentrated in consumer-goods industries, as readjustments spread from soft goods to a number of consumer durables. Between

¹ Of the Bureau's Branch of Employment Statistics.

October and January there were increasing reports of lay-offs, part-time work, plant shut-downs, and price reductions, in plants producing washing machines, refrigerators, furniture, radios and phonographs, stoves, oil burners, and heating equipment, in addition to the textile and apparel items indicated previously.

Sales data prepared by the United States Department of Commerce reveal that trends in factory employment have corresponded to fluctuations in current demand. For example, retail stores selling household appliances and radios reported consistent increases in sales volume throughout 1946 and 1947, and substantial decreases in the latter part of 1948. Similar trends were shown for retail-furniture and housefurnishing stores; these outlets reported minor advances through the first three quarters of 1948, but significant reductions in sales for the final quarter of the year.

Trade reports further indicate that sales resistance to major appliance and furniture items resulted in increased retail inventories and consequent "promotional" clearances in a number of important cities. Refrigerators, vacuum cleaners, washing machines, gas ranges, automatic irons, radios, furniture, and passenger-car tires were among the items most frequently featured in these clearances. Slackening of orders and caution with respect to forward buying have, of course, influenced the curtailment of manufacturing operations in these lines.

Selected Nondurable Goods Industries

The Nation's basic cotton-textile industry employed a record number of 529,400 production workers in March 1948. Preliminary data for January 1949 indicate further continuance of an employment level below the 1948 spring peak and more than 28,000 below January 1948. Thus, the industry was unable to rally from the seasonally reduced level of the summer. Average weekly hours for mid-January 1949 showed a drop of more than 4 hours compared to the workweek a year before, and aggregate man-hours were about 17 percent below the March 1948 peak. Reductions of over 11 percent in length of workweek had more effect on curtailed operations in cotton textiles than did employment decreases (7.5 percent) over the period.

Labor turn-over rates also reflected the industry's recent decline. Hiring reached a postwar low in December 1948, while lay-offs rose sharply from March to a postwar high of 17 per 1,000 in December. Workweek comparisons by month, August 1948 to December 1948, for northern and southern cotton-textile establishments are shown below:

	Average weekly hours	
	North	South
1948: August-----	37.9	37.6
September-----	37.8	36.9
October-----	35.0	37.3
November-----	35.2	37.4
December-----	36.6	37.7

Compared to the South, textile mills in the North (i. e., New England) showed greater declines in average weekly hours; Massachusetts and Rhode Island were particularly affected. Differences between North and South were especially marked from September to October. The average workweek for the North dropped sharply by mid-October, but in the South there was a slight increase. Because of the greater number of southern workers who did not receive pay for the Labor Day holiday, the September average for the South was influenced to a greater extent by that holiday than the average for the North.

Trends in woolen and worsted manufacturing followed closely the cotton textile trend. The postwar peak of December 1946 was followed by decreases in aggregate man-hours in the spring and summer months of 1947. The upward movement was resumed, however, and by February 1948 man-hours were only 2.4 percent below the postwar peak. A summer drop occurred, however, which, unlike that of 1947, was followed by a contraseasonal decline that continued to January 1949. Man-hours in mid-January were about 20 percent below the postwar peak and almost 18 percent below January 1948, reductions significantly larger than those in cotton textiles.

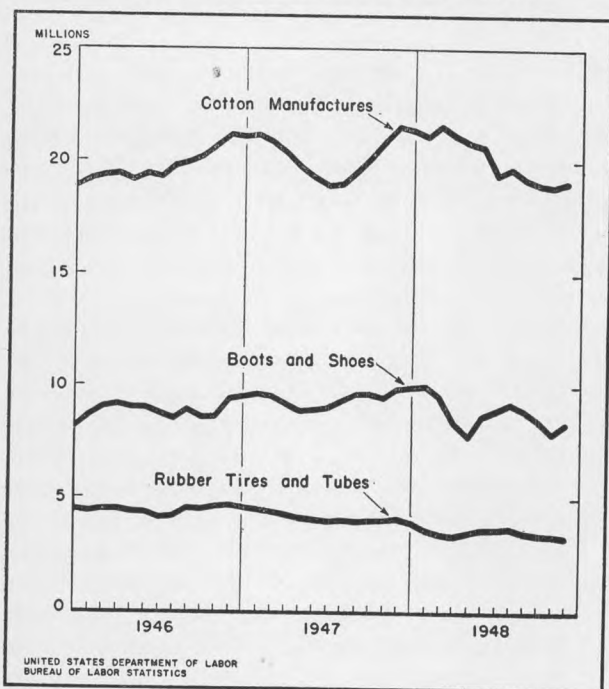
Average weekly hours in woolen and worsted mills, which dropped to 39.1 in mid-December 1948, had rallied from the mid-October low but were still substantially below the level of the postwar peak employment months.

Employment in woolen and worsted mills in January 1949 was 32,000 below the record postwar month, according to preliminary data, and about 28,000 below January 1948, reflecting a more severe down-turn than that in cotton textiles.

Hiring reached a postwar low in December 1948, while lay-offs rose to 30 per 1,000 compared with 4 per 1,000 in December 1946.

In the boot and shoe industry, the postwar record of production-worker employment was achieved in February 1948. However, as in cotton and in woolen and worsted textiles, the industry failed to recover in the fall from the seasonal down-turn of the spring and early summer. In January 1949, employment was 8 percent below the postwar peak. The 13-percent drop in total man-hours from the peak employment month resulted from almost equal decreases in employment and in the length of the workweek.

Weekly Man-Hours
Selected Nondurable Goods Industries



The hiring rate in the shoe industry in December 1948, which was only slightly above February, showed definite improvement over October and November. Reports indicated that the industry was preparing to reemploy workers as a result of new orders for the spring season. Some upturn in employment developed in December 1948 and January 1949. Lay-offs in December dropped slightly from October and November, but were nevertheless higher than the February rate of 5 per 1,000.

In the rubber tire and tube industry, the end of World War II made it possible to turn immediately to output for civilian use. By November 1946, production-worker employment reached an all-time high of 118,000. Gradual subsequent declines reduced employment 30,000 by mid-January 1949. Aggregate weekly man-hours fell by 32 percent over the 2-year period, resulting largely from the substantial drop in employment. Cut-backs in the average workweek, however, also developed. By the beginning of 1949, average weekly hours were almost 3 hours below the level at the employment peak.

Labor turn-over data further reflect the nature of the readjustment in this industry. The accession rate declined to 8 per 1,000 employees in December 1948, compared with 32 per 1,000 in November 1946. Similarly, the lay-off rate, at a low in November 1946, advanced to 17 per 1,000 in December 1948. Quits, or voluntary separations, declined markedly, from 25 to 11 per 1,000, over the period.

The physical volume of tire and tube production, according to information published by the United States Department of Commerce, corresponds closely in movement with the employment changes. In part, the decline in total output has resulted from a sharp reduction in exports since the first half of 1947. Still more important has been the substantial decrease in production for replacement. Shipments of original equipment to automobile-manufacturing plants have, of course, advanced with the increased output of new vehicles, but shipments to tire and tube dealers, which had increased substantially in the immediate postwar period to meet the large wartime backlog, have since declined sharply.

Selected Durable Goods Industries

In the refrigerator and refrigeration-equipment industry, postwar production-worker employment continued to advance until June 1948, when it was almost double the level at the war's end. Postwar demand for refrigerators has been particularly insistent, not only because of the wartime backlog, but also because of the record volume of new construction. Employment declines in the third, and especially, in the fourth quarter of 1948, reversed the previous expansion. Reflecting this reduction, total man-hours declined about 16 percent

between June 1948 and January 1949; and weekly hours were also lowered.

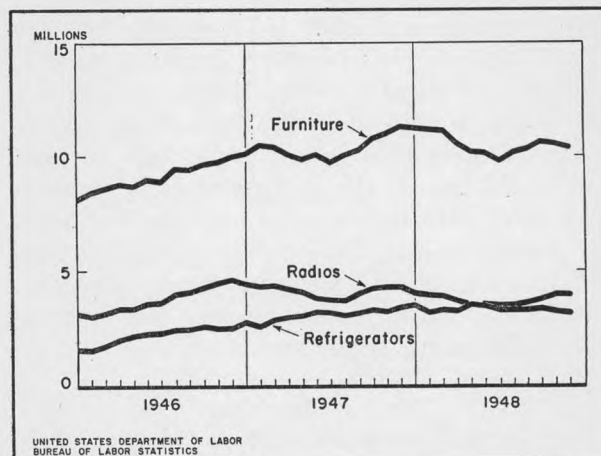
In the radio and phonograph industry, which includes the manufacture of television sets, it is not readily possible to distinguish employment trends in individual products in the BLS data for the industry as a whole. Production information shows the rapid strides made in output of television units during the postwar period, with 1948 indicating sustained record levels in that branch. Output of radio sets, on the other hand, has turned downward rather sharply from the 1947 peak. It appears, therefore, that the advance in television has operated to limit the over-all employment decline in the radio industry since December 1946. Reports for a number of States, principally the more important television centers—New York and Pennsylvania—indicate that the rise of this branch has more than offset declining activity in the radio branches.

Nationally, however, the radio and phonograph industry reduced production-worker employment about 14 percent between December 1946 and December 1948. A further reduction reported in January 1949 was largely seasonal in nature. Average weekly hours have changed but slightly over the 2 years. The hiring rate fell from 51 per 1,000 in 1946 to 42 per 1,000 in December 1948. The lay-off rate did not change substantially; quits, however, declined significantly—from 33 to 22 per 1,000.

Production worker employment in the laundry-equipment industry—including driers, ironers, washing machines, and wringers, for household use—has decreased, from the postwar peak in February 1948 to December 1948, about 28 percent, or by almost 5,000 workers. Reports of lay-offs in several important establishments in the industry have stressed the need to adjust production to declining sales volume. Average weekly hours also dropped substantially—particularly in mid-December 1948. At the end of the year the average workweek was about 4 hours less than the level reported at the employment peak.

In the furniture industry, wartime restrictions resulted in lowered employment levels from 1942 to 1945. It was possible in 1946, however, to expand employment rapidly to a point above the 1941 peak, owing to the increased availability of labor and materials. Employment expanded further in 1947, reaching a postwar peak in February

Weekly Man-Hours Selected Durable Goods Industries



1948. After the seasonal reduction in the spring and summer months, some increase developed in the latter part of 1948, but the levels remained below the postwar peak. In January 1949, aggregate weekly man-hours were about 14 percent below February 1948, as a result of an 8-percent decline in employment and a reduction of more than 2 hours in the average workweek.

Lay-offs in furniture-manufacturing lines increased in the more recent months, reflecting the declines in activity. In December 1948, the lay-off rate had increased to 35 per 1,000 employees—compared to a rate of 7 per 1,000 in February. The accession rate was substantially reduced over the period, changing from 58 to 23 per 1,000.

Production of cooking stoves reached a postwar peak in the first quarter of 1948. Seasonal declines followed as in preceding years, but, unlike the trends in other postwar years, the recovery in the fall months was not sufficient to reach the earlier levels. Shipments of oil burners and heating equipment also declined somewhat below previous peaks.

Indicating a slackening pace in new orders, the hiring rate for the industry as a whole dropped from 62 per 1,000 in November 1947 to 13 per 1,000 in December 1948, while the lay-off rate advanced sharply over the same period. By January 1949, production-worker employment had, consequently, been reduced by 30,000 from the November 1947 peak. Establishments in this industry also reported a significant decrease in the average

workweek. Aggregate weekly man-hours, largely reflecting employment cut-backs, decreased by about one-third from November 1947 to the first part of 1949.

Employment, average weekly hours, total weekly man-hours, and labor turn-over rates for selected industries

Item	Postwar peak employment month ¹	1948					1949
		August	September	October	November	December ²	January ²
Cotton manufactures:							
Employment, production worker.....	529,400	521,500	516,900	511,400	508,900	507,500	494,900
Average weekly hours.....	40.7	37.7	37.1	36.9	37.0	37.5	36.3
Total weekly man-hours (in thousands).....	21,550	19,660	19,180	18,920	18,830	19,030	17,960
Labor turn-over: ³							
Accessions (per 100 employees).....	4.8	4.7	4.4	3.8	3.2	2.5	2.9
Lay-offs (per 100 employees).....	.8	.8	.8	1.4	.9	1.7	1.8
Woolen and worsted manufactures:							
Employment, production worker.....	181,700	169,800	165,500	159,600	158,200	157,400	149,100
Average weekly hours.....	41.3	39.6	38.8	37.6	38.1	39.1	39.1
Total weekly man-hours (in thousands).....	7,450	6,720	6,430	6,000	6,030	6,154	5,830
Labor turn-over:							
Accessions (per 100 employees).....	3.2	3.2	3.0	2.5	3.5	2.3	2.1
Lay-offs (per 100 employees).....	.4	2.2	2.2	5.1	2.8	3.0	4.6
Boots and shoes:							
Employment, production worker.....	257,800	244,800	241,000	238,500	229,100	232,100	237,200
Average weekly hours.....	38.8	37.4	36.8	35.6	34.4	36.6	36.9
Total weekly man-hours (in thousands).....	10,000	9,160	8,870	8,490	7,880	8,490	8,750
Labor turn-over:							
Accessions (per 100 employees).....	4.0	5.1	4.4	3.3	3.3	4.1	4.2
Lay-offs (per 100 employees).....	.5	.8	.5	1.0	1.2	.9	.7
Rubber tires and inner tubes:							
Employment, production worker.....	118,000	91,500	91,400	90,000	91,200	89,600	88,400
Average weekly hours.....	39.0	39.5	37.7	37.2	36.2	35.6	35.4
Total weekly man-hours (in thousands).....	4,600	3,610	3,440	3,350	3,300	3,190	3,130
Labor turn-over:							
Accessions (per 100 employees).....	3.2	2.0	1.9	1.5	1.2	.8	1.4
Lay-offs (per 100 employees).....	.2	.3	.5	1.1	1.3	1.7	1.3
Refrigerators and refrigeration equipment:							
Employment, production worker.....	84,800	82,300	81,700	81,000	79,500	79,300	76,300
Average weekly hours.....	40.5	39.2	39.5	40.6	40.0	40.0	39.3
Total weekly man-hours (in thousands).....	3,430	3,220	3,220	3,280	3,180	3,170	2,990
Labor turn-over:							
Accessions (per 100 employees).....	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
Lay-offs (per 100 employees).....	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
Radios and phonographs:							
Employment, production worker.....	111,600	86,900	89,700	93,100	95,900	97,200	93,500
Average weekly hours.....	40.9	39.3	39.6	39.5	40.4	40.3	39.3
Total weekly man-hours (in thousands).....	4,560	3,420	3,550	3,680	3,870	3,920	3,670
Labor turn-over:							
Accessions (per 100 employees).....	5.1	6.3	7.6	6.2	6.0	4.2	5.3
Lay-offs (per 100 employees).....	1.4	1.6	.6	1.5	1.1	1.7	3.1
Washing machines, wringers, and driers, domestic:							
Employment, production worker.....	16,500	15,600	15,700	15,700	15,500	12,500	10,200
Average weekly hours.....	41.8	41.2	39.5	41.5	40.7	35.1	37.6
Total weekly man-hours (in thousands).....	690	640	620	650	630	440	385
Labor turn-over:							
Accessions (per 100 employees).....	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
Lay-offs (per 100 employees).....	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
Furniture:							
Employment, production worker.....	266,200	249,700	252,500	255,600	256,500	254,100	242,100
Average weekly hours.....	41.9	40.7	40.7	41.5	40.9	41.1	39.5
Total weekly man-hours (in thousands).....	11,150	10,160	10,280	10,600	10,490	10,440	9,560
Labor turn-over: ⁴							
Accessions (per 100 employees).....	5.8	8.0	7.4	6.2	4.6	2.3	4.0
Lay-offs (per 100 employees).....	.7	.6	.9	1.0	2.2	3.5	5.5
Stoves, oil burners, and heating equipment:							
Employment, production worker.....	96,200	88,500	92,000	93,300	87,600	76,400	64,000
Average weekly hours.....	40.1	40.5	39.5	40.9	39.0	39.2	37.4
Total weekly man-hours (in thousands).....	3,860	3,580	3,630	3,810	3,410	2,990	2,390
Labor turn-over:							
Accessions (per 100 employees).....	6.2	7.5	7.6	4.7	3.2	1.3	3.1
Lay-offs (per 100 employees).....	1.5	.7	1.0	2.0	5.1	11.6	7.5

¹ The postwar peak employment month for each industry was: Cotton manufactures, March 1948; woolen and worsted manufactures, December 1946; boots and shoes, February 1948; rubber tires and inner tubes, November 1946; refrigerators and refrigeration equipment, June 1948; radios and phonographs, December 1946; washing machines, wringers, and driers, domestic, February 1948; furniture, February 1948; stoves, oil burners, and heating equipment, November 1947.

² Preliminary.
³ Includes cotton smallwares industry.
⁴ Includes mattresses and bedsprings.
⁵ Not available.

Great Britain: Employment Policies and Production

JEAN A. FLEXNER and ANN S. RITTER¹

BRITISH PLANNING during the later stages of the war was designed to prevent unemployment during reconversion, to restore prosperity to the depressed areas, and to maintain full employment in the future; actually, employment remained at a high level throughout. It became apparent during 1947 from the fuel crisis of February and the sterling convertibility crisis of midsummer, that existing resources, including manpower, were not sufficient to perform all the necessary tasks. Consequently, policies were revised, emphasis shifted, and new programs devised. Some employment controls which had been relaxed were re-instituted; capital investment was reduced; and the development programs for depressed areas were slowed down.

Mid-1945 Manpower Problem

In mid-1945, the total labor force (21,649,000)² was at an all-time peak, equal to 45 percent of the population (47,791,000). The civilian labor force was considerably below the strength of mid-1939 (see table 1); almost one-fourth were in the armed forces; and 23 percent were engaged in supplying the armed forces. Less than 1 percent were unemployed, compared to 6 percent in 1939.

In mid-1945 British patterns of civilian employment showed the distortions caused by a war economy. (See table 2.) Compared to mid-1939, there was a great increase in employment in agriculture, and a pronounced decline in building and

civil engineering, in public utilities, in distribution, in consumers' services. Fewer men were at work in the coal mines. The total employed in manufacturing had risen slightly, but of this total only 6 percent were engaged in manufacturing for export (compared to 15 percent in 1939) and 56 percent were engaged in manufacturing supplies for the armed forces. The manufacturing industries which showed an increase were metals and engineering and chemicals; building materials, textiles, clothing, and food, drink, and tobacco had declined.

TABLE 1.—Great Britain: Labor force distribution¹

[In thousands]

Item	Total number			
	Mid-1939	Mid-1945	End-1947	Oct. 1948
Total labor force.....	19,750	21,649	20,430	20,361
Men.....	14,656	14,881	14,666	14,575
Women.....	5,094	6,768	5,764	5,786
Armed forces.....	480	5,090	1,119	797
Insured unemployed ²	1,270	103	300	322
Forces released, not yet employed.....	-----	40	123	33
Civilian labor force (at work) ^{3,4}	18,000	16,416	18,888	19,209
Men.....	13,163	10,133	13,253	13,543
Women.....	4,837	6,283	5,635	5,666
	Percentage distribution			
Total labor force.....	100	100	100	100
Men.....	74	69	72	72
Women.....	26	31	28	28
Armed forces.....	2	24	6	4
Insured unemployed ²	6	(3) ⁴	2	2
Forces released, not yet employed.....	-----	(3) ⁴	(3) ⁴	(3) ⁴
Civilian labor force (at work) ^{3,4}	92	76	92	94
Men.....	67	47	65	66
Women.....	25	29	27	28

¹ Figures relate to males aged 14 and under 65 years, and females aged 14 and under 60 years. Two women employed part-time are counted as one worker.

² The figures for mid-1939, mid-1945, and end-1947 relate only to persons insured under the Unemployment Insurance Acts. The figures for October 1948 represent the estimated total numbers of unemployed persons on the registers of the employment offices except registered disabled persons who require employment under sheltered conditions.

³ Including Fire Service, Police, and Civil Defense.

⁴ Less than 1 percent.

Source: Ministry of Labor Gazette, London, December 1948 (p. 418).

The British Government, in its 1944 White Paper on Employment Policy,³ foresaw the need for continuing controls—during the reconversion period—over prices, rationing, investment, and to some extent over the allocation of raw materials and labor, “in order to direct the efforts of industry towards the right tasks in the right order.” However, “under favorable external conditions” the statement continued, “it may not be very long before production becomes adequate to meet

³ Cmd. 6527. Presented by the Minister of Reconstruction to Parliament, May 1944.

¹ Of the Office of Foreign Labor Conditions.

² Labor force includes all those at work, or available for and seeking work, or in the armed forces except indoor private domestics. Civilian labor force excludes the armed forces.

the various calls upon it. When that happens, the first aim of employment policy—the maintenance of an adequate level of expenditure on goods and services—will no longer be realized automatically, as a byproduct of the war effort or of reconstruction, but will call for the application of a policy deliberately directed to that end.”

During reconversion, the Government concentrated upon “checking the development of localized unemployment;” removing obstacles to labor mobility and providing facilities for training and retraining.

The Distribution of Industry Act in 1945 carried further the prewar policy of diversifying the economy of the depressed areas. This law provided that a district which showed a persistently high volume and rate of unemployment could be scheduled as a development area, and could obtain Government assistance in diversifying its industries in order to utilize available skilled labor.

TABLE 2.—Great Britain: Employment by industry, mid-1939, mid-1945, end-1947, and October 1948

[In thousands]					
Industry	Mid-1939	Mid-1945	End-1947	Oct. 1948	Per cent change 1939-48
Total civilian labor force (at work).....	18,000	16,416	18,888	19,209	+7
Manufacturing industries.....	6,815	6,820	7,251	7,342	+8
Metals and engineering.....	2,267	3,336	2,876	2,907	+28
Chemicals, etc.....	266	423	336	343	+29
Building materials, etc.....	567	403	590	587	+4
Textiles.....	798	498	652	687	-14
Clothing, etc.....	1,005	652	831	836	-17
Food, drink, and tobacco.....	654	518	623	642	-2
Other manufactures.....	1,258	990	1,343	1,340	+7
Basic industries.....	3,298	3,288	3,629	3,724	+13
Coal: Total manpower ¹	773	738	758	764	-1
Wage earners on colliery books.....	(735)	(711)	(718)	(724)	(-1)
Other mining and quarrying.....	100	61	73	74	-26
Agriculture.....	910	1,025	1,055	1,102	+21
Fishing.....	40	16	35	35	-12
Transport and shipping.....	1,233	1,252	1,438	1,471	+19
Public utilities.....	242	196	270	278	+15
Building and civil engineering.....	1,310	722	1,364	1,376	+5
Public service.....	1,465	2,030	2,173	2,238	+53
Distribution.....	2,887	1,958	2,351	2,398	-17
Consumers' services.....					
Hotels and catering; entertainments and sport.....	817	618	834	844	+3
Other services.....	1,408	980	1,286	1,287	-9
Manufacturing industries.....	6,815	6,820	7,251	7,342	+8
For export.....	2,990	410	1,942	2,030	+105
For armed forces.....	1,270	3,830	350		
For home market.....	4,555	2,580	4,959	5,312	-9

¹ Total manpower includes administrative and clerical staff.

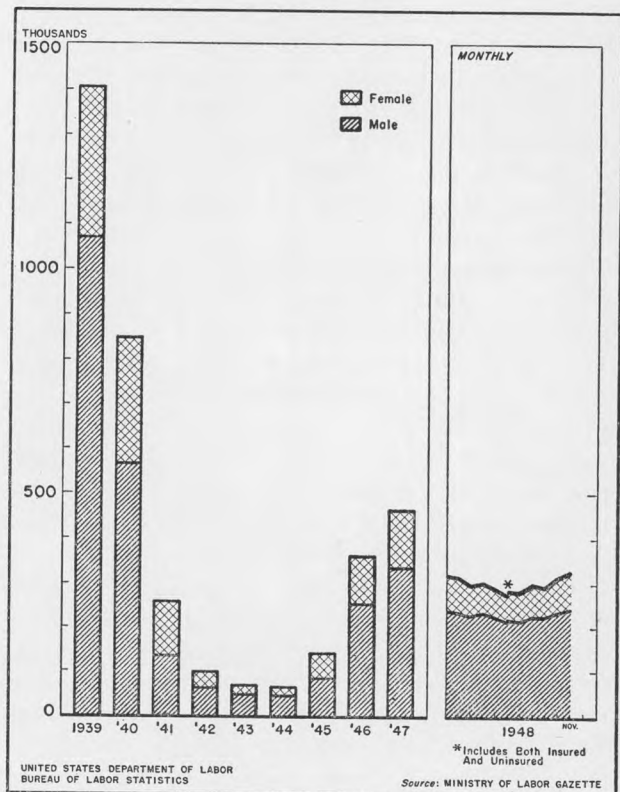
² Estimated.

Source: Ministry of Labor Gazette, London, December 1948.

Even while 4 million persons were being demobilized and other millions shifted out of war employment, the unemployed did not reach 400,000 in the postwar years (see chart). The only exception was in 1947 when about a million

persons were out of work because of the fuel and power crisis in February; however, not all of these registered at the employment offices. The unemployment data include wholly unemployed and temporarily stopped who register at unemployment offices, but not persons seeking a change of job or the disabled who require special types of employment. After June 1948, the uninsured as well as the insured are included.

Average Number of Registered Unemployed Great Britain



Employment Levels and Policies, 1945-47

A marked increase in output of fuel and power, a redistribution of manpower, and as great an addition as practicable to the total labor force were needed at the war's end to rebuild plants and houses, to restore exports, and finally to fill a great backlog of demand in the home market. For a year and a half, it was assumed that labor would be absorbed and redistributed automatically in accordance with the needs of the economy, and that the Government should remove wartime restrictions on changing jobs, watch for unemploy-

ment, and retrain those coming out of the armed forces. During 1945 and 1946, employment controls were lifted except in agriculture and coal mining. Housing and other large-scale investment programs were stimulated, both in the nationalized industries and in private industries.

In February 1947, the Government published its first estimate of how postwar national resources should be allocated to meet national needs. The Economic Survey for 1947 (February) stated: "The central fact of 1947 is that we have not enough resources to do all that we want to do. We have barely enough to do all that we *must* do." Primary objectives were to expand the nation's labor force, to increase its output, and to insure the placement of labor in the most useful jobs; difficulties in securing reallocation of labor without wartime powers of direction and with existing shortages of accommodations were foreseen by the Government.

Nevertheless, 1947 production and export targets required a net increase in civilian labor force of 278,000 persons. The chief need was to bring the work force up to strength in coal mining, agriculture, and textile manufacture and also to provide for some increase in every major group except public service (in which a decrease of 80,000 was planned). Although an additional 178,000 workers seemed to be in prospect from demobilization, it was recognized that special efforts would be necessary to attract the extra 100,000. These the Government proposed to recruit from women hitherto outside the labor force, and from abroad. During the year, an intensive campaign was begun to keep women in industry, or to bring them back, if necessary, as part-time workers. The Factories Act was relaxed to permit late shifts in textile mills.

Teams of Ministry of Labor officials visited the displaced persons' camps on the Continent to recruit suitable volunteers.

Employment Levels and Policies, 1947-48

By autumn, the Government realized that its 1947 survey had been over-optimistic. The fuel crisis in February, the sterling convertibility crisis in the summer of 1947, and the failure of exports to reach the target for mid-1947 all combined to cause a revision of plans.

Two wartime employment controls were rein-

troduced: the Control of Engagement Order in October 1947, and the Registration for Employment Order in December 1947.⁴ These orders together channeled all hiring through the public employment offices (or approved agencies); restored the Government's authority to direct workers to take essential employment; and required those engaged in certain nonessential work or not gainfully employed to register for work. Immediate improvement occurred in placements in industries given first preference by the employment service, but the net increase in employment during a year's time (October 1947-October 1948) was 5 percent. The registration order brought few useful new recruits into the labor market. Only 29 persons were directed to jobs; 338 coal miners and 129 agricultural workers were directed to remain in their industries, under pre-existing regulations. Chief reliance was placed on persuading applicants to take essential, rather than nonessential jobs. The obstacles proved to be the relatively unattractive working conditions in textiles, the hazards and insecurity long attached to coal mining, the monotony, poor housing, and other disadvantages of agricultural life.⁵

Late in 1947, the capital investment program was revised downward because of labor and materials shortages; however, the cuts in the housing program announced in December 1947 were not fully carried out, and the program was resumed in 1948.

The pressure to attain a high level of production and the difficulties encountered by the capital investment program raised some doubts during 1948 concerning the economic feasibility of the Development Area Plan. Against the long-run social advantages of new planned towns, industrial diversification, and redistribution of industry, the West Midlands Plan urges the short-run advantage and lower cost of expanding existing cities and industrial facilities. The consultants on the West Midlands Plan point to the pool of labor accustomed to factory work, the concentration of managerial talent, and of service and

⁴ See Monthly Labor Review, November 1947, (pp. 568-9), and December 1947 (pp. 683-4).

⁵ Coal miners have greatly improved their wage rates over prewar, and the National Coal Board is extending welfare facilities as fast as is consistent with other urgent demands of the economy. Preference is being given in new housing for coal miners and agricultural workers. The textile industry group has led 16 industry groups in the percentage increase in earnings between October 1938 and April 1948. Earnings of women in textiles are now above the all-industry average.

transport facilities in this area. The Government, while adhering to its general plan, has proceeded cautiously in the matter of scheduling for development additional areas which have requested such action.⁶

TABLE 3.—Great Britain: Production and manpower, for specified industries, end-1947 and end-1948

Industry	Production		
	End of 1947	End of 1948	
	Actual	Target	Actual
Coal:			
Total (million tons).....	196.5	211.0	208.4
Deep mined (million tons).....	186.3	200.0	196.7
Open cast (million tons).....	10.2	11.0	11.7
Production index ¹	101	-----	² 116
Textiles, cotton:			
Cotton yarn (million lbs.).....	740	900	890
Production index—all textiles ¹	116	-----	³ 129
Steel:			
Ingots (million tons).....	12.7	14.0	15.0
Production index ¹	102	-----	122
Shipbuilding:			
Total (gross tons).....	4950,000	-----	41,200,000
Tankers (gross tons).....	120,000	175,000	200,000
Production index ¹	135	-----	146
	Manpower		
Coal.....	718,000	750,000	726,000
Textiles, cotton.....	262,600	325,000	282,700
Steel.....	199,200	-----	204,700
Shipbuilding.....	214,700	-----	215,000

¹ 1946=100.

² October.

³ September.

⁴ The 1947 target had been 1,250,000.

Sources: Great Britain, Economic Survey 1947, Cmd. 7344 and Economic Survey 1948, Cmd. 7368; Monthly Digest of Statistics, Central Statistical Office, London, Dec. 1948; various issues of the New York Times, the London Times, and Daily News Record.

A substantial decline (323,000) was expected in the total labor force during 1948, owing to the exodus of women and to the raising of school leaving age to 15 years. However the Economic Survey for 1948 projected some increase (133,000) in the civilian labor force because of further cuts in the armed forces. This survey set manpower targets for only three industries—coal, agriculture, and textiles. As special measures to aid redistribution and recruitment, the Government planned to concentrate a large part of its 1948 house-building in mining and agricultural areas.

⁶ Within the last 3 years, the development areas greatly improved their employment position compared to prewar and to the country as a whole. Many Government munitions plants in these areas were turned over to private industry and by June 1948, 443 new factory buildings had been completed. Although 100,000 insured people in these areas were out of work in June 1948, the number employed in the development areas was estimated at 250,000 more than in 1939. Some 105,000 of the new jobs were attributed to industrial developments introduced by Government plan.

Situation in Late 1948

Great Britain's civilian labor force at work reached a peak of 19.2 million in October 1948, and exceeded the Economic Survey forecast by 340,000. The industry distribution of the employed labor force did not quite conform to the budgets of the Economic Survey—some industries having more, others less, than anticipated. Coal and textiles in particular had not met their manpower targets.

For this reason, the coal and cotton yarn industries did not quite meet their 1948 production goals. The deficits amounted to 1.2 percent in each. (See table 3.) In spite of the deficiency in coal output, coal exports were resumed and the steel industry exceeded its target for 1948. In shipbuilding, the building of tanker tonnage exceeded the 1948 target. The October 1948 index of total output for the British economy was 27 percent above the 1946 average.

Exports had in December 1948 reached 148 percent of 1938 volume instead of 160 percent, as had been planned. The current 4-year plan contemplates exports at 150 percent of the 1938 volume in 1952-53.

Possibilities for Expanded Production

In mid-1948, Great Britain's labor force was 20.3 million, or 42 percent of the total population. Compared with mid-1939, the percentage of total population gainfully employed had dropped slightly; the percentage of men gainfully employed had dropped rather significantly, from 66 to 62 percent. Changes in population and percent in labor force are shown in the following tabulation:

	Number (in thousands)	
	Mid-1939	Mid-1948
Total population.....	46,467	48,671
Male.....	22,332	23,593
Female.....	24,135	25,078
Labor force.....	19,750	20,293
Male.....	14,656	14,565
Female.....	5,094	5,728
Percent of total population in labor force:		
Total.....	43	42
Male.....	66	62
Female.....	21	23

Source: Monthly Digest of Statistics, Central Statistical Office, London, December 1948.

Because of the stabilization of the British population, the gradual aging of the population, and

the long-range decline in the birth rate, the native labor force is not expected to increase but rather to decline. However, several forecasts have already proved wrong. An expected fall in total population prior to 1948 did not take place, and now seems remote; the 1947 birth rate was higher than in any other year since 1921. Labor force totals in 1947 and 1948 also exceeded forecasts.

The effect of migration on population is, at the moment, unpredictable. After 1946, out-migration exceeded immigration (excluding EVW's, etc.) and thereby reversed a 15-year trend. The Government reserves the right to check too great a flow of certain types of skilled workers, but has agreed to encourage and facilitate migration to the British Commonwealth countries. Shortages of shipping and housing in the Dominions have hindered migration; nevertheless, in 2 years (1946-48) about 150,000 emigrated to the Dominions. This outward movement has been offset by the introduction of approximately 171,000 foreign workers up to December 1948. (These workers are included in labor force statistics.)

About 78,000 of the foreign workers are European Volunteer Workers (volunteers from displaced persons' camps); 69,000 were members of the Polish Resettlement Corps; 1,6000 are German, and 8,000 are Ukrainian ex-prisoners of war who voluntarily remained to work in agriculture on 1-year contracts instead of being repatriated with other prisoners of war prior to July 1, 1948.

Over 29,000 of the EVW's, all men, have been placed in agriculture. Nearly 11,000 men are in the coal mines; over 10,000 women are working in the textile industry; a large number of both men and women (including some German and Austrian women) entered domestic service.

Poles have been placed in coal mining (about 8,000), agriculture (8,000), building and civil engineering (15,000), and about 39,000 in a variety of industrial employments. About 20,000 Poles have not yet been placed.

EVW's receive the same rates of pay, rations, clothing coupons, and social insurance rights as British workers, and are subject to the same taxes and contributions for social insurance. They must, however, take only employment approved by the Ministry of Labor, and their stay is subject to good behavior. Certain training programs have been organized.

Prior to the recruiting and placement of foreign

workers from the Continent, the Ministry of Labor reached agreement with the unions and organizations of employers, governing the introduction of such workers into particular industries. Some agreements stipulated that in case of unemployment the foreign workers shall be released first.

Because it is evident that the British labor force has almost reached its upper limit and because it has proved nearly impossible to move workers from nonessential to essential employment, attention is therefore shifting to the potential increase in output obtainable from a rise in productivity, through mechanization and re-equipment, more regular attendance of workers, and improvements in the organization of work.

Hours and Absenteeism. Average weekly hours of work in April 1948 (the latest date for which information is available) were slightly lower than in October 1938, and considerably below wartime averages as the result of shorter hours schedules in a number of industries after hostilities ceased.⁷

The shortened weekly work schedules after mid-1945 were offset in some industries having critical labor shortages, by agreements to work overtime, e. g., in the coal and textile industries. However, in general, these two industries have not been able to maintain the longer hours.

By agreement of October 1947 most of the coal miners agreed to work at least some Saturdays or an extra half hour a day. The number of shifts actually worked per wage earner on colliery books has, however, averaged less than 5. The rate of absenteeism in coal mines during 1948 was 11.55 percent for all workers and 14.13 percent for workers at the coal face. While these percentages show some improvement over the situation prior to May 1947 (when the 5-day week was introduced), the favorable record of the second half of 1947 has not been maintained.

The cotton spinning mills, after trying a 9½-hour day (47½-hour week) reverted to the 9-hour day and 45-hour week, because the women workers could not manage longer hours and family responsibilities. The weaving mills rejected overtime work, by a ballot taken in April 1948. Thus, it would appear that it is not feasible to increase output under current conditions, by lengthening hours.

⁷ Whereas men in 16 industry groups averaged 47.7 hours a week in October 1938 and 52.9 in July 1943, in April 1948 they averaged 46.5. Women averaged 4 hours less a week both in 1938 and 1948, and 7 hours less than men in 1943.

Productivity. A more practical approach is to increase output per worker by making changes in equipment and methods of work.⁸ The publication of production indexes for the first time has made possible an estimate of the trend in national productivity and the series will provide a basis for the measurement of any future improvements. Economists at Cambridge University tentatively calculated that average output per worker decreased about 5 percent between 1935 and 1947. During 1948 this loss was made up, according to estimates given by Sir Stafford Cripps in January 1949. Average weekly tonnage of coal produced per man-shift worked in November 1948 (1.15 tons) was slightly above the 1938 annual level (1.14 tons). For the year 1948, it was 1.11 tons. An increase in over-all productivity of 2.5 percent a year is assumed as necessary to the achievement of the 4-year plan submitted to OEEC. Sir Stafford Cripps stressed the fact that to achieve even this increase will require continued vigor.

⁸ See also British Labor under the Labor Government, Part II, in Monthly Labor Review for October 1948 (p. 366) and reprint Serial No. R-1930.

A joint Anglo-American Production Council was established in September 1948 to study production problems in Great Britain. The Council recommended measures to assist in increasing productivity, including: (1) plant visits and exchange of production techniques among plants in the United Kingdom and the United States; (2) a joint committee to study particular industries and determine whether the productivity rate is increasing or declining; and (3) a joint committee to reconcile differences of opinion with respect to levels of productivity in the two countries.

The Trades Union Congress had reached agreement at the Margate Congress in September 1948 on the need for improving productivity and is discussing with its member unions specific proposals for raising it. The General Council has asked the unions to study such problems as uneconomic and wasteful use of labor, restrictive labor practices, and joint production committees, and to cooperate more actively in training programs.

Selected Excerpts From "The Gift Of Freedom"¹

EDITORIAL NOTE. *The Gift of Freedom* is a 150-page study of the social and economic status of American wage earners. While its main purpose is to acquaint workers in other countries with essential facts relating to the well-being of their American counterparts, so much useful and interesting material—hitherto scattered in scores of documents—has been brought together between its covers that it is invaluable for domestic use as well. *The Gift of Freedom* is much more than a routine marshalling of facts—it is an extremely literate exposition of social and economic history.

To illustrate this latter quality, portions of the Introduction and the final chapter entitled, "The Way of Freedom," are here reproduced. The Introduction exemplifies the general tone of the book and defines its scope and purpose. The concluding chapter points out the general landmarks in the history of civil liberties, but the excerpts reproduced here are concerned primarily with the application of civil rights and duties to wage earners and with the part played by workers in the maintenance and extension of rights and duties.

The Gift of Freedom may be purchased from the Superintendent of Documents, Washington 25, D. C., at 55 cents a copy, after mid-April.

Walt Whitman, the great American poet of democracy, better than any other person has proclaimed the conscience, character, quality, and destiny of the American worker.

*In the labor of engines and trades and the labor of fields
I find the developments,
And find the eternal meanings.*

¹ By Lawrence R. Klein and Witt Bowden, members of the Bureau's staff. The authors are listed in the order in which their respective contributions appear in the accompanying excerpts. Major authorship for the volume as a whole was Mr. Bowden's.

In the neuter statistical concept economists drably term "labor force", he saw the protoplasm of democracy and pondered the skills, temperament, and aspirations of men, seeking the dynamic principle which made America great.

He envisioned America, some 70 years ago, as an inheritor and protector of world liberty. This responsibility he regarded as both fearsome and sacred, to be accepted in the spirit of humility. This gift of freedom American democracy held only in trust.

The bailment on the gift of freedom has run out, and we in America, by precept to be sure, but no less by other means as well, must make good on our obligation. What objective tests can measure our ability to do so: Have wage earners prospered in a manner commensurate with the productive capacity of the American economy? Is the system flexible enough to permit workers full freedom of movement, choice, conscience, and opportunity? Has the lot of the worker in terms of status and influence progressively improved?

Affirmative or negative answers to these questions can be made by the reader on the basis of the factual information this pamphlet contains. An affirmative answer need not imply more than that it is possible for the American wage earner to enjoy certain political rights, to attain certain economic desires, and to secure certain social tenets. A negative answer means that such achievements are impossible within the American system and that the gift of freedom has been dissipated.

The pamphlet discusses those factors which most basically influence and describe the economic and social welfare of American workers. They can be conveniently and fairly accurately grouped under six main headings:

1. The Work Force. America is a Nation of working people, with as many as 60 million at work out of a total population of 145 million. How sustained is this employment, how extensive is unemployment, how mobile is the labor force, how is it distributed industrially and occupationally?

2. Productive Capacity. Here then is a labor force, now regularly at work most of the time. How productive is it and the industrial machine at which it works? Does the national output actually provide adequate levels of consumption among all classes?

3. Purchasing Power and Living Standards. What wages are paid to American workers and what is the wage structure of American industry? What is the trend of wage differentials between occupations and industries and between various sections of the country? What is the purchasing power of wages? What can the typical worker buy in units of labor time? For what commodities and services is family income expended? And finally, in what quantity and quality and in what variety can the low-income and salaried worker in America buy food, clothing, housing, equipment, services, and pleasures, and still live within his income?

4. Social Security. To the wage earner, "typical standards" mean little if he cannot be gainfully employed and thus maintain the standards. How are the American worker and his dependents protected against loss of income due to unemployment, work injury, illness, old age, or death? On the job, are the health and safety of the worker safeguarded? Is the employment of women and young people properly safeguarded? What is the national policy in regard to employment security and full employment?

5. Labor Organization. Trade-unions are the guarantors if not the progenitors of most worker security. They are effective only to the extent they are free. How extensively are American wage earners organized? What kinds of unions have they established? Are they Government or employer controlled? Are they restricted to the point of ineffectiveness? Are they militant or passive? Are they politically conscious and do they have political influence? Are they powerful and astute enough to cope with labor's problems in large-scale industry?

6. Civil Rights. Basic personal and political liberties are guaranteed to the individual by the Federal Constitution and by the constitutions of the 48 States. What are these liberties—of speech, thought, religion; of press, assembly, and political action; a free and secret ballot; freedom from unreasonable search and seizure, arrest, and prosecution? What progress is being made, where there is a breach between ideals and practice, to make these liberties effective in reality? Can a democracy protect itself against anti-

democratic enemies without destroying the basis of its freedom for all?

Let there be no false claims here. It is not an economic and social system alone which guarantees prosperity and security—least of all in America. In America we are thrice blessed with vast natural resources and abundant food supplies, the largest and most efficient industrial plant in the world, and a large, a varied, and adaptable work force.

To Whitman, viewing the seeming failure of nineteenth century democratic movements in certain other countries, only America offered the political and spiritual climate in which land, resources, vigor, and skills could bring democracy to full fruition. Candor calls for acknowledgment of flaws in the operation of the American system. Serious problems of inequality exist. Now and then blunders are committed which jar the sense of justice. But in America we strive and progress; our mistakes impede but do not halt our progress or change our direction.

In America today there is the combination of circumstances—free labor, free unions, social consciousness and social conscience, sacred regard for individual human dignity, and economic capacity—necessary to virile democratic leadership and reconstruction. Americans—and especially American labor—want to exercise that leadership and assistance, not as a largesse but in the spirit of comradeship. We want to share our material treasure, certainly; but we want to share our common political treasures even more, those free institutions of free men which are imbedded in the very marrow of any democratic social structure. That indeed is the gift of freedom.

* * * * *

Labor Unions as Champions of Civil Liberties. Americans of earlier generations thought of liberty mainly in terms of individualism. Governmental functions were few and largely defensive. The most important evolution affecting civil liberties has centered around an enlargement of the positive uses of government and an effort to achieve a more effective linking of rights and responsibilities. These changes have accompanied the growth of cities and of large-scale industry and the increasing interdependence of groups. Wage earners and their unions have played an increasingly vital part in the maintenance and extension of civil rights

and especially in the adaption of traditional liberties to changing industrial conditions.

The influence of organized labor in the preservation and extension of civil liberties goes back to our early history. Unions in the early nineteenth century demanded, for example, the abolition of property qualifications for voting; and the abandonment of these qualifications gave the right to vote to virtually all workingmen except slaves, who were later emancipated. Early laws and court decisions viewed as favoring employers and property owners led to concerted efforts by unions as well as other groups to bring about a change of emphasis from property rights to personal rights. Among the achievements of this movement were several reforms in addition to manhood suffrage. These included universal free education, maintained by taxes on property; the right of workers to file liens on property to secure payment of wages; abolition of imprisonment for debt; and exemption of wages and workers' tools from court action for payment of a wage earner's debt. The importance of these and related reforms was emphasized by an outstanding student of labor history (Prof. John R. Commons), who stated that by the middle of the nineteenth century there came into existence in the United States a "new jurisprudence by which, for the first time in the modern world, manhood suffrage created personal rights superior to property rights."

During the middle decades of the nineteenth century, the labor movement was comparatively ineffective. Unions were weakened by the economic depression of the forties and were diverted from ordinary trade-union activities by other interests.

After the Civil War such changes as the rapid building of railroads, the growth of large-scale industries, the rise of cities, and the increase in the number of immigrants gave a new impetus to labor organizations and at the same time confronted workers with new problems Nation-wide in scope. Out of these conditions various national unions emerged. These were eventually united in the American Federation of Labor. The first national convention of the Federation of Trades and Labor Unions (the origin of the American Federation of Labor) in 1881 pledged the unions to various principles and measures such as compulsory education, abolition of convict "contract"

labor, and the repeal of conspiracy laws which limited the activities of unions.

Repeatedly, in union resolutions and in actions related to specific situations, labor organizations have given vigorous support to virtually the whole range of civil rights and liberties. Typically, the unions have taken the lead in advocating changes later adopted, such as the secret ballot, woman suffrage, the right to strike, and the freeing of unions from early laws against conspiracy. Following is an incomplete list of such measures that have been vigorously and in large part effectively advocated by unions:

- Universal free compulsory education.
- Freedom of speech.
- Freedom of assembly.
- Freedom of the press.
- Freedom of moving-picture theaters.
- Freedom of radio broadcasting.
- Freedom of teachers; no censorship of school books.
- Free text books in public schools.
- Secret ballot.
- Extension of the right to vote to women.
- Election of the President and of United States Senators by popular vote.
- Nomination of party candidates for office in primaries by popular vote.
- Regulation of expenditures by political parties.
- Legal holidays on election days.
- Opportunity for direct legislation through the initiative and referendum.
- Right of asylum for political refugees.
- Nondiscrimination as to creed, color, sex, nationality, or politics.
- Freedom from compulsory labor.
- Right to strike.
- Measures to limit police interference in labor disputes.
- Federal protection against local violation of legal and constitutional rights.
- Limitation by law of court injunctions and restraining orders in labor disputes.
- Freedom of workers to organize and control their unions.
- Collective bargaining and the application of democratic principles to industry.

Freedom of Association for Workers. The maintenance of civil liberty was viewed in our early history as mainly a process of imposing limitations on the actions of government against individuals. Wage earners, however, were confronted early in their history by the problem of interference with their liberties by other individuals, particularly by their employers. The unrestricted right to hire and discharge workers was long

claimed and often asserted by employers. How could employers be prevented from discharging (or refusing to hire) a worker because of union membership, for example, or because of the expression of views opposed to those of an employer?

In meeting the problem of preventing an employer from violating the civil rights of workers, unions have depended on two main types of measures. One of these has been resort to governmental action for the protection of workers; the other has consisted of limitations on the actions of employers by provisions of collective agreement.

A highly important defense against interference with the political activities of workers has been the secret ballot. Unions, by the exercise of their political rights, were able by degrees to throw off various restraints on their activities. Legal protection was obtained for a wide variety of union activities by curbs on the application to unions of laws against conspiracies, monopolies, and combinations in restraint of trade. Various laws afforded positive defenses against interference by employers. The Norris-LaGuardia Act of 1932, for example, outlawed interference by employers with the freedom of workers to join unions, choose their own representatives, and bargain collectively as to the terms and conditions of employment. The act in particular restricted employers in the use of Federal court injunctions, restraining orders, and the police in labor disputes, and denied to employers the right to enforce in the courts any employment contract that interfered with the right to join a union. Later laws, especially the National Labor Relations Act of 1935, not only set forth the general principles of freedom of action by workers but also provide explicit penalties, such as reemployment and back pay for any worker discharged because of union membership or activity. Thus, job tenure is legally independent of the views and activities of workers as members of unions. Another important legal restriction on the power of employers over the tenure of jobs was included in the Selective Training and Service Act of 1940, which required employers to reemploy men called into military service.

The possibility of interference by employers with the civil liberties of their employees has been greatly reduced by the direct action of unions in collective agreements. These agreements between

unions and employers commonly include provisions to the effect that a worker shall not be discharged without cause shown or without a hearing; and the agreements usually provide for union-management grievance committees. Workers also are protected against arbitrary discharge by the usual provisions of union agreements for the union shop and maintenance of union membership.

The group basis of maintaining the individual rights of workers is reinforced by decisions of the United States Supreme Court. The Court declared in 1936, for example, that Congress is justified in protecting employees in their fundamental right to organize, choose their own representatives, and engage in collective bargaining or other activities without restriction or coercion by their employers. The basis of the right, it was stated, is the relative weakness of the individual employee; his inability individually to resist arbitrary and unfair treatment; and his dependence on his union for equality in dealing with his employer.

Personal Rights and the General Welfare. The adaptation of individual liberties to the conditions of large-scale industry and modern group relations has gone far beyond the imposing of limitations on the economic power of employing groups over their employees and the safeguarding of the rights of free association by workers. It has been recognized that the functions of government in securing the "blessings of liberty" under the Constitution can be carried out effectively only in connection with the exercise of extensive functions for promoting "the general welfare." These public "welfare" functions, never absent from the interpretation of the Constitution, have assumed new forms and increasing importance.

These functions are exemplified by recent Federal and State laws and by court decisions and administrative activities giving effect to legislative policies. All political parties have pledged themselves in varying degrees to an extension of these policies. Moreover, the people of the United States have given tangible expression to their desire for international cooperation consistent alike with political liberty and social welfare. They have pledged adherence to the principles of free unionism, free choice of governments, and equality of rights of nations as well as individuals. They have supported international collaboration

through the United Nations and its agencies such as the International Labor Organization. They have shared their resources through such public instrumentalities as lend-lease and the Economic Cooperation Administration and such unofficial agencies as CARE, Inc.

In keeping with the generally accepted principle of freedom of thought, inquiry, and expression, views differ as to economic policies and the most desirable type of economic organization. Early in our history we inherited and widely accepted the views associated with Adam Smith's "system of natural liberty." That "system" opposed the restrictions of guilds and the powers of corporate monopolies as well as the "interference" of governments in economic life. The "system" assumed that the general welfare and the interest of workers and employers, producers, and consumers, would all best be served by automatic adjustments brought about by the free competition of all in the market place.

The increasing imperfections of private enterprise, competitive markets, and automatic adjustments brought about a change in prevailing conceptions of liberalism. The early ideas were no longer viewed as "natural laws." Private enterprise was required to defend itself on rational and social grounds, submit to numerous controls, and yield in part to public enterprise. The existing organization of economic life is not, however, so closely associated with the government that opposition to the economic system is treason to the state. Government is an over-all agency for reconciling differences of views and interests as reflected in the free interchange of thought, inquiry, and expression and in the free association of individuals in groups.

Unions, throughout their history, and their members as individuals, have freely voiced their views in support of a broadening interpretation of the functions of government beyond the protective role of maintaining civil rights and liberties. They were in the forefront of efforts to adopt such varied public measures as workmen's compensation for industrial injuries; safety laws and inspection of

places of work; regulation of hours and working conditions and reduction of hours; minimum-wage laws; social insurance; publicly financed housing facilities; public services of various kinds; conservation of natural resources; and public responsibility for maintaining high levels of employment and production. Some unions have advocated varying degrees of public investment and socialization of industry. They have recognized, however, the differences in the views of their own members; and these have retained their rights of party affiliation and expression of individual views.

Workers have thus played a vital role in the evolution of freedom or liberalism in the United States. They have helped to maintain and extend the traditional liberties of the individual; they have effectively championed free unionism and voluntary group action; and they have been in the forefront of the movement which has rapidly expanded the positive uses of government. But workers have insisted that decisions regarding the economic as well as other functions of government must emerge from free discussions and criticisms and that the decisions when made must be generally accepted. Policies, when adopted, remain subject to change, however, by the same process of free discussion, criticism, and popular action, based on the widest possible voluntary participation in the process of social adjustment. Because of differences of opinion, needed changes may be slow or incomplete; but ultimate adaptations by prevailing agreement are more soundly based than changes by arbitrary authority, acting either directly or through the control of opinions. Such an authority can give no valid assurance either of devotion to the general welfare or of wisdom or of permanence.

The methods of freedom and the institutions of free men vary from country to country; freedom, in essence, is a way of life. Workers in the United States have inherited that way of life; they have defended it and have enriched and improved it. Their status as workers and citizens affords them ample reason for cherishing their heritage.

Summaries of Studies and Reports

Work Injuries in 1948: Preliminary Estimates

FOR THE FIRST TIME in 8 years, the number of disabling work injuries fell below 2 million, according to preliminary information for 1948. This improvement is encouraging, particularly in view of greater employment in almost every industry group during the year.

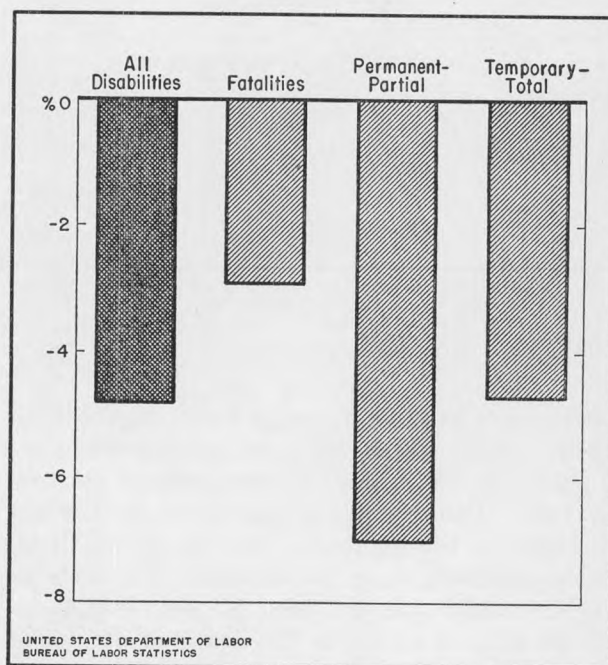
The volume of disabling work injuries in 1948 was estimated by the Bureau of Labor Statistics at about 1,960,000. This is almost 5 percent under the 1947 total of 2,059,000 injuries. The absence of any major disaster and the decrease in injury rates of manufacturing, mining, railroads, and a number of other industries account for this favorable showing.

The number of fatalities decreased by about 3 percent, from 17,000 to 16,500. This was not as marked an improvement as shown in the case of the less serious types of injuries. Permanent-partial impairments decreased 7 percent, and temporary-total disabilities, 4.7 percent. The latter group included the large bulk of all injuries, numbering 1,858,000. These injuries resulted in an inability to work for at least 1 full day after the day of injury, but involved no permanent ill effects. In contrast, the 83,700 permanent-partial disabilities involved the loss of some member of the body or the impairment of the use of some body part which would disable the workers to some extent for the remainder of their lives. Permanent-total disabilities numbered approximately 1,800, unchanged from the previous year.

Actual time lost during the year because of work injuries which occurred in 1948 is estimated at about 41,000,000 man-days, or the equivalent of a year's full-time employment of approximately 135,000 workers. This, however, represents only a part of the total production losses accruing from these injuries. If additional allowance is

made for the future effects of the deaths and permanent physical impairments included in the 1948 total, the economic time loss chargeable to these injuries would amount to about 219,000,000 man-days—an equivalent of a year's employment of about 730,000 workers.

Percent Decrease in Disabling Work Injuries
1947 to 1948



Construction was the only industry group to show a major increase in work injuries during 1948. This was due to a considerable increase in employment in this field as well as to an increase in the injury rate. Greater increase in total injuries than in employment is a phenomenon often associated with an expanding activity, particularly when the expansion has about reached the limit of the supply of skilled workmen.

There was a slight increase in the total number of agricultural work injuries, associated with a

slight increase in the number of hired hands and a decrease in the number of family workers. The number of fatalities increased 2.3 percent. These and past estimates of work injuries in agriculture have been based only on fragmentary data. Sample studies of injuries in agriculture are now being conducted by the Bureau of Agricultural Economics, and, when completed, will give a much sounder basis upon which to estimate these work injuries. Preliminary reports indicate that

a considerable upward revision in present and immediately past estimates may be necessary.

The mining group showed an encouraging improvement in its safety record. All this improvement was in coal mining. The number of fatalities in bituminous mines in 1948 was the fourth lowest on record and in anthracite mines was the second lowest on record. The 1948 fatality rates (number of fatalities per million tons mined) for both anthracite and bituminous-coal mining were the

Estimated number of disabling injuries during 1948, by industry group

[Preliminary]

Industry group	All disabilities		Fatalities		Permanent-total disabilities		Permanent-partial disabilities		Temporary-total disabilities	
	Total ¹	To employees	Total ¹	To employees	Total ¹	To employees	Total ¹	To employees	Total ¹	To employees
All groups ²	1,960,000	1,536,100	16,500	12,000	1,800	1,400	83,700	65,500	1,858,000	1,457,200
Agriculture ³	300,000	72,100	4,400	1,100	400	100	15,200	3,600	280,000	67,300
Mining and quarrying ⁴	87,200	82,600	1,400	1,300	200	200	3,700	3,500	81,900	77,600
Construction ⁵	173,100	121,900	2,500	1,900	300	200	4,800	3,400	165,500	116,400
Manufacturing ⁶	469,200	461,500	2,600	2,500	200	200	23,700	23,400	442,700	435,400
Public utilities.....	27,400	27,400	400	400	(?)	(?)	600	600	26,400	26,400
Trade ⁷	347,300	277,800	1,500	1,300	100	100	8,400	6,700	337,300	269,700
Railroads ⁸	62,900	62,900	700	700	300	300	4,400	4,400	57,500	57,500
Miscellaneous transportation ⁸	132,600	110,500	800	700	100	100	6,300	5,200	125,400	104,500
Services, government, and miscellaneous industries ⁸	360,300	319,400	2,200	2,100	200	200	16,600	14,700	341,300	302,400

¹ Differences between total number of injuries and injuries to employees represents injuries to self-employed and unpaid family workers.

² Does not include domestic servants.

³ Based on fragmentary data.

⁴ Based largely on U. S. Bureau of Mines data.

⁵ Based on small sample studies.

⁶ Based on comprehensive survey.

⁷ Less than 50.

⁸ Based largely on Interstate Commerce Commission data.

lowest in a statistical record extending back to 1910. The nonfatal rate in bituminous-coal mining was the lowest in a statistical history starting in 1930. Other types of mining showed slight increases in the number of injuries during 1948. Although there were no disasters as serious as the Centralia mine explosion of 1947, still 6 disasters which resulted in the death of a total of 49 men were recorded.

In manufacturing industries, preliminary reports indicate a substantial improvement in the injury-frequency rate; although employment increased slightly, total injuries decreased about 13 percent.

In interstate railroads, a decline in injury rates, coupled with a slight decrease in employment, resulted in a net decrease of about 12.5 percent in total injuries.

In utilities, trade, and the service, government, and miscellaneous group, improved safety records resulted in decreases in the total number of injuries, even though there was some increase in

employment. The miscellaneous transportation group showed a slightly greater decrease in injuries than occurred in employment.

Information now available indicates considerable improvement in industrial safety during 1948 in most lines of activity except construction. The record still leaves much to be desired, however. The loss of 730,000 man-years of productive effort is a tremendous cost to society.

The Economic Reports of the President and the CEA

SOURCES OF THE Nation's economic strength and means whereby the American competitive economic system can be kept sound were stressed in three Government documents that were issued in late 1948 and early 1949. These documents are the annual economic reports of the President and

of the Council of Economic Advisers and the President's annual message to Congress on the State of the Union.

Report of Council of Economic Advisers¹

The third annual report of the Council of Economic Advisers, submitted to President Truman on December 26, 1948, is largely a discussion of "the environment within which the Council operates." It is a general statement of the economic philosophy which guides the Council in determining the policies that it recommends under the duties assigned to the Council by the Employment Act of 1946.²

"Free" and "Competitive" Enterprise. "American sentiment," the report states, "has always been firm in support of a system of free enterprise and in opposition to a planned economy. Yet our political history is replete with accounts of policies adopted by Government for the very purpose of influencing the economy and of restricting or conditioning the choice of a course of private action." The history of United States policy justifies an interpretation of the phrase "freedom of enterprise" broad enough to permit the Council to propose comprehensive programs of taxation, monetary and credit control, public-works construction, regional development, and social welfare.

In defining competitive enterprise, the report continues: "The American definition of a competitive economic system, as drawn from our national policies, is unique. It falls far short of the theoretical standard, but calls for competition far beyond the requirements of the economic system of any other country."

"The assumption in classical [economic] doctrine that the productive resources of capital and labor were so fluid that they flowed readily into any profit-making opening was supported by observable facts. But it is not true today of a large part of American industry, where mass-production methods have led to the creation of great units which alone can exploit the new technology. The requirements of capital and of organization of forces to initiate a new enterprise present a serious obstacle to the appearance of new competitors in many of our most important industries. These

requirements also affect existing firms, and there has been a steady movement in the direction of increasing size as smaller units are merged into larger ones." The Council believes the better solution for the "administered price problem" can come from voluntary action on the part of industry rather than in legislation.

Determining the Labor Contract. The section on determining the labor contract emphasizes that "one limitation upon the character of policies proposed by the Council, clearly imposed by the Employment Act, is that the fixing of the terms of the labor contract shall in general be left to the voluntary action of management and labor. In the light of our legislative and industrial history the phrase 'free competitive enterprise' cannot be interpreted otherwise. Except in national emergency, it is settled national policy that employers and adult workers shall be permitted to make their own agreements about wages and other features of the labor contract, aside from legislation directed against substandard wages and working conditions."

"Labor and management have both been firm in their opposition to any plan to have the terms of the labor contract fixed by some official authority when the collective-bargaining process has collapsed * * * disputes generally affecting the economy remain a perennial threat to the attainment of economic stabilization and maximum production which is the objective of the Employment Act. * * *

"Settlement by government does not avoid but rather intensifies the need for adequate standards as to what precise decisions will be fair to both parties, acceptable to the public, and consistent with the needs of the whole economy. These standards include a wage structure in relation to prices that will maintain the producing power of industry and the buying power of labor in sound proportion. In the absence of such standards, no forced settlement could be desirable and therefore could not last. If such standards can be developed and win adherents, the prospects for voluntary settlement will become so bright that the need for compulsion would be rare indeed. * * *

"If an attempt is made to make further progress toward the goal of better economic adjustments by organizing a labor-management conference

¹ Third Annual Report to the President by the Council of Economic Advisers. Washington, December 1948.

² For a summary of the act, see *Monthly Labor Review*, April 1946 (p. 586).

rather than by establishing such a commission as the President proposed in his State of the Union message in January 1947, preparatory work would be as necessary as in the case of international conferences. The area within which there is some real chance of agreement should be ascertained by extensive preliminary inquiry, and an agenda should be prepared and agreed upon through which fruitful subjects might be carried to a conclusion and the conference not led into disagreements upon points not yet within the area of possible agreement."

Other Problems in Fixing Policy. "A great nation has many objectives, and social and political programs to which the popular voice has assigned supreme importance cannot be set aside in order to simplify the making of purely economic policies. The task is rather to devise those economic policies which will be effective and at the same time to permit other programs to move forward. * * *

"It is not to be expected that abstract theory can produce any rule which determines this stabilizing relationship among wages, prices, and profits or between any two of them. But it is not too much to hope that, through empirical observation, reenforced by economic analysis and judgment, it will be possible to make progress in ascertaining the respective movements which will contribute toward improved stability. * * *

"Early experience under the Employment Act of 1946 has brought into sharp focus the practical difficulties which lie between the initiation of a national economic policy and the adoption of that policy by the Congress. Our American democracy will yield only slowly to the need for the deliberate formulation and integration of national policies in the interest of sustained prosperity."

The Economic Report of the President

The third annual economic report of the President, submitted to Congress, on January 7, 1949, under the requirement of the Employment Act of 1946,³ points to the economic advances made during 1948. It cautions, however, that many adjustments in price and income relations are necessary as the economy moves out of a period of war-

³ The Economic Report of the President to the Congress, January 7, 1949, together with a report, The Annual Economic Review, January 1949, by the Council of Economic Advisers. Washington 1949.

created demands. The report is based on an analysis of the operation of the economy during 1948 made by the Council of Economic Advisers, and printed together with the President's Economic Report.

Situation During 1948. The past year has tested the strength of the country's economy, the President said. In early 1948, the sharp break in grain prices "spread concern throughout the economy. * * * But this break did not set off a train of consequences similar to those which, following World War I, had turned the boom into a deflation."

"Affirmative national policies and greater caution in the business community combined with other developments to make the economy more shock-resistant." Farm price supports guaranteed that the collapse of agricultural prices would not impoverish the farmer nor bring about a chain reaction of price breaks in other markets. The financial and banking structure, the Chief Executive said, is stronger than in the early 1920's, and working groups have greater income and savings. Social security has added to the feeling of stability.

"While the prosperity of the postwar years has been great, it has rested in considerable part on somewhat temporary factors which were the aftermath of war. In 1949 we are entering a period of harder tests."

Employment in 1948 ranged between 57 and 62 million workers and averaged more than 59 million. Production was between 3 and 4 percent higher than in 1947. Prices ceased the broad upward movement which had continued since the removal of price controls. Wages increased during 1948, although disparity was considerable in the increases granted to different workers. Work stoppages were about at the same level as in 1947. Profits in 1948 surpassed all records and kept rising through the year. Money and credit continued to increase, but at a lower rate than in 1947. Consumer income increased, but price increases meant no change in real income for consumers. Investments were generally higher than in 1947, but the export surplus of goods and services was lower than in 1947. Government fiscal transactions were a strong anti-inflationary factor in the early part of 1948, but lost a substantial part of their effect during the year.

Guides to Economic Policy. Six guides to economic policy were outlined by the President. "We should remember that the goal we seek is the greatest prosperity for the whole country and not the special gain of any particular group. * * * Maximum employment for 1949 means that nearly 1 million additional job opportunities should be provided for the growing labor force. * * *

"We should think and work with a reasonably long look ahead, not keeping our eyes just on the problems of the moment. * * * We must pursue affirmative programs for housing and health, for education, and resource development. * * *

"In order to have a yardstick for appraising strength and weakness in our economy and the adequacy of Government programs, we need concrete objectives for economic growth, and particularly standards for a better balance between production and consumption, income and investment, and prices, profits, and wages which will be conducive to sustained economic progress. * * *

"We are dedicated to the principle that economic stability and economic justice are compatible ends. * * *

"We must fulfill the requirements of our essential programs—national defense, international reconstruction, and domestic improvements and welfare—even if doing so may require the temporary exercise of temporary controls in our economy. * * *

"The vigorous commitment by the Government to an anti-inflation policy should not obscure the fact that the Government is equally committed to an antidepression policy."

Legislative Recommendations. Recommendations for legislative action were also made in the report. The President elaborated on his antiinflation program as outlined in his State of the Union Message (which is also reviewed in the present summary). In addition, he recommended legislation to increase Government revenue from taxation by 4 billion dollars a year.

He recommended that benefits under the Federal old-age and survivors insurance program should be substantially increased, that the minimum wage (under the Fair Labor Standards Act) should be increased to at least 75 cents an hour, and that public assistance for relief should be

Finally, he stated: "We should press forward at once with some programs of high priority needed now to conserve and increase the strength of our Nation." Programs dealing with natural resources, agriculture, international economic relations, housing, urban redevelopment, education, health, and old-age, disability, and unemployment insurance were suggested.

Presidential Message to Congress⁴

On January 5, 1949, President Truman delivered his message on the state of the Union before a joint session of Congress. He referred to the state of the Union as good and said that during the last 16 years "the American people have been creating a society which offers new opportunities for every man to enjoy his share of the good things of life. * * * But great as our progress has been, we still have a long way to go."

Of the first importance is the need "to protect our economy against the evils of 'boom and bust'." The President again asked that his anti-inflation program be enacted, requesting legislation for the following purposes:

- (1) To continue present consumer credit control and to increase the power to limit bank credit.
- (2) To provide authority to regulate commodity market speculation.
- (3) To continue export control authority.
- (4) To continue transport priorities and allocation powers.
- (5) To authorize priorities and allocation powers for key materials in short supply.
- (6) To extend and strengthen rent controls.
- (7) To provide "stand-by" authority to impose price ceilings on "scarce commodities which basically affect essential industrial production or the cost of living and to limit unjustified wage increases which would force a break in this ceiling."

The President's recommendations for labor legislation called for the repeal of the Labor Management Relations (Taft-Hartley) Act of 1947 and the re-enactment of the National Labor Relations (Wagner) Act. "However," said the President, "certain improvements which I recommended to the Congress 2 years ago, are needed. Jurisdictional strikes and unjustifiable secondary

⁴Message of the President to Congress on the State of the Union, White House release, January 5, 1949.

boycotts should be prohibited. The use of economic force to decide issues arising out of interpretation of existing contracts should be prevented. Without endangering our democratic freedoms, means should be provided for setting up machinery for preventing strikes in vital industries which affect the public interest.

"The Department of Labor should be rebuilt and strengthened, and those units properly belonging within that department should be placed in it. * * *

"The health of our economy and its maintenance at high levels further require that the minimum wage fixed by law should be raised to at least 75 cents an hour."

The message contained recommendations on a great variety of other subjects, including fiscal policy, anti-trust legislation, agriculture, public works and natural resources, social security and public health, education, housing, civil rights, and foreign policy.

Obligations and Rights Under Collective Bargaining

TYPICAL CONTRACT CLAUSES on the rights and obligations of the parties to collective agreements are included in one of the Bureau of Labor Statistics bulletin series on Collective Bargaining Provisions.¹ They are presented in chapters dealing respectively with management functions and union rights, activities, and responsibilities. In the selection of such clauses, the Bureau utilized a file of over 15,000 agreements, and made its choices in order to provide a handbook of sample clauses that would reflect the results of recent negotiations.

Management Functions

Many of the traditional "prerogatives" of management to direct and operate business have come to be regarded as subject to collective bargaining between unions and management. Management functions at any particular time,

¹ Bulletin No. 908. For a summary of two other chapters from this bulletin, see *Monthly Labor Review* for November 1948 (p. 487). Individual chapters are released as they are completed.

therefore, appear to depend upon the degree of joint confidence and the fields recognized as within the scope of collective bargaining by union and management. Adoption of the collective-bargaining agreement in a sense constitutes a curb on management's authority; for example, not to discriminate against union members, to pay certain wages, and to subject certain management decisions and actions to review by a grievance procedure. Limitations are also placed on the authority of management in the field of industrial relations by various laws and regulations, such as the Labor Management Relations Act of 1947 and the Fair Labor Standards Act of 1938.

Spokesmen for management at the President's National Labor-Management Conference in November 1945 classified management functions in two groups: absolute functions of management which are not subject to collective bargaining; and prerogatives exercised in situations in which initial management decisions may be reviewed through the grievance procedure. A third area of responsibility involves matters affecting the fundamental nature of the contract relationship and is consequently subject to collective bargaining before final decisions are made.

Some employers believe that a clear demarcation of collective bargaining and management rights is necessary. For this reason, they favor the inclusion in agreements of statements on the powers reserved to management. Because an agreement restricts management prerogatives, they deem it essential to specify those matters which are not limited by agreement and which are necessarily and essentially reserved for management's exclusive authority. In the opinion of these employers, such express statements tend to reduce the area of possible conflict and protect management's rights in the disposition of grievances over disputable issues and in arbitration on matters not specifically covered by agreement. Other employers fear that the specific enumeration of management rights may be interpreted as limiting management to those rights enumerated in the agreement.

Labor members of the National Labor-Management Conference opposed any listing of management functions on the ground that this would tend to cause a rigidity in industrial relations matters subject to collective bargaining. The labor members also pointed out that with the growth of

mutual understanding, a responsibility of one of the parties could well become the joint responsibility of both parties.

Among management-prerogative clauses in agreements, some are detailed and list the specific rights reserved to management; others state broadly that management reserves to itself all rights, powers, and authority not expressly modified or abrogated in the agreement, without specifying these rights. In those agreements that explicitly state management rights, two broad categories are usually included: (1) decisions dealing with the tangible aspects of the business—such as the determination of the number and location of plants, the type of products to be made, technological methods and processes, materials, finance and price policies, business practices, etc. and (2) decisions in the field of employer-employee relationship—such as the direction of the working forces, hiring, transfer, promotion, suspension, or discharge for cause, lay-off for lack of work; and maintenance of discipline; etc.

In analyzing management prerogatives, clauses on this subject must be considered in conjunction with other provisions in the same agreement which may affirm or modify management's stipulated discretionary powers. Frequently, clauses governing management's rights are dispersed throughout the contract: the extent of discretionary powers is stated with respect to specific actions and situations, such as transfers, promotions, demotions, discipline, plant rules, schedule of production; a general listing of management rights is not included.

A typical clause follows which sets forth in very general terms the rights reserved for management.

Company Reserves "Customary and Usual Rights, Powers, Functions, and Authority of Management" Except as Abridged or Modified by Agreement.

It is understood and agreed that the Company has all the customary and usual rights, powers, functions and authority of management.

Any of the rights, powers, functions or authority which the Company had prior to the signing of this agreement, or any agreement with the Union, including those in respect of rates of pay, hours of employment or conditions of work, are retained by the Company, except as those rights, powers, functions or authority are specifically abridged or modified by this agreement or by any supplement to this agreement arrived at through the process of collective bargaining.

Some clauses very definitely limit managerial authority. This is done by a statement that all or part of the management rights listed in the agreement are subject to grievance procedure; by a requirement of consultation with the union in some way; or by a specific exclusion of certain matters, such as wages, hours, and working conditions, from management's authority and a provision that they are subject to change only through collective bargaining.

Exercise of Management's Listed Rights Subject to Collective Bargaining and Grievance Procedure, but not Arbitration.

It is agreed that the Company has the right of management, except as expressly limited and modified in this agreement. This includes among other things the right to plan, direct, control, increase and discontinue operations; to change machinery and types of operations; to add or reduce shifts, and to select persons to be hired and promoted. Any complaint as to any action under this section may be made the subject of collective bargaining and grievance procedure up to but not including arbitration.

The enumeration of rights reserved to and retained by management is sometimes qualified by the statement that the exercise of such rights is subject to other provisions of the agreement. Such a proviso is usually implied even if not actually stated. As previously indicated, no definitive statement of management's rights can be made without checking the entire agreement for clauses which might restrict the rights enumerated.

Several "management rights" clauses state that the authority granted shall not be used for the purposes of discrimination because of union membership or activity. In effect, such limitations merely restate the ban on union discrimination contained in the National Labor Relations Act as amended by the Labor Management Relations Act of 1947.

Employers, who are concerned that the listing of topics regarded as management prerogatives jeopardizes any rights not listed, frequently guard against inadvertent omissions. This is accomplished by the inclusion of statements to the effect that the listing of specific rights is not all-inclusive nor does it exclude other rights not listed.

Management Actions not to Conflict With Agreement nor Discriminate Against Union Members. Enumeration of Rights not to Exclude Others not Listed.

The Management of the works and the direction of the working forces, including the right to hire, suspend or discharge for proper cause, or transfer, and the right to relieve employees from duty because of lack of work, or for other legitimate reasons, is vested exclusively in the Company provided that this will not be used for purposes of discrimination against any member of the Union nor will it be used contrary to any other provision of this Agreement. It is further understood and agreed that the foregoing statement of Management functions shall not be deemed in any way to exclude other Management functions not specifically enumerated.

In running the business, directing the working force, and maintaining shop discipline, management customarily adopts rules and regulations and lists penalties for failure to observe them. In turn, agreements specifically or tacitly permit management to establish reasonable and necessary plant rules. They rarely give a complete outline of working rules but frequently incorporate them by reference and affirm the company's right to adopt, revise, and enforce such rules. The agreement may also state management's right to discipline employees for infractions.

Quite commonly, the only contract reference is a statement that employees shall be properly informed of company rules, either by posting the regulations or distributing copies to all employees.

A proviso is often made that the exercise of the right to issue and enforce rules must not conflict with the terms of the agreement; or that the rules shall be applied without discrimination. In a number of agreements, the union is granted a voice in promulgating or in changing such rules; it may also be permitted to challenge a rule or its application through the grievance procedure.

Management Right to Issue and Enforce Rules Subject to Union Appeal. Rules in Force Pending Adjustment or Arbitration.

The promulgation and enforcement of rules and regulations not inconsistent with the provisions of this Agreement are vested in the Employer, provided that if the Union deems any such rule or regulation to be inconsistent with the provisions of this Agreement it shall so notify the Employer, and the Employer shall, within twenty-four (24) hours of notice to such effect either withdraw the rule or regulation or submit it to settlement by the adjustment procedure provided for under Article * * * of Section * * * of this Agreement [Arbitration], but the rule or regulation shall remain and [is] enforceable pending such settlement.

The employer is held responsible for notifying employees of the customs, practices, and rules governing employment conditions in the plant. Commonly, rules and regulations (and revisions) must be posted, but under some agreements each employee must be furnished with a copy. In some instances, the rules and the union contract are distributed to employees at the same time, or in a single document.

Disciplinary action, including discharge for violation of the rules or misconduct, is regularly recognized in agreements as a management function, provided no rights guaranteed in the agreement are abridged thereby. Sometimes, the specific penalty or range of penalties for violation of each rule is also listed. In other instances, the company is authorized to apply appropriate penalties, without listing them in detail. The right to appeal the company's disciplinary action through the grievance procedure is explicitly stated in some agreements; it is implicit in most others.

Disciplinary Action for Rules Violation Subject to Grievance Procedure.

Written rules governing the conduct of employees are hereto attached as Exhibit "B." A copy of such rules will be posted on the bulletin boards in the plant or distributed to the employees. All employees are required to observe said rules, but the Union reserves the right to utilize the grievance procedure with reference to any disciplinary action of the Employer for violation of such rules.

Unions sometimes charge employers with attempting to evade the terms of their agreements by moving their plants to nonunion areas. Therefore, some agreements restrict removal of the plant from its existing location. In others, this right is reaffirmed, but provision is made for certain safeguards on employment status and seniority of present employees if the plant is moved. Other types of restrictions include a ban on removal beyond a single fare transportation zone or beyond a specified distance from the existing location. Under some agreements, removal of the plant is allowed only with union consent, or if payment is made for the costs of transfer or moving expenses or for added travel expenses. A limit is sometimes placed on the amount of the difference between the old and new fares which the employer will pay or on the time during which he will make up such difference.

No Move Beyond Metropolitan Area Limits.

The firm agrees not to have its establishment beyond the limit of the metropolitan area during the life of this agreement.

Employees Given Opportunity to Retain Present Job or, if Unavailable, to Transfer to Another Job for Which Qualified.

The Employer agrees that during the life of this agreement it will not move its plant outside the limits of the City of * * * in order to avoid dealing with the Union. If the plant is moved, the employees then employed by the Employer will be given the opportunity to continue their employment in their occupational classification, if it is available, or to apply for transfer to another job for which they are qualified, by virtue of past experience with the Employer, to perform.

Management considers contracting work out to be an exercise of its right to determine the means and method of production. Unions seek to regulate or restrict the practice of subcontracting because it is a potential threat to their job opportunities and working standards.

Few of the agreements which limit contracting-out and subcontracting completely prohibit subcontracting. Some specify that the employer has the sole right to contract work out; others require prior union approval. More often, such work is permitted under certain conditions: if employees of the company are fully supplied with work; if it is more economical or expedient to contract out; if the shop is not properly equipped to do the work. Some agreements provide that work contracted out must be done under specified conditions; for example, the contractor must conform with the terms of the agreement; the work must be sent to a shop having an agreement with the union or another union not affiliated with it; the wage rates provided for in the agreement must be paid. Another limitation forbids the employer to subcontract with a firm on strike.

Some agreements also prohibit contracting within the shop or so-called "time contracts" under which workers bid for or are assigned work as contractors instead of receiving fixed hourly or piece-rate earnings. A ban on home work is also written into some agreements.

Company Retains Right to Subcontract.

The Company shall have the right to subcontract work as the demands of its business require.

Restrictions on Subcontracting: All Employees Must be on Full Time and None Laid Off; Subcontractor Must be Covered by Agreement.

The Employer shall not subcontract any work to any shop not operating under the Union agreement, nor shall any work be subcontracted or performed in a subcontract shop while any of the employees of the principal shop are employed less than full time or are laid off.

Union Rights, Activities, and Responsibilities

Under collective-bargaining agreements, unions and their officers and members generally are authorized to engage in certain activities on the employer's premises. They are granted access to certain facilities and records of the employer to the extent necessary or useful to the proper exercise of the union's function as bargaining representative.

Both the National Labor Relations Board and the courts have recognized the union's right to carry on certain activities on the employer's property. To safeguard management's property rights and to maintain discipline, some restrictions on or regulations of the kind and extent of activities permitted are generally agreed upon in collective bargaining. Mutual pledges by employers not to discriminate against workers for union membership or activity, and by unions not to intimidate or coerce employees in persuading them to join their ranks, are usually linked in the same clause. In essence, such clauses restate the statutory restrictions imposed on the parties by the Labor Management Relations Act.

A number of agreements contain clauses which forbid employer or union discrimination because of race, creed, or color, in addition to union membership activity. Some of them reiterate obligations imposed by several State fair employment acts.

Unions generally try to obtain as much latitude as possible for their members to distribute literature, to solicit new members, and to collect dues (if there is no check-off system) in the plant during working hours, provided work is not interfered with. However, some union agreements prohibit all union activity, other than the handling of grievances, in the plant on company time. Others state merely that no union activity shall take place during working hours, and this presumably leaves employees free to participate in union activity on their own time on the employer's premises. Some distinguish between union organizational activity and casual conversation on union matters. In

certain cases, union activity is specifically authorized on the employer's property during the employee's free time—a type of activity permitted under National Labor Relations Board rulings. Other agreements prohibit or restrict union solicitation and dues collection on company time but permit such activity on company property. Often agreements contain only a general prohibition of any union activity on company premises which interferes with production.

In some plants, the union is allowed office space for keeping books and records, and, in others, the union may hold elections for officers on company property.

Related clauses deal with the right of employees to wear such union insignia as badges and dues buttons, at work. This right may be expressly set forth; under some agreements, however, the employer's permission must be obtained. Company rules forbid the wearing of union insignia in some establishments.

Listing of Union Activities Permitted at Specified Times.

The Company will not interfere with the right of employees to join the Union or engage in Union activities and the Union agrees that its representatives and members will not carry on such activities on Company time or during working hours on Company property or in such manner as to interfere with the efficient operation of the plant. It is, however, permissible to collect Union dues and solicit Union membership before and after working hours or during the dinner period and distribute literature after working hours in the vicinity of the time clocks on Company property.

Often allowance is made by agreements for visits to the plant or office by union representatives who are not employees of the company. Notably in the building trades, union representatives generally can walk in and out of a property under construction, at will. In plants closed to the public, visits by outside union officials may be permitted only under certain conditions and on specific occasions. Generally, the purpose is to avoid interference with production and to insure that only authorized persons have access to the firm's plants and operations.

Requirements may consist of giving notice to the employer or of securing a special pass. The union representative may have to request specific authorization for each visit and perhaps be accompanied by an employer representative. Some agreements allow the union representative

to confer with any employee in a private office. In large mass-production establishments, a shop steward or committee system may be established in order to process grievances and to maintain contact with individual employees. This does not necessarily exclude outside union officials from entry to investigate grievances or to assist the local union in its discussions with management.

In some agreements, the timing of the visits is either not restricted or it is stated merely that visits may come at reasonable times and are not to interfere with production; others limit the number or length of visits. The number of representatives who may be in the plant at one time may be restricted. Where a hazard exists, the agreement may require adequate insurance coverage by the union in order to protect the company against any loss by or injury to the union representative.

Plant visits by union representatives are normally limited to purposes relating to the agreement or grievances arising in connection with it. Conferences and interference with employees during working hours are not generally permitted. Some agreements state the purposes of plant visits in general terms. Others state that visits are permissible to check compliance with the agreement, to investigate working and sanitary conditions, to study new operations and projects, etc.

Visits to be Prearranged and Limited to Department in Which Grievances are Involved. May be Accompanied by Company Representative.

The International President of the union or his representatives shall have access to the company's * * * plants in order to contact foremen, employees or members of the Joint Grievance Committee on matters pertaining to any grievance arising under this contract. Such visits to the plants must be pre-arranged with the Director of Industrial Relations or some other representatives designated by the company for such purpose, so as to avoid interference with the operations in any department. The company may designate someone to accompany these representatives on such visits. The company, through plant officials, will provide plant passes in such manner that no such representative of the International Union shall be inconvenienced when he wishes to make such a visit, provided arrangements have been previously made with the Director of Industrial Relations. Such visits shall be confined to departments in which grievances are involved, and shall not extend to departments not covered by this agreement, or to experimental research, testing

and other departments where confidential information is contained.

Many agreements require the employer to make available to the union its records of wage rates, changes in rates, current and new job descriptions, time-keeping records, and other instructions and data relating to hours, wages, or working conditions. In a few industries, the union is accorded the right to examine the employer's books to determine compliance with contract terms as to rates or earnings of the employees, etc. If a bonus or profit-sharing system is established by the agreement, the union may be authorized to inspect the financial records of the employer. Other types of information made available to the union include lists of new and discharged employees; information concerning lay-offs, recalls, transfers, demotions, and suspensions; copies of papers showing leaves of absence granted by the company; apprenticeship records, etc.

Entries in an employee's personnel file are sometimes open to inspection by the employee or his union representative and, in some cases, are subject to appeal through the grievance-arbitration procedure.

All Books and Records Showing Pay Rolls, Labor Cost, and Production Available to Union on Request.

Upon the request of the Union, the members of the Association shall exhibit for examination all books and records showing pay rolls, labor cost and production for the purpose of ascertaining whether the provisions of this agreement are fully complied with. Such examination shall be made during reasonable business hours. Failure to comply with this request shall be deemed a violation of this agreement.

In plants with large numbers of widely scattered workers, the bulletin board may be the union's only means of communicating with its members. Union agreements reflect widespread adoption of the privilege of unions either to use company bulletin boards or to use special bulletin boards provided by the company for the union's exclusive use. Some agreements prescribe the number and location of the bulletin boards; others stipulate that they shall be "conveniently" or "conspicuously" located; and still others specify that both parties shall agree on their location.

Some clauses provide that only notices officially

approved by the union or by a designated union official may be posted. Posting is subject to prior company approval in some agreements, although others make no reference to such approval. In some cases, notices are posted directly by the union; in others, they must be given to a designated company official for posting.

The nature of the material which can be posted is often restricted to noncontroversial subjects, such as notices of union elections, meetings, and social affairs. Often a description of the types of notice specifically permitted or prohibited is included in the agreements. Penalties may be provided for improper use of the boards.

Listing of Types of Notices Permitted.

The Union shall have the right to make reasonable use of the bulletin boards for posting notices, but shall be restricted to the following notices:

- (a) Notices of meetings of the Union.
- (b) Notices of its elections.
- (c) Notices of its appointments to offices and the results of its elections.
- (d) Notices of its social, educational or recreational affairs.

Numerous agreements contain employer pledges not to interfere with an employee's legal rights to join the union and not to discriminate against him because of union membership or activity, and union pledges not to discriminate against a non-union worker and not to intimidate or coerce him into joining or remaining in the union. Mutual pledges may be included not to take part in any public demonstrations or give out any publicity which would be harmful to peaceful industrial relations.

Mutual Noncoercion, No Discrimination Clause.

The individual employee shall be the sole judge of whether or not to become a member of the Union. Neither the employer nor the Union will in any way interfere with, discriminate against or coerce any employee because he is or is not a member of the Union.

When one or both parties agree not to discriminate against any employee because of race, creed, or color, or religious or political beliefs, such pledges are usually extended to persons seeking employment as well as to those actually on the pay roll.

Practical Uses of Trade-Union Records

UNION RECORDS as statistical sources were discussed in a paper presented at the American Statistical Association meeting at Cleveland in December 1948.¹ This paper had the twofold advantage of covering a field about which little is known outside the individual trade-unions themselves and of showing the varied uses to which the findings of a particular union—the International Association of Machinists—have been put. The speaker looked “at the union records from the inside,” in order to explain to his audience the scope of the IAM statistics dealing with union membership, collective agreements, and union finances. He added that examination of union election records had disclosed interesting facts also, and that if a session of the ASA’s annual meeting were devoted to union statistics, much could probably be learned about numerous other trade-union activities.

Census Methods and Tools

According to the speaker, the labor statistician is free to conduct a small-scale census. In performing his work he must utilize all appropriate statistical devices and common sense. The extent to which source material is used depends upon the union statistician himself, but he should be equipped with the necessary tools. The IAM’s census rests upon a foundation of punched cards² just as the United States Census does.

In each local, the financial secretary collects facts and sends his reports to the national union office. IAM has roughly 1,800 locals and about that many reports reach headquarters each month. Naturally, with such a volume of schedules, the marginally punched card has proved a suitable device for quick processing of records.

Union Uses of Records

In 1947, the IAM from these cards was able to analyze its membership by type of industry for the first time. The officers’ report to the twenty-

second convention of the IAM shows that in the automotive repair industry, for example, membership grew by 38.2 percent from January 1946 through February 1948 compared with an 11.3-percent advance in the union’s total membership.

Likewise, an elementary investigation was made to relate the union’s strength to the industrial standing of the same community. It showed that eight States accounted for almost two-thirds of the IAM members in continental United States. However, this concentration of membership was only partially accounted for by the industrial rank of the States. From figures for two States, it was also found that the predominance of IAM membership in one State as compared with another is not connected with the level of general union organization.

IAM punched cards were sorted, in another test, to determine whether a seasonal factor affects good standing membership. None was disclosed. But a distinct seasonal variation in dues payments was revealed in one local studied, from a high payment in January, followed by rises and falls, to a low in December when Christmas shopping has prior claim over other payments. The speaker also learned from his investigation that the IAM had 4 percent of the trade-union membership recently as against 1.8 percent of the total in the depth of the depression during the 1930’s.

In the analysis of its 11,000 collective agreements, which are received at the rate of 500 a month, IAM found punched cards convenient for coding purposes. Since members of the union make articles as diverse as airplanes and zippers, systematic means obviously were required merely to classify the agreements by industry. In doing this, the Standard Industrial Classification Manual prepared by the Federal Government was valuable.

Agreement information is constantly used by the IAM. A tabulation of wage rates and other provisions of current agreements is published monthly in the union’s Research Bulletin. Monthly, quarterly, and annual summaries are prepared of important provisions and characteristics of the agreements.

Academic interest alone is not a valid reason for such activities. The data obtained must serve as a guide to the officers of the union in determining its current operations and future plans.

¹ By Albert S. Epstein, statistician, International Association of Machinists.

² Mr. Epstein described the IAM agreement analysis card in the Monthly Labor Review for July 1947 (p. 75).

Valuable information for administrative purposes is contained in the published reports of trade-unions. The author analyzed the financial statement of eight unions to find out what they spent for a particular item compared with the expenditure by IAM. He discovered that the IAM spent 4 to 10 times as much as any other union for this particular service. IAM's outlay represented 17 percent of total expenditures and was greater on a proportionate basis than for any other union.

It may not be necessary to make inter-union comparisons of expenditures. Sometimes, it is sufficient to reduce expenditures to a per capita basis, by city, district, State, or vice presidential territory. One such study for an important item revealed a range from \$4.17 to \$10.14 per capita and a per capita average of \$5.04 for the United States and Canada. Such "cost-accounting" has an obvious value.

Uses of Records by Others

Some of the collective agreement information compiled by IAM on its punched cards was used by UNESCO. The labor advisory group to the American delegation of UNESCO needed data on equal pay for women. IAM obtained a list of agreements having such provisions, giving the industry group, location, union security number under IAM jurisdiction, and stating whether the agreement was signed jointly with any other union.

The most elaborate study of IAM agreements was made by the union for the benefit of the non-operating railroad unions which were seeking changes in pay, hours, and working conditions. All firms were listed which paid time and a half for hours worked in excess of 40 a week.

Hosiery Manufacture: Earnings in October 1948¹

OCCUPATIONAL EARNINGS LEVELS in the full-fashioned and seamless hosiery industries, presented separately in this report, differed substantially in October 1948.

The manufacturing processes used in producing full-fashioned hosiery are more complicated than

those in seamless hosiery. Use of similar job terms in the two industries (as in the accompanying tables) does not imply identical or equal job requirements. In the major production areas studied, full-fashioned hosiery mills on the average were larger, measured by employment, than seamless hosiery mills. The full-fashioned hosiery industry is also more highly unionized, although comparatively few of the southern mills had agreements with a labor union in October 1948, the date of the Bureau's study.²

Women account for three-fifths of the labor force in the full-fashioned hosiery industry and for an even larger proportion in seamless-hosiery production. Nearly all the knitters in full-fashioned hosiery mills are men, whereas in this work in seamless-hosiery mills, women predominate. The highly automatic types of knitting equipment employed in seamless-hosiery manufacture, however, require a proportionately greater number of adjusters and fixers than is needed in full-fashioned hosiery mills. Except for this job group, in which time rates are typical, a majority of the workers in the occupations for which earnings data are here presented are paid on a piece-work basis.

Nearly all establishments studied reported that a 40-hour workweek was scheduled in October 1948. Formal provisions for granting paid vacation leave to mill and office workers had been established by 74 of 81 full-fashioned hosiery establishments, 36 of 52 men's seamless-hosiery mills, and 8 of 21 plants manufacturing children's hosiery. Vacation plans typically provided 1 week with pay to employees with a year of service. A substantial number of employers, however, provided 2 weeks of paid vacation leave to office workers. Paid holidays, generally 5 in number, were provided for mill and office workers by a great majority of the full-fashioned hosiery plants in Philadelphia and Reading. Very few of the other establishments studied provided paid holidays to mill workers, but a majority (except in the men's hosiery industry in Statesville-Hickory, N. C. and the children's hosiery industry in Winston-

¹ Prepared by Toivo P. Kanninen of the Bureau's Division of Wage Analysis. Data were collected by field representatives under the direction of the Bureau's regional wage analysts. Greater detail on wages and wage practices for each area included in the study is available on request.

² The number of production areas studied, and estimated employment in the areas in October 1948, were: full-fashioned hosiery, 5 areas, 30,000 workers; men's seamless hosiery, 3 areas, 11,300 workers; and children's seamless hosiery, 2 areas, 3,000 workers. Mills employing less than 21 workers were excluded from the study.

Salem-High Point) provided 2 or more paid holidays to office employees.

Full-Fashioned Hosiery

Average hourly earnings of men knitters (using single-unit equipment and legger machines fitted with backrack attachments) varied considerably by area, gauge of hosiery, and number of sections in the machine. Knitters producing 45-gauge hosiery (24 sections or less) averaged from \$1.61 in Statesville-Hickory, N. C., to \$2.42 in Reading, Pa. In contrast, knitters making 51-gauge hosiery (26 or more sections) earned from \$1.97 in Statesville-Hickory to \$2.75 in Philadelphia.

TABLE 1.—*Straight-time average hourly earnings¹ in selected occupations in full-fashioned hosiery industry, in selected areas, October 1948*

Occupation and sex	Burlington-Greensboro, N. C.	Charlotte, N. C.	Philadelphia, Pa.	Reading, Pa.	Statesville-Hickory, N. C.
<i>Plant occupations, men</i>					
Adjusters and fixers, knitting machines (4 years' or more experience).....	\$2.00	\$2.05	\$1.77	\$1.90	\$1.84
Boarders, machine.....	1.35	1.38	1.77	1.75	1.11
Knitters, single-unit or backrack:					
Below 45-gauge, 24 sections or less.....	(2)	1.95	1.76	2.25	1.36
45-gauge, 24 sections or less.....	1.71	1.95	2.07	2.42	1.61
45-gauge, 26 or more sections.....	1.84	2.08	(2)	(2)	1.65
51-gauge, 24 sections or less.....	1.90	1.79	2.12	2.49	1.77
51-gauge, 26 or more sections.....	2.11	2.12	2.75	(2)	1.97
Preboarders.....	1.37	1.37	1.57	1.59	1.26
<i>Plant occupations, women</i>					
Boarders, machine.....	1.23	1.21	1.66	(2)	1.10
Folders.....	1.11	.95	1.13	.99	.95
Inspectors, hosiery.....	1.09	1.10	1.05	1.17	.93
Loopers, toe only (1 year's experience or more).....	1.24	1.18	1.34	1.29	1.07
Menders, hand.....	1.11	1.33	1.31	1.30	1.10
Pairers.....	.96	1.05	1.22	1.40	.98
Preboarders.....	1.28	1.16	1.55	(2)	(2)
Seamers.....	1.14	1.25	1.37	1.39	.98
<i>Office occupations, women</i>					
Clerks, pay roll.....	1.00	1.03	1.02	1.13	(2)
Clerk-typists.....	.87	1.04	.90	.78	(2)
Stenographers, general.....	1.05	1.08	1.09	(2)	(2)

¹ Exclusive of premium pay for overtime and night work.

² Insufficient data to justify presentation of an average.

Within an area, Philadelphia showed the greatest variation in earnings among the knitting classifications: knitters making 51-gauge hosiery (26 or more sections) averaged 99 cents an hour more than those producing below 45-gauge hosiery (24 sections or less).

Knitting machine adjusters and fixers averaged

\$1.77 and \$1.90 an hour, respectively, in Philadelphia and Reading; however, in the three North Carolina areas, earnings ranged from \$1.84 in Statesville-Hickory to \$2.05 in Charlotte. Earnings of men boarders (machine) averaged \$1.77 in Philadelphia and \$1.75 in Reading, but in North Carolina ranged from \$1.11 to \$1.35. Thus, although workers in Philadelphia in these two jobs had similar earnings, and in Reading differed by only 15 cents, average earnings of adjusters and fixers in each of the southern areas exceeded those of boarders by 65 cents or more.

Seamers (major women's job in the industry) earned 98 cents in Statesville-Hickory, \$1.14 in Burlington-Greensboro, \$1.25 in Charlotte, \$1.37 and \$1.39, respectively, in Philadelphia and Reading. Inter-area differences in earnings were generally smaller in other women's jobs. Hand menders, for example, earned from \$1.10 in Statesville-Hickory to \$1.33 in Charlotte. Hosiery inspectors averaged 93 cents in Statesville-Hickory and from \$1.05 to \$1.17 among the other areas. Folders, the lowest-paid mill group studied, earned 95 cents in Charlotte and Statesville-Hickory, 99 cents in Reading, \$1.11 and \$1.13, respectively, in Burlington-Greensboro and Philadelphia. As in the case of men's jobs (other than adjusters and fixers), Reading and Philadelphia mills generally had the highest earnings and the Statesville-Hickory area the lowest in nearly all jobs.

Seamless Hosiery

Women knitters operating automatic machines averaged 83 cents an hour in October 1948 in men's seamless hosiery mills in Reading, Pa., and the Statesville-Hickory area of North Carolina. For other women in this job, averages were 98 cents in men's hosiery mills in Winston-Salem-High Point, N. C., 86 cents in children's hosiery mills in the same area, and 91 cents in children's hosiery mills in Chattanooga. Transfer knitters' earnings ranged from 72 cents in Statesville-Hickory to 92 cents in Chattanooga. Women loopers (the largest job group in the industry) had average earnings ranging from 85 cents to 97 cents. For menders (the lowest-paid job studied) the range was from 64 to 81 cents an hour.

Men knitting-machine adjusters and fixers

earned \$1.21 in Chattanooga, \$1.26 in Reading, and \$1.34 in Statesville-Hickory; in the Winston-Salem-High Point area, they averaged \$1.40 in children's hosiery mills and \$1.51 in the men's hosiery division. Men knitters, automatic machines, averaged from 5 to 9 cents an hour more than did women on similar work in the same area.

TABLE 2.—*Straight-time average hourly earnings,¹ selected occupations in seamless hosiery industry, by type of hosiery and wage area, October 1948*

Occupation and sex	Men's hosiery			Children's hosiery	
	Reading, Pa.	Statesville-Hickory, N. C.	Winston-Salem-High Point, N. C.	Chattanooga, Tenn.	Winston-Salem-High Point, N. C.
<i>Plant occupations, men</i>					
Adjusters and fixers, knitting machines (4 years' or more experience).....	\$1.26	\$1.34	\$1.51	\$1.21	\$1.40
Boarders, hand.....	1.03	.90	1.14	.99	1.02
Knitters, automatic.....	.88	.90	1.07	(2)	.94
<i>Plant occupations, women</i>					
Boarders, hand.....	(2)	.77	.98	.85	.78
Folders and boxers.....	.82	.74	.94	.92	.81
Inspectors, hosiery.....	.75	.69	.89	(2)	.82
Knitters, automatic.....	.83	.83	.98	.91	.86
Knitters, string.....	(2)	(2)	1.00	.84	(2)
Knitters, transfer.....	.86	.72	(2)	.92	.86
Loopers, toe only (1 year's experience or more).....	.96	.85	.97	.88	.95
Menders, hand.....	.79	.64	.72	.81	.68
Pairers.....	.77	.71	.90	.87	.79
<i>Office occupations, women</i>					
Clerks, pay roll.....	(2)	.93	1.01	.91	(2)
Clerk-typists.....	(2)	.77	.93	.81	(2)
Stenographers, general.....	(2)	.90	.98	1.34	(2)

¹ Exclusive of premium pay for overtime and night work.

² Insufficient data to justify presentation of an average.

Occupational earnings in production of men's seamless hosiery were highest in the Winston-Salem-High Point area and lowest, except in two men's jobs, in the Statesville-Hickory area. In the children's hosiery division, earnings for nearly all the women's jobs were higher in Chattanooga than in Winston-Salem-High Point, but for men adjusters and fixers and for hand boarders, the reverse was true. Wages in men's hosiery mills exceeded those in the production of children's hosiery in the Winston-Salem-High Point area; in 7 of 10 jobs providing a comparison, the wage advantage in favor of men's hosiery workers amounted to 11 or more cents an hour.

Wage Chronology No. 4: Bituminous-Coal Mines, 1933-48¹

THE NATIONAL WAGE AGREEMENT between the United Mine Workers of America (Ind.) and associations representing the operators in the bituminous-coal industry, expiring on June 30, 1949, is an outgrowth of the Appalachian agreements, the first of which was concluded in 1933. This wage chronology covers the period since 1933 and traces the changes in basic wages, work schedules, and related wage practices affecting the major groups of workers in the Appalachian area, as provided by the master agreements. The data presented do not take account of variations in provisions of agreements negotiated in the various districts.

Since this chronology begins with the 1933 agreement, the provisions reported under that date do not necessarily indicate changes in prior conditions of employment. Changes in wages and related conditions have been the outcome of collective bargaining between the operators and the union, except for the November 1943 and May 1946 agreements. In these two months, prolonged disputes between the union and the operators and resulting work stoppages necessitated seizure and operation of the mines by the United States Government and, consequently, the agreements were made between the Government and the UMW.

During the period under consideration, changes in the number of hours worked per day and the number of days worked per week, and the introduction of portal-to-portal pay, were significant factors affecting miners' income. The formalized schedule of mine operation incorporated in the master agreements permitted the tabulation of these changes in this chronology, and made possible the computation of full-time daily and weekly earnings and straight-time hourly earnings for selected groups of workers paid on a time basis (table 4).

¹ Prepared in the Bureau of Labor Statistics by Willis C. Quant under the direction of Joseph W. Bloch. For purpose and scope of wage chronology series, see Monthly Labor Review, December 1948. Reprints of chronologies are available upon request.

TABLE 1.—Changes in basic wages and hours in bituminous-coal mines in the Appalachian area, 1933-48

OUTSIDE DAY WORKERS ¹

Effective date	Normal schedule of work ²				Amount of wage change	Application, exceptions, and other related matters
	Days per week	Daily hours paid for—				
		Total	Work	Lunch		
Oct. 2, 1933-----	5	8	8	0	40 cents per 7-hour day increase.	Previous 8-hour pay plus increase established as new rates for 7-hour day. The increase of 40 cents was applied to all the Appalachian area except northern West Virginia, where an increase of 64 cents a day was provided to eliminate a 24-cent differential between northern West Virginia and the northern Appalachian area.
Apr. 1, 1934-----	5	7	7	0		
Oct. 1, 1935-----	5	7	7	0	50 cents per day increase.	This increase applied to all the Appalachian area except the South ³ and to all occupations except slate pickers. An increase of \$1.40 a day was provided for the South to eliminate a 40-cent North-South differential. Rates for slate pickers were increased by 75 cents per day in the North and by \$1.15 in the South.
Apr. 1, 1937-----	5	7	7	0	do.	
Apr. 1, 1941-----	5	7	7	0	\$1 per day increase.	
Jan. 1943-----	5-6	7	7	0		6-day week authorized by supplemental agreement. Weekly earnings were increased by added workday paid for at premium rates (see overtime provisions).
Apr. 1, 1943-----	5-6	7	7	0		An increase of 85 cents a day for slate pickers only was ordered by National War Labor Board directive order of June 18, 1943.
Nov. 3, 1943-----	5-6	8¼	8¼	0		Daily and weekly earnings were increased by lengthened workday, the added ¼ hours being paid for at premium rates (see overtime provisions).
Apr. 1, 1945-----	5-6	8¼	8	¼	\$1.07 per day increase.	Flat amount added to previous 8¼-hour pay to adjust differentials between earnings of outside and inside workers.
May 22, 1946-----	5-6	8¼	8	¼	\$1.85 per day increase.	Flat amount added to previous 8¼-hour pay.
July 1, 1947-----	5-6	7¼	6¾	½	\$1.20 per 7¼-hour day increase.	Previous 8¼ hour pay plus \$1.20 established as rates for new 7¼-hour day.
July 1, 1948-----	5-6	7¼	6¾	½	\$1 per day increase.	Flat amount added to previous 7¼-hour pay.

INSIDE DAY WORKERS ⁴

Effective date	Normal schedule of work ²					Amount of wage change	Application, exceptions, and other related matters
	Days per week	Daily hours paid for					
		Total	Work	Travel	Lunch		
Oct. 2, 1933-----	5	8	8	0	0	40 cents per 7-hour day increase.	Previous 8-hour pay plus increase established as new rates for 7-hour day. The increase of 40 cents was applied to all the Appalachian area except northern West Virginia, where an increase of 64 cents was provided to eliminate a 24-cent differential between northern West Virginia and the northern Appalachian area.
Apr. 1, 1934-----	5	7	7	0	0		
Oct. 1, 1935-----	5	7	7	0	0	50 cents per day increase.	This increase applied to all the Appalachian area except the South ³ and to all occupations except greasers, trappers, flaggers, and switch throwers. An increase of \$1.40 per day was provided for the South to eliminate a 40-cent North-South differential. Rates for the 4 specified occupations were increased by 75 cents in the North and by \$1.15 in the South.
Apr. 1, 1937-----	5	7	7	0	0	do.	
Apr. 1, 1941-----	5	7	7	0	0	\$1 per day increase.	
Jan. 1943-----	5-6	7	7	0	0		6-day week authorized by supplemental agreement. Weekly earnings were increased by added workday paid for at premium rates. (See overtime provisions.)
Apr. 1, 1943-----	5-6	7	7	0	0		Increase of 85 cents per day for greasers, trappers, flaggers, and switch throwers only ordered by National War Labor Board directive order of June 18, 1943. Board also ruled that it would permit an additional increase of 76 cents to these workers if agreed upon in district negotiations.
Nov. 3, 1943-----	5-6	8¼	8	¾	0		Daily and weekly earnings increased by lengthened workday, by payment for travel time, and by payment of premium rates for productive and travel time after 40 elapsed hours during workweek. (See overtime and travel-time provisions.)
Apr. 1, 1945-----	5-6	9	8¾		¼		Daily and weekly earnings increased by payment of premium rates for all hours in excess of 7 per day and 35 per week (see overtime provisions) and by paid lunch periods.
May 22, 1946-----	5-6	9	8¾		¼	\$1.85 per day increase.	Flat amount added to previous 9-hour pay.
July 1, 1947-----	5-6	8	7½		½	\$1.20 per 8-hour day increase.	Previous 9-hour pay plus \$1.20 established as rates for new 8-hour day.
July 1, 1948-----	5-6	8	7½		½	\$1 per day increase.	Flat amount added to previous 8-hour pay.

¹ Data pertain to bit sharpeners, car droppers, trimmers, car repairmen, dumpers, sand dryers, car cleaners, slate pickers, and other able-bodied labor, and do not necessarily cover other outside workers paid on a day basis. The tabulation does not take into account variations provided by district agreements.

² The schedule of mine operation provided in master agreements does not represent a guarantee of the stipulated hours or days of work.

³ Includes mines in Maryland, Virginia, southern and upper Potomac

district of West Virginia, eastern Kentucky, and northern Tennessee.

⁴ Data pertain to motormen, rock drillers, drivers, brakemen, spraggers, trackmen, wiremen, bonders, timbermen, bottom eagers, coal drillers, snappers, trackmen helpers, wiremen helpers, greasers, trappers, flaggers, switch throwers, and other inside labor not classified. Mobile loading equipment operators covered by changes after 1941. The tabulation does not take into account variations provided by district agreements.

TABLE 1.—Changes in basic wages and hours in bituminous-coal mines in the Appalachian area, 1933-48—Continued

INSIDE TONNAGE AND PIECE-RATE WORKERS ¹

Effective date	Normal schedule of work ²					Amount of wage change for—				Application, exceptions, and other related matters
	Days per week	Daily hours paid for—				Pick mining	Machine loading	Cutting (short-wall)	Dead-work; yardage	
		Total	Work	Travel	Lunch					
Oct. 2, 1933.....	5	8	8	0	0					
Apr. 1, 1934.....	5	7	7	0	0	10 cents per ton increase.	8 cents per ton increase.	1 cent per ton increase.	9 percent increase.	
Oct. 1, 1935.....	5	7	7	0	0	9 cents per ton increase.	do.	do.	10 percent increase.	
Apr. 1, 1937.....	5	7	7	0	0	do.	do.	do.	do.	
Apr. 1, 1941.....	5	7	7	0	0	12 cents per ton increase.	11 cents per ton increase.	do.	15 percent increase.	6-day week authorized by supplemental agreement.
Jan. 1943.....	5-6	7	7	0	0					Weekly earnings were increased by added workday paid for at premium rates (see overtime provisions).
Nov. 3, 1943.....	5-6	8 $\frac{3}{4}$	8	$\frac{3}{4}$	0					Daily and weekly earnings increased by lengthened workday, by payment for travel time, and by payment of premium rates for productive and travel time after 40 elapsed hours during workweek (see overtime and travel-time provisions).
Apr. 1, 1945.....	5-6	9	8 $\frac{3}{4}$	$\frac{1}{4}$						Daily and weekly earnings increased by addition of $\frac{1}{2}$ of day's tonnage or piece-rate earnings, to compensate for daily overtime and travel time (see overtime and travel-time provisions).
May 22, 1946.....	5-6	9	8 $\frac{3}{4}$	$\frac{1}{4}$		\$1.85 per day increase.				Flat amount added to 9-hour pay as previously computed.
July 1, 1947.....	5-6	8	7 $\frac{1}{2}$	$\frac{1}{2}$		\$1.20 per day increase.				Flat amount added to day's pay as previously computed. This increase, plus previous \$1.85 daily increase, made a total of \$3.05 added to daily tonnage or piece-rate earnings plus $\frac{1}{2}$ of such daily tonnage or piece-rate earnings.
July 1, 1948.....	5-6	8	7 $\frac{1}{2}$	$\frac{1}{2}$		\$1 per day increase.				Flat amount added to day's pay as previously computed, making a total of \$4.05 added to daily tonnage or piece-rate earnings plus $\frac{1}{2}$ of such daily tonnage or piece-rate earnings.

¹ Data pertain only to types of work indicated, and also do not take into account variations provided by district agreements.

TABLE 2.—Changes in pay provisions for overtime and travel time in bituminous-coal mines, Appalachian area, 1933-48 ¹

OVERTIME PAY ²

Effective date	Outside day workers	Inside day workers	Inside tonnage and piece-rate workers
Oct. 2, 1933.....	No provision for overtime premium pay.	No provision for overtime premium pay.....	No provision for overtime premium pay.
Apr. 1, 1937.....	Time and one-half for hours in excess of 7 per day and 35 per week.	Time and one-half for hours in excess of 7 per day and 35 per week (at the face).	Do.
Jan. 1943 ³	No change	No change	Time and one-half for work performed after 35 hours per week (at face).
Nov. 3, 1943.....	Time and one-half for hours in excess of 7 per day and 35 per week at straight time rates. Double time for seventh consecutive day.	Time and one-half for productive time after 40 hours (productive and travel time combined) within first 5 days of workweek and for all productive time on sixth day worked. Time and one-half for travel time after 40 elapsed hours during workweek. Double time for seventh consecutive day.	Time and one-half (applied to average productive earnings and special travel rate, separately) for hours in excess of 40 per week (productive and travel time combined). Double time for seventh consecutive day.
Apr. 1, 1945.....	No change	Time and one-half for eighth hour of 9-hour day and \$1.50 to all workers for ninth hour. Time and one-half after 35 hours (portal-to-portal) worked at straight-time rates within week. Double time for seventh consecutive day.	Gross daily earnings increased by one-ninth to compensate for travel time and for overtime after 7 hours. Time and one-half after 35 hours (portal-to-portal) worked at straight-time rates within week. Double time for seventh consecutive day.
May 22, 1946.....	Added: time and one-half for work on sixth consecutive day.	Added: time and one-half for work on sixth consecutive day.	Added: time and one-half for work on sixth consecutive day.
July 1, 1947.....	Time and one-half for hours in excess of 7 $\frac{1}{4}$ per day and 36 $\frac{1}{4}$ per week and for sixth consecutive day. Double time for seventh consecutive day.	Time and one-half for hours in excess of 8 per day and 40 per week (portal-to-portal) and for sixth consecutive day. Double time for seventh consecutive day.	Time and one-half for hours in excess of 8 per day and 40 per week (portal-to-portal) and for sixth consecutive day. Double time for seventh consecutive day.

PAY FOR TRAVEL TIME

Oct. 2, 1933.....	No travel time.....	Travel time not paid for.....	Travel time not paid for.
Nov. 3, 1943.....	do.....	45 minutes of travel time per day, paid for at two-thirds of regular rate. Subject to overtime provisions.	45 minutes of travel time per day, paid for at two-thirds of hourly earnings. Subject to overtime provisions.
Apr. 1, 1945 ⁴	do.....	Travel time considered as working time and paid for accordingly. Subject to overtime provisions.	Travel time considered as working time and paid for by increasing daily production earnings (including overtime premium pay on sixth day) by one-ninth.

¹ Applies only to workers having standard schedule of hours reported in table 1. ² Pyramiding of overtime pay not required under the provisions.

³ Supplemental agreement authorizing 6-day week was carried over by subsequent agreements. The 6-day week was optional.

⁴ Retroactive claims for portal-to-portal pay were adjusted by payment of \$40 to each eligible worker employed from Apr. 1, to June 20, 1943, and a pro rata amount for less than continuous employment during this period.

TABLE 3.—Changes in related wage practices in bituminous-coal mines, in the Appalachian area, 1933-48

SHIFT PREMIUM PAY		
Effective date	Provision	Application, exceptions, and other related matters
Oct. 2, 1933	No provision for shift premiums	
Apr. 1, 1945	Second shift, 4 cents an hour; third shift, 6 cents an hour	For each hour employed, portal-to-portal.
HOLIDAY PAY		
Oct. 2, 1933	No provisions for work on holidays	Holidays to be observed are those recognized in district agreements.
Jan. 1943	Time and one-half for work on specified holidays	Do.
PAID VACATIONS		
Oct. 2, 1933	No provision for paid vacations	
Apr. 1, 1941	Employees with 1 year or more of service—10 consecutive calendar days. Vacation pay, \$20.	Annual mid-year vacation period, during which coal production ceases. No vacation pay for employees with less than a year's service. (The 1941 vacation period was curtailed to 5 days, that for 1942 to 3 days, with full vacation pay.)
Apr. 1, 1943	Vacation pay increased to \$50	1943 and 1944 vacations suspended, but full vacation payment made.
Apr. 1, 1945	Vacation pay increased to \$75	1945 vacation suspended, but full vacation payment made.
May 1946	Vacation pay increased to \$100	For employees with 1 year's service between specified dates. Those entering or leaving employment during qualifying period paid prorated amounts.
REPORTING ALLOWANCE		
Oct. 2, 1933	Day workers going into mine in morning receive minimum of 2-hours' pay.	
WORK TOOLS, EQUIPMENT, AND SUPPLIES		
Oct. 2, 1933		Matters affecting cost of explosives, blacksmithing, and electric cap lamps referred to district conferences.
Apr. 1, 1943	Necessary tools, blacksmithing, and safety equipment and devices, including electric cap lamps and carbide lamps, to be furnished by operators, except when operator elects to pay worker 6 cents per day for furnishing own carbide lamp and carbide.	Provision was contained in directive order of National War Labor Board dated June 18, 1943, and appeared in Nov. 3, 1943, contract for first time. Matters affecting cost of explosives referred to district conferences.
HEALTH AND WELFARE BENEFITS		
Oct. 2, 1933	No provision for health and welfare benefits	
June 1, 1946	A welfare and retirement fund was established to provide benefit payments to miners and their dependents or survivors in case of sickness, disability, death, or retirement, and for other related purposes. Financed through contributions by operators of 5 cents for each ton of coal produced for use or sale. A medical and hospital fund was established to be used for medical, hospital, and related purposes. Financed by wage deductions then being made.	
July 1, 1947	The 2 funds were to be used to complement each other. Operators' contributions to welfare and retirement fund increased to 10 cents per ton of coal produced for use or sale. Medical and hospital fund was combined with welfare and retirement fund.	
July 1, 1948	Operators' contributions to welfare and retirement fund increased to 20 cents per ton of coal produced for use or sale.	

TABLE 4.—Full-time daily and weekly earnings and straight-time hourly earnings¹ for selected occupations in bituminous-coal mines, Appalachian area,² 1933-48

Occupational group	Effective date											
	Oct. 2, 1933	Apr. 1, 1934	Oct. 1, 1935	Apr. 1, 1937	Apr. 1, 1941	Jan. 1943	Nov. 3, 1943	Apr. 1, 1945	May 22, 1946	July 1, 1947	July 1, 1948	
<i>Inside day workers</i>												
Motormen, rock drillers, and rubber-tired shuttle car operators:												
Full-time daily earnings.....	\$4.76	\$5.16	\$5.66	\$6.16	\$7.16	\$7.16	\$8.69	\$10.19	\$12.04	\$13.24	\$14.24	
Full-time weekly earnings:												
5-day week.....	23.80	25.80	28.30	30.80	35.80	35.80	45.34	50.95	60.20	66.20	71.20	
6-day week.....						46.54	58.35	64.72	76.47	86.06	92.56	
Straight-time hourly earnings.....	.595	.737	.809	.880	1.023	1.023	.993	1.019	1.204	1.655	1.780	
Drivers, brakemen, spraggers, trackmen, wiremen, bonders, timbermen, bottom cagers, coal drillers and snappers:												
Full-time daily earnings.....	4.60	5.00	5.50	6.00	7.00	7.00	8.50	10.00	11.85	13.05	14.05	
Full-time weekly earnings:												
5-day week.....	23.00	25.00	27.50	30.00	35.00	35.00	44.31	50.00	59.25	65.25	70.25	
6-day week.....						45.50	57.06	63.50	75.25	84.83	91.33	
Straight-time hourly earnings.....	.575	.714	.785	.857	1.00	1.00	.971	1.00	1.185	1.631	1.756	
Pumpers, trackmen helpers, wiremen helpers, timbermen helpers, and other inside labor not classified:												
Full-time daily earnings.....	4.36	4.76	5.26	5.76	6.76	6.76	8.21	9.71	11.56	12.76	13.76	
Full-time weekly earnings:												
5-day week.....	21.80	23.80	26.30	28.80	33.80	33.80	42.79	48.55	57.80	63.80	68.80	
6-day week.....						43.94	55.12	61.64	73.39	82.94	89.44	
Straight-time hourly earnings.....	.545	.680	.751	.823	.966	.966	.938	.971	1.156	1.595	1.720	
Loading machine operators and cutting and shearing machine operators and helpers: ³												
Full-time daily earnings.....	5.80	6.20	6.90	7.60	9.00	9.00	10.93	12.43	14.28	15.48	16.48	
Full-time weekly earnings:												
5-day week.....	29.00	31.00	34.50	38.00	45.00	45.00	56.98	62.15	71.40	77.40	82.40	
6-day week.....						58.50	73.37	79.08	90.83	100.62	107.12	
Straight-time hourly earnings.....	.725	.886	.986	1.086	1.286	1.286	1.249	1.243	1.428	1.935	2.060	
<i>Outside day workers</i>												
Bit sharpeners, car droppers, trimmers, car repairmen and dumpers:												
Full-time daily earnings.....	3.84	4.24	4.74	5.24	6.24	6.24	7.91	8.98	10.83	12.03	13.03	
Full-time weekly earnings:												
5-day week.....	19.20	21.20	23.70	26.20	31.20	31.20	39.55	44.90	54.15	60.15	65.15	
6-day week.....						40.56	50.58	57.41	69.25	78.20	84.70	
Straight-time hourly earnings.....	.480	.606	.677	.749	.891	.891	.891	1.012	1.220	1.659	1.797	
Sand dryers, car cleaners, and other able bodied labor:												
Full-time daily earnings.....	3.60	4.00	4.50	5.00	6.00	6.00	7.61	8.68	10.53	11.73	12.73	
Full-time weekly earnings:												
5-day week.....	18.00	20.00	22.50	25.00	30.00	30.00	38.05	43.40	52.65	58.65	63.65	
6-day week.....						39.00	48.66	55.50	67.33	76.25	81.75	
Straight-time hourly earnings.....	.450	.571	.643	.714	.857	.857	.857	.978	1.186	1.618	2.766	

¹ Full-time daily and weekly earnings reflect gross pay for normal hours in effect at the time (table 1) including straight-time and premium pay for scheduled overtime hours. Straight-time hourly earnings exclude premium pay for overtime. Shift premium pay is excluded from all figures as well as miners' expenses for tools, explosives, etc. Full-time daily earnings reflect week-day pay (Monday through Friday) except for period between Nov. 3, 1943, and Apr. 1, 1945, when premium rates were paid for part of work on fifth day. Full-time weekly earnings for 6-day week are shown only for period following formal agreement authorizing 6-day week (optional). These

pay scales were computed on basis of national agreements and do not take account of district variations.

² Regional differentials are not shown for years in effect. West Virginia differential was eliminated by 1934 wage agreement and Southern differential ended with 1941 contract.

³ Wage increases for mobile loading equipment operators exceeded those for other inside day workers during period Oct. 2, 1933, through Apr. 1, 1941. Thereafter, same changes affected all inside day workers for whom data are shown.

Footwear Manufacture: Earnings in October 1948¹

IN WOMEN'S CEMENT-PROCESS SHOE MANUFACTURE, average hourly earnings of men cutters (machine) in New England in October 1948 ranged from \$1.42 in the Auburn-Lewiston area of Maine to \$1.72 in Boston. Among six New England areas,

¹ Prepared by Toivo P. Kanninen of the Bureau's Division of Wage Analysis. Data were collected by field representatives under the direction of the Bureau's regional wage analysts. Greater detail on wages and wage practices for each wage area included in the study is available upon request.

The study covered the manufacture of selected types of footwear in 13 major production areas. Approximately 65,000 workers were employed in October 1948 in the industry divisions covered. Establishments employing less than 21 workers were excluded from the study.

hourly averages of men in other production jobs, also typically paid on a piece-rate basis, ranged as follows: Side lasters (machine), \$1.63 in Worcester to \$2.05 in Haverhill, Mass.; bed-machine operators, \$1.55 in Auburn-Lewiston to \$1.84 in Haverhill; and treers, \$1.30 in Worcester to \$1.66 in Haverhill. Earnings of fancy stitchers, the major women's job studied, ranged from \$1.06 in Worcester to \$1.38 in Boston. Earnings of floor girls, paid hourly rates, ranged from 85 cents in Boston to 94 cents in Lynn and Worcester. The highest job averages in New England were generally found in Boston or Haverhill; Worcester and, to a lesser extent, Auburn-Lewiston had the lowest earnings.

Straight-time average hourly earnings¹ in selected occupations in footwear establishments, by process and wage area
October 1948

Occupation and sex	Women's cement process shoes										Men's Goodyear welt shoes			Children's welt shoes
	New England						New York City ²	Missouri, except St. Louis	St. Louis, Mo.	Los Angeles, Calif.	Brockton, Mass.	Worcester, Mass.	Illinois	South-eastern Pennsylvania ³
	Auburn-Lewiston, Maine	Boston, Mass.	Haverhill, Mass.	Lynn, Mass.	Southeastern New Hampshire	Worcester, Mass.								
<i>Plant occupations: Men</i>														
Assemblers for pullover, machine.....	\$1.64	\$1.89	\$1.83	\$1.80	\$1.54	\$1.41	(4)	\$1.19	\$1.56	(4)	\$1.71	\$1.42	\$1.60	\$0.99
Bed-machine operators.....	1.55	1.59	1.84	1.70	1.69	1.58	\$2.39	1.35	1.60	(4)	1.48	1.46	1.69	1.14
Cutters, vamp and whole shoe, hand.....	(4)	1.78	(4)	1.67	(4)	(4)	2.36	1.34	1.59	\$1.75	1.52	(4)	1.85	.91
Cutters, vamp and whole shoe, machine.....	1.42	1.72	1.63	1.54	1.50	1.49	2.09	1.39	(4)	1.94	1.69	1.57	1.67	1.12
Edge trimmers, machine.....	1.64	2.00	1.95	1.80	1.67	1.55	2.67	1.39	1.65	1.98	1.81	1.62	1.89	1.31
Floor boys.....	(4)	.78	.88	(4)	.79	.92	1.07	.85	.86	.94	(4)	(4)	(4)	.71
Goodyear stitchers.....											1.61	1.55	1.73	1.10
Mechanics, maintenance.....	1.68	(4)	1.60	1.63	1.50	1.54	1.60	1.24	1.31	1.87	1.50	1.51	1.31	1.03
Side lasters, machine.....	1.79	1.99	2.05	1.69	1.72	1.63	2.49	1.34	1.57	(4)	1.48	1.63	1.61	1.09
Sole attachers, cement.....	1.42	1.55	1.63	1.76	1.53	1.46	2.27	1.19	1.41	1.73				.84
Trees.....	1.37	1.64	1.66	1.57	1.42	1.30	1.96	1.29	1.53	(4)	1.43	1.53	(4)	.95
Wood-heel-seat fitters, hand.....	(4)	1.36	(4)	1.69	1.36	(4)	2.04	1.25	1.54	(4)	(4)	(4)	(4)	(4)
Wood-heel-seat fitters, machine.....	1.41	(4)	1.70	(4)	1.33	1.51	2.61	1.06	1.51	(4)	(4)	(4)	(4)	(4)
<i>Plant occupations: Women</i>														
Fancy stitchers.....	1.22	1.38	1.25	1.25	1.20	1.06	(4)	.89	1.12	1.74	1.12	1.11	1.23	.94
Floor girls.....	.88	.85	.90	.94	.91	.94	(4)	.78	.89	1.01	.89	.86	.83	.74
Top stitchers.....	1.30	1.68	1.38	1.24	1.17	1.16	2.09	.92	1.07	1.64	1.08	1.04	1.32	.96
Vampers.....	(4)	(4)	1.09	(4)	.97	1.17	1.76	1.21	1.16	1.74	1.35	1.22	1.28	.90
<i>Office occupations: Women</i>														
Clerks, pay-roll.....	.70	.84	.82	.81	.80	.76	1.02	.84	.87	1.16	.77	.82	.93	.90
Clerk-typists.....	(4)	.74	.72	.77	.74	(4)	.99	.77	.82	.93	.67	.77	.88	.83
Stenographers, general.....	.80	.89	.83	.83	.82	.85	1.18	.86	.97	1.11	.85	.89	1.06	.86

¹ Excludes premium pay for overtime and night work.

² Study limited to establishments primarily engaged in producing women's street shoes.

³ Berks, Dauphin, Lancaster, Lebanon, and Schuylkill Counties.

⁴ Insufficient data to justify presentation of an average.

Among other women's shoe centers, St. Louis pay levels fell within the New England range, earnings in Missouri (except St. Louis) were generally below the lowest New England areas averages, and job averages for Los Angeles generally matched earnings for similar shop work in Boston and Haverhill. Earnings in New York City, where the study was limited to women's street shoes, were the highest recorded for any of the production jobs. Men edge trimmers (machine), for example, averaged \$1.39 in Missouri (except St. Louis), \$1.65 in St. Louis, \$1.98 in Los Angeles, and \$2.67 in New York; area averages in New England ranged from \$1.55 in Worcester to \$2 in Boston.

In men's Goodyear welt shoe manufacture, vamp and whole shoe cutters (machine) averaged \$1.57 in Worcester, \$1.67 in Illinois, and \$1.69 in Brockton, Mass.; but men Goodyear stitchers averaged \$1.55 in Worcester, \$1.61 in Brockton, and \$1.73 in Illinois. Among the women's jobs studied, vampers were the highest paid, ranging from \$1.22 in Worcester to \$1.35 in Brockton; floor girls had a low average of 83 cents in Illinois

and a high of 89 cents in Brockton. The Worcester area had the lowest earnings in 8 of the 11 plant jobs for which averages could be presented for each of the three centers.

An important segment of the children's welt shoe industry is located in southeastern Pennsylvania. The generally lower pay level in this area is reflected by the hourly averages of 71 cents for floor boys and \$1.12 for men cutters. Edge trimmers were the highest paid men workers covered, averaging \$1.31 an hour. In women's jobs, earnings ranged from 74 cents for floor girls to 96 cents for top stitchers. Hourly earnings in this area averaged 20 cents or more below those in women's cement-process shoe plants in Missouri (except St. Louis), the second lowest pay area studied, in a majority of the plant jobs for which comparable figures were available.

Office jobs showed smaller differences in earnings from area to area than did plant jobs. Clerk-typists averaged from 67 cents in Brockton to 99 cents in New York, and general stenographers from 80 cents in Auburn-Lewiston to \$1.18 in New York. In contrast to the earnings relation-

ship reported for plant jobs, office pay levels in southeastern Pennsylvania were above those in New England.

Related Wage Practices

A 40-hour workweek was scheduled by 180 of the 183 establishments studied in the 13 areas.

Paid holidays were granted to plant workers by 129 of the 139 establishments producing women's cement-process shoes, by 13 of 33 men's Goodyear welt shoe plants, and by only 1 of the 11 children's welt shoe plants surveyed. The most common practice in New York and among the New England shoe centers provided 6 paid holidays; 8 of 10 plants in Los Angeles and half of those in St. Louis paid for 3 holidays. Nearly all establishments granted paid holidays to office employees and the number of paid holidays received by this group generally exceeded the number granted to plant workers in the same establishments.

Vacations with pay were granted to plant workers with a year of service by nearly all establishments. With few exceptions, eligible shop workers received 1 week of paid vacation leave. All or a majority of the women's shoe plants in New York, Missouri (except St. Louis), St. Louis, Los Angeles, and of the men's shoe plants in Brockton and Illinois, provided a 2-week paid vacation to plant workers with 5 years of service. Office workers with a year of service received 1 week with pay in two-thirds of the establishments and 2 weeks in the remainder. Of 181 establishments employing office workers, 108 provided 2 weeks with pay after 5 years of service.

Local City Truck Driving: Union Scales, July 1, 1948¹

ORGANIZED MOTORTRUCK DRIVERS and their helpers received an average increase of 9 percent in basic hourly rates between July 1, 1947, and July 1, 1948, according to the Bureau of Labor Statistics

¹ Prepared by Annette Simi of the Bureau's Wage Analysis Division. Additional data, including a listing of union scales by commodity classification and type of truck, by city, will be presented in a forthcoming bulletin.

annual survey.² The over-all increase represented an 11-cent-an-hour gain for both drivers and helpers studied, bringing the respective levels of minimum hourly pay to \$1.43 and \$1.18.³ The July 1, 1948, index of hourly rates stood at 175.1 of the base-year (June 1, 1939) average.⁴

Although union wage scales advanced 75 percent between June 1, 1939, and July 1, 1948, two-thirds of the increase occurred since VJ-day. In June 1939, agreements providing minimum scales of \$1 or more an hour applied to only 14 percent of the drivers, whereas in 1945 such rates were received by about half of these workers. By July 1, 1948, two-thirds of the drivers were covered by contracts specifying minimum hourly scales of at least \$1.35.

TABLE 1.—Indexes of basic hourly wage rates and maximum straight-time workweeks for union motortruck drivers and helpers, 1936-48

[June 1, 1939=100]

Year	Drivers and helpers		Drivers		Helpers	
	Wage rates	Hours	Wage rates	Hours	Wage rates	Hours
1936: May 15.....	88.5	101.8	(¹)	(¹)	(¹)	(¹)
1937: May 15.....	94.4	100.9	94.5	100.8	94.2	101.2
1938: June 1.....	97.8	100.9	97.9	100.8	97.5	101.2
1939: June 1.....	100.0	100.0	100.0	100.0	100.0	100.0
1940: June 1.....	102.0	99.1	102.1	99.2	102.0	98.7
1941: June 1.....	106.1	98.5	105.9	98.5	107.0	98.1
1942: July 1.....	113.6	98.8	113.1	98.6	116.4	100.0
1943: July 1.....	119.8	98.6	119.2	98.4	123.0	99.8
1944: July 1.....	122.6	98.5	121.9	98.3	126.8	99.8
1945: July 1.....	125.2	98.3	124.5	98.1	129.8	99.7
1946: July 1.....	139.3	96.3	138.4	96.1	145.5	97.5
1947: July 1.....	160.8	94.0	159.9	93.6	166.8	95.8
1948: July 1.....	175.1	93.2	173.9	92.9	184.3	94.5

¹ Information not computed separately in 1936.

In 1939, minimum hourly rates for three-fourths of the helpers varied from 50 to 80 cents; in 1945, however, two-thirds of the helpers received basic

² Information is based on effective union scales as of July 1, 1948, covering 235,394 motortruck drivers and 34,682 helpers engaged in local city trucking in 77 cities. Data were primarily obtained from regional representatives of the International Brotherhood of Teamsters, Chauffeurs, Warehousemen, and Helpers of America (AFL); in some cities they were secured from local union officials by Bureau field representatives. Over-the-road drivers and local city drivers paid on a mileage or commission basis were excluded from the study.

Union scales are defined as the minimum wage rates or maximum schedule of hours agreed upon through collective bargaining by employers and trade-unions. Rates in excess of the agreed minimum which may be paid to union members because of long service, special qualifications, or other reasons are not included.

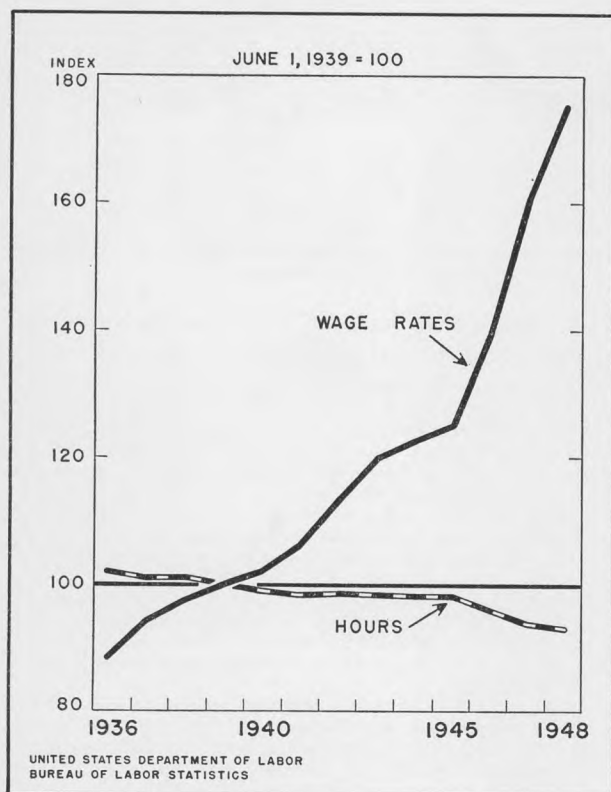
³ Averages are based on all rates reported for the current year; individual rates are weighted by the number of union members working at the rate. They are not an exact measure for time-to-time comparisons because of change in the classifications studied and in union membership.

⁴ In the index series designed to show wage-rate trends over a period of years, year-to-year changes in union scales are based on comparable quotations for each trade weighted by the membership for the current year.

rates of 70 to 95 cents. On July 1, 1948, the majority of helpers had scales ranging from \$1.15 to \$1.35; and about 12 percent were employed at rates under 95 cents an hour.

Straight-time weekly hours for union motor-truck drivers and helpers dropped approximately 1 percent, between July 1, 1947, and July 1, 1948, as shown by the index. The tendency toward a shorter workweek has been fairly constant since 1937—the first year for which comparable data are available. On July 1, 1948, over two-thirds of the union drivers and helpers studied were covered by agreements stipulating a 40-hour straight-time workweek. Relatively few contracts (affecting less than 5 percent of the total membership) specified work schedules in excess of 48 hours at straight-time pay. In contrast, workweeks of 48 hours or more before premium rates became effective applied to over half the drivers and helpers in July 1945, and to two-thirds in June 1940.

Hourly Wage Rates and Weekly Hours: Motortruck Drivers and Helpers



Wage-Rate Changes, 1947-1948

During the year July 1, 1947, to July 1, 1948 more than three-fourths of the drivers received wage advances resulting from contract negotiations. Basic wage rates of well over half of the drivers (56 percent) included in the study were increased from 5 to 15 percent. Agreements covering over 50 percent of the drivers specified minimum scales of at least \$1.45 an hour on July 1, 1948, whereas on July 1, 1947, only 3 out of 10 drivers had such scales.

TABLE 2.—Wage-rate changes in union scales for local city trucking, July 1, 1947, to July 1, 1948

Change in hourly rates	Percent of—		
	Drivers and helpers	Drivers	Helpers
No change.....	23.0	24.0	15.6
Increases: Total.....	77.0	76.0	84.4
Less than 5 percent.....	3.4	3.3	3.9
5 and under 10 percent.....	26.5	25.9	31.3
10 and under 15 percent.....	28.9	29.8	23.6
15 and under 20 percent.....	10.7	10.0	15.3
20 and under 25 percent.....	4.8	4.6	5.9
25 and under 30 percent.....	1.9	1.9	2.0
30 and under 35 percent.....	.6	.4	2.0
35 and under 40 percent.....	.1	.1	.2
40 and under 45 percent.....	(1)	(1)	.....
45 and under 50 percent.....	(1)	(1)	(1)
50 percent and over.....	.1	(1)	.2

¹ Less than 0.05 of 1 percent.

Approximately 85 percent of the truck drivers' helpers received wage increases during the 1-year period: for well over half of these helpers the increases varied from 5 to 15 percent, and for more than a fifth, from 15 to 25 percent. On July 1, 1948, the majority of the helpers were working under agreements providing minimum hourly scales of \$1.25 or more. In the preceding year, such rates applied to only one-fifth of these workers.

Because of variations in size and type of trucks and commodities handled, there is a wide range of rates within a city; classifications of drivers and drivers' helpers also differ considerably from one city to another. These factors account partly for the relative wage-level position of a particular city; other factors are city size and geographical location.

On July 1, 1948, average hourly rates for drivers ranged from 95 cents in New Orleans to \$1.74 in Oakland (Calif.). The next three top ranking

cities were also located on the West Coast—San Francisco (\$1.72), Seattle (\$1.67), and Los Angeles (\$1.60). In nine other cities, the wage levels also exceeded the general national average (\$1.43). Only seven cities—six in the South and one in New England—had average hourly scales of less than \$1.

Increases in wage levels for drivers between July 1, 1947, and July 1, 1948, ranged from 3 cents in Syracuse (N. Y.) and New Orleans to 24 cents in Phoenix. Cincinnati was the only other city which showed a gain of more than 20 cents. Wage advances of 10 cents or more an hour were

negotiated during the year in 54 of the 77 cities included in the study.

Average hourly rates for helpers on July 1, 1948, varied from 63 cents in Charleston (S. C.) to \$1.64 in Oakland. Spokane, San Francisco, and Seattle were the only other cities in which average rates exceeded \$1.50 an hour. In 26 cities, wage levels were higher than the general average of \$1.18 for all cities.

Between July 1, 1947, and July 1, 1948, average rates for helpers advanced from 1 cent in Syracuse to 22 cents in Spokane; in 49 cities, wage scales increased at least 10 cents an hour.

TABLE 3.—Average hourly wage rates of union motortruck drivers,¹ by city, July 1, 1948, and increases over previous year

City	Average hourly rate, July 1, 1948 ²	Increase from July 1, 1947 ³		City	Average hourly rate, July 1, 1948 ²	Increase from July 1, 1947 ³	
		Per-cent	Cents per hour			Per-cent	Cents per hour
Oakland, Calif.	\$1.739	8.4	13	Erie, Pa.	\$1.258	12.2	14
San Francisco, Calif.	1.719	9.7	15	St. Paul, Minn.	1.251	4.9	6
Seattle, Wash.	1.668	10.1	15	Manchester, N. H.	1.243	14.1	15
Los Angeles, Calif.	1.600	8.3	12	Louisville, Ky.	1.239	13.2	14
New York, N. Y.	1.571	7.8	11	Providence, R. I.	1.239	7.1	8
Newark, N. J.	1.539	8.5	12	Washington, D. C.	1.231	10.8	12
Spokane, Wash.	1.526	6.5	9	Omaha, Nebr.	1.219	11.0	12
Phoenix, Ariz.	1.512	19.2	24	Syracuse, N. Y.	1.219	2.8	3
Chicago, Ill.	1.490	4.8	7	Des Moines, Iowa	1.216	12.5	14
Detroit, Mich.	1.478	8.8	12	Rock Island (Ill.) district ⁴	1.208	9.5	10
Portland, Oreg.	1.463	10.0	13	Springfield, Mass.	1.205	5.3	6
Butte, Mont.	1.462	7.8	11	Salt Lake City, Utah	1.204	10.0	11
Cleveland, Ohio	1.461	10.6	14	Denver, Colo.	1.195	8.4	9
Average all cities	1.431	8.7	11	Baltimore, Md.	1.192	7.1	8
South Bend, Ind.	1.411	14.0	17	Worcester, Mass.	1.184	6.3	7
Toledo, Ohio	1.408	12.2	15	Knoxville, Tenn.	1.169	6.7	7
Pittsburgh, Pa.	1.388	6.7	9	Houston, Tex.	1.153	12.3	13
St. Louis, Mo.	1.385	10.7	13	Miami, Fla.	1.135	8.5	9
Charleston, W. Va.	1.372	11.8	14	Dallas, Tex.	1.131	13.0	13
Boston, Mass.	1.370	15.3	18	El Paso, Tex.	1.128	7.6	8
Duluth, Minn.	1.365	10.4	13	Reading, Pa.	1.128	8.2	9
Peoria, Ill.	1.353	6.6	8	Birmingham, Ala.	1.110	9.8	10
Milwaukee, Wis.	1.352	12.2	15	San Antonio, Tex.	1.109	12.9	13
Buffalo, N. Y.	1.347	8.5	11	Oklahoma City, Okla.	1.092	14.5	14
Seranton, Pa.	1.347	5.9	7	Atlanta, Ga.	1.077	17.5	16
Philadelphia, Pa.	1.313	4.8	6	Norfolk, Va.	1.056	7.6	7
Dayton, Ohio	1.310	14.4	17	Little Rock, Ark.	1.055	8.7	8
Minneapolis, Minn.	1.305	9.6	11	York, Pa.	1.052	21.0	18
Rochester, N. Y.	1.303	11.3	13	Memphis, Tenn.	1.047	11.3	11
Cincinnati, Ohio	1.295	22.0	23	Jackson, Miss.	1.024	16.1	14
Youngstown, Ohio	1.292	13.5	15	Jacksonville, Fla.	1.012	11.0	10
Wichita, Kans.	1.291	14.3	16	Portland, Maine	.994	12.2	11
Columbus, Ohio	1.271	13.6	15	Savannah, Ga.	.993	10.5	9
Indianapolis, Ind.	1.269	9.9	11	Chattanooga, Tenn.	.988	12.7	11
New Haven, Conn.	1.267	4.5	5	Charleston, S. C.	.979	13.8	12
Kansas City, Mo.	1.266	13.6	15	Richmond, Va.	.978	6.8	6
Mobile, Ala.	1.261	11.7	13	Charlotte, N. C.	.974	16.0	14
Grand Rapids, Mich.	1.259	12.5	14	New Orleans, La.	.952	3.6	3

¹ Does not include drivers paid on a commission or mileage basis.

² Based on all rates reported for July 1, 1948; individual rates weighted by number of union members working at each rate.

³ Based on comparable rates reported for July 1, 1947, and July 1, 1948; 1948 membership used as the weighting factor for both years.

⁴ Includes Rock Island and Moline, Ill., and Davenport, Iowa.

Wage-Rate Increases after July 1, 1948⁵

Available information, though limited, indicates that numerous increases have become effective since July 1, 1948. For example, between this date and December 31, 1948, wage increases

⁵ As partial information only is available on wage changes since July 1, 1948, no attempt has been made to estimate their effect on rate levels in this report.

ranging from 10 to 22½ cents an hour were negotiated for approximately 18,000 truck drivers and helpers in New York City. Contract renewals in Newark and Milwaukee advanced the basic hourly rates of 4,500 motortruck workers by 15 cents. Wage scales of 3,000 drivers and helpers employed by Baltimore trucking companies were raised 14 cents an hour. Increases

of 13 cents became effective since July 1, 1948, for members of some local unions in Buffalo, Philadelphia, and Washington, D. C. Wage increases from 7 to 22½ cents were reported for several other cities.

First Federal Mediation and Conciliation Service Report¹

IN AUGUST 1947, the Federal Mediation and Conciliation Service superseded the former Conciliation Service of the United States Department of Labor. As explained in its first annual report, the purpose for which the assistance of this agency is to be employed, under the Labor Management Relations Act of 1947, is "to prevent or minimize interruption of the free flow of [interstate] commerce growing out of labor disputes." Most of the effort of the Service is expended in mediation of disputes which do not develop into strikes or lock-outs and in improving the relationships of those who represent labor and management.

Although the provisions of the LMRA concerning national emergencies impose no special statutory duties upon the Service, it renders assistance in such situations by furnishing information when called upon. Such assistance has been provided to the President, to boards of inquiry, and to the Attorney General.²

In connection with assistance in national emergencies, the Service made some observations concerning use of injunctive orders. Experience during the year indicated that in some instances the order did much toward achievement of a peaceful settlement; in others, a similar statement could not be made. The final report of the board of inquiry in the maritime dispute involving the Pacific Coast longshoremen's union asserted that employers and unions regarded the injunction period as a "warming up" rather than a "cooling

off" period. The Service concluded from the year's experience that provision for an 80-day period of continued operations under injunctive order of a court tends to delay rather than facilitate settlement of a dispute, since the parties are likely to relax their efforts to reach a settlement and to "wait for the next deadline date * * * to spur them to renewed efforts." The public also, during the period, "appears to be lulled into a sense of false security." Such a condition prevents the awareness of a threat to the common welfare which "would produce a climate of public opinion favorable to settlement." Judgment was reserved as to the desirability of a shorter injunctive period or one of indefinite duration.

Operations of the Service

In the fiscal year ended June 30, 1948, the Service received 17,401 dispute notices, involving 53,385 establishments, and made 71 percent of its assignments on the basis of these notices.³ "This procedure," the report states, "provides a method, without the Service having to rely upon an invitation of one or both parties to the dispute or casual newspaper accounts, for bringing to the attention of the Service labor disputes which it might bear a responsibility to mediate." It also provides "knowledge of a disagreement sufficiently in advance of the expiration of the contract to permit the Service to carry on its mediation and conciliation functions most effectively. * * * the notice provisions have permitted the Service to assume its proper obligations in an orderly fashion."

Of 12,208 cases closed by the Service from September 1947 to June 1948, it declined to take jurisdiction in 2,904. In 63 percent of the latter, either interstate commerce was not affected or the degree to which it was affected was not substantial; in 20 percent, the degree was minor and a State or other mediation agency was available in the region. Other instances in which jurisdiction was not assumed included situations in which grievances were involved that should be settled by means provided in the contract, and cases in

¹ First Annual Report of the Director of the Federal Mediation and Conciliation Service for the Fiscal Year Ended June 30, 1948. Washington, 1949.

For the Director's statement on policies and procedures, see *Monthly Labor Review*, November 1947 (p. 564).

² A brief summarization of the national emergency disputes which occurred during the year—i. e., the meat packing, atomic energy, bituminous coal, telephone, maritime, and longshoremen's disputes—is given on pp. 41-54 of the report.

³ Under section 8 (d) of the LMRA, a party to a collective agreement in an industry affecting commerce, which desires to terminate or modify an existing contract, shall give advance notice of 60 days to the other party. Further, within 30 days after written notice has been served upon the other party to the contract, notice shall be given to the Federal Mediation and Conciliation Service and also to any State or Territorial Conciliation agency within the region.

which a union was not recognized as the bargaining agent.

The part which a commissioner of the Service takes in settlement of a dispute may be active; it may consist only of consultation; or it may be merely of a stand-by nature. Dispute cases that were closed during the period from September 1947 through June 1948, in which the Service had assumed jurisdiction, are classified below according to degree of participation by that agency in settlement.

	Number of cases closed	Percent
Total.....	8, 173	100. 0
Active part taken.....	4, 879	59. 7
Consultation only.....	673	8. 2
Stand-by.....	2, 621	32. 1

Wage-issue cases, which made up almost 85 percent of all disputes handled by the Federal Mediation and Conciliation Service in the year reviewed, concerned 87 percent of the workers involved in all cases handled. The union-security issue appeared in only 19 percent. The recognition, grievance, and jurisdiction category had 10 percent of all cases handled, but nearly three-fourths of these were dealt with during the first part of the fiscal year; after Service policy on these matters was announced, only a third as many of these cases were taken up.

Work stoppages were involved in only 18 percent of the active cases closed by the Service in the fiscal year 1948. It was stated that of all the threatened work-stoppage situations in which the Service interceded, only 29.8 percent developed into actual work stoppages.

Last Offer Ballots. The Service, under section 203 (c) of the LMRA, "shall seek to induce the parties," before they resort to coercion, to seek other means of settlement "including submission to the employees in the bargaining unit of the employer's last offer of settlement for approval or rejection in a secret ballot."

The report states that "perhaps no provision of the law has been more misunderstood by both unions and employers, and, in the early days of administration of the act, even by commissioners of the Service." As a result, "bona fide ballots on the employer's last offer" were in many instances reported when the ballots actually were taken on ratifications of agreements reached by

unions and employers. Regulations and procedures were issued during the year, which it was hoped would provide accurate statistics as to actual operation of this section of the law. Reasons are set forth, however, to indicate that "indiscriminately proposing a secret ballot in every dispute situation serves no useful purpose, but may on the contrary destroy the usefulness of the secret ballot in those few situations in which it may be successfully utilized to avert a work stoppage."

Federal-State Cooperation

Progress was made in bringing about better relations between Federal and State mediation and conciliation agencies, despite many problems involved. A detailed written agreement was reached with the State of New York, and either written or oral agreements with other States were consummated. The success of such an agreement for cooperation "depends largely on mutual confidence and the real desire to make it work."

Labor-Management Disputes in February 1949

EXCEPT FOR THE transportation tie-up in Philadelphia, no work stoppage involving as many as 10,000 workers occurred in February 1949. A moderate number of smaller disputes developed, but in the aggregate work stoppages continued at a rather low level for the country as a whole. The transit strike of 11,000 workers in Philadelphia was further complicated by a strike of about 3,800 taxicab drivers during part of the same period. San Francisco also had a taxi strike which continued throughout the month.

A threatened strike of Hudson & Manhattan Railroad employees—power plant workers, guards, and clerks, members of Utility Workers' Union (CIO)—was averted on February 3, only to be followed a week later by a 4-day strike of station agents and maintenance men, members of the Transport Workers Union (CIO). Early in February representatives of the Nation's railroads and negotiators for the 16 nonoperating railroad unions requested the further services of the 3-man

Presidential Emergency Board to mediate their wage increase and 40-hour week case. No settlement had been reached, however, by the month's end.

At the U. S. Rubber Co. plant in Detroit a strike of several hundred United Rubber, Cork, Linoleum and Plastic Workers of America (CIO) reportedly kept about 6,000 other employees idle for 2 or 3 days in a dispute over distribution of work hours each week. Nearly 2,000 newspaper employees in Portland, Oreg., were idle for about 3 weeks in February and early March in a dispute over new contract terms for members of the Printing Pressmen and Assistants' Union (AFL).

Part of the prolonged strike of Midwest typographical workers came to an end January 30, when a settlement was effected with the Hammond, Indiana, Times. The new agreement provided for a wage increase of \$12.50 per week. The strike which has been in effect since November 1947 continued against Chicago newspapers.

Employees of the American Woolen Co., with mills in New England, New York, and Kentucky, and cotton textile workers in Fall River and New Bedford, Mass., were denied wage increases by arbitration awards early in February. In each case the Textile Workers Union (CIO) had demanded an increase of 10 cents an hour.

Philadelphia Transportation Stoppages

Public transportation in the city of Philadelphia was practically at a standstill during stoppages of transit company employees and taxicab drivers in mid-February. About 11,000 operating and maintenance employees of the Philadelphia Transportation Co. were idle February 11 to 19, primarily in a dispute over wages. The taxicab strike lasted from February 15 to 17 and affected approximately 3,800 workers.

In the transit dispute union negotiators, headed by Michael J. Quill, international president of the Transport Workers' Union (CIO) demanded an increase of 20 cents an hour while the company

countered with an offer of 3 cents just before the strike. Other union demands included "swing pay," sick leave, and improvements in working conditions.

Negotiations for a new contract had been carried on since early in January with the aid of the State Mediation Service. The Federal Mediation and Conciliation Service intervened on the first day of the walk-out. A week before the expiration of the old contract, union members approved a "no contract, no work" resolution which gave the local union authority to call a strike effective at 12:01 a. m., February 11.

Railroads serving suburban areas arranged emergency schedules while many offices and industrial plants organized fleets of trucks, buses, and private cars to transport their employees. Taxicabs were available as usual the first few days of the strike until the unauthorized walk-out of cab drivers occurred on February 15. The drivers and mechanics of the Yellow Cab Co., members of the AFL Taxicab Drivers' Union affiliated with the International Brotherhood of Teamsters, were idle until February 18. They returned to work that day, upon orders of their union president, pending further negotiations with the company on the disputed wage issues.

On the night of February 19, the transport union and company officials agreed on a 1-year contract providing for a wage increase of 8 cents an hour. In addition, the contract provided for fringe benefits which included a sick-leave plan, an allowance for uniforms, and establishment of a guaranteed workweek with no lay-offs. Most rank-and-file members of the union accepted the settlement terms the next day at the second of two mass meetings. A group of union members, however, opposed the settlement and adopted a resolution denouncing the leadership because of the union negotiators' failure to eliminate the "split shift."

Operations of the transit system were resumed late on February 20 and by the next day normal service was being provided.

Technical Note

Measuring Intercity Differences in Living Costs¹

THE NEED for providing an adequate tool for measuring, on a continuing basis, place-to-place variations in living costs of moderate-income families was brought out sharply when the Bureau of Labor Statistics developed the City Worker's Family Budget.² With the extensive wartime shifting of workers to centers of war production, the importance of the problem, particularly for purposes of wage determination, resulted in the Congressional directive to the Bureau to determine the relative differences in living costs among cities and the amount of money needed by the average worker in overalls to live in these cities.

The City Worker's Family Budget consists of a comprehensive list of items in specified quantities³ which describes a "modest but adequate" level of living for a family of four persons. In the calculation of the budget costs, quantity weights were varied from city to city only with respect to differences in the climatic requirements for clothing and housing. A comparison of the budget costs for individual cities, therefore, gives a satisfactory measure of intercity differences in the cost of equivalent goods, rents, and services.

Repricing and recalculating the budget in detail at regular intervals is prohibitively costly and the detailed recomputation is too time consuming for practical purposes.

To meet these twin problems of cost and time, the intercity index formula described in this article has been developed.⁴

¹ Prepared by Bernard Mandel of the Bureau's Prices and Cost of Living Division.

² See *Monthly Labor Review*, February 1948. (Reprinted in BLS Bulletin No. 927.)

³ The items and quantities for each category of goods and services were determined at the point of maximum income elasticity on the consumption scale, or with reference to scientific standards. See BLS Bulletin No. 927, *Workers' Budgets in the United States*.

⁴ A manual describing the details for computing intercity indexes by this formula will be available upon request.

Development of Intercity Index Formula

Prior to the publication of the City Worker's Family Budget, the Bureau calculated and published an intercity index of differences in the cost of equivalent goods, rents, and services in 33 large cities, based on March 1945 prices of 180 goods and services.⁵ The items and quantity weights used in this index were based on family expenditures in 1941 obtained by the Bureau in its survey of Family Spending and Saving in Wartime.

The development of a shorter list of items and appropriate weights on which reliable intercity indexes could be based went forward concurrently with the development of the City Worker's Family Budget. This work resulted in the selection of the list of goods and services included in the intercity index formula.

Selection of Items. In selecting items for the short list, price relationships among the large cities were analyzed to determine the price of what single item or few items in a category would best reflect the difference in the level of prices for this category as between two cities. Further, the analysis endeavored to show whether the relative difference in the price of the item selected would approximate the relative difference in the average price for the total group.

The most direct approach to a solution of this problem seemed to be offered through correlation analysis of prices among the cities. The use of this procedure rests on the assumption that, among categories of commodities which are homogeneous with respect to use and physical characteristics, the same price-determining factors are in

⁵ *Relative Differences in the Cost of Equivalent Goods, Rents, and Services in 33 Large Cities, March 1945*, Bureau of Labor Statistics, mimeographed release, June 1, 1946. This was the first intercity index published by the Bureau subsequent to the discontinuance in June 1943 of the series released between 1939 and 1943 and entitled "Estimated Intercity Differences in Cost of Living." This older series was based on the estimated cost of the "maintenance budget" as defined and priced by the Works Progress Administration in 1935.

operation. Thus, the economic forces which tend to cause the price of milk to be higher in City A than in City B may be expected to operate in a like manner to establish prices for all dairy products at a higher level in City A. Hence, the first step taken in the selection of items for the formula was to ascertain the degree of association in city prices of pairs of items within a category (e. g., price of white bread with price of wheat cereal, pork chops with sliced bacon, inexpensive men's overalls with men's workshirts, etc.); this procedure used price data from 10 to 34 cities and was repeated, using prices for varying dates, in order to determine whether there was stability in the price relationships over time. In order to decrease the volume of clerical work involved, scatter diagrams instead of correlation coefficients were used for most of the groups to determine the degree of association between items. The items within groups were then classified in accordance with the degree of correlation in their prices. From among those items which correlated at least to a fair degree with each other, that item was selected which was most important in terms of total expenditure for the group. Other items were selected if they were important in the total expenditure for the group or if the variance in their prices between cities was significant.

The relatively simple case offered by the correlation analysis of items entering into the cost of transportation for automobile owners will illustrate this procedure. Prices of gasoline and motor oil were found to be fairly well correlated with each other but not with other items in the group; all automobile repair items correlated fairly well with each other but not with gasoline, motor oil, etc. Gasoline and brake relining were therefore two items selected for the transportation group since, among the items with which they showed fair correlation, they were most important in terms of expenditures. Very little correlation was found between insurance fees, automobile registration fees, and operator's permit renewal fees, but each of these items either represents an important part of transportation expenditure or reflects significant intercity price differences; each of these items was therefore included in the index.

To test the selection of items for each category, prices of the selected items for each city were weighted by fixed quantities derived from the expenditure studies, and, for the same cities, the

sums of these weighted prices were correlated with the sums of weighted prices for the full list of items in the group. If a high degree of correlation between these sums was not apparent, the price correlations were reexamined and other combinations of items were tried. This procedure resulted in the selection of 57 representative items; the prices of these items, when properly weighted together, would satisfactorily measure the differences in average price level between cities.

Relationship between Budget and Formula. The next step was to obtain quantity weights with which to combine price relatives of the selected items. For this purpose, the budget quantities of the City Worker's Family Budget were adopted. These quantities describe a defined level of living for city workers' families and were the basis for the Bureau's most recent comparison of intercity differences in price levels.

In relating the formula weights to the City Worker's Family Budget quantities, a pattern of imputation was followed which allocated the budget cost of all the budget items in a group to those few items within the group selected for the formula. It was found that the relationship between the budget cost for the short list of selected items within a group of goods and services and the budget cost for the full list of budget items in the same category could be expressed as a simple linear function of the form $Y=a+bX$, in which Y represents the budget cost of the full list of items, X the budget cost of the selected items, and the constants a and b are the regression coefficients determined by the linear relationship. These constants were computed on the basis of the variations in the two sets of costs at March 1946 prices in the 34 cities for which the budget was calculated.

While stress must be laid on the fact that *the present formula does not furnish dollar estimates of the City Worker's Family Budget costs*, the relationship between the budget cost aggregates as estimated by the formula and the actual budget cost aggregates can be used as a measure of the reliability of the formula procedure for estimating intercity differences. The variations, or scatters, of actual March 1946 costs for 34 individual cities around these straight lines of average relationships, as measured by standard errors of estimate and the coefficients of correlation between the actual and estimated budget aggregates, are listed in table 1

for groups of items for which regression equations were calculated. No regression equation was computed for the group comprising rent, heating fuels, utilities, and refrigeration, since the full budget quantities are used in the formula for these items.

TABLE 1. Relationship between estimated and actual budget aggregates for 34 cities

Item	Standard error of estimate	Coefficient of correlation
	Percent	"r"
Food:		
Cereals and bakery products.....	2	0.80
Meats, fats, and oils.....	1	.89
Dairy products, eggs, and oleomargarine.....	1	.99
Fresh fruits and vegetables.....	3	.72
Canned and dried fruits and vegetables.....	2	.54
Beverages, sugar, sweets, miscellaneous.....	2	.51
Clothing:		
Heavy.....	3	.84
Light.....	4	.62
Other.....	2	.87
Transportation:		
Automobile owners:		
Cities of population 50,000 to under 1,900,000.....	1	.98
Cities of population over 1,900,000.....	0.2	1.00
Nonautomobile owners:		
Cities of population 50,000 to under 1,900,000.....	12	.78
Cities of population over 1,900,000.....	5	.97
Medical and personal care commodities.....	4	.96
Household operation and personal services.....	5	.91
Reading, recreation, and tobacco.....	1	.99
Housefurnishings.....	2	.77

In general, the range of error is small; for the most important components, the standard error of estimate is 1 to 3 percent. However, these errors of estimate point up limitations of the formula in its present development which preclude its use as a reliable measure of intercity price differences for the individual groups. In the formula procedure for estimating relative intercity price differences in the over-all cost of equivalent goods and services, these errors of estimate tend to balance out in the summations.

As a summary measure, the simple coefficients of correlation show a good degree of association (an "r" of from 0.62 to 1.00) between the budget aggregate estimated by the formula and the actual budget aggregate. But it must be noted that these summary measures cover a range of association between the two aggregates: for one city the formula estimate for a particular classification is as much as 18 percent below the actual budget aggregate, and for another city and another classification as much as 10 percent above. In general, however, these "r's" describe the relatively good association of the aggregates in terms of March 1946 prices.

Formula Weights. The average straight-line relationship between the budget cost of items selected for the formula in a particular category of goods and services and the budget aggregate cost of all items in the same category resulted in the regression coefficients shown in table 2. This relationship, as has been indicated before, is of the form $Y=a+bX$, in which X is the cost of the selected items and Y is the cost of the full list of items. The coefficient a is the Y -intercept and depends on the magnitude of the cost aggregates; the coefficient b is the slope of the regression line. Aggregates are in cents per week for the food subgroups and in dollars per year for all other components.

TABLE 2.—Regression coefficients, intercity index formula

Item	Regression coefficients	
	a	b
Food:		
Cereals and bakery products.....	30.987	1.448
Meats, fats, and oils.....	23.625	1.234
Dairy products, eggs, and oleomargarine.....	34.861	1.069
Fresh fruits and vegetables.....	49.858	1.135
Canned and dried fruits and vegetables.....	75.225	3.182
Beverages, sugar, sweets, miscellaneous.....	77.969	1.270
Clothing:		
Heavy.....	45.491	1.345
Light.....	48.973	1.184
Other.....	71.250	4.077
Transportation:		
Cities of population between 50,000 and under 1,900,000:		
Automobile owners.....	41.909	1.001
Nonautomobile owners.....	11.016	.986
Cities of population of 1,900,000 or more:		
Automobile owners.....	58.437	.895
Nonautomobile owners.....	-5.681	1.294
Medical care and personal care commodities.....	55.196	2.214
Household operation and personal services.....	26.081	2.384
Recreation, reading, and tobacco.....	1.364	1.397
Housefurnishings.....	50.831	2.050

In effect, each regression equation combines the quantity weights for a category of goods and services in the City Worker's Family Budget which are allocated to the item selected for the formula to represent that category. In order to reduce the number of operations required for calculating the intercity index by formula to a point where prices can be applied to a single weight factor, it was necessary to examine in detail the equation $Y=a+bX$.

This equation can be written in the form $Y=a+bqp$ in which q is the budget quantity and p the price of the selected item. Combining the factors of the term bqp to isolate the price factor results in the equation $Y=a+(bq)p$ in which (bq) , the product of the budget quantity and the slope coefficient of the regression equation, is the formula

weight factor for the selected item, and a is an adjusting constant to be added to the aggregate of the weighted prices.

For some classifications of foods (e. g., low-cost meats, medium-cost meats, and high-cost meats) the price to be used in the formula is an estimated average price for the classification, obtained from a regression equation expressing the relationship between the price of the item selected to represent the classification (e. g., beef liver) and the average price of all items in the classification (e. g., low-cost meats).

This relationship can be expressed in the form $p' = c + kp$ in which p' is the estimated average price for the classification and p the price of the item selected for the formula. The constants c and k are the usual regression coefficients obtained by simple linear correlation.⁶

Thus, for foods, substituting the expression for the estimated price p' in the basic regression equation, $Y = a + (bq)p$, results in $Y = a + bqp' = a + bq(c + kp)$. Combining the factors of the term $bq(c + kp)$ to isolate the price factor results in the equation $Y = a + bqc + (bqk)p$ in which (bqk) , the product of the budget quantity and the slope coefficients of the regression equations, is the formula weight factor of the selected food items, and $a + bqc$ is a

TABLE 3.—Regression equation constants, food classifications

Composite classification	Selected item	Regression equation constants	
		c	k
All other bakery products.....	Soda crackers.....	6.94	0.69
Low-cost meats.....	Beef liver.....	7.75	.50
Medium-cost meats.....	Beef steak, top round.....	7.73	.61
High-cost meats.....	Lamb chops.....	3.38	.86
Fluid milk products.....	Fresh milk.....	-.21	.49
Citrus fruit, fresh.....	Oranges.....	2.08	.16
Green vegetables, fresh, low-cost.....	Cabbage.....	3.29	.84
Other fruits, fresh.....	Apples.....	1.21	.93
Tomatoes and tomato products, canned.....	Tomatoes, canned.....	2.37	.67
Citrus fruit, canned.....	Grapefruit juice, canned.....	5.02	.43

⁶ The use of a regression equation to obtain a single average price for a composite classification of related items is a technique extensively employed as part of the calculation of weighted totals in the budget's food groups. In the detailed budget calculations, multiple correlation analysis was applied in many instances whereby the prices of two or more related items were used to obtain the average price for the composite classification. In applying the regression equation technique to the formula procedure to obtain prices, simple correlation analysis of the price of only one item against the average price of the related food group was used. However, the basic data used in the formula procedure to obtain the regression coefficients of the pricing equation were the same as those used in the budget.

constant to be added to the aggregate of the weighted price.⁷

In table 3 are listed the regression equation constants for estimating the average price for composite food classifications.

Climatic Adjustment. One of the important factors influencing intercity differences in the cost of living is climate. The incidence of this factor is most obvious in the purchase of clothing and of fuel for house heating. The formula procedure, like the budget calculation, attempts to adjust the cost of these two components for climatic differences between cities. Data for these adjustments were obtained from the Bureau's expenditure studies of 1934-36 and 1941.

The average cost of clothing grouped as "heavy" and "light" items varies from the warmer to the colder regions of the United States. These cost variations were expressed as ratios of the United States average cost of heavy and light clothing. Two straight-line regression equations were fitted to the ratios of cost variation in terms of the correlation between the cost ratios of "heavy" and "light" clothing items and the normal number of annual degree days⁸; the number of annual degree days in the United States was used as a base from which variation in clothing costs due to climatic conditions was measured. In effect, these adjustments raise the cost aggregate of light clothing in warmer cities and decrease it in colder cities; the adjustment of the cost aggregate for heavy clothing is in the opposite direction, lowering it in the warmer cities and raising it in the colder cities. However, since the climatic adjustment factors are developed and applied separately for each clothing group they are not necessarily compensating.

A factor for determining the quantities of fuel for residential heating was developed by correlat-

⁷ The form $Y = a + bqp'$ assumes that only one composite classification of foods is dealt with. Actually, two or three composite classifications make up a particular food group; for example, low-cost meats, medium-cost meats, and high-cost meats are the three composite classifications which make up the food group "meats, fats, and oils." For the group "meats, fats, and oils," one regression equation of the basic form $Y = a + bX$ was computed. Each composite classification making up this food group has its own quantity weight and estimated average price. Hence, the full notation for this situation would be as follows: $Y = a + b(q_1p'_1 + q_2p'_2 + q_3p'_3)$ where the subscripts indicate the separate composite classifications making up a particular food group.

⁸ Annual degree days are the annual sum of the deviation below 65° in the daily mean temperature as published by the United States Weather Bureau. The normal number of annual degree days is the average of the number of annual degree days over a period of years.

ing the average quantities of fuel (measured in British thermal units) required to heat 5-room dwellings in various cities with the logarithms of corresponding degree days for each city.⁹

Time to Time Adjustment of Equations

The various regression equations described above are the basis for estimating March 1946 cost aggregates for groups of goods and services in individual cities, using a short list of items.

The formula weights and adjusting constants developed from the regression equations based on March 1946 prices can be used directly to obtain intercity indexes for this date. The result of this calculation for 10 cities and the corresponding indexes from the budget are shown in table 4.

TABLE 4.—Intercity indexes, calculated by formula, compared with cost of goods and services, city worker's family budget indexes, March 1946 prices

[Washington, D. C. =100]

City	Indexes: Total cost of goods and services	
	Formula procedure	City workers' family budget
Atlanta.....	92	91
Indianapolis.....	90	90
Kansas City.....	90	88
Minneapolis.....	94	94
New Orleans.....	88	88
Philadelphia.....	90	90
Portland, Oreg.....	92	93
San Francisco.....	94	95
Seattle.....	98	98
Washington, D. C.....	100	100

The closeness between the March 1946 intercity indexes obtained from the formula procedure and from the budget was an initial indication of the validity of the regression equation technique for developing a formula for measuring relative price differences between cities. The next step was to test the stability over time of the relationships between the formula and the budget as

⁹ The equations for clothing are $Y=0.576+.000086X$ for the "heavy" classification and $Y=1.212-0.000043X$ for the "light" classification. By substituting a range of annual degree days from lowest to highest for the X of the equations, it is possible to obtain a corresponding range of adjustment ratios (the Y of the equation) representing deviations from the United States average taken as 1.000. The equation for fuel is $Y=-384.323+128.156X$ in which X is the logarithm of degree days and Y is the British thermal units requirement (in millions of British thermal units). By substituting in the equation the logarithm of the normal number of annual degree days ranging from the lowest to the highest, it is possible to compute the corresponding range of British thermal units required. Tables of climatic adjustment factors for clothing and quantities of fuel required for a range of annual degree days have been developed from these equations.

expressed by the various regression coefficients obtained for groups of goods and services. The second date for which the budget is available, June 1947, offered an appropriate bench mark for this check.

The nature of this test is best described graphically. The accompanying diagrams illustrate the problem of adjusting the formula procedure for change over time as well as the approximate solution described below.

Scatter diagrams were plotted to show both the March 1946 and the June 1947 cost relationships in 10 cities between the selected items in the formula for a group of goods and services and the full list of items in the related group. For each group the straight line of average relationship described by the regression equations (the coefficients of which were based on March 1946 prices) was drawn through the March 1946 scatter. It was found that this line, when extended, generally fell significantly below the area of the June 1947 scatter. The slope of the line, however, closely approximated the slope of a line fitted to the June 1947 data.

On the basis of this test and other tests of the stability of price relationships among cities over time,¹⁰ it was concluded that the level of the linear regression equation was an acceptable estimate only when costs (or prices) were about the same magnitude as those on which the regression was calculated. An adjustment for changes in average prices over time was indicated. It was found that a simple but satisfactory adjustment could be effected by applying to the a term of each equation the relative change in average prices for the group or subgroup of items to which the equation relates. Relative changes from March 1946 to June 1947 in the Bureau's consumers' price index for appropriate groups or subgroups were used for this time adjustment.¹¹

¹⁰ The Bureau is conducting analyses of the stability of measures of price relationships derived from expenditure studies with particular reference to food classifications. Such research may indicate the need as described above for some similar adjustment of the regression equations for estimating average prices of composite food classifications. As subsequent research provides a basis for improving the regression constants and adjustments used in the formula, all such measures will be revised.

¹¹ In order to simplify the calculations in the food group, the adjustment factor represented by the change in the consumers' price index for "all foods" was applied to the sum of the "a" constants for the food subgroups (cereals and bakery products; meats, fats, and oils; fresh fruits and vegetables; etc.). Since the consumers' price index for all foods is a weighted average of the subgroups, the adjustment in terms of all foods does not differ significantly from an adjustment applied separately to the subgroups.

The diagrams illustrate how the regression line is moved into the June 1947 area of scatter as a result of this adjustment of the a regression coefficient by the change in the consumers' price index.

Test of Intercity Index Formula

To test the use of the formula for measuring intercity differences in living costs, indexes for 20 cities using June 1947 prices were computed by the formula procedure. These are shown in table 5, with the corresponding intercity indexes from the City Worker's Family Budget. The Bureau plans to reprice and calculate the cost of

TABLE 5.—Intercity indexes, total cost of goods and services, intercity index formula and city worker's family budget, June 1947 prices

[Washington, D. C.=100]

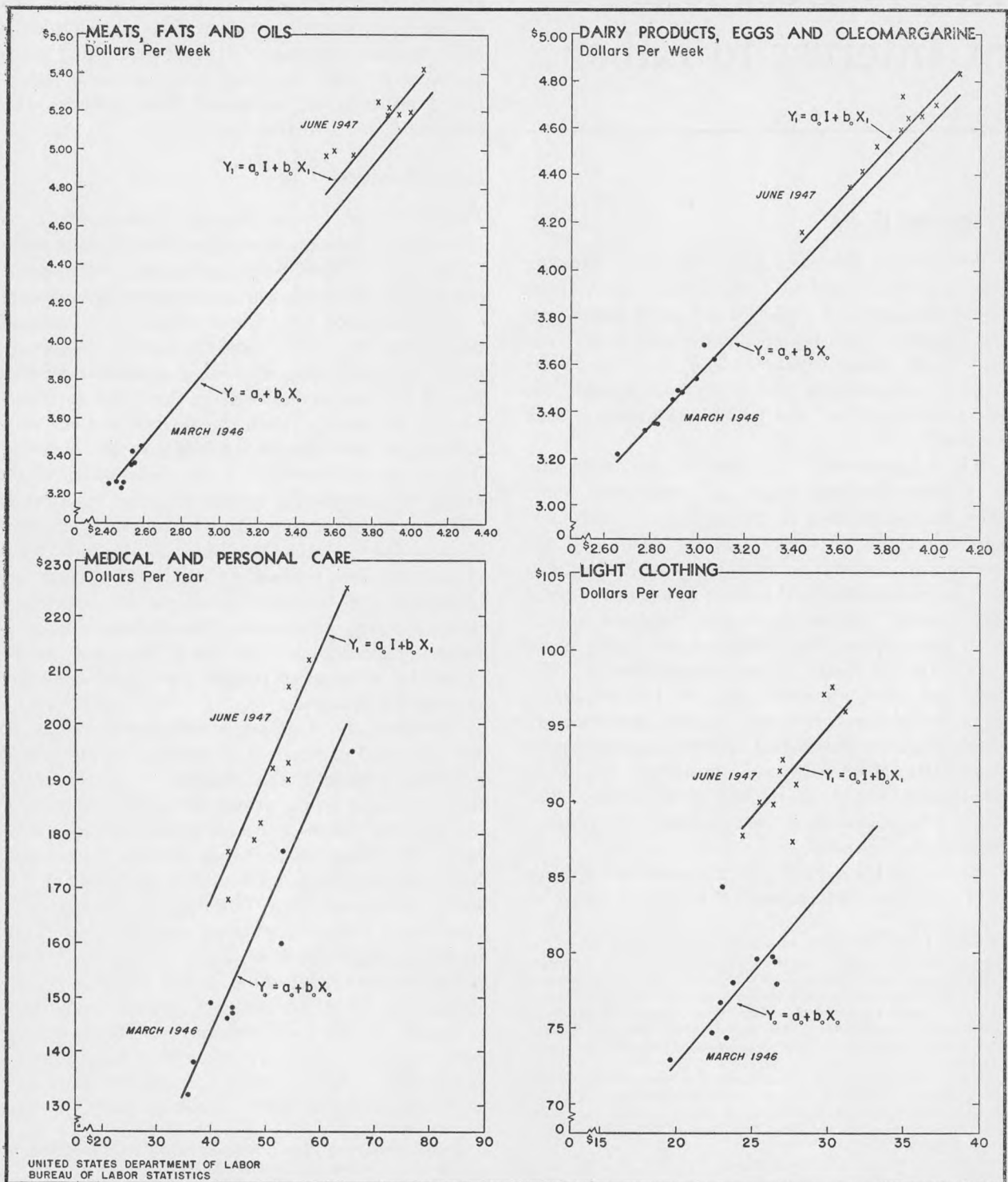
City	Indexes: Total cost of goods and services	
	Intercity index formula	City Workers Family Budget
Atlanta.....	93	92
Baltimore.....	94	95
Birmingham.....	93	93
Boston.....	95	96
Chicago.....	96	95
Denver.....	93	92
Houston.....	88	88
Indianapolis.....	89	90
Jacksonville.....	92	91
Kansas City.....	89	88
Memphis.....	94	94
New Orleans.....	88	88
New York.....	96	97
Philadelphia.....	92	92
Pittsburgh.....	95	96
Portland, Oreg.....	91	92
San Francisco.....	93	95
Seranton.....	92	92
Seattle.....	98	98
Washington, D. C.....	100	100

the city worker's family budget for selected cities when funds are available. At that time the formula will be further tested against the budget costs at a third point in time.

City Worker's Family Budget and Formula

The statistical relationship between the budget, with its more than 435 commodities, and the formula, with its 57 commodities, is established by means of simple linear correlation. While the concepts of the formula are essentially the same as those of the budget, the scope of its applicability is strictly limited. In its present development, the formula measures only *relative* intercity differences in the average *over-all* cost of equivalent goods, rents, and services. In the estimating process dollar totals are calculated for groups and subgroups of items and for all items combined, but these values are only used to obtain the indexes; they are not valid estimates of the current dollar value of the city worker's family budget. Nor are the dollar totals for the component groups of goods and services valid figures on which to base intercity index comparisons of price levels for particular groups of items. The formula procedures are based on a calculation of separate totals for the various component groups, because correlation studies have shown that intercity differences in prices of many items within these groups are related; hence, the over-all intercity percentage differences can be estimated more accurately by computing separate group totals. Positive and negative errors of estimate in the group and subgroup totals tend to cancel in the summation process.

Scatter Diagrams and Regression Lines,¹ Inter-city Index Formula, 10 Cities



¹ Regression equations are of the form $Y = a_0 + b_0 X$ where X is the cost (price times quantity) of the selected items of the formula and Y is the estimated cost of a full list of items. The coefficients "a₀" and "b₀" are based on March 1946 prices. Adjustment of the "a₀" coefficient for change over time by the CPI is indicated by "a₀I."

Recent Decisions of Interest to Labor¹

Wages and Hours²

Production of Records. In a decision³ affecting enforcement of the Fair Labor Standards Act, the Court of Appeals for the Fifth Circuit considered the extent of the investigative powers of the Wage and Hour Administrator. The Supreme Court of the United States previously had upheld⁴ the constitutionality of the provisions granting such powers.

The Administrator had asked for the production of records showing wages of employees, hours they worked, names of the employer's customers and the types of work done for each, and the source and destination of goods brought from or sent to places outside the State in which the plant was located. When the employer did not comply with the subpoena, the Administrator made application to the district court to enforce it. The employer then admitted that all his employees were engaged in commerce and the production of goods therefor, but denied that the records sought were material or relevant, and alleged that their production would be unduly burdensome. The district court dismissed the application for enforcement of the subpoena.

Reversing the district court, the court of appeals held that the Administrator was authorized to

¹ Prepared in the Office of the Solicitor, U. S. Department of Labor. 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.

² This section is intended merely as a digest of some recent decisions involving the Fair Labor Standards Act and the Portal-to-Portal Act. It is not to be construed and may not be relied upon as interpretation of these acts by the Administrator of the Wage and Hour Division or any agency of the Department of Labor.

³ *McComb v. Hunsaker Trucking Contractor* (U. S. C. C. A. (5th), December 14, 1948).

⁴ *Oklahoma Press Pub. Co. v. Walling* (327 U. S. 186).

make the investigation concerning wages and hours of the employees, but that the production of records concerning interstate purchase, sale, and transportation of goods was probably not necessary in the instant case since the employer had admitted coverage. If after examining wage and hour records, the Administrator needed additional information, he could then petition, the court said, for a further order.

Labor Relations

Prohibition of Union Security Agreements Constitutional. In some recent decisions, the Supreme Court of the United States held that a State could constitutionally outlaw union-security agreements.

In one opinion⁵ the Court affirmed decisions of the North Carolina⁶ and Nebraska⁷ supreme courts, respectively, upholding a statute of the former and an amendment to the State constitution of the latter. Both the statute and the constitutional amendment prohibited the entering into or the enforcement of contracts which made either membership or nonmembership in a labor union a condition of securing or retaining employment. The North Carolina statute had been challenged in criminal proceedings against an employer and labor-union agents for making a union-security agreement; the Nebraska constitutional amendment had been attacked in an action by a union to compel an employer to fire nonunion employees.

The grounds of attack were that the statutes were a denial of freedom of speech, assembly, and petition, impaired the obligation of contracts, denied unions equal protection of the laws, and denied both unions and employers due process of law. The Court, in rejecting all these arguments, held that there was no denial of the right of free speech and assembly. The right of employees to assemble to discuss working conditions did not include a right to drive from employment non-union workers not joining in the assembly. The unions, the Court pointed out, were claiming that nonunion workers did not have a constitutional right to work. The argument that the laws impaired the obligation of contracts was dismissed with the comment that its lack of merit "is now

⁵ *Lincoln Federal Labor Union v. Northwestern Iron & Metal Co.; Whitaker v. State of North Carolina* (U. S. Supreme Ct., January 3, 1949).

⁶ See *Monthly Labor Review*, March 1948 (p. 311).

⁷ See *Monthly Labor Review*, May 1948 (p. 540).

too clearly established to require discussion." The Court held that these statutes did not deny to unions equal protection of the laws. While it might be true that the statutes weakened the bargaining power of unions against employers, they also prohibited "yellow-dog" contracts—those which would make nonmembership in a union or membership in a company union a condition of employment. The Court ruled that the State laws were not a denial of due process of law. The argument that they interfered with liberty of employers and unions to make contracts was held to be based on a line of reasoning no longer accepted by the Court. Cases adopting such reasoning had, in a past period, upheld "yellow-dog" contracts and struck down laws fixing maximum hours and minimum wages. The Court stated that it is the present rule that States have power to limit the right of contract in the interest of the public welfare.

In a second opinion⁸ the Court upheld an Arizona State constitutional amendment forbidding employers to discriminate in employment on account of nonmembership in a union. An Arizona statute previously enacted had provided that "yellow-dog" contracts were not enforceable, but did not contain provisions for enforcement through damage suits or injunctions as did the anti-union-security statute. The Court held that even if the same sanctions did not exist for enforcement of the "anti-yellow-dog" statute, such provisions in the anti-closed-shop statute were not a denial of equal protection of the laws. The relative need of different groups for protection was held to be a matter for legislative judgment. Justice Murphy dissented.

Justice Frankfurter, concurring in all three decisions, pointed out that the trend of constitutional doctrine had shifted (from its former emphasis on preconceived economic ideas) to judicial deference to legislative judgment in regulating, for the benefit of the community, powerful economic forces, which now included labor unions. Previous decisions protecting individuals from certain activities of labor unions were held not to have prevented the growth of organized labor.

Justice Rutledge concurred in the opinions of the Court, with the important reservation that

he did not pass upon the right of a State to prohibit union workers from refusing to work with nonunion workers.

States Versus Federal Jurisdiction. The United States Supreme Court held⁹ that a State employment relations board did not have power to certify a union as collective bargaining representative for employees of a company engaged in interstate commerce and subject to the jurisdiction of the NLRB, even though the NLRB had not previously ruled on the representation question.

The Telephone Guild filed and then withdrew a petition with the NLRB for certification as representative of plant and traffic employees of a telephone company. The guild then filed a representation petition with the Wisconsin Employment Relations Board, which held an election and certified the guild as bargaining representative. The company and the International Brotherhood of Electrical Workers (AFL) who had entered into a collective bargaining agreement in behalf of these employees, asked the Wisconsin courts to set the State board certification aside. The circuit court, relying on a Supreme Court decision,¹⁰ issued such an order, but the State supreme court reversed it.

The United States Supreme Court, in reversing the decision of the State supreme court, held that the NLRB had exclusive jurisdiction over the question of certification of bargaining representative. The Court pointed out that the NLRB was granted by Federal law, and had asserted jurisdiction over labor relations in the telephone industry. The fact that the NLRB had not asserted jurisdiction over representation proceedings in this instance was held immaterial.

Both State and Federal statutes covered the same relationships and provided different standards. Thus, the Wisconsin statute provided that employees of a single craft may elect to be a separate bargaining unit while the Federal act leaves some discretion as to the relation of the unit to the NLRB. Even if there was no collision of formal orders of the boards, the Court stated, there might be a conflict in administrative practice which would create equal uncertainty and be equally destructive of peaceful industrial re-

⁸ *American Federation of Labor v. American Sash & Door Co.* (U. S. Supreme Ct., Jan. 3, 1949). For Arizona supreme court decision, see *Monthly Labor Review*, April 1948 (p. 420).

⁹ *LaCrosse Telephone Corp. v. Wisconsin Employment Relations Board* (U. S. Supreme Ct., January 17, 1949).

¹⁰ *Bethlehem Steel Co. v. New York Labor Relations Board* (330 U. S. 767).

lations. Section 10 (a) of the amended National Labor Relations Act was held not to give jurisdiction to the State board, since no formal agreement for cession of jurisdiction had ever been made between it and the NLRB.

The guild's contention that the certification order of the State board was not a "final judgment" and therefore not subject to review was dismissed by the court, since the certification created new legal relationships in effect compelling the company to bargain with the union. The fact that the certification itself did not constitute a formal command did not prevent it from being final.

Interference—Soliciting Strikers To Return to Work. The NLRB ruled¹¹ that an employer's direct solicitation of individual strikers on the picket line to return to work, although unaccompanied by threats or promises, constituted interference. The Board pointed out that here the employees had duly designated a collective bargaining representative. The employer was obligated to deal with that representative, and not with employees individually in derogation of the representative, except in case of a strike in breach of contract. One member dissented on the ground that the employer had at no time refused to bargain with the union and that the solicitation of individual strikers would not be considered an attempt to bypass the union.

Discrimination. A circuit court of appeals, reversing a decision by the NLRB, held¹² that an employer did not discriminate against economic strikers by failing to rehire them when there were vacancies. The NLRB had ruled that the employer was guilty of discrimination, on the ground that the strikers had, through their agent, made an unconditional application for reinstatement. The Board held the application was a continuing one, in view of the strikers' appearance outside the plant every day for 3 weeks thereafter. The court held that the application was not a continuing one and was not so considered by either employer or strikers. The strikers' appearance outside the plant was for organizing purposes, and, it was pointed out, they were not there during the whole day. There were no vacancies

at the time of the mass application. The strikers had been replaced and were not entitled to reinstatement. The court said that the employer could not be expected to search for strikers every time a vacancy occurred.

Supervisors. Two recent decisions of the NLRB consider the definition of supervisory employees, whose union activities are not protected by the amended National Labor Relations Act.

The Board ruled¹³ that control operators of an electric public-utility company were not supervisors. They possessed no authority, except in rare instances, to "hire, transfer, suspend, lay-off, recall, promote, discharge, assign, reward, or discipline other employees." However, they did direct some work of other employees outside the control room. The Board noted that the definition of supervisors in section 2 (11) of the act included any individual with "responsibility to direct" other employees, and stated that in some circumstances this power alone made one a supervisor. Persons with responsibility to direct were held to be in a twilight zone between those above the grade of lead man, straw bosses, and other minor supervisory employees, and those not possessing any of the other specific authorities enumerated in the act. Whether persons in this narrow area were supervisors depended upon the number of employees to be supervised, the opportunity for exercise of independent judgment, and other factors which might arise. The Board noted that in this case the control operators (who were themselves closely supervised by shift operating engineers) exercised almost no powers over the status of rank-and-file employees.

(2) The NLRB, in considering the status of certain classes of newspaper employees, pointed out¹⁴ that exercise of discretion does not necessarily make one a supervisor. Editorial writers were held not to be supervisors. Although they expressed management policy on certain topics, they were guided by a body of doctrine which, "though more nebulous than the blueprint which guides a skilled craftsman, nonetheless exists as a restriction on the exercise of their full discretion." Membership in the union was held not to impair their loyalty.

¹¹ *In re Sam'l Bingham's Son Mfg. Co.* (80 NLRB No. 244, December 31, 1948).

¹² *Sax v. NLRB* (U. S. C. C. A. (7th) December 15, 1948).

¹³ *In re Ohio Power Co.* (80 NLRB No. 205, December 17, 1948).

¹⁴ *In re A. S. Abell Co.* (80 NLRB No. 16, January 11, 1949).

Assistant city editors, assistant sports editors, telegraph editors, and chiefs of copy desks were all held to be supervisors. In this case the assistant city and sports editors were in charge of their departments at certain times, had power to accept or reject stories, and were consulted in grant of promotions and other personnel decisions. Telegraph editors determined the size of headlines and the length of front-page stories. Copy-desk chiefs instructed subordinates in regard to leads.

Make-up editors were held not to be supervisors, although they could shorten stories, since they exercised authority only when instructions from editorial and news departments conflicted with mechanical space limitations. Field correspondents assigned to work outside the city had more responsible positions, but were still held to be essentially reporters. They were not supervisors, nor were assistant chiefs of the art and photographic departments, the racing editor, dramatic critics, and heads of the financial departments, although all exercised some discretion.

Non-Communist Affidavits. Before an international or national union can participate in a representation, the NLRB held,¹⁵ all of its locals which have employees in the bargaining unit must have complied with the filing and non-Communist affidavit provisions of the amended National Labor Relations Act. The case involved a 31-State unit of insurance agents. With one member dissenting, the Board ruled that the compliance of each local was required even though it did not participate in collective bargaining.

Voting Rights of Economic Strikers. The NLRB ruling that permanently replaced economic strikers could not vote in a representation election was extended¹⁶ to include a situation in which the strike occurred after an election had been directed and after the eligibility date set for voters. The Board held that the act made no distinction between such a case and one in which the strike occurred before direction of an election. It pointed out instances in which employees were prevented from voting because of their resignation or discharge after the eligibility date. The fact that the employer was increasing personnel, and

later actually rehired the strikers, was held not to preclude the permanent replacement of these strikers. The replacements were held to be permanent, although not told that they were replacing the strikers, because the employer told them they were permanent.

Veteran's Reemployment

Promotion. Two recent decisions of a circuit court of appeals deal with the right of a reinstated veteran to promotion under the reemployment statutes.

(1) The court held¹⁷ that a reinstated veteran had not established his right to promotion from the position of roundhouse laborer to that of roundhouse hostler. The collective-bargaining contract provided that ability, merit, fitness, and seniority were to be considered in making promotions. When ability, merit, and fitness were sufficient (in the judgment of management), seniority was to govern. A district court had dismissed the veteran's action on the ground that he had failed to meet the burden of proof that he had a legal right to the promotion.

The court of appeals held that the findings of fact by the district court were supported by ample evidence, which the veteran had not overcome. The employer, in deciding that the veteran lacked the ability, merit, and fitness needed for promotion, was held to have acted in good faith and not capriciously and arbitrarily.

(2) The court of appeals considered¹⁸ the liability of a union in connection with an employer's claim that the union compelled the employer to demote a veteran illegally.

The veteran had sued the employer in the district court for damages because of a demotion, occurring within a year after reinstatement, from a position to which the veteran had been promoted after his return from military service. The district court awarded damages to the veteran against the employer, and, at the employer's request, held the union liable to the employer, because, through grievance procedures, it had compelled the employer to demote the veteran. The union appealed.

The court of appeals, reversing the district court, held that the union was not liable to the

¹⁵ *In re Prudential Insurance Co. of America* (81 NLRB No. —, January —, 1949).

¹⁶ *In re Rowe-Jordan Furniture Corp.* (81 NLRB No. —, January —, 1949).

¹⁷ *Rose v. Texas & New Orleans R. R. Co.* (U. S. C. C. A. (5th), December 16, 1948).

¹⁸ *Oil Workers International Union v. Sinclair Refining Co.*

employer, because the veteran's rights had not been violated by his demotion. The court pointed out that under a collective-bargaining agreement between the union and the employer, promotions were based on departmental seniority. The veteran had worked longer in the plant than a non-veteran whom he replaced when he was promoted, but he had less seniority in the department. His demotion, therefore, and the conduct inducing it, did not violate the reemployment statutes.

An additional reason for the decision was that the position to which the veteran was promoted was two steps above the one he left. Without deciding whether a veteran, on reinstatement, had a right to a promotion he might have claimed if he had not been in military service, the court said that the reemployment statutes did not give the veteran a right to a promotion he would not have received if he had remained on the job.

Promotion—Seniority Affected by Veteran's Absence. The Court of Appeals for the Seventh Circuit considered¹⁹ the extent to which conditions controlling the right to promotion and fixing the date of promotion according to seniority are modified by the fact that the veteran is absent in the service.

The veteran had been a telegrapher before entering the service. Under a contract between his employer and the union, vacancies in the position of dispatcher were customarily filled from telegraphers according to their seniority, provided they had the necessary ability, as determined by an examination. In practice, notice of vacancy was given the senior telegrapher, who then might bid on the position. If he did so, and could pass the examination, he was given the job. The contract further provided that seniority as dispatcher dated from time of passing the required examination. During the veteran's absence, a number of vacancies as dispatcher were filled, some of them by telegraphers who had less seniority than the veteran. Subsequently, while still in military service, he was notified of and bid on a dispatcher vacancy. He returned to employment as a telegrapher but promptly passed an examination and filled the vacancy. However, he claimed that his seniority as dispatcher should be retroactive to the date when the first vacancy in such a position was filled

¹⁹ *Morris v. Chesapeake & Ohio Co.* (U. S. C. C. A. (7th), December 14, 1948).

by a telegrapher junior to him. The district court decided that he was entitled as a matter of law to the promotion and to the retroactive seniority he claimed, but not to pay at the higher level retroactive to the date of his reinstatement. Since only the employer took an appeal, the question of pay was not considered.

In the court of appeals, the employer contended that the veteran had not met the conditions for promotion to the vacancy occurring during his absence in the service. Therefore, it was urged, he was not entitled to the earlier seniority date. The court of appeals adopted the lower court opinion as its own and affirmed the judgment. The telegrapher, said the court, had the right as an attribute of his position to bid for an advertised dispatcher's position. His military service excused him, in law, from having to bid for the vacancies which had been filled, during his absence, by men junior to him on the telegrapher's roster. Having passed the examination after his return, he was entitled to promotion. Once qualified for the job, his seniority was retroactive to the date when the first vacancy as dispatcher was filled by a telegrapher with less seniority.

The court distinguished another decision²⁰ of a circuit court of appeals, which denied a veteran's retroactive seniority in promotion from electrician helper to electrician, since in that case there was no custom or requirement that vacancies in the position of electricians must be filled by electrician helpers.

Decisions of State Courts

Colorado—All-Union Contract Issue. The Colorado Supreme Court held²¹ that a secondary boycott engaged in by a union for the purpose of compelling an employer, the owner of a butcher shop, to make a closed-shop contract was not a "labor dispute" within the meaning of the anti-injunction provisions of the Colorado Labor Peace Act. Less than a year before the union's demand for a closed shop and its boycott, a majority of the employees of that employer had voted against being represented by the union in an NLRB election. If the employer had made a closed-shop contract with the union, he would have been guilty of an

²⁰ *Raulins v. Memphis Union Station Co.* (168 F. (2d) 466 (U. S. C. C. A. (6th))).

²¹ *Amalgamated Meat Cutters & Butcher Workmen of North America, Local No. 64, AFL v. Green* (Colo. Supreme Ct., December 6, 1948).

unfair labor practice under the Federal act. The fact that the employer's cancellation of a lease was one cause for terminating the business of the lessee, a competitor, whose employees belonged to the union, was held immaterial. The competitor's agreement with the union, by its own terms, became void upon the termination of his business.

Section 2 (7) of the Colorado Labor Peace Act provided that the refusal of an employer to grant an all-union agreement did not constitute a "labor dispute" subject to the act's restrictions on injunctions. The court, in an earlier case,²² had held this section constitutional.

Michigan—Action Against Union for Loss of Job. A State court held²³ that an employee could bring an action against a union for damages and an injunction for interference with his employment because of his wrongful expulsion from membership. The union had a maintenance-of-membership contract with the employer, which provided that all employees, as a condition of employment, must maintain union membership in good standing. The union constitution and bylaws provided for presentation of written charges against an employee, a trial, and appeal within 30 days of the union's decision. In its defense against the employee's action, the union asserted that he was no longer a member in good standing, but failed to state that charges had been made in writing. It contended that a court had no jurisdiction to interfere in a dispute between a voluntary association and its member until all his remedies under

its constitution and bylaws had been exhausted. The member claimed that the union had failed to abide by its own rules and that resort to the remedies it mentioned was futile.

The lower court dismissed the case without an opinion. But the supreme court reversed the decision and sent the case back for trial, on the ground that, if proved to be true, the member's allegations justified the grant of the relief requested.

Wisconsin—Compulsory Arbitration in Public Utility Disputes. A Wisconsin circuit court held constitutional²⁴ a State law providing for compulsory arbitration of labor disputes in public utilities. The law provides that if collective bargaining between an employer and employees in a public utility reaches an impasse, a conciliator may be appointed by the State labor board to assist in settling the dispute. If the conciliator is unable to effect a settlement, an arbitrator shall be appointed, whose decision shall be binding. Strikes and lock-outs in public utilities are prohibited under penalty.

The court, in contrast with the decision of another circuit court²⁵ of the same State, held that the statute was lawful under the State police power; that it did not impose involuntary servitude upon the workers or deny them the equal protection of the laws; that it was not an unlawful delegation of either legislative or judicial power or an invasion of the executive power; and that it did not contravene the Taft-Hartley Act.

²² *Denver Milk Producers v. International Brotherhood of Teamsters* (116 Colo. 389, 183 P. (2d) 529).

²³ *Howland v. Local Union, UAW* (Mich. Supreme Ct., December 17, 1948).

²⁴ *United Gas Workers v. Wisconsin Employment Relations Board* (Wis. Cir. Ct. Milwaukee Co., December 14, 1948).

²⁵ See *Monthly Labor Review*, May 1948 (p. 541).

Chronology of Recent Labor Events

January 12, 1949

THE NATIONAL LABOR RELATIONS BOARD, in the case of *Super-Cold Southwest Co. and Retail, Wholesale and Department Store Union (CIO)*, held that five employees who disobeyed an order to work overtime were discharged for cause, and not unlawfully. The overtime work order was not issued to interfere with the union meeting which the men attended but to avoid operational losses the following day. The employer had readily excused those men who asked to be excused. (Source: Labor Relations Reporter, vol. 23, Summary, p. 5, and LRRM, p. 1305.)

January 13

THE WEIRTON STEEL Co. and the independent union of its employees signed an agreement which provides retirement pay of at least \$100 a month for eligible employees participating in the National Steel retirement annuity plan, and smaller pensions for other eligible employees, retroactive to January 1, 1949. (Source: Iron Age, Jan. 20, 1949, p. 108.)

January 15

ARBITRATOR DOUGLAS V. BROWN, in the case of textile manufacturers in Fall River and New Bedford, Mass., and the Textile Workers Union of America (CIO), denied a wage increase. He held that the grant of such an increase might "open the door to the possibility of serious unemployment and loss of income to both employees and companies." The risk of such losses, he held to be more serious than the risk that the employees would forego an increased standard of living. (Source: Labor Relations Reporter, vol. 23 LRR, p. 191.)

On February 2, a wage increase was also denied in the arbitration between the American Woolen Co. and the Textile Workers Union of America (CIO). Raymond F. O'Connell, arbitrator, ruled that conditions did not justify the 10-cent-an-hour increase and \$1.15 minimum hourly wage rate sought by woolen and worsted workers. (Source: New York Times, Feb. 3, 1949.)

On February 7, the Textile Workers Union of America (CIO) dropped demands for a 10-cent-an-hour wage increase for woolen and worsted goods workers. (Source: New York Times, Feb. 8, 1949.)

January 17

THE SUPREME COURT of the United States, in the cases of *La Crosse Telephone Corp. v. Wisconsin Employment Relations Board et al.*; *International Brotherhood of Electrical Workers, Local B-953, AFL, v. Same*, held that the Wisconsin Employment Relations Board does not have jurisdiction in a representation proceeding involving the employees of a telephone company which is engaged in interstate commerce. The Court's ruling was made even though the NLRB had not as yet undertaken to determine the collective bargaining unit and bargaining agent of these employees. (Source: Labor Relations Reporter, Extra Edition Bulletin, vol. 23, No. 23, Jan. 17, 1949.)

THE CONGRESS OF INDUSTRIAL ORGANIZATIONS announced that members of the Oil Workers International Union in California had accepted the offer of the Union Oil Co. and returned to work. This settlement was the last in a 4-month work stoppage among major oil companies in the State (for discussion, see MLR, Dec. 1948, p. 629). (Source: CIO News, Jan. 17, 1949, p. 8.)

January 19

THE CIO, the British Trades Union Congress, and the Dutch Federation of Labor formally withdrew from the World Federation of Trades Unions at the Paris meeting of the organization's executive committee. (Source: New York Times, Jan. 20, 1949, and CIO News Jan. 24, 1949, p. 10; for earlier action, see chron. item for May 5, 1948, MLR, June 1948.)

THE NLRB, IN THE CASE OF *Associated Shoe Industries of Southeastern Massachusetts Inc. et al.*, held that the appropriate unit for a representation election does not include employees of independent shoe manufacturers who have regularly adopted contracts negotiated between the region's Shoe Manufacturers' Association and a union, but have not participated or attempted to participate in negotiations. (Source: U. S. Law Week, vol. 17 LW, p. 2338, and NLRB release W-70, Jan. 26, 1949, p. 3.)

AN NLRB TRIAL EXAMINER recommended that John L. Lewis and the United Mine Workers of America (Ind.) should cease to give effect to the union-shop provision of the current contract with 18 captive coal mines (see Chron. item for June 25, 1948, MLR, Aug. 1948). He held that the union shop requirement of their 1948 contract is illegal because it was not authorized by a majority of the employees through a Government-conducted election under the Labor Management Relations Act of 1947. (Source: NLRB release R-152, Jan. 19, 1949.)

THE NLRB, IN THE CASE OF *E. I. duPont de Nemours & Co. and United Gas, Coke, and Chemical Workers of America (CIO)*, held that the petitioning union's failure to protest execution of contract with a rival union during the 6 months' interval between the execution of contract and the election of a bargaining agent barred an attack on the election. (Source: Labor Relations Reporter, vol. 23, LMR Reference Guide, p. 4, and LRRM, p. 1316.)

January 28

THE NLRB, IN THE CASE OF *Safeway Stores, Inc.* [Pueblo, Colo.] and *Retail Clerks Union, Local No. 24*, held that the provision of the National Labor Relations Act which permits union-shop agreements under certain conditions takes precedence over a State law which does not prohibit but only regulates union-shop agreements. (Source: Labor Relations Reporter, vol. 23 LRRM, p. 1337.)

OFFICIALS OF THE Amalgamated Clothing Workers of America (CIO) announced their decision not to ask for a fourth-round wage increase owing to the current economic situation. Slackened demand for men's apparel and reduced food costs were cited. (Source: Washington Star, Jan. 28, 1949.)

January 30

THE CHICAGO LOCAL of the International Typographical Union (AFL) voted to accept the contract offered by the Hammond (Ind.) Times, which granted a \$12.50 weekly wage increase. The contract was drawn, an official of the paper stated, within the terms of a Federal District Court injunction (see Chron. items for Mar. 29, 1948, MLR, May 1948 and Oct. 14, 1948, MLR, Dec. 1948) ordering the union to cease its insistence on a closed shop. (Source: Labor, Feb. 5, 1949.)

January 31

THE SUPREME COURT of the United States ruled in the case of *Clyde Wilkerson v. Wilson McCarthy and Henry Swan*; it held that evidence of railroad employee's injury while crossing a wheel pit via a slippery plank was sufficient to warrant submission of Federal Employer's Liability Act case to a jury to determine the issue of railroad's negligence and employee's contributory negligence. (Source: U. S. Law Week, vol. 17 LW, pp. 4159 and 4175.)

THE SENATE LABOR COMMITTEE received an opinion from the Attorney General of the United States, asserting that failure of the Administration's labor-management relations bill to provide for injunctions against national emergency strikes does not mean that the President is without power to obtain such injunctions. (Source: Labor Relations Reporter, vol. 23, LRR, p. 217.)

THE NLRB, IN THE CASE *American Optical Co.* and *Optical and Instrument Workers Organizing Committee (CIO)*, barred its facilities to the union. The Board held that the petitioner was an organizing committee of the CIO whose officers have not complied with the affidavit and filing requirements of the LMRA of 1947 (see Chron. item for Oct. 7, 1947, MLR Jan. 1948). (Source: Labor Relations Reporter, vol. 23 LRRM, p. 1351.)

February 2

THE PRESIDENT'S FACT-FINDING BOARD in the dispute between the non-operating railroad unions and the railroads was asked to re-enter negotiations (see Chron. item for Dec. 17, 1948; MLR, Feb. 1949). The dispute, which concerns wages and hours, affects 1 million workers and has been in progress for 10 months. (Source: Labor, Feb. 5, 1949.)

February 7

The second conference on unfinished business in social legislation met in Washington, D. C., and was addressed by the Secretary of Labor. (Source: Washington Star, Feb. 7, 1949.)

February 8

A United States District Court judge, in the case of *Upholsterers' International Union of North America v. Leathercraft Furniture Co.*, held that a union requirement that an employee must be a union member in order to receive benefits from a social security fund to which an employer is obligated to make contributions does not violate Section 302 (c) of the LMRA of 1947. Section 302 (c) specifies a fund established for the benefit of "the employees of the employer." (Source: U. S. Law Week, vol. 17 LW, p. 2374.)

February 10

THE NLRB, IN THE CASE OF *Daniel Hamm Drayage Co., Inc.*, announced that a trial examiner had recommended that the employer should be required to reimburse seven men for any loss of wages they suffered because they were refused employment under an illegal closed-shop agreement. (Source: NLRB release R-157, Feb. 10, 1949.)

Publications of Labor Interest

Arbitration and Mediation

Compulsory Arbitration of Labor Disputes. By James A. Sprunk. (In Michigan Law Review, Ann Arbor, December 1948, pp. 242-254. \$1.)

Reviews briefly State laws providing for compulsory arbitration of labor disputes, and court decisions involving constitutionality of such legislation.

Fourteenth Annual Report of the National Mediation Board, Including the Report of the National Railroad Adjustment Board, for the Fiscal Year Ended June 30, 1948. Washington, 1948. 112 pp. 40 cents, Superintendent of Documents, Washington.

Mediation and Arbitration under the New York State Board of Mediation in 1947. New York, State Department of Labor, Division of Research and Statistics, 1948. 44 pp.; processed. (Publication No. B-12.)

Cooperative Movement

Cooperation in Canada, 1947—Sixteenth Annual Summary. Ottawa, Department of Agriculture, Marketing Service, 1948. 10 pp.; processed.

Statistics of number, membership, volume of business, and geographical distribution of cooperative associations, 1947, with comparative figures for earlier years.

The Cooperative Movement in Labor Britain. Edited by N. Barou. London, Victor Gollancz, Ltd., 1948. 143 pp. 7s. 6d.

Essays on various aspects of the cooperative movement, with "conclusions" by the editor. Subjects include retail distributive cooperatives; the Labor Government and cooperative price, dividend, and financial policy; prospects for agricultural cooperation; workers' productive cooperatives; and labor relations in the cooperative movement. One paper deals with methods used to bring cooperation to the "deserts" in which the cooperative movement, for one reason or another, has not developed.

The Cooperative Movement in Israel. Tel-Aviv, General Cooperative Association of Jewish Labor in Eretz-Israel, 1948. 12 pp. In English, French, Russian.

EDITOR'S NOTE.—Correspondence regarding the publications to which reference is made in this list should be addressed to the respective publishing agencies mentioned. Where data on prices were readily available, they have been shown with the title entries.

Summary information concerning the General Cooperative Association of Jewish Labor in Israel (Hevrat Ovdim, Ltd.), and the various bodies which are auxiliary or supplementary to it.

The Seventeenth Congress of the International Cooperative Alliance. (In Review of International Cooperation, London, September-October 1948, pp. 185-236.)

Extended account of proceedings of the congress, which was held in Prague, Czechoslovakia, September 27-30, 1948. (See also article in Monthly Labor Review, December 1948, pp. 600-602.)

Year Book of Agricultural Cooperation, 1947. Edited by Horace Plunkett Foundation. Cambridge, England, W. Heffer & Sons, Ltd., 1948. 342 pp., bibliography. 15s.

Consists principally of a collection of articles, by various authors, each dealing with agricultural cooperation in a specific country. One paper, however, covers cooperative organization among fishermen in 11 countries, and another lists laws concerning agricultural cooperation passed by many nations in the period 1940-42.

Cooperatives in the Petroleum Industry. By Ludwig von Mises and others. New York, Petroleum Industry Research Foundation, 1947. In 4 parts, variously paged.

Written from the viewpoint of private business, on the thesis that cooperatives "cannot maintain themselves by their own efforts," that they cannot "stand the competition of private business without Government favoritism," and that they are given unfair advantages in the matter of taxation.

Costs and Standards of Living

How to Live Within Your Income. By J. K. Lasser and Sylvia F. Porter. New York, Simon & Schuster, 1948. 120 pp., forms. \$1.

Working Women's Budgets in Twelve States: Cost-of-Living Reports Prepared Chiefly for the Use of Minimum-Wage Administrations. Washington, U. S. Department of Labor, Women's Bureau, 1948. 33 pp. (Bull. No. 226.) 15 cents, Superintendent of Documents, Washington.

Living and Office Operating Costs in Colombia. Washington, U. S. Department of Commerce, Office of International Trade, 1948. 9 pp. (International Reference Service, Vol. V, No. 84.) 5 cents, Superintendent of Documents, Washington.

A similar report for Ecuador was also issued recently.

Education and Training

Handbook of Adult Education in the United States. Edited by Mary L. Ely. Compiled under auspices of Institute of Adult Education with cooperation of American Association for Adult Education. New York, Columbia University, Institute of Adult Education, 1948. 555 pp., bibliography. \$5.

Principles and Practices of Vocational Education. By Arthur B. Mays. New York, McGraw-Hill Book Co., Inc., 1948. 303 pp., bibliographies. \$3.50.

Training Problems in the Far East. By Marguerite Thibert. Geneva, International Labor Office, 1948. 160 pp. (Studies and Reports, New Series, No. 11.) \$1. Distributed in United States by Washington Branch of ILO.

Report on a first-hand survey made by the author for the International Labor Organization and the United Nations Economic Commission for Asia and the Far East.

Vocational Training of Adults in the United Kingdom. Geneva, International Labor Office, 1948. 88 pp., bibliography, plans, illus. (Vocational Training Monograph No. 1.) 50 cents. Distributed in United States by Washington Branch of ILO.

First in a series of national monographs undertaken by the ILO for the purpose of making available to governments, employers, and workers information on the experience of different countries in organizing vocational training and retraining programs. This monograph deals primarily with government sponsored training schemes. Special attention is given in an appendix to methods of training for coal mining.

Industrial Accidents; Workmen's Compensation

Proceedings of the President's Conference on Industrial Safety, Washington, D. C., September 27-29, 1948. Washington, [U. S. Department of Labor, Bureau of Labor Standards], 1949. 93 pp., illus. (Bull. No. 103.) Limited free distribution.

Contains addresses and technical committee planning reports and recommendations of a groundwork conference held in preparation for an enlarged conference scheduled for March 23-25, 1949. The bulletin also outlines the scope and organization of the various committees.

Accident Prevention in Brick, Pipe, and Tile Manufacture. London, Ministry of Labor and National Service, Factory Department, 1948. 95 pp., illus. (Safety Pamphlet No. 17.) 2s. net, H. M. Stationery Office, London.

Review of Fatal Injuries in the Petroleum Industry for 1947. Washington, American Petroleum Institute, Department of Safety, 1948. 19 pp.

Shows incidence and rate of fatalities and permanent total disabilities, and also accident causes.

Barème Indicatif d'Invalidité pour les Accidentés du Travail. Paris, Fédération Nationale des Organismes de Sécurité Sociale, 1948. 53 pp.

Gives tables of invalidity rates used in workmen's compensation for industrial injuries and occupational diseases, under French legislation in effect as of March 1948.

Industrial Home Work

Industrial Home Work. (In International Labor Review, Geneva, December 1948, pp. 735-751. 50 cents. Distributed in United States by Washington Branch of ILO.)

Report on an inquiry by the ILO into the status of industrial home work in various countries, dealing briefly with its extent, systems under which it is carried on, minimum wage controls, regulation of hours, social insurance, holidays with pay, and other matters.

El Trabajo Industrial a Domicilio en el Distrito Federal. México, D. F., Universidad Nacional Autónoma de México, Instituto de Investigaciones Económicas, 1946. 77 pp.

Study of industrial home work in the Federal District of Mexico, with developments in the United States as background.

Industrial Hygiene

Maximum Allowable Concentration Limits of Harmful Substances. (In New Jersey Industrial Safety Guide, State Department of Labor, Division of Engineering and Safety, [Trenton?], January 1948, pp. 1-4.)

Rules and regulations (effective December 15, 1947) establishing revised standards of permissible daily atmospheric content of specific toxic chemicals and radiant energy in places of industrial employment in New Jersey.

Carbon Tetrachloride Poisoning. By Gordon A. Abbott and Milton J. Miller. (In Public Health Reports, Federal Security Agency, Public Health Service, Washington, December 10, 1948, pp. 1619-1624. 10 cents, Superintendent of Documents, Washington.)

Report on 10 cases, 8 of them merchant seamen who had been exposed to the poison in their duties aboard ship. According to the study, most of these casualties, four of which were fatal, could have been avoided by proper ventilation.

Paints, Lacquers, and Finishes. By W. B. Harris. (In Monthly Review, Division of Industrial Hygiene & Safety Standards, New York State Department of Labor, New York, November 1948, pp. 41-44, bibliography.)

Indicates the toxicity of specific materials, outlines health and fire hazards in their manufacture and application, and suggests control measures.

Memorandum on the Use of Radium in Industry with Particular Reference to Luminising with Radioactive Material. London, Ministry of Labor and National Service, 1947. 6 pp. 2d. net, H. M. Stationery Office, London.

Outlines the nature, properties, and hazards of radium, methods of detection, tolerance dose, and necessary precautions in its use.

Observations on Cardiovascular Patients in Industry. By Paul H. Kuhn, M.D. (In Industrial Medicine, Chicago, December 1948, pp. 461-467, bibliography, charts. 75 cents.)

Brief account of 6 years' experience (1942-47) in a small plant.

Report of the Departmental Committee on Industrial Diseases. London, Ministry of National Insurance, 1948. 15 pp. (Cmd. 7557.) 4d. net, H. M. Stationery Office, London.

The report establishes principles which should govern selection of diseases for insurance under the British National Insurance (Industrial Injuries) Act.

Industrial Relations

American Labor and the Government. By Glenn W. Miller. New York, Prentice-Hall, Inc., 1948. 638 pp., bibliography. \$7.35.

This three-part study of labor controls is organized as follows: Part I deals with labor problems which led to pre-World War I controls; Part II covers existing labor legislation and the development of new control measures in the between-wars period; Part III surveys the effects of World War II and the postwar period on labor controls, especially with respect to labor-management relations.

Human Relations in an Expanding Economy: A study of the Manufacturing Departments in the Endicott Plant of the International Business Machines Corporation. By F. L. W. Richardson, Jr., and Charles R. Walker. New Haven, Conn., Yale University, Labor and Management Center, 1948. 95 pp., diagrams.

The study describes the impact of technological and other changes upon human relations, and discusses the methods adopted to deal with problems which resulted.

According to the authors, a firm which undergoes a period of expansion tends to increase centralization of responsibility, increase the levels of authority within the plant, multiply staff functions, and divide jobs so that they call for a greater degree of specialization. Generally, these factors result in deterioration of human relations in the plant. However, the Endicott plant surveyed, by adopting measures designed to minimize these tendencies, was able to improve or maintain satisfactory human relations during the period under consideration (1940-47).

Manual of Industrial Relations. Deep River, Conn., National Foremen's Institute, Inc., 1948. 191 pp., loose-leaf. \$7.50.

Collective Bargaining Provisions: Union Rights, Activities, and Responsibilities. Washington, U. S. Bureau of Labor Statistics, 1948. 32 pp.; processed. Free.

Other recent reports in this series deal with provisions concerning, respectively, management prerogatives; safety, health, and sanitation; and seniority.

Employee Benefit Plans and Collective Bargaining. New York, American Management Association, 1948. 27 pp. (Personnel Series, No. 123.) 50 cents.

Contains two papers which analyze the implications for management of compulsory bargaining on benefits, as a result of the National Labor Relations Board ruling in the Inland Steel case.

The Right to Work. By Cecil B. DeMille. San Francisco, California Personnel Management Association, 1948. 12 pp.; processed. (Management Report No. 29.) \$1.

Union Contracts in Retail Trade, New York City, 1948: Food Stores. New York, State Department of Labor,

Division of Research and Statistics, 1948. 31 pp.; processed.

Contracts for drug, dry goods, men's hat and haberdashery, and shoe stores have been covered in other reports already published in this series.

New Principles Governing Industrial Relations and Labor Protection in Sweden. By Gunnar Hultman. (In Industrial Safety Survey, International Labor Office, Geneva, July-September 1948, pp. 81-86, chart. 50 cents. Distributed in United States by Washington Branch of ILO.)

Labor and Social Legislation

Labor Law: A Concise Explanation of the Rights and Duties of Employees and Employers Under State and Federal Laws. By Victor S. Axelroad. New York, Oceana Publications, 1948. 90 pp. (Legal Almanac Series, No. 7.) \$1.

*Kentucky Labor Laws * * * Complete With Amendments and Annotations to May 1, 1948.* Frankfort, Department of Industrial Relations, 1948. 29 pp.

Rhode Island Labor Laws. Providence, Department of Labor, December 1948. 261 pp.

Working Under the Wage-Hour Law. By William B. McComb. San Francisco, California Personnel Management Association, 1948. 17 pp.; processed. (Management Report No. 27.) \$1.

Address by the administrator of the Federal wage and hour laws, tracing their background, their value, and the effects of Supreme Court decisions on their administration, with suggestions for improvement in the basic provisions. The discussion which followed the address is also given.

Code of Labor and Industrial Laws of the Province of Quebec and Federal Laws, [Canada], with Rules and Regulations Concerning Their Application. Compiled and consolidated by Gus. Franq. Montreal, Mercantile Printing, Ltd., 1948. 487 pp. In English and French.

A Statement of the Laws of Ecuador in Matters Affecting Business in its Various Aspects and Activities. Washington, Inter-American Development Commission, 1948. 142 pp.; processed. \$4.

Includes a summary of labor and social legislation.

Labor Management Relations Act, 1947

The New Congress and the Taft-Hartley Law. An NBC radio discussion by Charles Gregory, Gerard D. Reilly, Gerhard Van Arkel. Chicago, University of Chicago, 1948. 33 pp. (Round Table, No. 556.)

Expressions of diversified opinion as to what legislative decisions Congress should make in connection with the terms of the Taft-Hartley Act.

The Taft-Hartley Act and Union Political Contributions and Expenditures. By Joseph E. Kallenbach. (In Minnesota Law Review, Minneapolis, December 1948, pp. 1-26. \$1.)

Labor Organizations

Contemporary Unionism in the United States. By Clyde E. Dankert. New York, Prentice-Hall, Inc., 1948. 521 pp. \$6.35.

The course of present-day American unionism is traced in relation to its historical roots. Its characteristics are discussed in terms of structure, principles, membership, administration, leadership, collective bargaining, attitudes toward wages, hours, seniority, etc., and policies anent strikes and political action.

National Patterns of Union Behavior. By Adolf Sturmthal. (In *Journal of Political Economy*, Chicago, December 1948, pp. 515-526. \$1.50.)

A demonstration of the thesis that a theory of trade-union behavior as it is found in various countries cannot be built upon deductive logic or the assumptions of traditional economic theory, but must take into consideration national characteristics and behavior patterns.

The Union as a Monopoly. By Charles E. Lindblom. (In *Quarterly Journal of Economics*, Cambridge, Mass., November 1948, pp. 671-697. \$1.25.)

The Firemen's and Patrolmen's Unions in the City of New York: A Case Study in Public Employee Unions. By Emma Scheweppe. New York, King's Crown Press, 1948. 395 pp., bibliography. \$4.50.

Forty-Fifth Directory of Labor Organizations in Massachusetts, 1947-48 (With Statistics of Membership, 1945-47). [Boston], Department of Labor and Industries, 1948. 119 pp. (Labor Bull. No. 193.)

Labor Unions in Canada—How They Work and What They Seek. By A. Andras. Ottawa, Woodsworth House Publishers, 1948. 86 pp. 50 cents.

Popular presentation of trade-union development, structure, etc., in Canada, by the assistant research director of the Canadian Congress of Labour.

Labor Movements in Latin America. By Robert J. Alexander. London, Fabian Society, 1947. 24 pp. (Research Series, No. 122.) 1s. 6d.

Traces progress of the labor movements from mutual assistance societies to trade-unions. A short history of the several continental federations is also given.

Migrants; Migratory Labor

Displaced Persons—A Selected Bibliography, 1939-47. Compiled by Felicia Fuss. New York, Russell Sage Foundation, Library, 1948. 12 pp. 20 cents.

Rehabilitation of Displaced Persons in India. (In *International Labor Review*, Geneva, August 1948, pp. 187-198. 50 cents. Distributed in United States by Washington Branch of ILO.)

Selected References on the Labor Importation Program Between Mexico and the United States. By Robert C. Jones. Washington, Pan American Union, 1948. 5 pp.

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Personnel Management

Personnel Management—Principles, Practices, and Point of View. By Walter D. Scott, Robert C. Clothier, William R. Spiegel. New York, McGraw-Hill Book Co., Inc., 1949. 648 pp., bibliography, charts, forms, illus. 4th ed. \$4.50.

The Personnel Interview. By Richard Stephen Uhrbrock. (In *Personnel Psychology*, Vol. 1, No. 3, Washington, Autumn 1948, pp. 273-302, bibliography; also reprinted.)

Selecting the New Employee: Techniques of Employment Procedure. By Paul W. Boynton. New York, Harper & Bros., 1949. 136 pp. \$2.

Staff Development—the Supervisor's Job. Washington, Federal Security Agency, Division of Personnel Management, 1948. 40 pp. (Training Manual No. 6.)

Population

State Censuses: An Annotated Bibliography of Censuses of Population Taken After the Year 1790 by States and Territories of the United States. By Henry J. Dubester. Washington, U. S. Department of Commerce, Bureau of the Census, and U. S. Library of Congress, Reference Department, 1948. 73 pp. 20 cents, Superintendent of Documents, Washington.

[*Population*] *Census of the Commonwealth of Australia, 1947—Summary for the Australian Capital Territory.* By Roland Wilson. Canberra, Commonwealth Government Printer, 1948. 10 pp. (Census Bull. No. 3.) 1s. 2d.

Population Policy in Great Britain. London, P E P (Political and Economic Planning), 1948. 227 pp., charts. 15s.

Covers population trends as well as the need for a demographic policy, basic principles of such a policy, and measures required to carry it out, including housing, education, health services, and taxation.

The Postwar Population of the Soviet Union. By N. S. Timasheff. (In *American Journal of Sociology*, Chicago, September 1948, pp. 148-155. \$1.25.)

Discusses various estimates of the postwar population of the Soviet Union and presents a new estimate.

Prices

Consumers' Prices, 1914-48. By Robert A. Sayre. New York, National Industrial Conference Board, Inc., 1948. 86 pp., charts.

The tables in this report indicate the changes in consumers' prices recorded by the National Industrial Conference Board from 1914 to June 1948. The text discussion includes a description of the methods used in constructing the Board's consumers' price indexes. These indexes, formerly called "cost of living" indexes, are based on "quoted retail prices for consumers' goods and services purchased by moderate-income families."

Retail Prices of Food, 1946 and 1947. Washington, U. S. Bureau of Labor Statistics, 1949. 58 pp. (Bull.

No. 938.) 15 cents, Superintendent of Documents, Washington.

Gas and Electricity: Price Changes in 1947. Washington, U. S. Bureau of Labor Statistics, 1948. 8 pp. (Serial No. R. 1934; reprinted, with additional data, from Monthly Labor Review, July 1948.) Free.

Manufacturers' Average Prices, 1926-48: Metal Beds, Bed-springs, Mattresses, Dual Sleeping Equipment. Washington, U. S. Bureau of Labor Statistics, 1949. 9 pp.; processed. Free.

World Prices, 1948 Compared with 1939. By Irving B. Kravis and Ann S. Ritter. Washington, U. S. Bureau of Labor Statistics, 1948. 10 pp. (Serial No. R. 1943; reprinted from Monthly Labor Review, November 1948.) Free.

Social Security

Compilation of the [Federal] Social Security Laws, Including the Social Security Act, as Amended, and Related Enactments Through July 1, 1948. Washington, Federal Security Agency, Social Security Administration, 1948. 114 pp. 25 cents, Superintendent of Documents, Washington.

Federal Grants-in-Aid in Health, Education, Social Security—Selected References, 1938-48. Compiled by Ruth Bray. Washington, Federal Security Agency, Library, 1948. 19 pp.; processed.

Outline of Federal Retirement Systems. By Thurza J. Brannon. Washington, Federal Security Agency, Social Security Administration, Bureau of Research and Statistics, 1948. 145 pp.; processed. (Bureau Report No. 15.)

Summarizes the provisions of 22 individual federally operated systems (including those covering veterans) providing retirement, disability, and survivors' benefits.

Social Security for the Self-Employed in 1949. By Leo J. Linder. (In Lawyers Guild Review, New York, July-August 1948, pp. 447-455. 50 cents.)

Troisième Rapport Annuel, Exercice 1947, Office National de Sécurité Sociale, [Belgium]. Brussels, Ministère du Travail et de la Prévoyance Sociale, 1948. 73 pp., charts.

Report on operation of the general social security system in Belgium during 1947, with the text of pertinent legislation in force, and on the special social security systems applicable to workers in the mines and the merchant marine.

Czechoslovak National Insurance—A Contribution to the Pattern of Social Security. Prague, Orbis, 1948. 224 pp., illus. In English. 75 cents, Universal Distributors Co., New York.

The major part of the book (pp. 35-213) consists of the text of the National Insurance Act of April 15, 1948. The Act is preceded by an introductory chapter by the Minister of Social Welfare discussing the background, guiding principles, main provisions, economic aspects, and outlook for the future of national insurance in Czechoslovakia.

The Czechoslovak insurance system is also described in an article in the August 1948 International Labor Review.

The New Social Welfare Act of Eire. By P. J. Keady. (In Bulletin of the International Social Security Association, Vol. I, No. 4, Montreal, December 1948, pp. 2-7; processed.)

The Act, passed by the Dail on November 10, 1948, deals with the following services administered by the Department of Social Welfare: Health insurance, unemployment insurance and assistance, widows' and orphans' contributory and noncontributory pensions, and pensions for the aged and the blind.

Voluntary action: A Report on Methods of Social Advance. By Sir William Beveridge. London, Allen & Unwin, 1948. 420 pp.

A digest of this report will appear in the April 1949 issue of the Monthly Labor Review. 16s. net.

Wages and Hours of Labor

The New Wage Chronology Series. Washington, U. S. Bureau of Labor Statistics, 1949. 3 pp. (Serial No. R. 1944; reprinted from Monthly Labor Review, December 1948.) Free.

Wage Chronology No. 1 (also published in December 1948 Monthly Labor Review, and reprinted as Serial No. R. 1945) shows major changes in wage rates and related wage practices put into effect by American Woolen Co. since February 1, 1939. The second chronology (in January 1949 Review, and reprinted as Serial No. R. 1946) deals with the northern cotton textile industry, 1943-48.

Union Wage Scales of Local Transit Operating Employees, October 1, 1948, and October 1, 1947, by City and Classification. Washington, U. S. Bureau of Labor Statistics, 1949. 18 pp.; processed. Free.

Prevailing Wages and Hours of Employees in the Baking Industry, Honolulu, Hawaii, April 1948. Honolulu, Department of Labor and Industrial Relations, Bureau of Research and Statistics, 1948. 13 pp., charts; processed. (Bull. No. 25.)

Salaries Paid in Electric Department of [Texas] Cities Owning Electric Systems. Austin, League of Texas Municipalities, 1948. 14 pp.; processed. (Bull. No. 48.)

The Prevalence of Incentive Wages in Wisconsin. By William H. Mayer and William H. Keown. Madison, University of Wisconsin, Bureau of Business Research and Service, 1948. 41 pp., map, charts; processed. (Wisconsin Commerce Reports, Vol. II, No. 2.) \$1.10.

The Search for Finality in Wage and Hour Litigation. By L. Metcalfe Walling. (In Fordham Law Review, New York, November 1948, pp. 200-219. \$1.)

The conclusion is reached that "almost the final word" has been spoken on overtime standards under the Fair Labor Standards Act, unless Congress changes the law.

Statistics Relative to Wages, Hours of Work, and Employees in the Various Branches of the Lithographing Industry, [Quebec], 1938-47. [Montreal?], Lithographing In-

dustry Parity Committee for the Province of Quebec, 1948. 68 pp.; processed.

Wages, Hours, and Working Conditions for Urban Municipal Employees, [Canada], October 1947. (In *Labor Gazette*, Department of Labor, Ottawa, December 1948, pp. 1448-1456.)

Miscellaneous

The American Democracy—A Commentary and An Interpretation. By Harold J. Laski. New York, Viking Press, 1948. 785 pp. \$6.50.

The 14 chapters of the book, beginning with "The Traditions of America," cover substantially all phases of the American scene. One of the longer chapters is devoted to labor. The author, a noted scholar and leader of the British Labor Party, states that the book has been in a sense a generation in the making, beginning with his experience as a teacher in the United States 30 years ago. It was written "out of deep love of America," and he has tried "to make intelligible * * * why America arouses that deep love." The book is in considerable part a record of the author's personal impressions but it includes the results of extensive research.

American Communism—A Critical Analysis of its Origins, Development, and Programs. By James Oneal and G. A. Werner. New York, E. P. Dutton & Co., Inc., 1947. 416 pp. Rev. ed. \$5.

Citations by Official Government Agencies of Organizations and Publications Found to be Communist or Communist Fronts. Washington, U. S. Congress, House of Representatives, Committee on Un-American Activities, 1948. 144 pp. 30 cents, Superintendent of Documents, Washington.

100 Things You Should Know About Communism and Labor. Washington, U. S. Congress, House of Representatives, Committee on Un-American Activities, 1948. 21 pp. 10 cents, Superintendent of Documents, Washington.

Economics and Problems of Labor. By Philip Taft. New York, Stackpole & Heck, Inc., 1948. 822 pp. 2d ed., rev. \$5.

Subjects covered include unemployment and its alleviation, problems of the needy aged and their solution, wages

and income, hours of labor, history and development of the labor movement, union management and policies, weapons of organized labor, employers' organizations, employer techniques unfavorable to unions, collective bargaining, peaceful settlement of labor disputes, special groups in the labor force, and the outlook for labor.

Industry and Labor, Volume I, No. 1. Geneva, International Labor Office, January 1, 1949. 40 pp. 25 cents per number, \$5 per year. Distributed in United States by Washington Branch of ILO.

With this number, the ILO resumes publication of the periodical formerly called *Industrial and Labor Information*, which ceased in mid-1940. The new journal will be issued twice a month.

Die Amtstätigkeit Der Arbeitsinspektorate im Jahre 1947. Vienna, Verlag Des Zentral-Arbeitsinspektorates, 1948. 105 pp., illus.

Official composite report on the work of the 16 regional and 2 special Austrian labor inspectorates in 1947, the first to be published since 1937. Part A of the report contains a description of the organizational aspects of labor inspection as well as data on accidents and occupational diseases and accident prevention. Part B consists of 10 special reports on such topics as the textile industry in Voralberg, protection against dust, and the danger involved in use of methylbromide.

Report of the Ministry of Labor and National Service, Great Britain, for year 1947. London, 1948. 169 pp. (Cmd. 7559.) 3s. net, H. M. Stationery Office, London.

Indian Labor Problems. Edited by A. N. Agarwala. London, Arthur Probsthain; Allahabad, Kitabistan, 1947. 406 pp. 35s.; 16 Rs.

This summary of Indian labor problems, written mainly by Indians, includes contributions on the wage structure, the trade-union movement, labor efficiency, labor legislation, social insurance, and child labor. The book's value lies in its representation of problems which Indian sociologists and economists consider important.

Facts and Figures about Economic and Social Conditions of the Philippines, 1946-47. Manila, Bureau of the Census and Statistics, 1948. 107 pp.

Includes data on unemployment, average daily wages, value of production of leading crops, and population, for the Philippines as a whole and for individual provinces.

Current Labor Statistics

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NOTE.—Earlier figures in many of the series appearing in the following tables are shown in the Handbook of Labor Statistics, 1947 Edition (BLS Bulletin 916). The Handbook also contains descriptions of the techniques used in compiling these data and information on the coverage of the different series. For convenience in referring to the historical statistics, the tables in this issue of the Monthly Labor Review are keyed to tables in the Handbook.

<i>MLR table</i>	<i>Handbook table</i>	<i>MLR table</i>	<i>Handbook table</i>	<i>MLR table</i>	<i>Handbook table</i>	<i>MLR table</i>	<i>Handbook table</i>
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A-3	A-3	A-13	(¹)	C-6	C-1	F-1	H-1
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A-5	A-2	A-15	A-9	D-2	D-2	F-3	H-4
A-6	A-4	B-1	B-1	D-3	D-2	F-4	(²)
A-7	(²)	B-2	B-2	D-4	D-4	F-5	I-3
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A-9	A-6	C-2	(¹)	D-6	D-4		
A-10	(²)	C-3	C-2	D-7	D-5		

¹ New or revised series; not included in Handbook.

² Not included in 1947 edition of Handbook.

A: Employment and Pay Rolls

TABLE A-1: Estimated Total Labor Force Classified by Employment Status, Hours Worked, and Sex

Labor force	Estimated number of persons 14 years of age and over ¹ (in thousands)												
	1949					1948							
	Jan.	Dec.	Nov. ²	Oct.	Sept. ²	Aug.	July ²	June	May	Apr.	Mar.	Feb.	Jan.
	Total, both sexes												
Total labor force ³	61,546	62,828	63,138	63,166	63,578	64,511	65,135	64,740	61,660	61,760	61,005	61,004	60,455
Civilian labor force.....	60,078	61,375	61,724	61,775	62,212	63,186	63,842	63,479	60,422	60,524	59,769	59,778	59,214
Unemployment.....	2,664	1,941	1,831	1,642	1,899	1,041	2,227	2,184	1,761	2,193	2,440	2,689	2,065
Employment.....	57,414	59,434	59,893	60,134	60,312	61,245	61,615	61,296	58,660	58,330	57,329	57,139	57,149
Nonagricultural.....	50,651	52,059	51,932	51,506	51,500	52,801	52,452	51,899	50,800	50,883	50,482	50,368	50,089
Worked 35 hours or more.....	41,314	43,425	40,036	42,451	30,372	42,305	32,404	43,240	42,726	42,179	42,576	40,977	42,242
Worked 15-34 hours.....	5,533	5,303	8,469	5,747	17,149	4,811	12,147	4,910	4,886	4,902	4,467	5,255	4,614
Worked 1-14 hours ⁴	1,899	1,844	1,877	1,726	1,596	1,447	1,394	1,403	1,637	1,776	1,684	1,798	1,513
With a job but not at work ⁵	1,907	1,488	1,549	1,583	2,472	4,239	6,508	2,348	1,550	2,027	1,753	2,338	1,721
Agricultural.....	6,763	7,375	7,961	8,627	8,723	8,444	9,163	9,396	7,861	7,448	6,847	6,771	7,060
Worked 35 hours or more.....	4,299	5,235	5,485	6,811	6,705	6,122	7,011	7,390	5,936	5,670	4,754	3,844	4,729
Worked 15-34 hours.....	1,725	1,680	1,997	1,455	1,636	1,669	1,767	1,669	1,513	1,336	1,397	1,759	1,765
Worked 1-14 hours ⁴	392	265	279	223	218	249	203	182	201	187	265	386	250
With a job but not at work ⁵	345	196	201	140	165	405	184	154	211	255	431	782	315
	Males												
Total labor force ³	44,614	45,012	45,182	45,229	45,453	46,525	46,715	46,039	44,519	44,589	44,228	44,236	44,071
Civilian labor force.....	43,161	43,573	43,782	43,851	44,101	45,215	45,437	44,794	43,298	43,369	43,009	43,026	42,846
Unemployment.....	2,011	1,411	1,231	1,088	1,251	1,326	1,448	1,375	1,239	1,567	1,765	1,889	1,574
Employment.....	41,150	42,162	42,551	42,763	42,850	43,889	43,989	43,420	42,058	41,801	41,244	41,137	41,273
Nonagricultural.....	35,193	35,991	36,079	36,016	35,960	36,836	36,633	36,162	35,386	35,352	35,063	35,046	35,018
Worked 35 hours or more.....	29,888	31,469	29,442	31,081	23,115	31,226	24,344	31,700	31,006	30,575	30,649	29,592	30,719
Worked 15-34 hours.....	3,075	2,678	4,719	3,922	10,577	2,599	7,766	2,535	2,565	2,525	2,390	2,800	2,414
Worked 1-14 hours ⁴	879	763	808	711	646	563	597	597	709	787	729	899	610
With a job but not at work ⁵	1,352	1,082	1,110	1,132	1,622	2,448	3,962	1,332	1,105	1,465	1,294	1,755	1,275
Agricultural.....	5,957	6,171	6,472	6,747	6,890	7,053	7,356	7,257	6,673	6,450	6,181	6,091	6,264
Worked 35 hours or more.....	4,102	4,813	5,007	5,772	5,858	5,663	6,152	6,310	5,525	5,321	4,548	3,698	4,505
Worked 15-34 hours.....	1,261	1,046	1,120	738	743	882	903	707	862	816	1,035	1,375	1,255
Worked 1-14 hours ⁴	275	143	163	124	138	179	145	111	136	124	211	330	202
With a job but not at work ⁵	318	170	182	114	151	330	167	129	150	189	387	688	292
	Females												
Total labor force ³	16,932	17,816	17,956	17,937	18,125	17,986	18,420	18,701	17,141	17,171	16,777	16,768	16,384
Civilian labor force.....	16,917	17,802	17,942	17,924	18,111	17,971	18,405	18,685	17,124	17,155	16,760	16,752	16,368
Unemployment.....	653	530	600	554	648	615	779	809	622	626	675	750	491
Employment.....	16,264	17,272	17,342	17,371	17,462	17,356	17,626	17,876	16,502	16,529	16,085	16,002	15,877
Nonagricultural.....	15,458	16,068	15,853	15,490	15,630	15,965	15,819	15,737	15,414	15,531	15,419	15,322	15,071
Worked 35 hours or more.....	11,426	11,956	10,594	11,370	7,257	11,079	8,060	11,540	11,720	11,604	11,927	11,385	11,523
Worked 15-34 hours.....	2,458	2,625	3,750	2,655	6,572	2,212	4,381	2,375	2,321	2,377	2,077	2,455	2,200
Worked 1-14 hours ⁴	1,020	1,081	1,069	1,015	950	884	831	806	928	989	955	899	903
With a job but not at work ⁵	555	406	439	451	850	787	869	816	445	562	459	583	446
Agricultural.....	806	1,204	1,489	1,880	1,833	1,791	2,546	1,016	1,188	998	666	680	806
Worked 35 hours or more.....	197	422	478	1,039	847	1,391	1,807	2,139	1,188	998	666	680	806
Worked 15-34 hours.....	464	634	877	717	893	459	869	1,080	411	349	206	146	224
Worked 1-14 hours ⁴	117	122	116	99	80	70	58	62	651	520	362	384	510
With a job but not at work ⁵	27	26	19	26	14	75	27	25	61	66	44	94	23

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. All data exclude persons in institutions. Because of rounding, the individual figures do not necessarily add to group totals.

² Census survey week contains legal holiday.

³ Total labor force consists of the civilian labor force and the armed forces.

⁴ Excludes persons engaged only in incidental unpaid family work (less than 15 hours); these persons are classified as not in the labor force.

⁵ Includes persons who had a job or business, but who did not work during the census week because of illness, bad weather, vacation, labor dispute, or because of temporary lay-off with definite instructions to return to work within 30 days of lay-off. Does not include unpaid family workers.

Source: U. S. Department of Commerce, Bureau of the Census.

NOTE.—Explanatory notes outlining briefly the concepts, methodology, size of the reporting sample, and sources used in preparing data presented in tables A-2 through A-15 are contained in the Bureau's monthly mimeographed release, "Employment and Pay Rolls—Detailed Report," which is available upon request.

TABLE A-2: Estimated Number of Wage and Salary Workers in Nonagricultural Establishments, by Industry Division ¹

Industry division	[In thousands]														Annual average	
	1949	1948												1943		1939
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1943	1939	
Total estimated employment.....	44,329	46,087	45,735	45,877	45,889	45,478	45,098	45,009	44,616	44,299	44,600	44,279	44,603	42,042	30,287	
Manufacturing.....	15,880	16,278	16,455	16,597	16,697	16,441	16,172	16,115	15,892	15,950	16,269	16,183	16,267	17,381	10,078	
Mining.....	924	939	938	941	948	952	922	950	935	817	924	914	922	917	845	
Anthracite.....	82	82	82	82	82	83	81	82	81	82	82	81	81	81	89	
Bituminous coal.....	419	423	421	422	426	426	395	426	423	309	419	415	422	437	388	
Metal.....	100	101	99	103	100	99	103	104	102	103	102	101	100	126	103	
Quarrying and nonmetallic.....	86	93	95	96	98	98	97	97	95	93	90	87	89	90	76	
Crude petroleum and natural gas production ²	237	240	241	238	242	246	246	241	234	230	231	230	230	181	189	
Contract construction ³	1,906	2,078	2,162	2,206	2,239	2,253	2,219	2,173	2,052	1,933	1,805	1,731	1,871	1,567	1,150	
Transportation and public utilities.....	3,978	4,067	4,066	4,091	4,092	4,139	4,136	4,105	4,042	3,974	4,032	4,019	4,020	3,619	2,912	
Transportation.....	2,729	2,810	2,809	2,836	2,832	2,869	2,873	2,860	2,809	2,744	2,808	2,802	2,802	2,746	2,080	
Communication.....	734	740	740	740	741	747	745	734	731	731	728	723	719	488	391	
Other public utilities.....	515	517	517	515	519	523	518	511	502	499	496	494	492	385	441	
Trade.....	9,625	10,380	10,036	9,889	9,733	9,660	9,646	9,670	9,617	9,576	9,598	9,520	9,622	7,322	6,705	
Finance.....	1,709	1,723	1,720	1,723	1,732	1,761	1,754	1,726	1,716	1,704	1,697	1,690	1,680	1,401	1,382	
Service.....	4,546	4,628	4,644	4,641	4,647	4,622	4,645	4,663	4,738	4,768	4,729	4,730	4,723	3,786	3,228	
Government.....	5,761	5,994	5,714	5,789	5,801	5,650	5,604	5,607	5,624	5,577	5,546	5,492	5,498	6,049	3,987	
Federal.....	1,876	2,156	1,856	1,875	1,873	1,855	1,837	1,804	1,788	1,771	1,758	1,746	1,748	2,875	898	
State and local.....	3,885	3,838	3,858	3,914	3,928	3,795	3,767	3,803	3,836	3,806	3,788	3,746	3,755	3,174	3,089	

¹ Data are based upon reports submitted by cooperating establishments and therefore differ from employment information obtained by household interviews, such as the Monthly Report on the Labor Force. The Bureau of Labor Statistics estimates of employment in nonagricultural establishments differ from those on the Monthly Report on the Labor Force (table A-1) in several important respects. The Bureau of Labor Statistics data cover all full- and part-time wage and salary workers in private nonagricultural establishments who worked or received pay during the pay period ending nearest the 15th of the month, in Federal establishments during the pay period ending just before the first of the month, and in State and local government during the pay period ending on or just before the last of the month. Persons who worked in more than one establishment during the reporting period would be counted more than once. Proprietors, self-employed persons, domestic servants, unpaid family workers, and personnel of the armed

forces are excluded. These estimates have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series. Data for the three most recent months are subject to revision.

² Includes well drilling and rig building.
³ These figures cover all employees of private firms whose major activity is construction. They are not directly comparable with the construction employment estimates presented in table 2, p. 1111, of the June 1947 issue of this publication, which include self-employed persons, working proprietors, and force-account workers and other employees of nonconstruction firms or public bodies who engage in construction work, as well as all employees of construction firms. An article presenting this other construction employment series appeared in the August 1947 issue of this publication, and will appear quarterly thereafter.

TABLE A-3: Estimated Number of Wage and Salary Workers in Manufacturing Industries, by Major Industry Group ¹

Major industry group	[In thousands]														Annual average	
	1949	1948												1943		1939
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1943	1939	
All manufacturing.....	15,880	16,278	16,455	16,597	16,697	16,441	16,172	16,115	15,892	15,950	16,269	16,183	16,267	17,381	10,078	
Durable goods.....	8,006	8,228	8,299	8,318	8,294	8,188	8,165	8,122	8,114	8,164	8,258	8,167	8,256	10,297	4,357	
Nondurable goods.....	7,874	8,050	8,156	8,279	8,403	8,253	8,007	7,993	7,778	7,786	8,011	8,016	8,011	7,084	5,720	
Iron and steel and their products.....	1,894	1,936	1,952	1,955	1,945	1,928	1,897	1,904	1,894	1,897	1,929	1,920	1,925	2,034	1,171	
Electrical machinery.....	714	730	735	731	725	716	714	726	727	742	756	763	767	914	355	
Machinery, except electrical.....	1,537	1,561	1,563	1,569	1,569	1,564	1,571	1,577	1,568	1,562	1,587	1,591	1,589	1,585	690	
Transportation equipment, except automobiles.....	579	585	588	583	572	542	561	562	565	589	589	589	588	2,951	193	
Automobiles.....	972	985	973	982	985	953	984	918	964	979	985	914	989	845	466	
Nonferrous metals and their products.....	454	468	474	473	469	465	457	469	467	475	482	478	478	525	283	
Lumber and timber basic products.....	803	875	908	918	930	930	912	881	851	833	827	813	816	589	465	
Furniture and finished lumber products.....	528	549	562	562	558	552	542	550	548	561	576	581	580	429	385	
Stone, clay, and glass products.....	525	539	544	545	541	538	527	535	530	526	527	518	520	422	349	
Textile-mill products and other fiber manufactures.....	1,322	1,357	1,368	1,371	1,384	1,397	1,364	1,418	1,416	1,425	1,435	1,428	1,413	1,330	1,235	
Apparel and other finished textile products.....	1,309	1,324	1,338	1,353	1,348	1,329	1,235	1,263	1,247	1,268	1,334	1,333	1,311	1,080	894	
Leather and leather products.....	410	409	408	421	425	429	421	419	404	418	442	448	445	378	383	
Food.....	1,719	1,787	1,840	1,931	2,069	1,957	1,903	1,786	1,610	1,562	1,655	1,658	1,688	1,418	1,192	
Tobacco manufactures.....	96	100	103	103	101	99	96	98	97	99	100	101	101	103	105	
Paper and allied products.....	481	491	493	491	487	479	476	477	476	476	480	479	482	389	320	
Printing, publishing, and allied industries.....	728	738	734	735	725	720	716	719	718	718	722	724	726	549	561	
Chemicals and allied products.....	783	788	790	789	785	775	751	762	759	767	773	773	774	873	421	
Products of petroleum and coal.....	236	240	242	240	245	246	247	245	242	238	238	237	238	170	147	
Rubber products.....	241	246	249	248	246	245	240	243	243	246	253	257	259	231	150	
Miscellaneous industries.....	549	570	591	597	588	577	558	563	566	569	579	578	574	563	311	

¹ Estimates include all full- and part-time production and nonproduction workers in manufacturing industries who worked or received pay during the pay period ending nearest the 15th of the month. These estimates have been adjusted to levels indicated by Federal Security Agency data through 1946

and have been carried forward from 1946 bench-mark levels, thereby providing consistent series. Data for the three most recent months are subject to revision.

TABLE A-4: Estimated Number of Wage and Salary Workers in Nonagricultural Establishments for Selected States¹

[In thousands]

Region and State	1948												1947	Annual average 1943
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	
New England:														
Maine.....	262	263	269	275	280	276	270	259	253	261	261	264	270	301
Vermont ²	94	94	94	95	96	95	96	95	94	94	94	94	97	91
Massachusetts.....	1,755	1,727	1,732	1,735	1,726	1,714	1,731	1,720	1,701	1,711	1,706	1,711	1,773	1,734
Rhode Island.....	287	288	288	288	285	286	287	287	288	290	289	289	298	313
Connecticut.....	780	775	776	771	761	762	766	768	773	773	766	770	792	799
Middle Atlantic:														
New York.....	5,551	5,502	5,513	5,500	5,461	5,405	5,416	5,385	5,380	5,400	5,375	5,397	5,575	5,268
New Jersey.....	1,585	1,584	1,594	1,604	1,599	1,589	1,592	1,576	1,568	1,563	1,553	1,561	1,604	1,732
Pennsylvania.....	3,704	3,671	3,668	3,660	3,627	3,586	3,609	3,579	3,522	3,584	3,546	3,566	3,662	3,480
East North Central:														
Indiana.....	1,226	1,215	1,220	1,237	1,203	1,205	1,207	1,197	1,183	1,194	1,180	1,186	1,221	1,191
Illinois.....	3,256	3,230	3,228	3,218	3,195	3,185	3,174	3,126	3,110	3,144	3,151	3,172	3,225	2,957
Wisconsin.....	1,006	1,000	1,003	1,018	1,007	1,016	993	977	973	974	972	971	996	885
West North Central:														
Minnesota.....	809	813	813	825	823	813	803	782	767	762	764	773	795	666
Missouri.....	1,158	1,144	1,153	*1,144	*1,141	*1,140	*1,139	*1,126	*1,120	*1,120	*1,114	*1,125	*1,156	1,081
South Atlantic:														
Maryland.....	724	723	719	720	717	708	707	698	686	685	676	682	698	756
Georgia.....	754	751	753	*749	*747	*736	*742	*739	*738	*740	*731	*737	*752	733
East South Central:														
Tennessee.....	750	748	752	756	754	743	743	740	733	734	721	720	722	669
West South Central:														
Texas.....	1,798	1,777	1,768	1,758	1,746	1,740	*1,725	1,702	*1,693	1,670	1,664	*1,677	1,715	1,644
Mountain:														
Montana.....	142	142	143	143	142	141	139	136	136	133	133	134	138	117
Idaho.....	131	132	134	132	122	121	118	117	115	115	115	118	125	101
New Mexico.....	129	129	129	129	128	127	125	123	120	119	117	118	121	95
Arizona.....	159	156	156	154	153	*155	*156	*156	*156	*155	*155	*155	*156	142
Utah.....	183	186	191	195	189	189	184	180	171	173	171	173	181	*187
Nevada ³	47	48	48	49	50	50	49	48	48	47	47	48	49	55
Pacific:														
Washington.....	672	676	685	688	677	674	655	641	659	653	649	651	668	726
California.....	3,113	3,085	3,122	3,160	3,146	3,109	3,077	3,046	3,024	3,029	3,024	3,037	3,122	3,065

¹ Revised data in all except the first three columns are identified by an asterisk for the first month's publication of such data. Comparable series, January 1943 to date, are available upon request to U. S. Department of Labor or cooperating State agency. See table A-5 for addresses of cooperating State agencies.

² Does not include contract construction.

³ Average for 1943 may not be strictly comparable with current data.

TABLE A-5: Estimated Number of Wage and Salary Workers in Manufacturing Industries, by State¹
[In thousands]

Region and State	1948												1947	Annual average 1943 ²
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	
New England:														
Maine ³	109.3	111.2	113.7	117.9	120.2	116.5	115.2	108.2	106.7	115.2	116.5	116.9	118.5	144.4
New Hampshire	79.2	80.4	82.1	82.1	83.6	82.1	82.7	81.6	82.6	84.4	85.6	85.8	85.3	77.0
Vermont ³	36.2	36.6	36.7	37.3	37.9	37.1	37.8	37.7	38.0	38.7	38.8	39.1	40.0	41.3
Massachusetts	715.7	722.8	727.9	731.3	725.6	710.0	726.1	723.4	729.7	745.7	745.9	747.3	757.2	835.6
Rhode Island	139.5	142.1	142.8	144.7	144.1	144.8	146.5	147.0	149.9	153.6	154.5	153.5	154.6	169.4
Connecticut ³	392.4	396.5	397.0	397.1	392.1	393.3	396.5	401.1	406.4	412.5	412.1	413.2	417.8	504.2
Middle Atlantic:														
New York	1,839.1	1,870.8	1,884.1	1,888.5	1,869.6	1,816.5	1,831.7	1,829.0	1,850.4	1,902.6	1,906.4	1,905.8	1,924.6	2,115.7
New Jersey	724.1	740.3	747.8	750.4	743.9	732.8	741.8	740.7	746.0	753.7	757.8	757.3	764.0	951.1
Pennsylvania	1,498.9	1,504.0	1,503.1	1,508.1	1,498.0	1,481.2	1,495.4	1,489.4	1,497.5	1,514.3	1,513.1	1,515.6	1,527.3	1,579.3
East North Central:														
Ohio	1,210.6	1,224.6	1,226.5	1,231.8	1,224.5	1,216.4	1,228.2	1,221.3	1,230.7	1,244.0	1,243.9	1,246.0	1,250.9	1,363.3
Indiana	542.9	545.8	551.6	569.4	542.7	544.1	545.5	541.9	540.0	552.8	553.4	556.3	559.0	633.1
Illinois	1,234.5	1,242.7	1,243.3	1,243.8	1,231.0	1,227.4	1,228.7	1,203.5	1,198.0	1,253.5	1,267.0	1,271.0	1,273.6	1,263.7
Michigan	988.5	993.4	1,002.0	1,004.9	987.8	996.8	962.7	998.5	1,002.7	1,010.9	970.7	1,019.6	1,024.2	1,181.8
Wisconsin ³	426.5	430.7	431.8	445.9	434.5	447.9	429.7	420.0	426.3	432.5	434.2	433.9	436.1	442.8
West North Central:														
Minnesota ³	197.5	200.8	201.9	210.2	210.0	206.6	203.3	190.9	188.7	198.0	199.0	200.0	202.0	215.1
Iowa ³	155.7	153.8	153.8	153.9	153.0	152.1	149.8	135.1	133.8	153.7	154.7	155.5	*156.2	161.7
Missouri ³	345.5	347.2	349.8	347.3	349.1	345.7	343.9	339.3	339.9	346.6	349.2	350.3	351.7	412.9
North Dakota	6.6	6.9	7.0	6.8	6.9	7.0	7.1	6.7	6.4	6.3	6.4	6.6	6.7	5.6
South Dakota	12.0	12.2	11.9	11.6	11.7	11.8	11.9	11.3	11.3	11.0	11.1	11.2	11.3	10.3
Nebraska	42.9	44.1	43.6	42.4	43.1	43.6	43.0	36.1	34.9	42.4	43.0	43.8	46.3	60.8
Kansas ³	87.8	87.8	88.3	87.5	87.6	87.6	87.6	80.7	75.4	79.8	79.8	81.6	83.1	144.2
South Atlantic:														
Delaware	44.9	45.3	46.3	48.9	48.2	46.6	46.6	45.8	46.6	46.5	45.9	45.7	46.1	55.2
Maryland	227.7	233.0	235.3	242.4	239.2	232.8	229.4	228.5	228.2	228.9	228.5	226.9	229.6	348.8
District of Columbia	17.1	17.0	16.9	17.0	16.7	17.2	17.1	17.2	17.4	17.1	16.8	17.3	17.5	15.6
Virginia	211.3	215.5	218.4	217.7	214.5	211.5	211.1	210.8	212.8	213.7	213.5	213.6	215.1	231.9
West Virginia	132.3	132.7	134.1	132.9	133.7	133.3	133.9	132.4	131.9	130.9	130.3	132.4	132.5	132.2
North Carolina	367.3	369.3	370.8	375.4	378.9	362.9	381.7	381.4	382.6	385.8	380.4	382.7	380.8	399.9
South Carolina	193.0	193.6	193.8	194.3	196.9	195.8	200.5	199.3	199.3	200.5	196.9	198.3	198.9	191.8
Georgia ³	271.8	277.7	280.0	*279.8	*280.3	*273.7	*276.3	*275.1	*276.6	*281.1	*280.1	*281.3	*280.0	302.9
Florida ³	99.7	97.3	90.7	89.9	88.2	88.0	90.0	93.2	96.5	99.4	98.9	100.3	97.8	136.0
East South Central:														
Kentucky	126.8	128.6	129.2	128.1	127.4	126.8	127.0	125.9	128.2	129.5	129.4	129.5	130.4	131.7
Tennessee ³	245.1	250.5	256.3	256.3	258.9	255.6	255.7	258.0	257.7	259.9	256.1	255.4	254.7	255.9
Alabama ³	224.8	228.7	229.1	227.1	228.3	228.9	227.4	227.2	226.5	230.9	230.2	232.7	230.9	258.5
Mississippi	86.6	87.0	87.2	87.4	90.6	91.3	89.5	88.1	88.6	90.0	90.5	95.5	95.7	95.1
West South Central:														
Arkansas ³	77.1	79.0	80.2	79.5	79.6	78.8	79.0	77.4	74.9	73.0	69.8	71.9	76.1	76.7
Louisiana ³	150.9	152.6	153.6	*155.7	*155.6	*150.0	*148.7	*147.9	*148.3	*145.9	*142.6	*150.4	*150.9	166.1
Oklahoma ³	66.7	67.4	67.9	67.2	66.9	66.7	68.9	65.2	65.5	62.6	62.6	64.0	64.7	99.7
Texas	350.8	358.0	352.8	351.4	353.6	352.9	354.8	341.7	338.7	337.0	340.1	342.7	346.6	424.8
Mountain:														
Montana	18.1	18.6	18.8	18.1	18.0	18.1	17.7	17.1	17.1	17.2	17.3	17.7	18.5	15.7
Idaho ³	20.9	23.4	26.0	24.8	20.1	20.6	18.8	18.1	16.7	16.9	17.6	18.2	19.5	15.9
Wyoming	6.4	7.2	7.4	6.8	6.8	6.8	6.8	6.5	6.3	6.2	6.1	6.1	7.0	5.1
Colorado	55.9	59.2	60.2	58.3	56.9	56.5	56.3	53.3	54.0	55.5	55.1	57.2	61.0	67.5
New Mexico ³	9.9	10.1	10.1	10.4	10.5	10.4	10.0	9.3	8.8	8.2	8.2	8.3	8.6	7.9
Arizona ³	15.2	15.1	14.8	*13.8	*15.1	*15.8	*15.4	*15.2	*14.9	*14.7	14.6	14.7	14.7	19.4
Utah ³	28.2	30.9	31.6	32.8	29.1	29.4	26.7	25.2	23.3	24.4	24.1	25.1	26.9	33.5
Nevada ³	3.3	3.4	3.4	3.5	3.6	3.4	3.4	3.3	3.3	3.3	3.3	3.3	3.3	7.9
Pacific:														
Washington	176.9	186.0	191.6	190.5	183.1	179.9	163.4	152.4	175.3	173.7	173.0	173.0	174.6	285.6
Oregon	109.9	117.3	118.8	117.3	121.2	117.3	112.8	110.7	110.2	109.2	109.2	109.8	111.4	192.1
California	725.1	737.1	768.0	801.7	771.6	741.3	713.0	696.3	695.8	700.4	703.5	705.0	715.1	1,165.5

¹ Revised data in all except the first three columns are identified by an asterisk for the first month's publication of such data. Comparable series, January 1943 to date are available upon request to U. S. Department of Labor or cooperating State Agency listed below.

² Average for 1943 may not be strictly comparable with current data for those States now based on Standard Industrial Classification.

³ Series based on Standard Industrial Classification.

Cooperating State Agencies:

- Alabama—Department of Industrial Relations, Montgomery 5.
- 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 3.
- Connecticut—Employment Security Division, Department of Labor and Factory Inspection, Hartford 15.
- Delaware—Federal Reserve Bank of Philadelphia, Philadelphia 1, Pa.
- Florida—Unemployment Compensation Division, Industrial Commission, Tallahassee.
- Georgia—Employment Security Agency, Department of Labor, Atlanta 3.
- Idaho—Employment Security Agency, Industrial Accident Board, Boise.
- Illinois—Department of Labor, Chicago 1.
- Indiana—Employment Security Division, Indianapolis 4.
- Iowa—Employment Security Commission, Des Moines 8.
- Kansas—State Labor Department, Topeka.
- Kentucky—Department of Economic Security, Frankfort.
- Louisiana—Division of Employment Security, Department of Labor, Baton Rouge 4.
- Maine—Unemployment Compensation Commission, Augusta.
- Maryland—Department of Employment Security, Baltimore 2.

- Massachusetts—Division of Statistics, Department of Labor and Industries, Boston 10.
- Michigan—Department of Labor and Industry, Lansing 13.
- Minnesota—Division of Employment and Security, Department of Social Security, St. Paul 1.
- Missouri—Division of Employment Security, Department of Labor and Industrial Relations, Jefferson City.
- Montana—Unemployment Compensation Commission, Helena.
- Nebraska—Division of Placement and Unemployment Insurance, Department of Labor, Lincoln 1.
- Nevada—Employment Security Department, Carson City.
- New Hampshire—Unemployment Compensation Division, Bureau of Labor, Concord.
- New Jersey—Department of Labor, Trenton 8.
- New Mexico—Employment Security Commission, Albuquerque.
- New York—Division of Placement and Unemployment Insurance, Department of Labor, New York 17.
- North Carolina—Department of Labor, Raleigh.
- Oklahoma—Employment Security Commission, Oklahoma City 2.
- Pennsylvania—Federal Reserve Bank of Philadelphia, Philadelphia 1 (manufacturing); Bureau of Research and Information, Department of Labor and Industry, Harrisburg (nonmanufacturing).
- Rhode Island—Division of Census and Information, Department of Labor, Providence 2.
- Tennessee—Department of Employment Security, Nashville 3.
- Texas—Bureau of Business Research, University of Texas, Austin 12.
- Utah—Department of Employment Security, Industrial Commission, Salt Lake City 13.
- Vermont—Unemployment Compensation Commission, Montpelier.
- Virginia—Division of Research and Statistics, Department of Labor and Industry, Richmond 21.
- Washington—Employment Security Department, Olympia.
- Wisconsin—Statistical Department, Industrial Commission, Madison 3.
- Wyoming—Employment Security Commission, Casper.

TABLE A-6: Estimated Number of Production Workers in Manufacturing Industries¹

[In thousands]

Industry group and industry	1949		1948										Annual average		
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1948	1939
All manufacturing	12,673	13,055	13,233	13,375	13,488	13,245	12,987	12,959	12,738	12,791	13,131	13,066	13,150	14,560	8,192
Durable goods	6,525	6,735	6,807	6,822	6,803	6,709	6,681	6,662	6,642	6,683	6,791	6,711	6,795	8,727	3,611
Nondurable goods	6,148	6,320	6,426	6,553	6,685	6,536	6,306	6,297	6,096	6,108	6,340	6,355	6,355	5,834	4,581
<i>Durable goods</i>															
Iron and steel and their products ²	1,597	1,638	1,654	1,657	1,648	1,631	1,601	1,610	1,600	1,603	1,634	1,628	1,634	1,761	991
Blast furnaces, steel works, and rolling mills	542.8	538.2	535.0	535.1	535.8	526.5	523.0	517.7	511.8	516.1	508.5	508.8	508.8	516.7	388.4
Gray-iron and semisteel castings	113.1	115.5	115.8	114.9	112.3	110.4	114.6	112.9	116.6	119.9	120.5	120.4	120.4	88.4	62.2
Malleable-iron castings	39.0	38.6	38.5	38.6	37.4	36.1	37.9	37.3	37.2	37.9	37.8	37.9	37.9	28.8	19.2
Steel castings	74.9	75.1	75.0	74.7	73.1	71.8	73.3	72.1	72.3	73.0	72.3	71.3	71.3	90.1	32.1
Cast-iron pipe and fittings	30.0	29.9	29.3	30.1	29.5	28.9	28.9	28.4	27.6	28.3	28.0	28.7	28.7	18.0	17.6
Tin cans and other tinware	46.4	47.0	48.7	50.1	49.1	47.3	44.7	42.8	42.1	44.5	45.7	47.4	47.4	32.4	31.8
Wire drawn from purchased rods	28.8	28.7	29.1	28.6	28.4	28.0	28.7	29.4	30.1	30.6	30.9	31.4	36.0	22.0	30.4
Wirework	42.2	42.1	42.1	42.8	42.4	41.8	40.2	41.1	41.9	43.4	42.5	43.5	43.5	32.8	30.4
Cutlery and edge tools	24.3	25.0	24.3	23.9	22.5	21.8	22.1	23.1	23.7	24.0	24.6	24.7	21.8	15.4	15.4
Tools (except edge tools, machine tools, files, and saws)	24.4	24.5	24.6	24.7	24.6	24.6	25.1	25.2	25.5	25.7	25.8	25.9	27.8	15.3	15.3
Hardware	54.2	54.1	53.8	53.5	53.0	52.2	52.7	54.6	55.9	57.2	56.9	56.0	45.3	35.7	35.7
Plumbers' supplies	42.4	42.6	42.4	41.3	40.4	38.8	40.3	39.3	39.4	40.2	40.0	40.0	25.0	26.2	26.2
Stoves, oil burners, and heating equipment, not elsewhere classified	76.4	87.6	93.3	92.0	88.5	81.8	83.0	83.7	81.9	87.5	91.0	93.1	60.4	49.2	49.2
Steam and hot-water heating apparatus and steam fittings	65.3	66.1	66.6	65.3	63.9	60.8	63.8	64.0	63.0	66.0	66.5	65.9	64.4	32.3	32.3
Stamped and enameled ware and galvanizing	113.5	117.6	116.5	114.3	114.9	116.0	116.9	116.8	118.1	120.1	121.2	121.6	97.0	59.2	59.2
Fabricated structural and ornamental metalwork	65.6	65.8	66.3	65.0	64.2	62.5	62.8	63.2	63.8	63.9	63.4	63.7	71.0	35.5	35.5
Metal doors, sash, frames, molding, and trim	10.9	11.3	11.2	11.0	10.9	10.4	10.4	10.2	10.1	10.5	10.2	10.8	12.8	7.7	7.7
Bolts, nuts, washers, and rivets	28.7	28.4	28.3	28.1	27.9	28.1	28.5	28.6	28.9	28.9	28.7	28.7	31.6	15.2	15.2
Forgings, iron and steel	38.4	38.2	37.4	36.9	35.3	35.1	34.9	35.1	36.7	37.5	37.6	37.8	43.6	16.4	16.4
Wrought pipe, welded and heavy-riveted	19.5	19.7	19.9	19.8	19.7	19.8	20.1	18.8	18.8	19.2	19.1	19.8	28.4	8.9	8.9
Screw-machine products and wood screws	35.3	35.5	35.5	35.0	35.1	35.2	35.9	36.4	36.8	36.8	36.6	36.1	53.8	18.0	18.0
Steel barrels, kegs, and drums	7.9	7.8	7.9	8.0	8.1	7.9	7.9	7.6	7.7	7.9	8.1	8.4	8.5	6.5	6.5
Firearms	22.4	22.4	22.1	21.7	21.4	21.5	21.4	21.2	21.0	20.8	20.4	20.0	71.7	5.3	5.3
Electrical machinery ²	536	552	557	553	548	538	535	547	548	563	577	584	588	741	259
Electrical equipment	363.4	367.9	367.1	368.6	363.9	362.3	367.7	368.3	376.0	382.9	387.7	389.7	497.5	182.7	182.7
Radios and phonographs	97.2	95.9	93.1	89.7	86.9	85.9	89.0	90.0	93.4	97.6	99.2	100.3	124.1	44.0	44.0
Communication equipment	91.5	93.5	92.4	89.7	87.5	87.0	90.3	90.0	93.9	96.5	97.2	98.2	119.3	32.5	32.5
Machinery, except electrical ²	1,179	1,202	1,204	1,209	1,208	1,202	1,209	1,217	1,207	1,202	1,232	1,237	1,231	1,293	529
Machinery and machine-shop products	506.0	505.6	506.7	509.0	502.2	505.9	511.8	507.9	514.4	518.6	521.3	518.5	586.0	207.6	207.6
Engines and turbines	52.6	52.5	52.1	50.5	51.5	52.4	52.1	53.5	53.9	54.7	54.4	54.6	79.5	18.7	18.7
Tractors	61.6	60.9	59.8	59.2	60.0	61.1	60.4	56.3	44.8	62.2	61.9	61.4	52.4	31.3	31.3
Agricultural machinery, excluding tractors	77.1	76.2	75.9	72.8	72.6	74.9	76.3	75.2	76.2	75.9	74.6	72.3	45.1	28.5	28.5
Machine tools	47.3	47.5	47.6	48.0	47.8	46.8	47.0	47.5	47.7	49.2	50.4	50.4	109.7	36.6	36.6
Machine-tool accessories	54.4	54.5	54.7	55.3	55.1	51.8	55.4	55.5	55.5	55.9	56.3	56.4	105.4	25.8	25.8
Textile machinery	41.6	41.6	41.6	41.8	41.8	41.4	42.0	41.6	41.4	41.1	40.8	40.7	28.5	21.9	21.9
Pumps and pumping equipment	69.4	69.1	68.9	69.1	67.9	68.5	70.0	71.6	72.2	73.7	75.4	75.5	92.8	24.9	24.9
Typewriters	18.4	18.9	20.6	21.0	22.1	22.9	23.7	23.8	24.1	24.9	25.1	25.8	12.0	16.2	16.2
Cash registers; adding, and calculating machines	43.8	44.1	44.2	44.9	44.6	45.2	45.8	45.6	46.3	46.1	45.9	45.3	34.8	19.7	19.7
Washing machines, wringers, and driers, domestic	12.5	15.5	15.7	15.7	15.6	15.7	16.4	16.0	16.2	16.3	16.5	16.2	13.3	7.5	7.5
Sewing machines, domestic and industrial	15.0	14.9	14.8	14.6	14.3	14.0	14.0	13.9	13.8	13.7	13.5	13.4	10.7	7.8	7.8
Refrigerators and refrigeration equipment	79.3	79.5	81.0	81.7	82.3	84.3	84.8	82.5	79.7	81.0	81.6	82.6	54.4	35.2	35.2
Transportation equipment, except automobiles	444	451	453	449	439	414	430	434	438	462	465	464	472	2,508	159
Locomotives	26.5	26.5	26.6	26.5	26.5	17.2	26.4	26.3	26.4	26.6	26.6	26.3	34.1	6.5	6.5
Cars, electric- and steam-railroad	56.1	55.9	54.5	54.5	54.6	54.5	55.0	53.9	53.9	54.4	54.0	55.9	60.5	24.5	24.5
Aircraft and parts, excluding aircraft engines	150.5	149.8	145.3	138.5	133.5	130.3	127.6	125.1	137.3	136.1	135.3	134.7	794.9	39.7	39.7
Aircraft engines	28.5	28.0	27.5	26.7	21.6	25.6	25.6	25.1	24.8	24.6	24.9	25.3	233.5	8.9	8.9
Shipbuilding and boatbuilding	92.7	94.5	97.3	97.5	99.5	103.4	108.9	116.1	122.5	125.8	127.7	132.9	1,225.2	69.2	69.2
Motorcycles, bicycles, and parts	12.0	13.6	13.8	13.3	11.6	10.8	12.4	12.9	14.4	14.8	14.6	14.5	10.0	7.0	7.0
Automobiles	776	782	777	782	788	763	787	739	767	772	784	720	789	714	402
Nonferrous metals and their products ²	385	398	404	403	399	395	388	399	398	406	413	409	409	449	229
Smelting and refining, primary, of nonferrous metals	41.2	41.4	41.2	40.2	41.4	41.9	42.0	41.4	41.0	40.8	40.2	39.9	56.4	27.6	27.6
Alloying; and rolling and drawing of nonferrous metals, except aluminum	54.7	54.5	54.6	54.3	52.9	51.9	52.6	52.6	53.7	54.6	53.1	53.6	75.8	38.8	38.8
Clocks and watches	27.0	28.2	28.8	28.6	27.5	25.9	28.3	28.3	28.5	28.8	28.6	28.6	25.2	20.3	20.3
Jewelry (precious metals) and jewelers' findings	26.8	27.5	27.5	27.1	26.3	25.8	26.3	26.4	27.1	27.6	27.5	27.3	20.5	14.4	14.4
Silverware and plated ware	27.7	28.3	28.1	27.7	27.4	26.5	27.4	27.2	27.5	27.5	27.1	26.8	15.1	12.1	12.1

See footnotes at end of table.

TABLE A-6: Estimated Number of Production Workers in Manufacturing Industries¹—Continued

[In thousands]

Industry group and industry	1949	1948												Annual average	
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1943	1939
<i>Durable goods—Continued</i>															
Nonferrous metals and their products²—Con.															
Lighting equipment		30.9	31.8	31.9	32.2	31.6	30.2	30.9	30.4	31.3	33.1	33.9	33.6	28.2	20.5
Aluminum manufactures		40.6	40.9	40.1	38.5	39.5	39.3	42.3	42.7	44.2	45.2	45.2	45.3	79.4	23.5
Sheet-metal work, not elsewhere classified		36.6	37.1	37.3	37.0	37.3	36.8	36.4	36.7	37.5	38.3	38.4	38.8	37.9	18.7
Lumber and timber basic products²															
Sawmills and logging camps	720	788	821	831	843	844	829	799	772	754	749	736	738	535	420
Planing and plywood mills		635.2	667.2	678.2	691.4	692.1	681.1	654.5	627.7	611.0	606.9	594.1	597.7	435.8	313.7
		152.9	154.1	152.8	152.1	152.5	148.3	145.8	144.0	142.7	142.3	141.1	140.8	99.2	79.1
Furniture and finished lumber products²															
Mattresses and bedsprings	440	462	470	470	466	461	452	459	458	470	485	490	489	366	328
Furniture		33.4	35.7	37.1	36.8	35.2	33.2	33.4	33.3	34.9	37.0	38.6	38.7	21.7	20.5
Wooden boxes, other than cigar		254.1	256.5	255.6	252.5	249.7	244.4	248.1	249.6	256.2	263.7	266.2	265.1	200.0	177.9
Caskets and other morticians' goods		34.8	35.4	34.9	34.4	34.6	35.6	34.8	34.8	36.0	37.0	37.6	37.8	35.4	28.3
Wood preserving		18.8	19.5	19.2	19.5	19.4	18.9	19.4	19.9	20.3	20.9	20.7	21.0	14.2	13.9
Wood, turned and shaped		16.8	17.0	17.1	17.3	17.7	17.2	16.8	16.5	16.2	16.7	16.7	17.6	12.4	12.6
		33.4	33.9	34.5	34.3	34.6	33.6	35.4	34.3	35.0	35.7	35.1	34.3	26.4	24.6
Stone, clay, and glass products²															
Glass and glassware	448	462	467	468	464	461	450	458	454	451	452	443	445	360	294
Glass products made from purchased glass		118.8	121.8	123.2	122.9	119.7	114.9	120.5	121.5	121.8	121.7	118.8	121.0	99.8	71.4
Cement		14.7	14.7	14.4	13.9	13.9	14.3	14.2	14.1	14.2	14.4	14.3	14.4	11.3	10.0
Brick, tile, and terra cotta		37.0	37.2	36.9	36.2	36.9	37.0	36.5	36.0	35.5	35.3	35.2	35.2	27.1	24.4
Pottery and related products		83.1	83.5	83.5	83.6	83.4	81.9	82.1	79.6	77.9	77.3	75.3	78.0	52.5	58.0
Gypsum		61.6	61.5	61.0	60.3	60.0	57.0	59.0	58.5	57.9	58.9	57.8	57.4	45.0	33.8
Wallboard, plaster (except gypsum), and mineral wool		7.5	7.8	7.9	7.8	7.8	7.8	7.6	7.5	7.5	7.6	7.6	7.5	4.5	4.9
Lime		14.8	14.9	14.8	14.7	14.7	14.7	14.5	14.5	14.5	14.3	14.4	14.5	11.1	8.1
Marble, granite, slate, and other products		10.7	10.7	10.7	10.8	10.8	10.8	10.7	11.0	11.1	10.9	10.7	10.7	9.3	9.5
Asbestos products		19.2	19.0	19.0	18.9	19.0	18.7	18.5	18.1	17.9	18.4	17.9	18.0	12.5	18.5
		20.7	20.5	20.6	20.5	20.7	21.1	20.5	20.1	20.1	20.1	19.7	15.8	23.4	7.7
		25.1	25.6	25.7	24.9	25.1	24.1	25.0	25.1	25.2	25.3	25.1	25.1	22.0	15.9
<i>Nondurable goods</i>															
Textile-mill products and other fiber manufactures²															
Cotton manufactures, except smallwares	1,200	1,236	1,245	1,249	1,261	1,274	1,243	1,295	1,293	1,301	1,312	1,306	1,292	1,237	1,144
Cotton smallwares		507.5	508.9	511.4	516.9	521.5	509.9	527.7	524.7	526.4	529.4	525.3	523.6	526.3	418.4
Silk and rayon goods		13.1	13.3	13.4	13.4	13.5	13.4	14.0	14.4	14.6	14.9	14.9	14.6	17.8	14.1
Woolen and worsted manufactures, except dyeing and finishing		120.8	122.0	122.4	122.1	121.5	116.5	121.2	120.3	120.1	120.0	119.2	115.5	104.1	126.6
Hosiery		156.5	158.2	159.6	165.8	169.8	167.5	173.8	173.2	175.0	178.3	179.5	177.4	174.1	157.7
Knitted cloth		140.5	142.3	141.7	141.7	143.7	135.3	145.6	147.0	149.7	151.9	150.8	149.5	125.9	168.0
Knitted underwear and knitted gloves		11.2	11.5	11.3	11.1	11.2	11.1	11.2	11.5	11.8	11.7	11.7	11.6	12.6	11.5
Knitted underwear		33.2	33.9	32.8	31.8	31.7	30.3	33.1	33.8	33.4	34.0	33.9	32.9	34.8	29.7
Dyeing and finishing textiles, including woolen and worsted		43.6	46.1	47.9	49.1	50.1	50.2	51.8	52.3	53.8	54.1	53.5	52.8	44.9	40.7
Carpets and rugs, wool		92.5	91.9	91.5	91.1	91.7	91.0	93.1	94.2	95.0	95.1	95.5	94.4	80.2	70.6
Hats, fur-felt		40.7	40.7	40.8	40.7	40.0	40.0	40.0	39.7	39.4	39.4	39.0	38.4	24.5	27.0
Jute goods, except felts		11.7	12.0	11.5	12.5	13.3	12.3	13.4	12.9	12.7	13.7	13.7	13.7	11.0	15.4
Cordage and twine		4.3	4.3	4.1	4.0	4.3	4.3	4.3	4.2	4.3	4.1	4.2	4.0	4.2	3.8
		14.9	15.1	14.9	15.3	15.4	15.8	16.2	16.4	16.7	17.1	17.2	16.8	18.3	12.8
Apparel and other finished textile products															
Men's clothing, not elsewhere classified	1,129	1,145	1,159	1,175	1,173	1,157	1,070	1,095	1,082	1,103	1,165	1,166	1,147	958	790
Shirts, collars, and nightwear		303.2	307.8	319.2	320.4	318.9	296.5	314.4	309.8	310.0	314.5	311.3	308.1	265.9	229.6
Underwear and neckwear, men's		73.7	77.7	78.1	77.4	76.9	75.8	80.0	80.9	82.0	82.2	82.0	81.6	67.2	74.0
Work shirts		19.1	19.5	18.9	18.1	17.9	16.7	18.2	18.4	18.7	19.0	18.7	18.1	16.3	17.0
Women's clothing, not elsewhere classified		18.1	18.8	18.9	18.2	18.6	18.5	18.6	18.2	17.9	17.5	16.8	15.8	18.5	14.1
Corsets and allied garments		485.3	488.3	488.8	490.3	478.8	437.0	435.4	427.6	440.0	481.7	485.3	476.2	345.3	286.2
Millinery		19.3	19.2	19.3	19.0	18.6	17.3	18.1	18.5	19.2	19.9	20.1	19.7	16.5	18.8
Handkerchiefs		23.8	22.1	25.8	24.8	24.8	22.2	20.0	20.5	23.6	27.6	27.9	26.4	23.3	25.5
Curtains, draperies, and bedspreads		5.5	5.5	5.3	5.0	4.9	4.0	4.9	5.0	5.1	5.1	5.0	4.9	5.7	5.1
Housefurnishings, other than curtains, etc.		25.6	27.1	27.4	27.9	28.6	25.1	26.4	26.4	27.7	30.6	33.8	31.6	25.2	17.8
Textile bags		32.2	33.2	32.2	31.4	30.4	28.1	27.9	27.7	29.0	30.4	29.2	30.0	24.0	11.2
		30.3	29.8	29.6	29.2	28.9	28.1	27.1	26.8	26.8	27.3	27.8	28.2	19.6	12.6
Leather and leather products²															
Leather	365	364	363	376	379	383	375	373	359	372	396	402	399	340	347
Boot and shoe cut stock and findings		47.3	46.4	47.7	48.0	47.7	47.2	47.9	47.5	47.6	49.2	50.3	50.2	46.5	50.0
Boots and shoes		17.0	17.0	17.6	17.9	18.1	17.7	17.8	17.3	17.7	18.9	19.5	19.7	19.2	20.0
Leather gloves and mittens		232.7	229.5	238.5	241.0	244.8	239.5	236.6	225.5	235.9	254.1	257.8	256.2	205.6	230.9
Trunks and suitcases		10.6	12.4	12.8	13.0	13.2	12.8	12.9	12.4	12.2	12.5	12.5	12.2	15.4	10.0
		12.8	14.2	14.6	14.3	13.8	13.3	13.3	13.2	13.3	13.9	14.0	13.3	13.7	8.3
Food²															
Slaughtering and meat packing	1,182	1,253	1,306	1,400	1,537	1,418	1,364	1,257	1,091	1,047	1,149	1,159	1,191	1,056	855
Butter		218.2	205.3	197.7	195.2	196.8	201.3	199.6	184.5	184.0	193.6	190.9	209.7	174.0	135.0
Condensed and evaporated milk		35.0	34.6	35.5	36.6	38.2	39.6	40.5	39.2	36.9	34.3	32.0	32.6	33.2	20.1
Ice cream		18.7	19.5	20.3	21.1	21.9	22.6	23.0	21.6	20.5	19.3	18.8	15.4	19.9	10.9
Flour		23.9	24.3	26.2	29.6	31.8	32.8	31.6	29.2	27.1	24.4	23.6	23.6	23.0	17.6
Feeds, prepared		41.5	41.7	40.1	41.5	42.3	42.7	41.4	39.9	40.1	40.3	40.7	41.8	32.9	27.8
		28.9	28.9	29.2	29.3	29.5	29.3	28.7	27.9	26.6	26.3	27.4	29.3	25.0	17.3

See footnotes at end of table.

TABLE A-6: Estimated Number of Production Workers in Manufacturing Industries¹—Continued

[In thousands]

Industry group and industry	1949		1948										Annual average		
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1943	1939
<i>Nondurable goods—Continued</i>															
Food²—Continued															
Cereal preparations.....		12.5	13.1	13.2	13.2	13.8	13.9	13.0	12.8	12.2	12.1	12.4	12.1	11.4	8.4
Baking.....		251.7	255.7	258.0	253.2	61.0	250.0	247.8	242.2	239.5	241.7	238.7	236.4	211.3	190.4
Sugar refining, cane.....		24.2	22.4	22.4	25.0	25.3	25.8	22.1	21.4	20.8	23.5	24.2	22.2	16.7	15.9
Sugar, beet.....		10.8	25.2	25.0	10.6	9.1	7.5	7.3	6.6	5.7	5.9	6.8	11.1	10.1	11.6
Confectionery.....		82.4	89.8	88.9	81.1	71.6	63.0	64.5	62.1	67.1	72.5	77.3	82.0	59.5	55.7
Beverages, nonalcoholic.....		39.5	40.4	43.0	46.6	49.6	50.3	46.2	43.4	40.5	38.4	36.1	37.4	32.2	23.8
Malt liquors.....		77.9	80.7	81.3	86.0	87.8	88.2	83.1	73.6	77.3	74.8	74.1	75.2	54.3	40.5
Canning and preserving.....		163.1	195.2	289.1	444.4	326.2	274.3	186.9	153.2	140.7	135.5	136.8	142.2	188.5	150.3
Tobacco manufactures ¹	83	87	90	90	88	86	83	85	84	86	87	88	87	91	93
Cigarettes.....		34.1	35.1	35.1	34.9	34.5	33.6	33.3	33.1	33.2	33.2	33.5	33.6	33.9	27.4
Cigars.....		45.2	47.2	46.5	44.9	44.1	41.7	43.6	43.7	45.2	46.2	46.2	45.8	47.5	55.8
Tobacco (chewing and smoking) and snuff.....		7.8	7.8	7.9	7.8	7.8	7.6	7.7	7.6	7.7	7.8	7.9	7.9	9.3	10.1
Paper and allied products ¹	391	401	403	401	398	394	388	390	389	389	393	392	395	324	265
Paper and pulp.....		207.0	206.6	206.0	206.7	206.7	205.8	204.2	204.7	203.7	203.8	203.0	203.0	160.3	137.8
Paper goods, other.....		63.5	63.6	63.5	62.7	61.8	60.5	61.7	61.5	61.4	62.0	61.9	62.6	50.2	37.7
Envelopes.....		13.2	13.2	12.9	12.6	12.3	12.3	12.5	12.7	12.7	12.7	12.5	12.4	10.2	8.7
Paper bags.....		16.8	17.0	17.8	17.8	17.7	17.4	17.5	17.6	18.0	18.2	18.0	18.1	13.1	11.1
Paper boxes.....		99.9	101.5	99.8	97.0	94.8	90.9	92.8	91.4	92.7	95.2	96.5	97.7	89.6	69.3
Printing, publishing, and allied industries ¹	436	443	442	442	436	432	430	433	432	432	435	438	439	331	328
Newspapers and periodicals.....		152.3	151.0	150.7	149.4	147.7	146.8	146.9	146.4	145.0	144.8	144.1	143.6	113.0	118.7
Printing, book and job.....		188.7	187.8	188.8	185.4	183.1	183.0	184.4	184.2	183.2	185.4	187.7	189.7	138.7	127.6
Lithographing.....		31.3	31.4	31.4	31.1	31.2	31.2	31.1	30.9	31.3	31.4	31.8	32.0	25.9	26.3
Bookbinding.....		34.5	35.1	34.9	34.4	34.8	33.3	35.1	35.1	35.9	37.2	37.4	37.6	29.4	25.8
Chemicals and allied products ¹	594	597	599	600	597	586	567	574	572	580	587	588	588	734	288
Paints, varnishes, and colors.....		47.6	48.1	48.7	48.6	49.7	49.1	49.1	48.7	48.0	48.6	49.3	48.6	38.2	28.3
Drugs, medicines, and insecticides.....		64.4	64.8	64.4	64.2	63.9	63.4	63.6	63.6	64.2	65.2	65.6	65.7	56.0	27.5
Perfumes and cosmetics.....		12.3	12.9	12.8	12.5	12.4	10.8	10.9	11.0	11.2	11.6	12.1	12.0	14.1	10.4
Soap.....		26.5	26.5	27.2	27.0	25.1	24.0	23.7	21.7	21.8	24.9	25.4	25.5	17.9	15.3
Rayon and allied products.....		64.8	63.9	63.9	63.7	64.9	64.4	63.4	63.5	63.7	63.7	63.7	63.2	54.0	48.3
Chemicals, not elsewhere classified.....		211.2	210.7	210.0	210.9	211.2	202.0	207.6	204.8	207.2	205.4	205.5	206.7	144.5	69.9
Explosives and safety fuses.....		27.4	27.4	27.7	27.6	27.8	27.4	26.7	25.7	25.6	25.8	25.5	25.3	112.0	7.3
Compressed and liquefied gases.....		9.5	9.5	9.9	9.8	10.1	10.0	10.1	10.0	10.0	9.9	9.8	9.9	7.8	4.0
Ammunition, small-arms.....		7.2	7.4	7.4	7.5	7.5	7.7	7.8	7.8	7.8	7.8	7.8	7.7	154.1	4.3
Fireworks.....		2.4	2.6	2.6	2.8	2.7	2.2	2.5	2.6	2.4	2.4	2.6	2.5	28.2	1.2
Cottonseed oil.....		25.7	27.2	27.3	23.4	14.3	12.5	12.7	13.6	15.2	17.6	19.5	21.7	20.4	15.3
Fertilizers.....		28.7	28.7	28.8	28.7	26.8	25.5	27.2	32.3	36.7	38.1	35.4	33.3	27.5	18.8
Products of petroleum and coal ²	162	165	167	162	168	170	170	170	167	164	165	163	164	125	106
Petroleum refining.....		113.3	113.7	107.6	114.0	115.9	117.0	116.6	114.7	113.6	113.5	112.1	112.4	83.1	73.2
Coke and byproducts.....		32.3	32.2	32.1	32.4	32.4	31.8	31.7	31.1	29.7	30.7	30.3	30.5	25.5	21.7
Paving materials.....		2.7	2.8	2.9	2.9	2.8	2.7	2.6	2.4	2.3	1.8	1.8	2.0	2.1	2.5
Roofing materials.....		15.2	17.2	18.1	18.0	17.8	17.4	17.7	17.3	17.4	17.4	17.6	18.0	13.1	8.1
Rubber products ²	191	196	199	198	197	195	191	195	195	198	204	208	210	194	121
Rubber tires and inner tubes.....		89.6	91.2	90.0	91.4	91.5	90.9	91.4	92.6	96.4	98.9	100.6	90.1	54.2	54.2
Rubber boots and shoes.....		23.5	23.2	22.9	22.5	22.0	20.7	21.8	21.7	22.1	22.6	22.8	22.5	23.8	14.8
Rubber goods, other.....		82.6	84.5	84.7	82.9	80.8	79.2	81.7	81.7	84.0	85.7	86.5	86.8	79.9	51.9
Miscellaneous industries ²	415	433	453	460	451	441	425	430	432	436	447	445	443	445	244
Instruments (professional and scientific), and fire-control equipment.....		29.9	30.0	29.5	29.0	28.1	28.0	27.7	27.5	27.6	27.7	27.7	27.7	86.7	11.3
Photographic apparatus.....		39.7	39.7	39.7	39.7	39.7	39.0	38.3	37.8	38.4	38.8	39.0	38.9	35.5	17.7
Optical instruments and ophthalmic goods.....		26.3	26.0	26.4	26.1	26.0	23.9	25.6	26.7	27.0	27.2	27.4	27.8	33.3	11.9
Pianos, organs, and parts.....		13.3	13.5	13.9	13.5	13.3	12.3	13.5	13.7	13.3	14.8	15.7	16.8	12.2	7.8
Games, toys, and dolls.....		37.8	46.6	49.4	48.1	45.3	42.4	41.1	40.2	40.3	38.5	36.3	33.5	19.1	19.1
Buttons.....		13.2	13.1	13.1	13.0	13.0	12.5	12.9	12.8	13.1	13.8	13.4	13.3	13.1	11.2
Fire extinguishers.....		2.8	2.9	2.9	2.8	2.7	2.8	2.8	2.7	2.7	2.6	2.5	2.6	9.3	1.0

¹ Data are based upon reports from cooperating establishments covering both full- and part-time production and related workers who worked or received pay during the pay period ending nearest the 15th of the month. Major industry groups have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series. Data shown for the three most recent months are subject to revision without notation. Revised figures in any column other than the first three are identified by an asterisk for the first month's publication of such data.

² Estimates for the individual industries comprising the major industry groups have been adjusted to levels indicated by Federal Security Agency

data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series. Comparable data from January 1939 are available upon request to the Bureau of Labor Statistics. Such requests should specify the series desired.

More recently adjusted data for the individual industries comprising the major industry groups listed below supersede data shown in publications dated prior to:

Major industry group	Mimeographed release	Monthly Labor Review
Iron and steel and their products.....	Dec. 1948	Jan. 1949
Stone, clay, and glass products.....	Dec. 1948	Jan. 1949

TABLE A-7: Indexes of Production-Worker Employment in Manufacturing Industries¹—Continued

[1939 average=100]

Industry group and industry	1948												Annual average	
	1949													
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.		Jan.	1943
<i>Nondurable goods—Continued</i>														
Paper and allied products ²	147.5	151.1	151.7	151.0	149.8	148.6	146.1	146.9	146.5	146.8	148.0	147.8	148.7	122.2
Paper and pulp.....	150.2	150.0	149.5	150.0	150.0	149.4	148.2	148.5	147.8	147.9	147.3	147.4	116.3	
Paper goods, other.....	168.2	168.6	168.4	166.1	163.9	160.2	163.6	163.0	162.6	164.2	164.1	165.9	133.1	
Envelopes.....	151.0	151.2	148.0	145.2	141.4	140.9	144.0	145.8	145.6	145.7	143.9	142.0	116.9	
Paper bags.....	151.0	152.8	160.1	159.9	159.2	156.3	157.8	158.5	162.3	164.1	162.0	163.2	118.0	
Paper boxes.....	144.0	146.3	144.0	139.9	136.7	131.0	133.9	131.8	133.7	137.3	139.1	140.8	129.3	
Printing, publishing, and allied industries ²	132.9	135.2	134.7	134.8	133.0	131.8	131.1	132.3	132.0	131.8	132.8	133.5	134.0	100.8
Newspapers and periodicals.....	128.3	127.2	127.0	125.9	124.4	123.7	123.8	123.3	122.2	122.0	121.4	121.0	95.2	
Printing; book and job.....	147.8	147.1	147.9	145.3	143.5	143.4	144.5	144.3	143.5	145.3	147.1	148.6	108.7	
Lithographing.....	119.3	119.7	119.7	118.5	118.9	118.9	118.3	117.6	119.0	119.5	121.2	121.7	98.5	
Bookbinding.....	133.8	136.0	135.3	133.7	134.8	129.1	136.3	136.2	139.2	144.5	145.1	145.9	114.1	
Chemicals and allied products ²	206.1	207.0	207.8	208.1	207.1	203.3	196.6	199.2	198.4	201.4	203.6	204.2	204.1	254.5
Paints, varnishes, and colors.....	168.2	170.2	172.1	172.0	175.7	173.6	173.6	172.1	169.8	171.9	174.5	171.8	135.1	
Drugs, medicines, and insecticides.....	233.9	235.4	234.1	233.2	232.1	230.2	231.1	231.1	233.3	236.9	238.3	238.5	203.6	
Perfumes and cosmetics.....	118.0	124.1	122.7	119.7	119.0	104.1	105.0	105.2	107.6	111.2	116.2	115.4	135.8	
Soap.....	173.5	173.9	178.4	177.2	164.7	167.6	155.4	142.2	142.9	163.1	166.3	167.0	117.1	
Rayon and allied products.....	134.0	132.3	132.3	131.8	134.3	133.2	133.0	131.2	131.4	131.8	131.8	130.8	111.7	
Chemicals, not elsewhere classified.....	302.1	301.4	300.3	301.6	302.1	288.9	296.9	292.9	296.3	293.8	293.9	295.6	206.7	
Explosives and safety fuses.....	375.2	375.4	379.3	379.2	380.7	376.1	365.7	351.9	350.7	354.1	349.9	347.5	1536.9	
Compressed and liquefied gases.....	239.6	239.2	247.9	247.0	253.1	252.4	250.9	252.4	250.1	246.2	249.9	249.9	197.3	
Ammunition, small-arms.....	167.7	171.5	173.7	174.2	173.9	180.2	181.5	181.6	182.5	182.8	182.2	178.7	3595.4	
Fireworks.....	208.0	220.6	227.4	243.3	231.8	190.2	212.2	219.7	210.1	203.9	221.8	213.4	2426.5	
Cottonseed oil.....	168.3	178.0	179.0	153.3	93.8	82.0	83.0	89.1	99.5	115.0	127.7	142.1	133.4	
Fertilizers.....	152.1	152.4	152.9	152.3	142.2	135.6	144.4	171.4	194.7	202.3	188.1	176.9	146.2	
Products of petroleum and coal ²	153.0	155.4	157.7	152.7	159.1	160.3	160.7	160.3	157.3	154.9	155.4	153.9	155.0	117.6
Petroleum refining.....	154.8	155.3	146.9	155.7	158.3	159.8	159.2	156.7	155.2	155.0	153.1	153.5	113.4	
Coke and byproducts.....	148.7	148.2	147.8	149.2	149.3	146.8	145.9	143.2	136.8	141.4	139.6	140.6	117.4	
Paving materials.....	108.8	113.6	117.2	118.0	113.5	108.8	107.1	97.1	92.7	75.3	73.2	83.2	87.0	
Roofing materials.....	187.5	212.8	223.3	222.7	219.4	215.5	218.2	213.2	214.6	215.3	217.5	222.7	161.2	
Rubber products ²	157.8	161.8	164.5	163.5	162.8	160.9	157.7	161.6	161.1	163.8	168.9	172.0	173.5	160.3
Rubber tires and inner tubes.....	165.3	168.2	165.9	168.6	168.7	167.6	169.4	168.5	170.7	177.7	182.4	185.5	166.1	
Rubber boots and shoes.....	158.0	156.2	154.0	151.2	148.3	139.4	146.9	146.4	149.0	152.4	153.8	151.5	160.5	
Rubber goods, other.....	159.2	162.9	163.4	159.9	155.8	152.7	157.5	157.5	161.9	165.3	166.9	167.4	154.1	
Miscellaneous industries ²	169.4	177.0	184.9	187.8	184.2	180.1	173.9	175.7	176.6	178.4	182.6	181.9	180.9	181.7
Instruments (professional and scientific), and fire-control equipment.....	264.0	265.0	261.0	256.7	248.8	247.4	244.5	242.8	244.1	244.6	245.2	245.3	766.4	
Photographic apparatus.....	224.3	224.6	224.5	224.4	224.5	220.9	216.6	214.1	217.1	219.8	220.9	220.4	200.9	
Optical instruments and ophthalmic goods.....	221.5	218.7	221.8	219.7	218.3	201.0	215.6	224.1	226.9	229.1	230.0	233.6	280.3	
Pianos, organs, and parts.....	170.8	173.7	178.2	173.6	170.4	167.3	173.7	175.2	170.5	189.7	201.5	215.2	156.2	
Games, toys, and dolls.....	198.0	243.9	258.7	251.7	236.9	221.8	214.8	210.3	210.7	201.2	189.9	175.0	99.7	
Buttons.....	117.8	116.6	117.0	116.1	116.2	111.2	114.8	114.2	116.3	122.6	119.4	118.7	116.6	
Fire extinguishers.....	272.6	281.0	281.8	271.3	269.1	271.8	270.6	260.9	266.8	258.6	249.3	253.5	913.1	

See footnotes 1 and 2, table A-6.

TABLE A-8: Indexes of Production-Worker Weekly Pay Rolls in Manufacturing Industries¹

[1939 average=100]

Industry group and industry	1948												Annual average	
	1949													
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.		Jan.	1943
All manufacturing.....	363.2	377.8	379.0	382.9	382.2	374.7	360.0	359.0	346.7	347.1	358.4	354.1	358.7	334.4
Durable goods.....	412.8	430.9	429.9	435.7	423.7	418.8	403.0	401.3	390.8	393.4	402.0	393.1	403.1	469.5
Nondurable goods.....	314.7	326.0	329.3	331.2	341.6	331.6	318.0	317.6	303.6	301.9	315.7	316.0	315.3	202.3
<i>Durable goods</i>														
Iron and steel and their products ²	356.7	371.4	373.6	376.0	365.0	360.5	336.9	340.5	334.4	329.6	340.8	337.6	341.9	311.4
Blast furnaces, steel works, and rolling mills.....	306.1	304.7	305.0	300.3	295.8	269.9	268.4	265.4	253.0	260.9	257.5	261.2	222.3	
Gray-iron and semisteel castings.....	424.1	429.4	436.1	433.3	417.1	398.2	421.5	394.3	415.6	444.0	436.7	438.2	261.1	
Malleable-iron castings.....	520.8	505.7	512.2	493.1	478.8	448.8	468.1	460.3	453.0	469.7	467.6	480.1	278.9	
Steel castings.....	525.2	528.0	523.2	504.4	498.6	464.3	494.7	478.5	477.3	481.0	465.6	465.3	493.5	
Cast-iron pipe and fittings.....	471.2	470.9	445.7	437.1	432.7	414.3	422.0	401.4	370.0	397.5	392.5	394.4	177.2	
Tin cans and other tinware.....	340.3	334.7	351.6	391.7	364.9	353.2	310.8	286.1	274.9	289.8	302.4	320.0	161.6	
Wire drawn from purchased rods.....	274.0	271.3	276.2	263.8	262.5	242.8	243.3	249.8	255.3	269.1	268.7	271.6	255.3	
Wirework.....	334.7	331.6	333.2	322.5	326.6	315.1	295.7	298.2	302.0	316.4	309.0	320.5	202.6	
Cutlery and edge tools.....	394.3	405.8	392.1	374.9	359.3	335.7	343.6	357.8	364.6	370.6	377.2	381.9	279.5	

See footnotes 1 and 2, table A-6.

TABLE A-8: Indexes of Production-Worker Weekly Pay Rolls in Manufacturing Industries 1—Con.

[1939 average=100]

Industry group and industry	1949													Annual average
	1948													
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.		1943
<i>Durable goods—Continued</i>														
Stone, clay, and glass products 2—Continued														
Gypsum.....	378.5	387.7	397.1	386.5	380.1	353.2	352.7	349.7	343.7	328.3	320.1	325.2	151.7	
Wallboard, plaster (except gypsum), and mineral wool.....	493.0	495.7	493.8	491.8	484.7	491.6	475.7	465.0	467.9	448.7	431.7	429.9	223.8	
Lime.....	313.0	322.3	326.9	323.8	324.5	309.9	311.9	314.7	314.5	301.5	280.3	286.0	171.6	
Marble, granite, slate, and other products.....	204.2	190.9	196.8	194.2	195.6	184.9	185.9	183.2	176.6	179.3	169.5	173.5	90.8	
Abrasives.....	593.7	583.3	594.6	588.5	576.3	571.6	578.8	565.0	546.6	560.2	526.0	417.4	480.2	
Asbestos products.....	390.6	398.4	414.5	402.7	395.6	377.5	385.4	380.0	378.5	376.2	370.6	370.4	254.6	
<i>Nondurable goods</i>														
Textile-mill products and other fiber manufactures 2	276.7	291.9	291.9	291.2	295.5	298.2	285.4	304.6	303.8	307.1	315.6	310.6	303.0	178.9
Cotton manufactures, except smallwares.....	352.7	348.9	350.0	354.9	357.4	342.0	365.9	369.7	374.7	385.1	377.0	378.7	215.9	
Cotton smallwares.....	224.2	222.1	222.5	228.7	227.3	226.5	238.0	238.3	243.0	249.1	249.3	243.8	214.6	
Silk and rayon goods.....	293.4	299.1	299.4	301.3	295.2	276.9	292.2	289.0	287.6	288.0	282.2	271.5	138.6	
Woolen and worsted manufactures, except dyeing and finishing.....	270.9	268.8	265.7	286.1	297.8	295.5	311.5	307.9	308.6	322.1	321.1	292.0	199.5	
Hosiery.....	201.8	210.3	208.8	201.1	202.8	184.2	199.8	197.6	203.5	212.6	204.8	202.9	109.6	
Knitted cloth.....	227.0	232.9	228.7	219.7	228.4	224.4	223.2	223.1	237.1	243.3	242.6	236.5	174.7	
Knitted underwear and knitted gloves.....	264.6	272.7	249.8	250.5	244.1	228.2	260.8	266.4	261.2	268.8	269.1	251.9	192.7	
Dyeing and finishing textiles, including woolen and worsted.....	256.1	273.6	291.2	297.3	313.2	305.2	324.9	326.5	344.5	348.1	334.4	329.6	183.3	
Carpets and rugs, wool.....	327.7	316.8	311.6	310.7	309.2	299.8	320.6	321.7	328.7	332.1	334.6	326.8	174.9	
Hats, fur-felt.....	359.8	393.5	393.2	387.5	381.5	368.4	371.8	358.1	348.8	352.6	346.0	340.5	145.2	
Jute goods, except felts.....	175.3	163.1	162.9	180.9	200.3	171.8	197.4	184.6	176.4	197.5	202.2	195.8	121.5	
Cordage and twine.....	288.6	285.9	286.8	248.4	282.2	273.0	277.5	272.2	275.9	264.2	265.7	250.1	196.4	
Textile bags.....	283.6	291.5	284.7	283.7	286.4	288.2	306.5	303.4	311.4	330.4	337.6	330.6	240.3	
Apparel and other finished textile products	327.2	327.4	335.4	325.0	348.1	342.3	303.6	303.6	297.9	306.5	343.2	345.2	337.0	185.2
Men's clothing, not elsewhere classified.....	293.0	297.5	302.4	324.7	324.0	294.1	312.9	311.5	317.1	324.8	316.4	313.4	174.9	
Shirts, collars, and nightwear.....	233.4	238.8	256.0	254.0	247.1	246.6	258.5	266.8	274.6	279.7	272.0	273.0	143.6	
Underwear and neckwear, men's.....	322.2	335.6	309.9	301.3	294.1	269.6	289.1	296.7	297.0	313.7	300.0	292.0	166.5	
Work shirts.....	319.6	339.5	352.4	341.4	340.0	326.4	333.9	325.8	316.1	305.6	284.6	247.5	220.4	
Women's clothing, not elsewhere classified.....	369.8	379.8	351.0	390.2	380.3	326.6	310.7	299.3	307.1	376.4	387.1	374.8	184.4	
Corsets and allied garments.....	231.9	235.8	233.1	225.3	217.0	201.1	210.8	213.0	229.1	241.6	237.7	234.5	137.1	
Millinery.....	187.5	188.8	193.1	201.5	197.0	165.3	132.0	127.9	171.3	212.5	236.0	204.4	123.3	
Handkerchiefs.....	295.1	303.2	289.3	259.4	241.0	181.3	231.0	239.1	251.5	259.4	243.4	222.5	184.0	
Curtains, draperies, and bedspreads.....	343.5	372.2	375.4	*379.9	382.1	317.6	330.8	334.8	348.5	397.0	431.4	419.1	230.2	
Housefurnishings, other than curtains, etc.....	705.9	727.7	698.6	634.9	633.4	573.0	587.3	544.2	684.6	609.2	572.9	597.8	370.3	
Textile bags.....	572.1	553.3	556.3	549.5	521.9	498.3	471.1	464.8	446.4	449.3	461.7	481.1	233.0	
Leather and leather products 2	235.0	234.3	223.3	236.8	245.1	248.3	236.5	233.4	215.4	227.1	251.7	262.5	258.7	154.2
Leather.....	210.9	202.0	206.3	208.5	207.3	203.6	205.2	201.1	197.9	206.4	216.4	214.8	140.6	
Boot and shoe cut stock and findings.....	178.1	166.5	175.3	185.2	189.5	178.6	179.9	169.6	173.4	187.9	198.6	201.4	142.2	
Boots and shoes.....	227.4	211.3	227.6	238.7	242.9	225.3	202.8	219.5	249.7	261.0	268.3	242.0	142.0	
Leather gloves and mittens.....	209.9	259.4	286.8	274.5	285.4	267.4	273.6	256.9	241.3	252.8	252.2	245.3	239.4	
Trunks and suitcases.....	339.8	410.5	401.4	393.3	376.2	339.5	339.5	339.8	347.2	364.1	366.9	321.6	240.3	
Food 2	312.8	333.5	340.7	358.2	389.8	351.3	352.2	328.3	281.3	267.4	285.8	288.5	296.6	180.9
Slaughtering and meat packing.....	365.6	336.2	305.4	303.5	296.0	318.8	329.2	226.4	192.5	295.8	280.6	323.0	188.6	
Butter.....	382.6	379.0	384.7	397.8	418.5	432.6	429.8	407.2	381.0	348.2	332.7	330.3	231.0	
Condensed and evaporated milk.....	407.4	424.4	435.6	473.7	492.5	509.9	520.3	477.9	438.1	403.0	388.1	369.8	268.5	
Ice cream.....	270.4	273.9	291.2	333.5	348.4	365.8	341.5	311.3	286.4	261.3	250.9	248.0	170.6	
Flour.....	346.6	351.9	355.2	360.7	368.6	368.3	339.9	314.6	304.7	292.2	318.2	326.0	182.9	
Feeds, prepared.....	396.0	405.9	405.8	415.4	405.0	400.0	391.7	367.4	337.1	329.6	314.7	379.0	230.0	
Cereal preparations.....	326.8	342.3	341.6	326.0	349.5	377.5	353.7	333.6	313.0	297.8	322.2	307.8	223.3	
Baking.....	318.4	285.3	286.4	348.2	369.5	378.5	295.0	270.8	259.2	249.8	257.2	243.2	153.0	
Sugar refining, cane.....	194.2	528.9	455.8	207.7	161.1	138.6	130.6	274.4	275.8	298.5	278.8	261.2	152.8	
Sugar, beet.....	347.0	388.7	376.4	345.7	345.7	255.4	261.8	235.5	117.0	100.6	108.2	132.2	195.9	
Confectionery.....	284.7	287.1	298.6	340.9	349.0	387.1	342.6	311.6	289.9	270.7	254.3	265.6	163.2	
Beverages, nonalcoholic.....	359.5	377.4	371.8	417.2	419.6	435.7	389.9	332.8	350.3	324.4	320.7	319.9	180.5	
Malt liquors.....	280.0	313.7	537.1	835.0	525.4	469.2	314.8	260.4	240.8	227.0	239.9	239.3	216.0	
Canning and preserving.....														
Tobacco manufactures 2	200.5	217.9	223.5	224.3	214.8	218.3	205.5	205.8	201.3	205.7	204.6	195.7	210.5	151.0
Cigarettes.....	269.2	264.4	279.0	268.1	288.3	270.0	283.1	253.1	254.3	246.5	219.2	259.6	172.0	
Cigars.....	192.1	207.4	197.2	187.4	180.9	171.1	175.8	175.1	182.7	186.6	189.4	188.2	141.0	
Tobacco (chewing and smoking) and snuff.....	178.5	173.1	180.7	176.1	173.3	164.1	166.7	161.8	161.6	159.6	162.2	161.2	132.3	
Paper and allied products 2	342.6	356.5	362.2	357.4	355.0	352.1	341.7	337.8	331.1	325.7	330.8	328.9	328.0	184.8
Paper and pulp.....	357.9	364.7	359.1	362.9	363.6	357.7	347.7	343.2	333.3	330.6	333.8	330.3	181.6	
Paper goods, other.....	394.7	392.8	381.2	372.3	365.1	355.3	358.4	355.0	350.7	354.2	352.9	355.1	193.2	
Envelopes.....	315.6	318.4	307.0	298.3	290.0	272.9	284.0	283.3	282.1	285.7	282.8	278.0	165.7	
Paper bags.....	362.5	362.4	391.4	390.2	392.7	380.0	364.4	355.4	365.3	373.7	357.8	368.1	183.4	
Paper boxes.....	335.3	344.5	342.1	328.0	318.6	294.9	304.8	290.4	292.5	305.4	307.1	309.1	189.6	
Printing, publishing, and allied industries 2	268.8	250.6	275.4	273.6	273.6	264.8	260.1	264.9	262.2	259.5	258.5	254.7	255.3	124.7
Newspapers and periodicals.....	298.9	253.3	252.2	253.6	240.6	235.5	238.1	236.5	234.6	229.2	224.6	215.9	111.7	
Printing; book and job.....	316.0	307.9	305.4	304.8	297.6	296.0	299.3	296.7	291.0	292.5	290.9	293.9	137.3	
Lithographing.....	233.3	234.5	235.5	233.1	231.8	223.5	230.3	224.1	221.4	222.0	210.0	224.0	124.9	
Bookbinding.....	310.6	315.1	309.7	307.8	310.2	291.8	310.0	302.9	304.0	313.4	307.7	315.3	174.8	

See footnotes 1 and 2, table A-6.

TABLE A-8: Indexes of Production-Worker Weekly Pay Rolls in Manufacturing Industries¹—Con.

[1939 average=100]

Industry group and industry	1949		1948											Annual average
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.		1943
<i>Nondurable goods—Continued</i>														
Chemicals and allied products ²	459.1	462.3	461.9	460.1	462.5	450.6	432.7	434.9	422.5	422.1	425.1	425.6	426.7	422.5
Paints, varnishes, and colors.....	325.5	329.9	338.4	339.3	345.1	343.0	335.6	329.9	315.9	319.1	324.4	318.6	197.2	
Drugs, medicines, and insecticides.....	511.9	512.4	506.9	491.1	485.3	480.6	486.7	481.5	479.9	487.6	489.2	490.7	286.3	
Perfumes and cosmetics.....	249.0	261.9	252.2	243.0	237.4	204.3	213.7	209.7	215.1	222.0	231.2	230.9	180.6	
Soap.....	404.1	405.3	412.2	400.7	365.7	344.3	343.1	322.9	321.8	359.0	376.4	379.3	174.5	
Rayon and allied products.....	305.3	300.1	296.7	297.5	302.7	289.6	280.2	275.1	274.6	271.9	270.2	268.6	168.2	
Chemicals, not elsewhere classified.....	639.7	637.5	628.6	641.6	629.1	600.4	613.6	589.6	591.1	584.3	584.8	586.8	336.9	
Explosives and safety fuses.....	746.9	749.1	763.8	796.0	798.3	760.2	737.6	683.8	648.3	675.2	678.2	669.2	2,361.8	
Compressed and liquefied gases.....	483.8	491.0	488.5	513.9	512.0	518.2	505.4	491.7	483.7	473.6	475.5	465.0	325.3	
Ammunition, small-arms.....	395.2	403.7	409.4	411.2	403.1	420.8	411.2	404.1	398.8	396.8	388.7	380.5	6,734.4	
Fireworks.....	541.4	544.2	552.7	621.0	630.2	507.0	572.5	594.9	572.5	625.8	610.2	591.6	5,963.9	
Cottonseed oil.....	539.9	555.4	559.8	459.3	261.7	230.1	228.3	245.9	270.2	316.4	338.0	397.4	230.4	
Fertilizers.....	427.5	415.3	430.8	436.1	408.9	396.7	414.5	470.4	530.1	540.2	482.2	475.2	272.2	
Products of petroleum and coal ³	349.6	346.4	354.9	344.8	345.6	358.2	353.4	342.2	335.8	316.7	320.0	315.4	318.1	184.3
Petroleum refining.....	338.2	343.9	324.7	326.1	345.5	344.9	330.8	326.2	310.9	306.6	302.1	303.9	176.7	
Coke and byproducts.....	353.3	346.7	349.5	353.2	350.8	329.5	330.1	320.6	287.3	314.6	312.3	309.8	183.4	
Paving materials.....	259.6	253.3	276.3	279.1	264.3	248.1	235.0	222.8	206.5	173.1	160.6	168.2	144.8	
Roofing materials.....	412.8	517.5	577.7	558.3	548.7	531.9	523.3	508.5	495.6	502.7	500.7	508.3	267.2	
Rubber products ⁴	320.6	332.7	341.9	345.5	344.9	347.2	329.7	330.2	318.9	312.8	320.6	337.2	354.9	263.9
Rubber tires and inner tubes.....	299.6	312.9	318.2	326.2	341.0	329.8	322.0	305.7	286.4	292.4	315.4	344.4	265.7	
Rubber boots and shoes.....	388.2	377.2	369.0	355.9	344.1	321.7	329.7	328.1	333.9	347.0	345.0	342.8	268.8	
Rubber goods, other.....	370.0	378.7	383.0	370.8	356.3	331.9	343.7	337.7	347.1	356.2	366.2	368.3	255.8	
Miscellaneous industries ⁵	384.2	405.0	420.8	422.6	411.8	397.4	375.0	386.7	384.2	382.6	394.0	393.9	388.2	322.7
Instruments (professional and scientific), and fire-control equipment.....	573.6	571.9	555.5	530.1	505.9	487.2	491.0	492.6	494.2	489.3	487.1	507.5	1,356.9	
Photographic apparatus.....	456.4	456.7	450.2	450.5	444.1	443.8	438.8	409.7	416.2	422.3	424.2	418.1	311.5	
Optical instruments and ophthalmic goods.....	455.7	447.8	451.9	444.4	439.6	393.1	421.6	426.7	438.1	444.8	446.3	452.3	439.0	
Pianos, organs, and parts.....	381.2	389.5	387.6	369.1	361.7	327.9	362.7	367.8	357.9	396.0	421.1	455.5	295.1	
Games, toys, and dolls.....	470.8	633.2	651.1	613.5	566.8	521.2	510.6	496.7	487.6	463.7	450.1	399.7	169.7	
Buttons.....	285.9	273.6	275.4	271.9	275.3	254.0	271.7	269.4	269.4	269.4	285.5	275.7	204.1	
Fire extinguishers.....	635.1	638.1	616.9	606.1	566.7	573.0	595.6	563.4	575.5	541.0	523.2	546.8	1,629.2	

See footnotes 1 and 2, table A-6.

* Revised.

TABLE A-9: Estimated Number of Employees in Selected Nonmanufacturing Industries¹

[In thousands]

Industry group and industry	1949		1948											Annual average	
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	1943	1939
Mining:^{2,3}															
Coal:															
Anthracite.....	77.2	77.0	77.0	76.6	77.5	77.7	76.2	77.4	76.4	76.9	77.4	76.6	76.2	78.4	83.6
Bituminous.....	401	405	403	404	408	408	378	407	405	296	401	397	404	419	372
Metal:															
Iron.....	89.5	90.4	88.7	92.0	89.4	88.4	91.7	92.8	91.4	91.7	91.4	90.2	89.7	112.7	92.6
Copper.....	31.8	32.3	32.1	32.8	33.4	33.7	33.7	32.7	32.5	31.5	31.0	30.9	30.9	35.3	21.1
Lead and zinc.....	24.2	24.5	23.9	27.0	26.9	26.5	26.6	26.7	26.5	26.8	26.9	27.0	26.9	33.3	25.0
Gold and silver.....	16.9	16.9	16.6	16.2	13.0	12.0	15.0	16.2	16.4	16.3	16.3	16.3	15.7	21.6	16.3
Miscellaneous.....	8.8	8.6	8.2	8.1	8.2	8.1	8.4	8.3	8.1	8.5	8.7	8.7	8.6	7.7	26.0
Quarrying and nonmetallic.....	7.9	8.2	7.9	7.9	7.9	8.0	8.0	7.9	7.7	7.7	7.9	7.8	7.7	14.8	4.2
Crude petroleum and natural gas production ⁴	77.5	83.4	85.3	86.6	87.8	87.8	87.1	86.8	85.1	83.9	80.0	76.8	79.9	80.9	68.5
Transportation and public utilities:	129.5	129.6	130.4	129.9	133.2	137.1	136.6	133.5	128.7	127.2	127.1	127.1	126.4	103.2	114.4
Class I steam railways ⁵	1,256	1,307	1,329	1,345	1,350	1,356	1,361	1,352	1,321	1,258	1,316	1,311	1,318	1,355	988
Street railways and busses ⁶	243	244	245	246	248	248	246	249	249	249	249	249	250	227	194
Telephone.....	638	642	642	642	643	647	644	633	630	630	627	623	620	402	318
Telegraph ⁷	33.3	33.9	34.2	34.5	34.7	35.1	36.0	36.1	36.3	36.9	36.9	36.8	36.6	46.9	37.6
Electric light and power.....	281	282	282	281	284	286	283	279	274	273	271	269	268	211	244
Service:															
Hotels (year-round).....	366	370	372	375	373	369	375	379	377	377	375	377	378	344	323
Power laundries ⁸	221	224	225	229	232	233	239	238	233	232	231	230	235	252	196
Cleaning and dyeing ⁹	84.5	86.3	87.5	89.4	88.7	89.7	92.6	94.7	93.4	92.5	90.0	86.8	88.9	78.0	58.2

¹ Unless otherwise noted, data include all employees. Data for the three most recent months are subject to revision without notation. Revised figures for earlier months are identified by an asterisk for the first month's publication of such data.

² Includes production and related workers only.

³ Estimates have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 benchmark levels, thereby providing consistent series.

⁴ Does not include well drilling or rig building.

⁵ Includes all employees at middle of month. Excludes employees of switching and terminal companies. Class I steam railroads include those with over \$1,000,000 annual revenue. Source: Interstate Commerce Commission.

⁶ Includes private and municipal street-railway companies and affiliated, subsidiary, or successor trolley-bus and motor-bus companies.

⁷ Includes all land-line employees except those compensated on a commission basis. Excludes general and divisional headquarters personnel, trainees in school, and messengers.

TABLE A-10: Indexes of Employment in Selected Nonmanufacturing Industries ¹

[1939 average=100]

Industry group and industry	1949				1948								Annual average, 1943	
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.		Jan.
Mining: ^{2 3}														
Coal:														
Anthracite.....	92.3	92.0	92.1	91.7	92.7	92.9	91.1	92.6	91.4	91.9	92.6	91.6	91.1	93.7
Bituminous.....	107.8	109.0	108.3	108.8	109.7	109.7	101.8	109.6	108.9	79.7	108.0	106.8	108.7	112.6
Metal:														
Iron.....	96.6	97.6	95.8	99.3	96.5	95.5	99.1	100.2	98.7	99.0	98.7	97.4	96.9	121.7
Copper.....	150.5	152.7	152.1	155.4	158.2	159.6	159.5	159.6	155.0	153.7	149.4	146.8	146.5	167.4
Lead and zinc.....	96.7	98.2	95.6	107.9	107.7	106.0	106.6	106.9	106.0	107.2	107.9	108.2	107.5	133.2
Gold and silver.....	103.5	103.6	101.9	99.8	79.8	74.0	92.2	99.7	100.6	100.4	100.2	99.9	96.2	132.7
Miscellaneous.....	33.8	33.1	31.6	30.9	31.4	31.1	32.2	31.9	31.3	32.5	33.3	33.4	33.1	29.7
Quarrying and nonmetallic.....	188.0	194.7	188.4	188.6	188.9	190.0	191.3	188.6	182.9	182.8	189.1	187.0	183.0	352.0
Crude petroleum and natural gas production ⁴	113.2	121.8	124.6	126.5	128.3	128.2	127.3	126.8	124.2	122.5	116.8	112.2	116.7	118.2
Transportation and public utilities:	113.2	113.2	114.0	113.5	116.4	119.8	119.4	116.7	112.5	111.2	111.1	111.1	110.5	90.2
Class I steam railroads ⁵	127.2	132.3	134.6	136.2	136.7	137.3	137.9	136.9	133.8	127.3	133.3	132.7	133.4	137.2
Street railways and busses ⁶	125.4	125.9	126.2	126.9	127.9	128.1	127.2	128.3	128.5	128.3	128.7	128.6	129.2	117.0
Telephone.....	200.8	202.2	202.1	201.9	202.3	203.7	202.8	199.4	198.4	198.3	197.4	196.2	195.0	126.7
Telegraph ⁷	88.6	90.0	90.7	91.6	92.3	93.3	95.7	96.0	96.3	97.9	98.2	97.8	97.2	124.7
Electric light and power.....	115.2	115.6	115.5	115.1	116.2	117.1	115.8	114.1	112.3	111.7	110.9	110.3	109.8	86.3
Trade: ⁸														
Wholesale.....	115.9	117.8	118.3	118.1	117.1	117.0	116.2	115.3	114.5	114.8	115.3	116.1	116.3	95.9
Retail.....	111.7	129.0	119.4	116.0	113.4	111.2	112.0	113.6	113.1	112.8	113.8	111.8	114.4	99.9
Food.....	111.6	114.6	113.8	113.8	112.0	112.3	113.8	115.5	116.3	116.1	116.7	113.9	114.4	106.2
General merchandise.....	126.0	177.1	146.4	135.3	127.2	120.8	121.3	124.8	123.7	123.4	124.5	122.9	129.4	116.9
Apparel.....	110.9	135.0	122.8	119.4	113.9	105.1	108.0	115.4	115.2	114.6	116.8	108.2	111.5	110.1
Furniture and housefurnishings.....	91.1	97.6	93.8	92.2	91.6	90.1	90.5	91.2	91.9	91.6	91.9	91.0	93.6	67.7
Automotive.....	108.9	113.7	111.7	110.0	110.1	111.1	109.8	108.4	107.0	107.1	105.8	105.7	106.5	63.0
Lumber and building materials.....	117.6	123.9	126.6	127.8	128.0	129.6	128.2	126.3	123.7	121.9	119.4	118.8	122.5	91.5
Service:														
Hotels (year-round).....	113.4	114.6	115.3	116.2	115.7	114.6	116.2	117.6	117.0	116.9	116.4	116.8	117.2	106.6
Power laundries ²	113.1	114.4	114.8	116.7	118.4	119.0	122.1	121.5	119.0	118.3	117.7	117.6	120.1	128.7
Cleaning and dyeing ³	145.3	148.4	150.5	153.7	152.5	154.3	159.2	162.9	160.6	159.0	154.8	149.3	152.8	134.0

¹ See footnote 1, table A-9.
² See footnote 2, table A-9.
³ See footnote 3, table A-9.
⁴ See footnote 4, table A-9.

⁵ See footnote 5, table A-9.
⁶ See footnote 6, table A-9.
⁷ See footnote 7, table A-9.
⁸ Data include all nonsupervisory employees and working supervisors.

TABLE A-11: Indexes of Weekly Pay Rolls in Selected Nonmanufacturing Industries ¹

[1939 average=100]

Industry group and industry	1949				1948								Annual average, 1943	
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.		Jan.
Mining: ^{2 3}														
Coal:														
Anthracite.....	238.6	224.6	216.0	260.4	247.3	260.3	193.3	246.0	246.2	195.4	255.9	232.8	242.4	146.1
Bituminous.....	353.0	353.3	343.1	358.5	355.1	365.8	293.0	344.2	344.3	167.4	342.0	320.0	350.5	203.3
Metal:														
Iron.....	222.8	225.9	216.8	224.9	211.2	210.4	202.2	208.2	206.1	201.7	201.3	201.7	198.9	184.9
Copper.....	354.4	358.0	355.0	371.6	361.0	355.8	331.5	345.0	336.3	319.7	313.8	310.3	302.7	257.9
Lead and zinc.....	241.2	245.4	232.2	255.6	247.6	254.8	242.4	232.9	232.6	232.6	234.8	241.7	238.0	214.6
Gold and silver.....	278.0	277.8	265.4	252.7	199.2	189.1	193.2	238.1	238.9	235.8	232.8	235.0	228.1	226.7
Miscellaneous.....	60.6	61.1	56.6	56.4	54.1	56.1	57.1	54.2	54.6	55.2	56.7	58.4	56.4	37.2
Quarrying and nonmetallic.....	412.3	438.1	401.4	405.0	406.7	387.5	383.0	360.7	352.5	343.1	349.2	347.4	348.4	500.7
Crude petroleum and natural gas production ⁴	288.1	321.2	329.5	345.2	342.4	348.5	329.7	329.1	312.6	295.4	272.7	262.0	272.8	199.6
Transportation and public utilities:	245.1	235.7	235.3	230.7	235.6	251.0	240.8	227.1	223.4	213.4	208.3	219.9	215.5	128.0
Class I steam railroads.....	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Street railways and busses ⁶	231.3	233.4	231.2	235.7	239.7	240.7	232.2	231.2	228.1	227.1	232.6	234.7	230.1	155.7
Telephone.....	337.2	339.7	349.7	338.8	335.4	331.7	336.1	327.1	326.1	317.7	314.7	316.3	315.8	144.9
Telegraph ⁷	210.9	212.6	215.3	217.4	220.4	225.5	233.2	228.5	231.1	224.8	213.0	212.6	209.5	159.3
Electric light and power.....	206.8	206.4	205.8	204.5	204.3	204.9	202.8	196.4	192.1	188.6	184.4	188.2	187.9	109.2
Trade: ⁸														
Wholesale.....	222.7	224.4	224.2	222.5	220.8	220.6	215.3	211.8	211.8	211.0	210.8	214.9	211.7	127.0
Retail.....	222.6	250.4	228.4	223.5	219.4	218.1	218.6	218.3	213.8	211.5	210.4	208.4	209.4	120.6
Food.....	232.4	234.8	229.6	227.4	226.0	229.0	232.9	231.9	227.0	225.5	226.1	212.5	219.4	129.2
General merchandise.....	248.3	334.8	270.3	252.7	238.3	231.8	233.6	236.5	229.2	225.8	225.5	221.4	233.0	135.9
Apparel.....	211.9	254.7	226.5	222.2	210.8	195.5	202.1	214.3	211.8	209.2	208.8	194.3	198.8	86.5
Furniture and housefurnishings.....	186.8	201.0	182.5	184.3	179.9	178.5	176.7	179.6	180.3	175.6	173.7	177.8	174.5	86.5
Automotive.....	216.5	224.7	219.0	215.6	217.0	219.6	213.4	209.6	205.3	204.7	197.5	196.8	193.9	84.7
Lumber and building materials.....	239.8	251.0	254.7	261.3	258.3	264.6	257.3	252.8	242.6	234.9	228.6	227.6	228.0	120.7
Service:														
Hotels (year-round) ⁹	235.6	237.9	237.9	238.7	235.3	233.7	234.4	236.3	234.6	233.4	229.0	233.2	230.4	138.7
Power laundries ²	228.5	227.7	226.9	227.6	232.9	228.1	240.6	238.3	232.3	231.5	227.5	225.4	232.9	167.0
Cleaning and dyeing ³	284.3	291.3	289.3	300.0	296.8	287.2	308.0	324.8	312.4	308.0	291.2	271.9	285.6	185.4

¹ See footnote 1, table A-9.
² See footnote 2, table A-9.
³ See footnote 3, table A-9.
⁴ See footnote 4, table A-9.
⁵ Not available.

⁶ See footnote 6, table A-9.
⁷ See footnote 7, table A-9.
⁸ See footnote 8, table A-10.
⁹ Money payments only; additional value of board, room, uniforms, and tips, not included.

TABLE A-12: Federal Civilian Employment by Branch and Agency Group ¹

Year and month	All branches	Executive ²				Legislative	Judicial	Government corporations ³
		Total	Defense agencies ⁴	Post Office Department ⁵	All other agencies			
Total (including areas outside continental United States)								
1939	968,596	935,493	207,979	319,474	408,040	5,373	2,260	25,470
1943	3,183,235	3,138,838	2,304,752	364,092	469,994	6,171	2,636	35,590
1948: January	1,983,182	1,943,466	890,719	430,310	622,437	7,046	3,461	29,209
February	1,986,946	1,947,317	895,850	427,480	623,987	7,101	3,470	29,068
March	1,996,306	1,956,507	897,917	431,691	626,899	7,217	3,462	29,120
April	2,010,189	1,970,562	903,814	438,824	627,924	7,186	3,461	28,980
May	2,025,801	1,986,188	909,885	442,661	633,642	7,257	3,468	28,888
June	2,038,194	1,998,797	916,864	442,588	639,345	7,308	3,459	28,630
July	2,065,672	2,026,086	919,784	452,932	653,370	7,305	3,477	28,804
August	2,073,728	2,034,538	924,555	455,549	654,434	7,341	3,495	28,354
September	2,083,630	2,044,087	933,214	457,003	653,870	7,377	3,485	28,681
October	2,076,035	2,036,951	931,918	458,414	646,619	7,355	3,500	28,229
November	2,078,661	2,039,218	934,509	459,685	645,024	7,443	3,537	28,463
December	2,375,099	2,335,762	937,178	754,128	644,456	7,343	3,512	28,329
1949: January	2,089,428	2,050,202	933,670	475,832	640,700	7,414	3,538	28,274
Continental United States								
1939	926,659	897,602	179,381	318,802	399,419	5,373	2,180	21,504
1943	2,913,534	2,875,928	2,057,696	363,297	454,935	6,171	2,646	28,889
1948: January	1,760,689	1,728,265	704,251	428,783	595,231	7,046	3,388	21,990
February	1,760,914	1,728,482	705,792	425,998	596,692	7,101	3,396	21,935
March	1,770,672	1,738,043	708,934	430,116	598,993	7,217	3,388	22,024
April	1,781,238	1,748,658	710,991	437,242	600,425	7,186	3,387	22,007
May	1,795,611	1,763,092	717,072	441,076	604,944	7,257	3,394	21,868
June	1,808,240	1,775,838	724,683	440,977	610,178	7,308	3,388	21,706
July	1,839,560	1,806,926	732,217	451,339	623,370	7,305	3,406	21,923
August	1,854,250	1,821,574	742,925	453,926	624,723	7,341	3,424	21,911
September	1,868,606	1,836,008	756,500	455,372	624,136	7,377	3,409	21,812
October	1,868,871	1,836,310	762,682	456,708	616,920	7,355	3,426	21,780
November	1,876,482	1,843,888	770,286	457,972	615,630	7,443	3,462	21,689
December	2,176,352	2,144,013	777,474	751,256	615,283	7,343	3,437	21,712
1949: January	1,896,032	1,863,569	777,679	474,096	611,794	7,414	3,463	21,586

¹ Employment represents an average for the year or is as of the first of the month. Data for the legislative and judicial branches and for all Government corporations except the Panama R. R. Co. are reported directly to the Bureau of Labor Statistics. Data for the executive branch and for the Panama R. R. Co. are reported through the Civil Service Commission but differ from those published by the Civil Service Commission in the following respects: (1) Exclude seamen and trainees who are hired and paid by private steamship companies having contracts with the Maritime Commission, included by Civil Service Commission starting January 1947; (2) exclude substitute rural mail carriers, included by the Civil Service Commission since September 1945; (3) include in December the additional postal employment necessitated by the Christmas season, excluded from published Civil Service Commission figures starting 1942; (4) include an upward adjustment to Post Office Department employment prior to December 1943 to convert temporary substitute employees from a full-time equivalent to a name-count basis, the latter being the basis on which data for subsequent months have been reported; (5) the Panama R. R. Co. is shown under Government corporations here, but is included under the executive branch by the Civil Service Commission; (6) employment published by the Civil Service Commission as of the last day of the month is presented here as of the first day of the next month.

Data for Central Intelligence Agency are excluded.

² From 1939 through June 1943, employment was reported for all areas monthly and employment within continental United States was secured by deducting the number of persons outside the continental area, which was

estimated from actual reports as of January 1939 and 1940 and of July 1941 and 1943. From July 1943, through December 1946, employment within continental United States was reported monthly and the number of persons outside the country (estimated from quarterly reports) was added to secure employment in all areas. Beginning January 1947, employment is reported monthly both inside and outside continental United States.

³ Data for current months cover the following corporations: Federal Reserve banks, mixed ownership banks of the Farm Credit Administration, and the Panama R. R. Co. Data for earlier years include at various times the following additional corporations: Inland Waterways Corporation, Spruce Production Corporation, and certain employees of the Federal Deposit Insurance Corporation and of the Office of the Comptroller of the Currency, Treasury Department. Corporations not included in this column are under the executive branch.

⁴ Covers the National Military Establishment, Maritime Commission, National Advisory Committee for Aeronautics, The Panama Canal, and until their abolition or amalgamation with a peacetime agency, the agencies created specifically to meet war and reconversion emergencies.

⁵ For ways in which data differ from published figures of the Civil Service Commission, see footnote 1. Employment figures include fourth-class postmasters in all months. Prior to July 1945, clerks at third-class post offices were hired on a contract basis and therefore, because of being private employees, are excluded here. They are included beginning July 1945, however, when they were placed on the regular Federal pay roll by congressional action.

TABLE A-13: Federal Civilian Pay Rolls by Branch and Agency Group ¹

[In thousands]

Year and month	All branches	Executive ²				Legislative	Judicial	Government corporations ³
		Total	Defense agencies ⁴	Post Office Department ⁵	All other agencies			
Total (including areas outside continental United States)								
1939	\$1,757,292	\$1,692,824	\$357,628	\$586,347	\$748,849	\$14,767	\$6,691	\$43,010
1944: ⁶	8,301,111	8,206,411	6,178,387	864,947	1,163,077	18,127	9,274	67,299
1948: January	483,071	473,466	211,495	100,395	161,576	2,442	1,346	5,817
February	445,134	435,894	191,372	98,054	146,468	2,414	1,199	5,627
March	498,325	488,676	218,706	102,124	167,846	2,499	1,343	5,807
April	477,620	468,100	204,606	100,894	162,600	2,482	1,322	5,716
May	474,725	465,556	205,912	100,925	158,519	2,469	1,207	5,693
June	505,345	495,792	225,440	102,653	167,699	2,536	1,279	5,738
July	528,437	518,639	223,968	121,677	172,994	2,600	1,301	5,897
August	543,421	533,523	229,236	122,320	181,967	2,695	1,390	5,813
September	547,818	537,969	232,975	121,909	183,086	2,694	1,453	5,702
October	533,834	523,860	225,675	124,095	174,090	2,656	1,454	5,864
November	550,308	540,393	235,507	125,130	179,756	2,682	1,419	5,814
December	624,693	614,566	245,159	178,899	190,508	2,722	1,468	5,937
1949: January	532,091	522,281	224,999	124,266	173,016	2,657	1,352	5,801
Continental United States								
1944: ⁶	\$7,628,017	\$7,540,825	\$5,553,166	\$862,271	\$1,125,388	\$18,127	\$8,878	\$60,187
1948: January	443,259	434,366	179,395	100,052	154,919	2,442	1,309	5,142
February	408,614	399,975	161,996	97,703	140,276	2,414	1,165	5,060
March	456,878	447,901	185,284	101,765	160,852	2,499	1,305	5,173
April	439,691	430,845	174,409	100,543	155,893	2,482	1,287	5,077
May	434,657	426,011	174,209	100,570	151,232	2,469	1,174	5,003
June	461,406	452,529	189,974	102,306	160,249	2,536	1,242	5,099
July	487,057	478,016	191,686	121,263	165,067	2,600	1,263	5,178
August	501,794	492,593	197,058	121,906	173,629	2,695	1,351	5,155
September	506,281	497,084	200,912	121,479	174,693	2,694	1,414	5,089
October	491,288	482,045	192,530	123,633	165,882	2,656	1,413	5,174
November	509,069	499,801	203,323	124,667	171,811	2,682	1,379	5,207
December	581,480	572,012	211,614	178,151	182,247	2,722	1,428	5,318
1949: January	493,368	484,180	195,082	123,815	165,283	2,657	1,314	5,217

¹ Data are from a series revised June 1947 to adjust pay rolls, which from July 1945 until December 1946 were reported for pay periods ending during the month, to cover the entire calendar month. Data for the executive branch and for the Panama R. R. Co. are reported through the Civil Service Commission. Data for the legislative and judicial branches and for all Government corporations except the Panama R. R. Co. are reported directly to the Bureau of Labor Statistics. Data for Central Intelligence Agency are excluded.

² From 1939 through May 1943, pay rolls were reported for all areas monthly. Beginning June 1943, some agencies reported pay rolls for all areas and some reported pay rolls for the continental area only. Pay rolls for areas outside continental United States from June 1943 through November 1946 (except for the National Military Establishment for which these data were reported monthly during most of this period) were secured by multiplying employment in these areas (see footnote 2, table A-12, for derivation of the employ-

ment) by the average pay per person in March 1944, as revealed in a survey as of that date, adjusted for the salary increases given in July 1945 and July 1946. Beginning December 1946 pay rolls for areas outside the country are reported monthly by most agencies.

³ See footnote 3, table A-12.

⁴ See footnote 4, table A-12.

⁵ Beginning July 1945, pay is included of clerks at third-class post offices who previously were hired on a contract basis and therefore were private employees and of fourth-class postmasters who previously were recompensed by the retention of a part of the postal receipts. Both these groups were placed on a regular salary basis in July 1945 by congressional action.

⁶ Data are shown for 1944, instead of 1943 as in the other Federal tables, because pay rolls for employment in areas outside continental United States are not available prior to June 1943.

TABLE A-14: Civilian Government Employment and Pay Rolls in Washington, D. C., by Branch and Agency Group ¹

Year and month	Total government	District of Columbia government	Federal						
			Total	Executive				Legislative	Judicial
				All agencies	Defense agencies ²	Post Office Department ³	All other agencies		
Employment ⁴									
1939.....	143,548	13,978	129,570	123,773	18,761	5,099	99,913	5,373	424
1943.....	300,914	15,874	285,040	278,363	144,319	8,273	125,771	6,171	506
1948: January.....	221,794	18,448	203,346	195,714	65,065	7,258	123,391	7,046	586
February.....	224,517	18,625	205,892	198,201	65,543	7,235	125,423	7,101	590
March.....	226,256	18,668	207,588	199,784	66,050	7,412	126,322	7,217	587
April.....	*227,627	*18,626	209,001	201,227	66,635	7,396	127,196	7,186	588
May.....	*228,877	*18,682	210,195	202,350	67,212	7,380	127,758	7,257	588
June.....	229,526	18,848	210,678	202,782	67,592	7,387	127,803	7,308	588
July.....	233,308	19,294	214,014	206,110	69,056	7,499	129,555	7,305	599
August.....	234,253	18,882	215,371	207,438	70,217	7,486	129,735	7,341	592
September.....	235,063	18,853	216,210	208,245	70,771	7,551	129,923	7,377	588
October.....	234,544	18,564	215,980	208,036	70,666	7,589	129,781	7,355	589
November.....	236,478	19,065	217,413	209,373	71,084	7,702	130,587	7,443	597
December.....	241,444	18,764	222,680	214,740	72,219	10,800	131,721	7,343	597
1949: January.....	237,468	18,862	218,606	210,589	71,202	7,623	131,764	7,414	603
Pay rolls (in thousands)									
1939.....	\$305,741	\$25,226	\$280,515	\$264,541	\$37,825	\$12,524	\$214,192	\$14,765	\$1,209
1943.....	737,792	32,884	704,908	685,510	352,007	20,070	313,433	17,785	1,613
1948: January.....	63,295	4,499	58,796	56,141	16,656	2,776	36,709	2,442	213
February.....	57,991	4,281	53,710	51,099	15,910	2,165	33,024	2,414	197
March.....	65,336	4,518	60,818	58,104	17,900	2,340	37,864	2,499	215
April.....	62,987	4,495	58,492	55,799	16,324	2,277	37,198	2,482	211
May.....	63,492	4,422	59,070	56,400	18,045	2,234	36,121	2,469	201
June.....	66,658	4,561	62,097	59,350	19,250	2,300	37,800	2,536	211
July.....	67,208	3,461	63,747	60,931	20,235	2,651	38,045	2,600	216
August.....	71,251	3,480	67,771	64,848	21,114	2,695	41,039	2,695	228
September.....	73,551	4,607	68,944	66,020	22,141	2,722	41,157	2,694	230
October.....	70,755	4,450	66,305	63,421	20,908	2,684	39,829	2,656	228
November.....	73,221	4,526	68,695	65,782	21,656	2,750	41,376	2,682	231
December.....	78,846	4,741	74,105	71,139	22,526	3,704	44,909	2,722	244
1949: January.....	71,989	4,636	67,353	64,470	20,614	2,741	41,115	2,657	226

¹ Data for the legislative and judicial branches and District of Columbia Government are reported to the Bureau of Labor Statistics. Data for the executive branch are reported through the Civil Service Commission but differ from those published by the Civil Service Commission in the following respects: (1) Include in December the temporary additional postal employment necessitated by the Christmas season, excluded from published Civil Service Commission figures starting 1942; (2) include an upward adjustment to Post Office Department employment prior to December 1943 to convert temporary substitute employees from a full-time equivalent to a name-count basis, the latter being the basis on which data for subsequent months have been reported; (3) exclude persons working without compensation or for \$1 a year or month, included by the Civil Service Commission from June through November 1943; (4) employment published by the Civil Service Commission as of the last day of the month is presented here as of the first day of the next month.

Beginning January 1942, data for the executive branch cover, in addition to the area inside the District of Columbia, the adjacent sections of Maryland and Virginia which are defined by the Bureau of the Census as in the metro-

politan area. Data for Central Intelligence Agency are excluded.
² Covers the National Military Establishment, Maritime Commission, National Advisory Committee for Aeronautics, The Panama Canal, and until their abolition or amalgamation with a peacetime agency, the agencies created specifically to meet war and reconversion emergencies.
³ For ways in which data differ from published figures of the Civil Service Commission, see footnote 1.
⁴ Yearly figures represent averages. Monthly figures represent (1) the number of regular employees in pay status on the first day of the month plus the number of intermittent employees who were paid during the preceding month for the executive branch, (2) the number of employees on the pay roll with pay during the pay period ending just before the first of the month for the legislative and judicial branches, and (3) the number of employees on the pay roll with pay during the pay period ending on or just before the last of the month for the District of Columbia Government.

*Revised.

TABLE A-15: Personnel and Pay in Military Branch of Federal Government ¹
[In thousands]

Year and month	Personnel (average for year or as of first of month) ¹					Type of pay				
	Total	Army and Air Forces ²	Navy	Marine Corps	Coast Guard	Total	Pay rolls ⁴	Mustering-out pay ⁵	Family allowances ⁶	Leave payments ⁷
1939.....	345	192	124	19	10	\$331,523	\$331,523			
1943.....	8,944	6,733	1,744	311	156	11,181,079	10,148,745		\$1,032,334	
1948: January.....	1,422	898	421	83	20	300,241	250,954	13,465	23,454	12,369
February.....	1,419	905	414	80	20	281,423	240,493	11,838	23,567	5,526
March.....	1,423	909	413	80	20	285,011	242,969	13,051	24,997	3,995
April.....	1,417	906	412	79	20	285,210	247,452	9,751	25,414	2,693
May.....	1,420	917	408	80	20	278,967	242,292	9,087	25,736	1,882
June.....	1,439	930	407	82	20	277,368	243,239	5,756	26,476	1,898
July.....	1,463	940	420	84	20	276,590	246,422	2,516	26,353	1,299
August.....	1,514	978	430	86	21	278,234	244,547	3,955	27,756	1,976
September.....	1,548	1,010	432	86	21	292,040	251,398	9,292	28,115	3,235
October.....	1,585	1,042	438	84	21	294,843	259,175	5,818	28,253	1,598
November.....	1,610	1,057	446	85	21	298,971	264,137	5,793	28,534	567
December.....	1,628	1,072	449	85	22	294,042	260,046	5,201	28,605	190
1949: January.....	1,644	1,089	447	86	22	299,582	265,618	5,012	28,709	243

¹ Except for Army personnel for 1939 which is from the Annual Report of the Secretary of War, all data are from reports submitted to the Bureau of Labor Statistics by the various military branches. Because of rounding, totals will not necessarily add to the sum of the items shown.

² Includes personnel on active duty, the missing, those in the hands of the enemy, and those on terminal leave through October 1, 1947, when lump-sum terminal-leave payments at time of discharge were started.

³ Prior to March 1944, data include persons on induction furlough. Prior to June 1942 and after April 1945, Philippine Scouts are included.

⁴ Pay rolls are for personnel on active duty; they include payment of personnel while on terminal leave through September 1947. For officers this applies to all prior periods and for enlisted personnel back to October 1, 1946 only. Beginning October 1, 1947, they include lump-sum terminal-leave payments made at time of discharge. Coast Guard pay rolls for all periods and Army pay rolls through April 1947 represent actual expenditures. Other

data represent estimated obligations based on an average monthly personnel count. Pay rolls for the Navy and Coast Guard include cash payments for clothing-allowance balances in January, April, July, and October.

⁵ Represents actual expenditures.

⁶ Represents Government's contribution. The men's share is included in the pay rolls.

⁷ Leave payments were authorized by Public Law 704 of the 79th Congress and were continued by Public Law 254 of the 80th Congress to enlisted personnel discharged prior to September 1, 1946, for accrued and unused leave, and to officers and enlisted personnel then on active duty for leave accrued in excess of 60 days. Value of bonds (representing face value, to which interest is added when bonds are cashed) and cash payments are included. Lump-sum payments for terminal leave, which were authorized by Public Law 350 of the 80th Congress, and which were started in October 1947, are excluded here and included under pay rolls.

B: Labor Turn-Over

TABLE B-1: Monthly Labor Turn-Over Rates (Per 100 Employees) in Manufacturing Industries, by Class of Turn-Over ¹

Class of turn-over and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
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 2.6
1947.....	6.0	5.0	5.1	5.1	4.8	5.5	4.9	5.3	5.9	5.5	4.8	3.6
1946.....	8.5	6.8	7.1	6.7	6.1	6.7	7.4	7.0	7.1	6.8	5.7	4.3
1943.....	8.3	7.9	8.3	7.4	7.2	8.4	7.8	7.6	7.7	7.2	6.6	5.2
1939 ³	4.1	3.1	3.3	2.9	3.3	3.9	4.2	5.1	6.2	5.9	4.1	2.8
Total separation:												
1948.....	4.3	4.2	4.5	4.7	4.3	4.5	4.4	5.1	5.4	4.5	4.1	² 4.3
1947.....	4.9	4.5	4.9	5.2	5.4	4.7	4.6	5.3	5.9	5.0	4.0	3.7
1946.....	6.8	6.3	6.6	6.3	6.3	5.7	5.8	6.6	6.9	6.3	4.9	4.5
1943.....	7.1	7.1	7.7	7.5	6.7	7.1	7.6	8.3	8.1	7.0	6.4	6.6
1939 ³	3.2	2.6	3.1	3.5	3.5	3.3	3.3	3.0	2.8	2.9	3.0	3.5
Quit: ⁴												
1948.....	2.6	2.5	2.8	3.0	2.8	2.9	2.9	3.4	3.9	2.8	2.2	² 1.7
1947.....	3.5	3.2	3.5	3.7	3.5	3.1	3.1	4.0	4.5	3.6	2.7	2.3
1946.....	4.3	3.9	4.2	4.3	4.2	4.0	4.6	5.3	5.3	4.7	3.7	3.0
1943.....	4.5	4.7	5.4	5.4	4.8	5.2	5.6	6.3	6.3	5.2	4.5	4.4
1939 ³.....	.9	.6	.8	.8	.7	.7	.7	.8	1.1	.9	.8	.7
Discharge:												
1948.....	.4	.4	.4	.4	.3	.4	.4	.4	.4	.4	.4	² .3
1947.....	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4
1946.....	.5	.5	.4	.4	.4	.3	.4	.4	.4	.4	.4	.4
1943.....	.5	.5	.6	.5	.6	.6	.7	.7	.6	.6	.6	.6
1939 ³.....	.1	.1	.1	.1	.1	.1	.1	.1	.1	.2	.2	.1
Lay-off: ⁵												
1948.....	1.2	1.2	1.2	1.2	1.1	1.1	1.0	1.2	1.0	1.2	1.4	² 2.2
1947.....	.9	.8	.9	1.0	1.4	1.1	1.0	.8	.9	.9	.8	.9
1946.....	1.8	1.7	1.8	1.4	1.5	1.2	.6	.7	1.0	1.0	.7	1.0
1943.....	.7	.5	.5	.6	.5	.5	.5	.5	.5	.5	.7	1.0
1939 ³	2.2	1.9	2.2	2.6	2.7	2.5	2.5	2.1	1.6	1.8	2.0	2.7
Miscellaneous, including military: ⁴												
1948.....	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	² .1
1947.....	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
1946.....	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.1	.1
1943.....	1.4	1.4	1.2	1.0	.8	.8	.8	.8	.7	.7	.6	.6

¹ Month-to-month changes in total employment in manufacturing industries as indicated by labor turn-over rates are not precisely comparable to those shown by the Bureau's employment and pay-roll reports, as the former are based on data for the entire month, while the latter, for the most part, refer to a 1-week period ending nearest the 15th of the month. The turn-over sample is not so extensive as that of the employment and pay-roll survey—proportionately fewer small plants are included; printing and publishing, and certain seasonal industries, such as canning and preserving,

are not covered. Plants on strike are also excluded. See Note, table B-2.

² Preliminary figures.

³ Prior to 1943, rates relate to wage earners only.

⁴ Prior to September 1940, miscellaneous separations were included with quits.

⁵ Including temporary, indeterminate (of more than 7 days' duration), and permanent lay-offs.

TABLE B-2: Monthly Labor Turn-Over Rates (Per 100 Employees) in Selected Groups and Industries ¹

Industry group and industry	Total accession		Separation									
			Total		Quit		Discharge		Lay-off		Miscellaneous, including military	
	Dec. 1948 ²	Nov. 1948	Dec. 1948 ²	Nov. 1948	Dec. 1948 ²	Nov. 1948	Dec. 1948 ²	Nov. 1948	Dec. 1948 ²	Nov. 1948	Dec. 1948 ²	Nov. 1948
MANUFACTURING												
Durable goods.....	2.5	3.9	4.3	4.1	1.8	2.2	0.3	0.4	2.1	1.4	0.1	0.1
Nondurable goods.....	2.8	4.0	4.4	4.2	1.7	2.3	.3	.3	2.3	1.5	.1	.1
<i>Durable goods</i>												
Iron and steel and their products.....	2.2	3.2	4.0	3.4	1.7	2.0	.3	.3	1.8	.9	.2	.2
Blast furnaces, steel works, and rolling mills.....	1.9	2.7	2.4	2.4	1.6	1.8	.2	.2	.3	.2	.3	.2
Gray-iron castings.....	2.6	4.1	6.7	5.5	2.2	2.8	.6	.6	3.7	2.0	.2	.1
Malleable-iron castings.....	3.2	4.9	6.8	5.2	2.6	3.2	.5	.5	3.5	1.3	.2	.2
Steel castings.....	2.7	3.5	4.3	4.3	1.8	2.4	.3	.5	2.1	1.3	.1	.1
Cast-iron pipe and fittings.....	1.7	2.3	2.3	2.2	1.4	1.7	.2	.2	.6	.2	.1	.1
Tin cans and other tinware.....	3.9	3.5	6.0	7.4	1.7	2.6	.4	.7	3.8	4.0	.1	.1
Wire products.....	1.6	3.1	2.7	2.6	1.0	1.7	.3	.3	1.2	.5	.2	.1
Cutlery and edge tools.....	1.2	3.9	3.9	2.8	1.2	1.4	.2	.6	2.4	.8	.1	(³)
Tools (except edge tools, machine tools, files, and saws).....	1.4	2.4	2.3	3.1	1.2	1.4	.2	.3	.9	1.3	(³)	.1
Hardware.....	2.5	4.3	4.6	3.6	2.0	2.5	.3	.5	2.2	.5	.1	.1
Stoves, oil burners and heating equipment.....	2.2	3.2	17.1	8.0	1.8	2.4	.3	.4	14.9	5.1	.1	.1
Steam and hot-water heating apparatus and steam fittings.....	2.2	3.9	6.9	3.1	1.7	2.0	.6	.5	4.5	.5	.1	.1
Stamped and enameled ware and galvanizing.....	2.3	3.6	6.1	5.1	2.0	2.6	.4	.4	3.5	1.9	.2	.2
Fabricated structural-metal products.....	3.2	3.6	3.1	2.9	1.6	1.6	.1	.3	1.3	.8	.1	.2
Bolts, nuts, washers, and rivets.....	1.8	2.6	2.6	3.1	1.3	1.7	.3	.2	.9	1.1	.1	.1
Forgings, iron and steel.....	1.9	4.0	2.9	3.1	1.2	2.1	.1	.3	1.5	.6	.1	.1
Electrical machinery.....	2.2	3.0	4.0	3.2	1.5	1.6	.3	.2	2.1	1.3	.1	.1
Electrical equipment for industrial use.....	1.3	1.7	2.0	2.2	.9	1.1	.2	.1	.7	.9	.2	.1
Radios, radio equipment, and phonographs.....	4.3	6.0	4.3	4.1	2.2	2.4	.4	.5	1.5	1.1	.2	.1
Communication equipment, except radios.....	1.2	1.3	3.7	2.8	1.4	1.6	.2	.2	2.0	.9	.1	.1
Machinery, except electrical.....	2.0	2.9	3.3	3.1	1.3	1.6	.3	.3	1.6	1.1	.1	.1
Engines and turbines.....	2.5	4.4	4.4	3.4	1.1	1.4	.3	.4	2.9	1.5	.1	.1
Agricultural machinery and tractors.....	2.6	3.7	2.8	3.2	1.7	2.1	.4	.4	.5	.5	.2	.2
Machine tools.....	1.8	1.9	3.5	2.4	1.1	1.3	.2	.2	2.0	.8	.2	.1
Metalworking machinery and equipment, not elsewhere classified.....	2.4	3.3	3.6	3.5	.9	1.4	.3	.4	2.3	1.6	.1	.1
General industrial machinery, except pumps.....	1.6	2.3	2.8	2.3	1.1	1.4	.2	.3	1.4	.5	.1	.1
Pumps and pumping equipment.....	2.2	3.2	2.7	3.1	1.4	1.7	.3	.4	.9	.9	.1	.1
Pumps and pumping equipment.....	1.9	2.7	2.6	2.6	1.1	1.2	.2	.3	1.1	.9	.2	.2
Transportation equipment, except automobiles.....	5.5	6.4	6.3	5.7	1.6	1.9	.3	.3	4.3	3.4	.1	.1
Aircraft.....	3.6	5.5	3.4	3.3	1.9	2.1	.3	.2	1.1	.9	.1	.1
Aircraft parts, including engines.....	3.0	3.3	1.3	1.8	.8	1.2	.2	.3	.2	.3	(³)	.1
Shipbuilding and repairs.....	11.7	11.0	15.0	12.7	1.9	2.0	.7	.3	12.3	10.3	.1	.1
Automobiles.....	3.5	5.0	4.4	4.5	2.4	2.6	.4	.5	1.4	1.2	.2	.2
Motor vehicles, bodies, and trailers.....	3.9	5.7	4.6	4.5	2.8	2.9	.4	.5	1.2	.9	.2	.2
Motor-vehicle parts and accessories.....	2.4	3.4	3.7	4.2	1.5	2.0	.3	.4	1.8	1.7	.1	.1
Nonferrous metals and their products.....	2.1	3.1	4.1	3.5	1.3	1.8	.3	.4	2.4	1.2	.1	.1
Primary smelting and refining, except aluminum and magnesium.....	1.6	1.7	2.0	1.9	.9	1.0	.3	.4	.6	.3	.2	.2
Rolling and drawing of copper alloys.....	2.0	1.7	1.7	2.1	.8	1.0	.2	.2	.5	.8	.2	.1
Lighting equipment.....	2.0	2.8	5.8	3.1	.7	1.9	.3	.3	4.8	.9	(³)	(³)
Nonferrous-metal foundries, except aluminum and magnesium.....	2.6	4.4	4.1	4.7	1.5	2.6	.3	.6	2.1	1.3	.2	.2
Lumber and timber basic products.....	2.7	5.2	5.3	5.9	2.6	3.7	.2	.3	2.4	1.8	.1	.1
Sawmills.....	2.3	4.6	4.9	6.1	2.4	3.4	.2	.3	2.3	2.3	(³)	.1
Planing and plywood mills.....	1.8	3.4	3.2	3.7	1.4	2.4	.2	.2	1.5	1.0	.1	.1
Furniture and finished lumber products.....	2.3	4.6	6.0	5.7	2.0	2.9	.4	.6	3.5	2.1	.1	.1
Furniture, including mattresses and bedsprings.....	2.3	4.6	6.3	5.9	2.1	3.0	.4	.6	3.7	2.2	.1	.1
Stone, clay, and glass products.....	2.1	3.5	4.0	3.4	1.5	2.0	.3	.4	2.0	.9	.2	.1
Glass and glass products.....	2.5	3.9	6.1	3.6	1.3	1.7	.2	.3	4.4	1.4	.2	.2
Cement.....	1.6	3.0	2.7	2.9	1.6	2.1	.5	.4	.4	.3	.2	.1
Brick, tile, and terra cotta.....	2.8	3.7	3.2	3.8	2.3	2.5	.3	.7	.5	.5	.1	.1
Pottery and related products.....	2.3	4.5	3.0	3.4	1.8	2.5	.3	.4	.8	.4	.1	.1

See footnotes at end of table.

TABLE B-2: Monthly Labor Turn-Over Rates (Per 100 Employees) in Selected Groups and Industries¹—Continued

Industry group and industry	Total accession		Separation									
			Total		Quit		Discharge		Lay-off		Miscellaneous, including military	
	Dec. 1948 ²	Nov. 1948	Dec. 1948 ²	Nov. 1948	Dec. 1948 ²	Nov. 1948	Dec. 1948 ²	Nov. 1948	Dec. 1948 ²	Nov. 1948	Dec. 1948 ²	Nov. 1948
MANUFACTURING—Continued												
<i>Nondurable goods</i>												
Textile-mill products.....	2.1	3.2	3.7	3.6	1.6	2.0	0.2	0.3	1.8	1.2	0.1	0.1
Cotton.....	2.6	3.2	4.0	3.7	2.0	2.4	.2	.3	1.7	.9	.1	.1
Silk and rayon goods.....	1.7	3.8	3.3	3.5	1.4	2.1	.2	.3	1.6	1.1	.1	(3)
Woolen and worsted, except dyeing and finishing.....	2.3	3.5	4.4	4.4	.9	1.3	.2	.2	3.1	2.8	.2	.1
Hosiery, full-fashioned.....	1.5	2.7	2.4	2.6	1.4	2.0	.2	.2	.8	.4	(3)	(3)
Hosiery, seamless.....	1.6	4.2	4.7	4.4	1.6	2.6	(3)	.1	3.1	1.7	(3)	(3)
Knitted underwear.....	1.0	2.4	6.0	6.6	1.7	2.4	.2	.3	4.1	3.9	(3)	(3)
Dyeing and finishing textiles, including woolen and worsted.....	1.0	2.2	2.1	2.0	.7	.9	.4	.3	.9	.7	.1	.1
Apparel and other finished textile products.....	2.9	3.7	5.6	5.1	2.4	3.1	.2	.2	3.0	1.8	(3)	(3)
Men's and boys' suits, coats, and overcoats.....	3.3	3.0	4.8	5.4	1.9	2.1	.1	.1	2.8	3.2	(3)	(3)
Men's and boys' furnishings, work clothing, and allied garments.....	1.7	3.3	7.5	4.4	2.8	3.7	.2	.1	4.5	.6	(3)	(3)
Leather and leather products.....	3.9	3.1	3.4	3.7	2.1	2.3	.2	.2	1.0	1.1	.1	.1
Leather.....	1.8	1.9	2.2	2.4	1.0	1.2	.1	.2	1.0	.9	.1	.1
Boots and shoes.....	4.2	3.3	3.5	4.0	2.3	2.5	.2	.2	.9	1.2	.1	.1
Food and kindred products.....	4.8	7.8	7.1	6.5	2.1	3.1	.6	.7	4.2	2.5	.2	.2
Meat products.....	6.2	11.2	7.0	6.3	2.3	3.2	.8	.9	3.7	1.9	.2	.3
Grain-mill products.....	2.2	3.3	2.6	3.6	1.6	2.5	.5	.5	.4	.4	.1	.2
Tobacco manufactures.....	2.1	3.1	5.2	4.5	1.8	2.8	.3	.5	3.1	1.1	(3)	.1
Paper and allied products.....	1.4	2.5	2.4	2.8	1.3	1.7	.2	.3	.8	.7	.1	.1
Paper and pulp.....	1.2	1.9	2.0	2.3	1.0	1.4	.2	.3	.7	.5	.1	.1
Paper boxes.....	2.0	4.2	3.6	4.4	1.9	2.7	.3	.5	1.3	1.1	.1	.1
Chemicals and allied products.....	1.0	1.5	1.7	1.7	.7	.8	.2	.2	.7	.6	.1	.1
Paints, varnishes, and colors.....	1.0	1.8	1.6	2.3	.9	1.1	.2	.3	.4	.8	.1	.1
Rayon and allied products.....	.7	.9	1.2	1.3	.6	.7	.2	.1	.3	.4	.1	.1
Industrial chemicals, except explosives.....	1.0	1.7	1.7	1.9	.7	.9	.2	.3	.7	.6	.1	.1
Products of petroleum and coal.....	.6	.7	1.0	1.5	.4	.6	(3)	.2	.4	.6	.2	.1
Petroleum refining.....	.6	.5	.7	1.0	.3	.5	(3)	.1	.2	.3	.2	.1
Rubber products.....	1.6	2.5	4.0	3.1	1.4	1.8	.2	.2	2.3	1.0	.1	.1
Rubber tires and inner tubes.....	1.0	1.2	3.2	2.6	1.0	1.1	.1	.1	2.0	1.3	.1	.1
Rubber footwear and related products.....	2.9	4.2	5.8	3.5	2.5	2.8	.3	.2	2.8	.4	.2	.1
Miscellaneous rubber industries.....	1.7	4.0	4.2	4.1	1.3	2.6	.3	.5	2.5	.9	.1	.1
Miscellaneous industries.....	1.9	2.3	2.8	3.4	1.1	1.7	.1	.2	1.5	1.4	.1	.1
NONMANUFACTURING												
Metal mining.....	4.3	4.9	3.9	4.2	2.8	2.9	.3	.3	.6	.8	.2	.2
Iron-ore.....	1.7	1.6	2.7	2.9	1.2	1.1	.1	.1	1.1	1.4	.3	.3
Copper-ore.....	6.5	6.8	4.9	5.2	4.0	4.2	.2	.3	.5	.5	.2	.2
Lead- and zinc-ore.....	4.1	6.4	3.4	3.9	2.7	3.0	.5	.7	.1	.1	.1	.1
Coal mining.....												
Anthracite.....	1.4	1.5	1.7	1.8	1.1	1.2	.1	(3)	.2	.3	.3	.3
Bituminous.....	2.2	2.9	2.4	2.9	1.9	2.3	.1	.1	.2	.4	.2	.1
Public utilities:												
Telephone.....	(4)	1.8	(4)	1.7	(4)	1.4	(4)	.1	(4)	.1	(4)	.1
Telegraph.....	(4)	1.1	(4)	2.2	(4)	1.2	(4)	.1	(4)	.8	(4)	.1

¹ Since January 1943 manufacturing firms reporting labor turn-over information have been assigned industry codes on the basis of current products. Most plants in the employment and pay-roll sample, comprising those which were in operation in 1939, are classified according to their major activity at that time, regardless of any subsequent change in major products. Labor turn-over data, beginning in January 1943, refer to wage and salary workers.

Employment information for wage and salary workers is available for major manufacturing industry groups (table A-3); for individual industries these data refer to production workers only (table A-6).

² Preliminary figures.

³ Less than 0.05.

⁴ Not available.

NOTE: Explanatory notes outlining the concepts, sources, size of the reporting sample, and methodology used in preparing the data presented in tables B-1 and B-2 are contained in the Bureau's monthly mimeographed release, "Labor Turn-Over," which is available upon request.

C: Earnings and Hours

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries¹

Year and month	MANUFACTURING																	
	All manufacturing			Durable goods			Nondurable goods			Iron and steel and their 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	Total: Iron and steel and their products			Blast furnaces, steel works, and rolling mills			Gray-iron and semi-steel castings		
										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
1939: Average.....	\$23.86	37.7	\$0.633	\$26.50	38.0	\$0.698	\$21.78	37.4	\$0.582	\$27.52	37.2	\$0.739	\$29.88	35.3	\$0.845	\$25.93	37.1	\$0.699
1941: January.....	26.64	39.0	.683	30.48	40.7	.749	22.75	37.3	.610	31.07	40.4	.769	33.60	38.7	.869	30.45	41.2	.739
1947: December.....	52.69	41.2	1.278	56.48	41.7	1.354	48.72	40.8	1.196	58.13	41.2	1.412	60.01	39.5	1,519	58.16	42.5	1.368
1948: January.....	52.07	40.5	1.285	55.46	40.9	1.355	48.45	40.0	1.210	57.43	40.6	1.414	60.58	39.5	1,533	57.31	41.6	1.379
February.....	51.75	40.2	1.287	54.77	40.5	1.352	48.56	39.9	1.217	56.99	40.4	1.409	59.74	39.5	1,513	57.24	41.2	1.390
March.....	52.07	40.4	1.289	55.25	40.9	1.352	48.66	39.9	1.220	57.28	40.6	1.412	59.26	39.4	1,510	58.47	41.8	1.401
April.....	51.79	40.1	1.292	54.96	40.5	1.357	48.33	39.6	1.220	56.49	39.9	1.416	58.37	38.6	1,513	56.39	40.2	1.404
May.....	51.86	39.9	1.301	54.81	40.1	1.366	48.65	39.6	1.230	57.39	40.3	1.423	60.54	39.9	1,515	55.15	39.3	1.403
June.....	52.85	40.2	1.316	56.13	40.5	1.385	49.37	39.8	1.242	57.70	40.3	1.431	59.54	39.3	1,515	57.85	40.7	1.422
July.....	52.95	39.8	1.332	56.21	40.0	1.407	49.49	39.5	1.252	57.71	39.6	1.457	60.37	38.7	1,559	56.66	39.8	1.426
August.....	54.05	40.1	1.349	58.19	40.7	1.431	49.79	39.5	1.262	60.52	40.3	1.501	65.10	39.6	1,642	58.26	40.3	1.447
September.....	54.19	39.8	1.362	57.95	40.0	1.448	50.37	39.6	1.272	60.69	39.7	1.528	66.02	39.3	1,679	59.44	40.2	1.480
October.....	54.65	40.0	1.366	59.41	40.9	1.452	49.70	39.1	1.271	62.17	40.8	1.525	67.02	40.4	1,657	59.27	40.2	1.475
November.....	54.57	39.8	1.371	58.71	40.4	1.454	50.19	39.2	1.282	61.74	40.5	1.525	66.20	40.0	1,656	58.45	39.8	1.472
December.....	55.10	40.0	1.376	59.40	40.8	1.457	50.51	39.3	1.286	61.91	40.5	1.528	65.73	39.8	1,656	58.88	40.0	1.472
Iron and steel and their products—Continue																		
	Malleable-iron castings			Steel castings			Cast-iron pipe and fittings			Tin cans and other tinware			Wirework			Cutlery and edge tools		
1939: Average.....	\$24.16	36.0	\$0.671	\$27.97	36.9	\$0.759	\$21.33	36.4	\$0.581	\$23.61	38.8	\$0.611	\$25.96	38.1	\$0.683	\$23.11	39.1	\$0.601
1941: January.....	28.42	40.2	.707	32.27	41.4	.780	25.42	40.5	.626	25.31	39.8	.639	28.27	39.7	.712	25.90	40.5	.652
1947: December.....	59.18	41.8	1.414	60.05	41.6	1.443	50.98	42.2	1.206	53.92	42.5	1.265	57.83	42.6	1,356	50.26	42.0	1.197
1948: January.....	59.03	41.5	1.420	59.48	41.1	1.446	49.67	40.4	1.225	51.45	40.7	1.263	56.34	41.8	1,347	49.91	41.8	1.192
February.....	57.44	40.8	1.405	58.52	40.5	1.445	50.42	40.3	1.250	50.44	40.1	1.263	55.47	41.1	1,349	50.09	41.6	1.193
March.....	57.79	40.8	1.414	59.88	41.3	1.450	50.21	40.1	1.248	49.76	39.8	1.251	55.70	41.0	1,355	50.20	41.5	1.207
April.....	56.77	39.8	1.424	60.13	41.2	1.458	48.52	38.5	1.258	49.65	39.8	1.250	54.96	40.4	1,360	49.90	41.4	1.205
May.....	57.21	40.4	1.415	60.49	41.3	1.463	49.07	40.2	1.271	50.98	40.2	1.273	55.11	40.5	1,367	50.22	41.2	1.217
June.....	57.46	40.1	1.430	61.60	41.7	1.479	52.74	40.9	1.288	53.04	41.0	1.295	55.82	40.6	1,373	50.36	41.4	1.216
July.....	57.37	39.9	1.441	58.71	40.0	1.467	51.94	40.5	1.281	56.99	42.0	1.362	57.36	40.0	1,422	50.03	40.5	1.235
August.....	59.44	40.2	1.470	61.79	41.4	1.492	52.84	40.6	1.302	57.04	41.6	1.368	58.11	40.3	1,443	51.77	41.6	1.245
September.....	59.24	39.4	1.505	61.27	39.8	1.539	53.93	41.1	1.309	60.03	42.8	1.401	56.91	39.2	1,451	51.25	41.3	1.240
October.....	61.58	40.6	1.517	63.36	41.0	1.544	55.08	41.7	1.319	55.46	40.3	1.378	59.74	40.8	1,463	52.49	42.0	1.248
November.....	60.71	39.9	1.527	63.92	41.3	1.547	56.97	42.9	1.326	54.51	40.1	1.363	59.47	40.5	1,468	52.89	41.7	1.267
December.....	61.49	40.1	1.532	63.79	41.2	1.547	57.06	42.9	1.330	56.23	41.3	1.363	60.05	40.5	1,481	52.31	41.4	1.270
Iron and steel and their products—Continued																		
	Tools (except edge tools, machine tools, files, and saws)			Hardware			Plumbers' supplies			Stoves, oil burners, and heating equipment, not otherwise classified			Steam and hot-water heating apparatus and steam fittings			Stamped and enameled ware and galvanizing		
1939: Average.....	\$24.49	39.7	\$0.618	\$23.13	38.9	\$0.593	\$25.80	38.2	\$0.676	\$25.25	38.1	\$0.666	\$26.19	37.6	\$0.697	\$23.92	38.1	\$0.627
1941: January.....	29.49	44.7	.662	25.24	40.9	.621	27.13	39.0	.696	26.07	38.7	.678	30.98	42.5	.732	26.32	39.4	.665
1947: December.....	54.44	43.0	1.266	52.55	42.2	1.245	57.00	41.6	1.370	56.22	42.0	1.339	58.66	42.2	1,389	54.72	41.5	1.320
1948: January.....	54.24	42.6	1.273	53.29	42.4	1.256	55.61	40.8	1.365	54.24	40.3	1.345	54.87	40.3	1,363	53.65	40.7	1.319
February.....	54.02	42.3	1.278	52.79	42.3	1.249	55.26	40.4	1.367	54.59	40.2	1.358	57.07	41.3	1,383	52.42	40.0	1.311
March.....	54.68	42.6	1.287	52.63	42.0	1.252	56.54	41.2	1.374	54.12	40.1	1.352	56.53	40.9	1,380	52.78	40.3	1.311
April.....	54.15	41.9	1.293	52.05	41.6	1.251	56.27	40.6	1.386	54.34	39.9	1.363	56.13	40.7	1,378	52.93	40.1	1.321
May.....	54.01	41.6	1.299	50.84	40.4	1.253	56.93	41.0	1.388	54.18	39.7	1.366	56.90	40.7	1,396	53.75	40.3	1.332
June.....	54.96	42.1	1.308	52.22	40.6	1.285	56.51	40.4	1.401	55.95	40.2	1.392	57.68	40.7	1,418	53.54	40.2	1.330
July.....	54.11	41.2	1.314	50.27	38.8	1.295	56.48	40.2	1.405	55.26	39.7	1.392	59.42	41.0	1,448	52.62	38.6	1.363
August.....	56.53	42.2	1.342	52.62	40.3	1.306	58.12	40.7	1.429	57.04	40.5	1.411	58.18	40.3	1,444	54.80	39.8	1.378
September.....	55.09	40.6	1.356	52.62	39.5	1.331	56.78	38.7	1.466	56.24	39.5	1.424	58.39	40.3	1,450	53.37	38.4	1.397
October.....	56.80	41.6	1.366	54.30	40.8	1.331	62.31	41.4	1.506	58.12	40.9	1.423	60.66	41.0	1,479	55.97	39.9	1.403
November.....	56.54	41.2	1.373	54.61	40.9	1.334	61.27	40.9	1.499	55.02	39.0	1.410	60.17	40.6	1,482	56.33	40.1	1.403
December.....	56.80	41.5	1.368	55.04	41.2	1.336	62.01	41.3	1.501	55.29	39.2	1.412	59.34	40.3	1,478	57.14	40.4	1.414

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries¹—Con.

MANUFACTURING—Continued

Year and month	Iron and steel and their products—Continued																			
	Fabricated structural and ornamental metal work			Metal doors, sash, frames, molding, and trim			Bolts, nuts, washers, and rivets			Forgings, iron and steel			Screw-machine products and wood screws			Steel barrels, kegs, and drums				
	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		
1939: Average	\$27.95	38.5	\$0.727				\$26.04	37.7	\$0.690	\$29.45	38.4	\$0.767								
1941: January	31.01	41.8	.743				29.58	41.9	.706	36.75	45.0	.818								
1947: December	58.81	42.7	1.378	\$58.97	43.5	\$1.354	57.79	42.5	1.359	67.20	42.2	1.591	\$56.77	43.0	\$1.319	\$57.08	42.5	\$1.344		
1948: January	55.76	41.1	1.356	56.49	42.0	1.346	55.68	40.6	1.369	65.74	41.6	1.581	56.54	42.7	1.324	55.31	41.0	1.356		
February	55.31	40.9	1.353	55.88	41.7	1.342	57.38	42.0	1.364	65.51	41.4	1.583	56.62	42.8	1.324	51.35	38.2	1.343		
March	56.15	41.1	1.371	57.35	41.1	1.385	59.20	43.1	1.372	64.42	40.8	1.579	56.99	42.9	1.327	53.16	39.5	1.344		
April	55.77	40.8	1.365	57.97	41.2	1.392	58.44	42.5	1.375	63.10	40.0	1.577	56.30	42.4	1.327	53.49	39.2	1.361		
May	57.16	41.2	1.388	58.55	41.0	1.412	57.88	42.2	1.371	62.64	40.0	1.566	56.06	42.1	1.331	55.31	40.4	1.369		
June	57.84	41.2	1.395	61.49	42.7	1.439	58.76	42.3	1.386	64.74	40.7	1.580	55.65	41.9	1.328	55.41	40.5	1.369		
July	55.39	39.4	1.398	56.45	39.4	1.435	57.37	41.5	1.383	63.44	40.0	1.585	55.85	42.1	1.355	53.24	38.6	1.381		
August	59.92	41.1	1.447	61.80	42.2	1.465	60.97	42.3	1.440	66.59	40.4	1.647	56.52	41.2	1.366	58.39	39.9	1.462		
September	57.25	39.2	1.448	63.75	42.7	1.489	59.43	40.8	1.454	68.82	40.6	1.695	56.77	41.0	1.386	53.74	36.5	1.468		
October	61.83	42.3	1.462	62.98	42.4	1.478	60.87	41.5	1.464	70.63	41.4	1.708	58.61	41.8	1.400	58.59	39.7	1.477		
November	61.74	41.9	1.472	62.29	42.2	1.476	61.41	42.0	1.458	70.54	41.1	1.716	57.42	41.2	1.394	59.33	40.1	1.479		
December	61.79	42.2	1.465	64.31	43.2	1.477	62.77	42.6	1.472	71.27	41.4	1.708	57.89	41.7	1.397	62.07	41.2	1.506		
	Iron and steel and their products—Continued			Electrical machinery														Machinery, except electrical		
	Firearms			Total: Electrical machinery			Electrical equipment			Radios and phonographs			Communication equipment			Total: Machinery, except electrical				
1939: Average	\$27.28	41.3	\$0.660	\$27.09	38.6	\$0.702	\$27.95	38.7	\$0.722	\$22.34	38.5	\$0.581	\$28.74	38.3	\$0.751	\$29.27	39.3	\$0.746		
1941: January	35.09	48.6	.722	31.84	42.4	.751	33.18	43.4	.765	24.08	38.2	.632	32.47	41.4	.784	34.36	44.0	.781		
1947: December	60.01	42.0	1.429	55.34	41.1	1.346	56.99	41.2	1.384	48.59	40.4	1.203	56.15	41.7	1.348	59.67	42.2	1.413		
1948: January	59.88	41.8	1.434	54.82	40.5	1.352	56.77	40.8	1.391	47.56	39.6	1.202	54.64	40.5	1.351	59.13	41.8	1.415		
February	60.80	42.1	1.446	54.50	40.4	1.348	56.11	40.6	1.382	47.00	39.2	1.200	55.83	41.1	1.359	58.65	41.4	1.417		
March	62.33	42.7	1.460	54.41	40.3	1.350	56.23	40.5	1.388	47.00	39.2	1.199	54.78	40.5	1.355	59.12	41.6	1.421		
April	61.16	41.8	1.463	53.86	39.9	1.350	55.70	40.2	1.387	47.01	39.1	1.201	53.49	39.6	1.353	59.30	41.4	1.431		
May	61.42	41.9	1.466	53.70	39.6	1.357	55.41	39.9	1.390	46.97	38.8	1.211	53.59	39.3	1.364	59.33	41.2	1.441		
June	63.10	42.1	1.489	54.86	40.0	1.372	56.67	40.3	1.408	48.10	39.1	1.229	54.06	39.7	1.366	60.50	41.4	1.461		
July	63.06	42.4	1.489	55.46	39.4	1.407	57.24	39.5	1.449	49.45	39.7	1.247	53.82	38.8	1.387	59.83	40.6	1.473		
August	61.73	42.1	1.468	57.49	40.0	1.439	59.18	40.0	1.478	50.21	39.3	1.279	57.56	40.3	1.429	61.45	41.0	1.498		
September	63.23	42.3	1.493	57.72	40.0	1.443	59.37	40.0	1.486	50.66	39.6	1.278	57.80	40.6	1.426	61.31	40.6	1.510		
October	64.47	42.3	1.523	58.17	40.2	1.448	60.04	40.3	1.492	50.74	39.5	1.285	58.21	40.6	1.435	62.25	41.0	1.518		
November	64.44	42.2	1.528	58.29	40.3	1.446	60.18	40.3	1.493	52.09	40.4	1.288	57.15	40.1	1.426	61.92	40.7	1.520		
December	63.76	41.4	1.541	58.31	40.3	1.446	60.41	40.5	1.492	52.49	40.3	1.301	55.74	39.6	1.413	62.67	41.1	1.524		
	Machinery, except electrical—Continued																			
	Machinery and machine-shop products			Engines and turbines			Tractors			Agricultural machinery, excluding tractors			Machine tools			Machine-tool accessories				
1939: Average	\$28.76	39.4	\$0.730	\$28.67	37.4	\$0.767	\$32.13	38.3	\$0.839	\$26.46	37.0	\$0.716	\$32.25	42.9	\$0.752	\$31.78	40.9	\$0.777		
1941: January	34.00	43.7	.777	36.50	44.1	.827	36.03	41.5	.868	29.92	39.5	.757	40.15	50.4	.797	37.90	50.0	.758		
1947: December	59.22	42.7	1.391	61.14	40.5	1.519	60.24	41.3	1.459	57.85	40.6	1.424	61.34	43.1	1.424	63.47	42.4	1.497		
1948: January	58.33	42.0	1.389	62.79	41.3	1.529	60.10	41.1	1.462	57.84	40.4	1.433	59.64	42.0	1.420	63.58	42.2	1.508		
February	58.11	41.8	1.392	62.66	41.6	1.527	59.40	40.6	1.464	57.80	40.4	1.432	60.54	42.3	1.432	63.59	42.2	1.508		
March	58.29	41.8	1.395	63.31	41.6	1.525	59.43	40.6	1.464	59.55	41.0	1.451	60.58	42.3	1.433	62.30	41.8	1.491		
April	58.57	41.6	1.418	63.47	41.0	1.530	60.08	39.4	1.526	58.87	40.5	1.455	60.29	42.0	1.437	63.50	42.0	1.513		
May	59.05	41.6	1.418	63.46	41.2	1.543	54.12	35.5	1.526	59.44	40.7	1.461	60.63	42.0	1.443	63.19	41.8	1.514		
June	59.51	41.6	1.432	63.59	40.2	1.581	61.83	40.8	1.516	61.31	41.1	1.493	61.75	42.0	1.469	62.23	41.4	1.504		
July	58.81	40.7	1.444	61.53	38.8	1.588	63.30	41.1	1.541	60.22	40.0	1.504	61.09	41.6	1.469	62.71	41.3	1.518		
August	60.73	41.3	1.470	63.78	40.0	1.599	64.33	40.5	1.586	60.37	39.7	1.529	61.85	41.6	1.486	65.17	41.4	1.574		
September	60.42	40.7	1.486	63.66	39.4	1.621	63.70	40.4	1.578	62.20	40.5	1.537	62.11	41.6	1.492	63.43	40.6	1.564		
October	61.76	41.3	1.495	66.10	40.6	1.634	63.76	40.4	1.578	61.45	40.0	1.534	63.31	41.8	1.514	64.40	41.0	1.570		
November	61.46	41.0	1.499	65.27	40.1	1.629	61.67	39.3	1.569	60.59	39.6	1.531	62.84	41.5	1.513	63.87	40.8	1.566		
December	62.11	41.5	1.499	66.96	41.1	1.632	62.84	40.0	1.572	62.18	40.1	1.552	62.75	41.6	1.508	65.21	41.7	1.572		

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries¹-Con.

MANUFACTURING-Continued

Year and month	Machinery, except electrical-Continued																	
	Textile machinery			Typewriters			Cash registers; adding, and calculating machines			Washing machines, wringers, and driers, domestic			Sewing machines, domestic and industrial			Refrigerators and refrigeration 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
1939: Average	\$26.19	39.8	\$0.660	\$23.98	37.3	\$0.643	\$30.38	37.2	\$0.821									
1941: January	30.13	44.6	.677	26.40	39.1	.675	34.78	41.4	.846									
1947: December	58.56	43.1	1.358	55.89	42.9	1.301	65.67	42.9	1.537	\$60.42	43.7	\$1.384	\$63.21	42.9	\$1.472	\$57.05	41.2	\$1.384
1948: January	59.21	43.1	1.374	55.59	42.6	1.305	65.39	42.4	1.557	58.28	42.6	1.369	62.74	42.4	1.476	57.62	41.6	1.386
February	59.50	42.8	1.390	55.68	42.4	1.312	64.11	41.6	1.554	57.69	41.8	1.382	63.14	42.8	1.476	52.55	38.1	1.378
March	61.40	43.7	1.406	54.62	42.0	1.301	65.30	42.2	1.561	56.38	41.2	1.370	63.90	43.0	1.483	55.51	39.9	1.392
April	61.01	43.5	1.403	54.63	42.0	1.301	65.62	42.1	1.573	58.15	42.1	1.383	61.01	42.3	1.434	55.99	40.2	1.391
May	61.28	43.3	1.417	53.31	41.2	1.294	64.55	41.5	1.570	57.39	41.3	1.390	64.89	41.8	1.551	56.72	40.5	1.402
June	62.53	43.3	1.443	53.75	41.2	1.305	66.43	41.5	1.614	59.29	41.8	1.417	65.99	42.5	1.553	59.47	40.5	1.467
July	60.61	42.1	1.440	54.62	41.5	1.317	67.45	41.5	1.639	57.05	39.5	1.445	65.19	41.5	1.571	57.22	38.6	1.482
August	62.21	42.3	1.470	52.78	40.6	1.300	66.00	40.8	1.628	61.27	41.2	1.486	68.04	43.1	1.578	59.40	39.2	1.514
September	62.86	42.4	1.483	53.31	40.5	1.316	66.04	40.4	1.646	59.32	39.5	1.500	69.17	43.1	1.604	60.07	39.5	1.522
October	62.26	42.1	1.480	48.51	36.9	1.316	65.51	40.0	1.646	62.13	41.5	1.498	70.20	43.7	1.608	62.60	40.6	1.540
November	62.24	41.8	1.490	56.11	40.9	1.371	66.63	40.8	1.644	61.04	40.7	1.499	71.30	44.0	1.618	61.02	40.0	1.526
December	63.58	42.3	1.498	56.63	41.3	1.372	67.99	40.9	1.673	51.12	35.1	1.458	71.02	44.0	1.608	61.60	40.0	1.541
	Transportation equipment, except automobiles																	
	Total: Transportation equipment, except automobiles	Locomotives			Cars, electric and steam-railroad			Aircraft and parts, excluding aircraft engines			Aircraft engines			Shipbuilding and boatbuilding				
1939: Average	\$30.51	38.9	\$0.785	\$28.33	36.7	\$0.771	\$26.71	36.0	\$0.741	\$30.34	41.5	\$0.745	\$36.58	44.1	\$0.835	\$31.91	38.0	\$0.835
1941: January	35.69	43.1	.828	34.79	42.8	.814	29.57	38.5	.768	34.13	44.7	.776	42.16	47.2	.892	37.69	42.0	.893
1947: December	59.79	40.8	1.465	63.63	40.7	1.565	59.84	41.4	1.447	57.12	40.6	1.406	60.39	41.2	1.465	61.74	40.5	1.525
1948: January	59.56	40.3	1.479	62.34	40.1	1.553	58.51	40.7	1.439	55.53	39.4	1.408	59.30	40.6	1.461	64.05	40.9	1.567
February	58.67	39.6	1.482	61.01	39.2	1.555	58.02	40.2	1.442	56.13	39.9	1.406	58.29	40.1	1.452	61.54	38.9	1.582
March	59.40	40.3	1.472	63.46	40.2	1.579	58.90	40.9	1.439	56.71	40.1	1.414	59.53	40.6	1.467	62.07	40.3	1.539
April	59.89	40.5	1.478	64.96	40.5	1.604	58.70	40.9	1.437	57.75	40.6	1.421	60.33	40.5	1.491	62.04	40.2	1.541
May	59.30	40.0	1.481	64.67	40.1	1.610	58.07	40.2	1.446	57.74	40.4	1.428	61.02	40.9	1.494	60.40	39.4	1.531
June	59.27	39.8	1.489	64.58	39.7	1.626	58.46	39.9	1.467	57.99	40.4	1.436	62.14	40.6	1.532	59.76	39.2	1.525
July	58.95	39.2	1.503	64.00	38.4	1.665	56.19	38.3	1.466	57.89	40.0	1.449	64.79	40.6	1.534	59.49	38.8	1.534
August	60.53	39.7	1.527	64.76	38.7	1.674	61.31	40.5	1.526	59.68	40.5	1.475	65.11	41.1	1.583	58.87	37.7	1.568
September	60.74	39.0	1.556	66.52	39.7	1.677	67.21	37.4	1.531	61.98	40.7	1.507	66.26	41.2	1.609	58.62	36.6	1.604
October	62.70	39.8	1.575	63.74	38.3	1.663	63.16	40.8	1.548	62.45	40.6	1.537	67.75	41.7	1.623	60.52	37.5	1.616
November	61.98	39.3	1.579	66.29	39.0	1.698	62.74	40.2	1.562	63.30	40.9	1.548	66.61	41.2	1.617	56.16	35.0	1.606
December	64.56	40.6	1.588	71.90	40.5	1.774	66.03	42.0	1.571	63.61	41.1	1.550	67.30	41.7	1.616	63.21	39.1	1.617
	Transportation equipment, except automobiles-Con.			Nonferrous metals and their products														
	Motorcycles, bicycles, and parts			Automobiles			Total: Nonferrous metals and their products			Smelting and refining, primary, of nonferrous metals			Alloying; and rolling and drawing nonferrous metals, except aluminum			Clocks and watches		
1939: Average				\$32.91	35.4	\$0.929	\$26.74	38.9	\$0.687	\$26.67	38.2	\$0.699	\$28.77	39.6	\$0.729	\$22.27	37.9	\$0.587
1941: January				37.69	38.9	.969	30.47	41.4	.736	29.21	38.7	.755	35.96	44.0	.818	23.90	38.9	.614
1947: December	\$58.96	42.3	\$1.393	64.64	41.4	1.563	55.53	41.8	1.327	55.44	41.2	1.346	57.26	40.5	1.412	48.69	41.9	1.164
1948: January	55.33	40.3	1.373	60.96	39.6	1.538	55.06	41.2	1.336	55.85	41.1	1.360	57.30	40.4	1.418	47.63	40.2	1.185
February	55.65	39.8	1.400	59.00	38.1	1.548	55.07	41.2	1.338	55.58	41.0	1.357	57.73	40.6	1.422	48.59	41.0	1.186
March	55.88	40.4	1.384	59.51	38.9	1.539	55.23	41.1	1.344	55.31	40.5	1.366	58.25	40.8	1.429	49.15	41.1	1.196
April	56.36	40.3	1.398	59.14	38.6	1.533	54.87	40.9	1.343	56.49	41.1	1.375	56.84	40.0	1.422	49.09	40.8	1.205
May	55.54	39.4	1.410	54.44	35.2	1.548	54.96	40.6	1.355	57.33	41.5	1.380	57.42	40.1	1.431	48.27	40.1	1.205
June	54.07	37.5	1.442	61.30	37.7	1.624	55.91	40.8	1.369	57.96	41.3	1.403	59.35	41.2	1.440	48.89	40.1	1.219
July	54.28	37.6	1.445	63.48	38.5	1.649	56.34	40.1	1.404	59.75	41.2	1.449	61.61	40.8	1.511	48.96	39.8	1.230
August	62.67	41.6	1.508	64.67	38.9	1.664	57.97	40.7	1.424	61.74	41.4	1.493	63.37	41.0	1.547	50.80	40.7	1.249
September	61.79	41.1	1.503	62.74	37.4	1.676	58.73	40.8	1.438	63.39	41.6	1.522	63.36	40.8	1.552	50.76	40.3	1.259
October	66.51	42.9	1.551	67.29	39.9	1.689	59.25	41.2	1.440	62.01	41.4	1.497	63.20	40.8	1.549	51.11	40.4	1.266
November	66.68	43.6	1.529	65.46	38.8	1.688	58.76	40.8	1.440	60.78	40.6	1.498	61.33	39.8	1.541	51.47	40.3	1.277
December	57.12	38.8	1.472	68.09	40.3	1.691	59.36	41.2	1.442	61.20	41.0	1.502	63.34	41.0	1.546	51.22	40.4	1.269

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries¹—Con.

MANUFACTURING—Continued

Year and month	Nonferrous metals and their products—Continued												Lumber and timber basic products					
	Jewelry (precious metals) and jewelers' findings			Silverware and plated ware			Lighting equipment			Aluminum manufactures			Total: Lumber and timber basic products			Sawmills and logging camps		
	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
1939: Average	\$26.36	39.4	\$0.660	\$26.03	40.7	\$0.643	\$25.73	37.1	\$0.693	\$27.49	39.3	\$0.699	\$19.06	39.0	\$0.489	\$18.29	38.4	\$0.476
1941: January	26.43	39.1	.664	27.37	41.4	.666	28.19	39.3	.717	32.85	42.0	.782	20.27	38.9	.521	19.59	38.4	.510
1947: December	55.53	44.4	1.254	63.80	47.2	1.353	54.11	40.5	1.336	52.86	40.1	1.320	45.65	43.2	1.056	44.20	42.8	1.032
1948: January	51.69	41.9	1.237	62.54	46.3	1.354	53.92	39.8	1.356	53.35	40.2	1.329	44.49	42.4	1.050	42.94	42.0	1.023
February	52.98	42.6	1.249	62.52	46.1	1.356	52.86	39.3	1.345	52.75	39.6	1.330	45.01	41.7	1.080	43.41	41.1	1.055
March	52.17	42.2	1.237	63.81	46.5	1.374	53.22	39.2	1.359	52.05	39.4	1.322	45.32	42.3	1.071	43.86	42.0	1.046
April	51.31	41.2	1.246	62.09	45.7	1.360	52.90	38.8	1.364	52.53	39.7	1.323	45.59	42.1	1.083	43.99	41.6	1.057
May	50.59	39.8	1.271	62.00	45.5	1.363	51.75	37.7	1.373	52.83	39.7	1.332	47.39	42.5	1.115	45.06	41.3	1.095
June	52.10	40.9	1.274	62.24	45.5	1.367	53.19	37.5	1.419	52.13	39.1	1.333	48.43	42.8	1.131	47.37	42.6	1.113
July	49.30	39.8	1.240	58.55	43.7	1.340	56.31	38.6	1.460	52.79	37.3	1.414	48.14	41.9	1.149	47.29	41.7	1.133
August	51.07	40.3	1.267	60.79	44.6	1.365	55.88	38.4	1.454	55.16	38.9	1.419	50.64	43.1	1.175	49.90	42.9	1.162
September	51.86	40.3	1.290	64.35	46.2	1.392	57.64	39.4	1.463	55.41	38.7	1.432	49.22	41.8	1.178	48.31	41.6	1.162
October	52.74	40.8	1.296	64.67	46.0	1.407	57.13	39.3	1.453	58.04	40.2	1.444	49.60	42.5	1.167	48.45	42.2	1.148
November	54.35	41.5	1.310	64.78	46.0	1.409	57.79	39.5	1.458	57.73	40.1	1.440	48.34	41.6	1.162	47.14	41.3	1.141
December	55.45	41.7	1.330	63.14	45.0	1.401	58.07	39.6	1.464	57.56	40.1	1.434	47.24	41.5	1.140	45.54	41.0	1.111
	Lumber and timber basic products—Con.						Furniture and finished lumber products						Stone, clay, and glass products					
	Planing and plywood mills			Total: Furniture and finished lumber products			Furniture			Caskets and other morticians' goods			Wood preserving			Total: Stone, clay, and glass products		
1939: Average	\$22.17	41.1	\$0.540	\$19.95	38.5	\$0.518	\$20.51	38.9	\$0.530	-----	-----	-----	-----	-----	-----	\$23.94	37.6	\$0.637
1941: January	22.51	40.5	.554	20.90	38.7	.540	21.42	39.0	.552	-----	-----	-----	-----	-----	-----	25.02	37.4	.669
1947: December	51.61	44.8	1.151	47.72	42.7	1.117	49.10	42.9	1.145	\$49.01	42.2	\$1.157	\$40.50	39.8	\$1.017	51.00	41.0	1.245
1948: January	50.67	43.9	1.152	47.02	41.9	1.122	48.54	42.2	1.151	48.52	41.8	1.157	39.71	39.2	1.014	50.10	40.0	1.253
February	51.31	43.8	1.171	46.68	41.4	1.127	48.38	41.9	1.155	48.85	41.8	1.155	36.95	35.8	1.031	49.98	39.8	1.255
March	51.06	43.8	1.166	47.08	41.8	1.126	48.58	42.1	1.156	49.21	42.3	1.156	39.59	38.6	1.026	51.41	40.8	1.260
April	51.94	44.0	1.181	46.34	41.0	1.131	47.64	41.1	1.161	48.23	41.3	1.167	41.09	39.8	1.033	51.77	40.7	1.271
May	52.53	43.9	1.197	46.39	40.8	1.136	47.60	40.8	1.167	47.48	40.7	1.165	42.29	40.3	1.050	52.30	40.7	1.286
June	52.61	43.8	1.213	46.54	40.7	1.145	47.57	40.6	1.174	47.61	40.6	1.172	42.45	40.4	1.050	52.45	40.6	1.292
July	51.91	42.7	1.220	46.30	40.3	1.149	46.95	40.0	1.176	47.37	40.0	1.177	43.51	41.1	1.059	51.50	39.4	1.307
August	53.88	43.9	1.231	47.68	41.0	1.163	48.47	40.7	1.189	48.56	40.6	1.195	42.77	40.9	1.046	54.07	40.9	1.322
September	53.27	42.8	1.247	48.16	40.8	1.181	49.25	40.7	1.211	48.54	40.5	1.194	43.45	40.7	1.068	53.98	40.2	1.344
October	54.47	43.9	1.246	49.20	41.5	1.184	50.56	41.5	1.217	48.20	40.4	1.189	44.54	41.7	1.069	55.11	41.0	1.345
November	53.41	43.0	1.246	48.41	40.7	1.188	50.17	40.9	1.226	48.39	39.9	1.209	43.99	41.2	1.069	54.29	40.1	1.353
December	54.09	43.3	1.254	48.76	41.1	1.187	50.42	41.1	1.227	49.44	41.0	1.203	42.93	40.3	1.074	54.85	40.6	1.352
	Stone, clay, and glass products—Continued																	
	Glass and glassware			Glass products made from purchased glass ²			Cement			Brick, tile, and terra cotta			Pottery and related products			Gypsum		
1939: Average	\$25.32	35.2	\$0.721	-----	-----	-----	\$26.67	38.2	\$0.699	\$20.55	37.8	\$0.543	\$22.74	37.2	\$0.625	-----	-----	-----
1941: January	28.02	36.3	.772	-----	-----	-----	26.82	37.9	.709	21.74	36.9	.587	22.92	36.4	.635	-----	-----	-----
1947: December	53.07	39.5	1.344	\$46.16	42.3	\$1.092	51.94	42.0	1.237	47.46	41.2	1.146	48.55	39.2	1.238	\$56.53	45.6	\$1.241
1948: January	52.49	38.0	1.383	44.48	41.1	1.083	51.21	41.4	1.237	46.74	40.5	1.150	47.32	38.2	1.234	55.94	45.3	1.234
February	53.00	38.8	1.368	44.18	40.0	1.105	51.07	41.7	1.226	45.52	38.9	1.163	46.98	38.5	1.230	54.58	44.4	1.229
March	54.42	40.0	1.362	43.96	40.5	1.085	51.72	42.0	1.231	47.54	40.5	1.166	48.17	39.4	1.233	55.71	45.0	1.237
April	54.12	39.9	1.355	43.16	39.6	1.089	53.27	42.0	1.269	48.39	40.6	1.186	48.45	39.2	1.249	58.98	46.8	1.261
May	53.44	39.3	1.360	45.53	40.4	1.131	55.85	42.6	1.311	49.75	41.1	1.206	48.09	38.7	1.263	60.17	47.2	1.275
June	53.32	39.2	1.361	45.75	40.3	1.136	56.38	42.7	1.321	49.66	40.8	1.210	48.42	38.6	1.272	59.91	46.2	1.298
July	50.90	37.0	1.376	43.32	37.4	1.158	56.61	42.1	1.346	49.52	40.2	1.227	47.30	37.6	1.293	58.86	44.2	1.332
August	54.88	39.5	1.393	47.14	40.6	1.161	57.35	42.7	1.344	52.05	41.4	1.254	49.96	39.3	1.294	63.44	47.1	1.347
September	55.57	39.0	1.428	47.18	40.3	1.172	56.48	41.4	1.365	51.25	40.3	1.265	48.31	37.7	1.305	63.95	46.4	1.378
October	57.00	40.0	1.427	48.35	41.4	1.168	56.26	41.7	1.348	52.48	41.0	1.270	51.33	39.4	1.325	64.81	47.2	1.372
November	55.58	38.4	1.448	49.46	41.2	1.199	55.42	41.2	1.346	51.75	40.4	1.274	52.06	39.2	1.334	64.60	47.0	1.375
December	57.18	39.4	1.453	50.42	42.1	1.199	55.27	41.5	1.333	51.92	40.6	1.271	51.34	38.9	1.326	65.61	47.9	1.370

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries¹—Con

MANUFACTURING—Continued

Year and month	Stone, clay, and glass products—Continued												Textile-mill products and other fiber manufactures					
	Lime			Marble, granite, slate, and other products			Abrasives			Asbestos products			Total: Textile-mill products and other fiber manufactures			Cotton manufactures, except smallwares		
	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
1939: Average				\$26.18	36.9	\$0.714				\$24.43	39.0	\$0.627	\$16.84	36.6	\$0.460	\$14.26	36.7	\$0.389
1941: January				24.29	34.6	.708				27.26	41.3	.660	18.01	36.9	.488	15.60	37.2	.419
1947: December	\$50.48	46.4	\$1.085	48.68	41.9	1.160	\$60.68	44.0	\$1.380	53.85	41.8	1.289	45.15	41.0	1.100	43.64	41.1	1.061
1948: January	49.10	44.2	1.094	46.89	40.6	1.153	59.07	44.4	1.331	53.98	41.4	1.305	45.19	40.5	1.115	43.81	40.7	1.077
February	47.86	43.7	1.091	46.23	40.4	1.146	58.38	42.6	1.372	54.04	40.9	1.322	45.79	40.2	1.139	43.43	40.1	1.083
March	50.58	45.8	1.102	47.57	40.9	1.162	60.62	42.6	1.424	54.49	41.3	1.318	46.32	40.6	1.140	43.98	40.7	1.081
April	52.08	46.3	1.127	47.97	40.9	1.160	59.02	41.5	1.423	55.11	41.2	1.338	45.46	39.9	1.138	43.08	40.1	1.076
May	52.41	46.1	1.136	49.44	41.3	1.193	61.04	41.9	1.457	55.45	41.3	1.340	45.22	39.6	1.142	42.64	39.6	1.078
June	53.32	45.9	1.153	49.21	40.9	1.198	61.39	42.2	1.456	56.17	41.7	1.348	45.29	39.5	1.147	42.00	39.1	1.075
July	52.46	44.4	1.169	48.27	39.8	1.209	58.53	41.3	1.423	57.18	41.7	1.373	44.15	38.6	1.145	40.63	38.0	1.070
August	54.78	45.8	1.192	50.32	41.1	1.219	60.17	41.5	1.449	57.52	41.4	1.391	45.07	38.5	1.170	41.61	37.7	1.106
September	54.75	45.0	1.217	50.05	40.9	1.221	62.09	42.0	1.479	58.81	42.0	1.400	45.12	38.0	1.188	41.69	37.1	1.125
October	55.45	45.8	1.203	50.34	41.2	1.220	62.30	41.8	1.492	58.85	41.6	1.415	44.94	37.9	1.187	41.60	36.9	1.127
November	55.24	45.4	1.213	48.76	39.3	1.238	61.37	41.4	1.482	56.55	40.5	1.404	45.17	38.0	1.190	41.60	37.0	1.125
December	53.89	44.5	1.203	51.80	41.6	1.246	61.73	41.3	1.494	56.53	40.7	1.394	45.48	38.3	1.188	42.21	37.5	1.126
Textile-mill products and other fiber manufactures—Continued																		
Year and month	Cotton smallwares			Silk and rayon goods			Woolen and worsted manufactures, except dyeing and finishing			Hosiery			Knitted cloth			Knitted outerwear and knitted gloves		
	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
1939: Average	\$18.22	39.0	\$0.474	\$15.78	36.5	\$0.429	\$19.21	36.4	\$0.528	\$18.98	35.6	\$0.536	\$18.15	38.4	\$0.468	\$17.14	37.0	\$0.461
1941: January	19.74	39.3	.503	16.53	35.7	.461	21.78	37.9	.576	18.51	33.8	.550	19.90	37.9	.503	17.65	35.8	.489
1947: December	42.35	40.5	1.045	46.48	42.3	1.100	49.12	41.2	1.192	42.95	39.1	1.098	44.18	41.9	1.045	38.02	38.5	.978
1948: January	43.15	40.3	1.071	47.55	41.9	1.137	48.79	40.8	1.195	41.76	37.9	1.103	44.65	42.1	1.062	37.94	37.7	.992
February	43.23	40.4	1.072	47.92	41.8	1.147	52.82	40.8	1.303	41.72	37.6	1.108	45.23	41.9	1.079	39.18	38.7	1.001
March	43.31	40.2	1.080	48.53	42.2	1.151	53.49	40.7	1.313	42.80	38.6	1.108	45.84	41.9	1.094	39.08	38.6	1.004
April	43.03	39.6	1.087	48.31	41.8	1.156	52.33	39.9	1.311	41.61	37.4	1.112	44.39	41.4	1.072	38.73	38.4	1.007
May	42.72	39.3	1.089	48.38	41.8	1.157	52.61	40.1	1.314	41.14	36.7	1.120	42.79	39.7	1.078	39.00	38.5	1.012
June	43.98	39.8	1.066	48.47	41.8	1.159	53.10	40.3	1.320	42.01	36.6	1.146	43.94	40.7	1.079	38.84	38.3	1.004
July	43.48	39.3	1.107	47.69	41.6	1.147	52.31	39.5	1.327	41.52	36.1	1.148	44.21	40.5	1.091	37.28	37.2	.987
August	43.40	38.9	1.115	48.85	41.3	1.182	52.13	39.6	1.317	42.98	36.8	1.167	44.70	40.8	1.097	37.89	37.3	1.000
September	44.09	39.0	1.130	49.62	41.2	1.206	51.19	38.8	1.323	43.38	36.2	1.200	43.72	39.1	1.117	38.91	37.7	1.016
October	42.87	38.0	1.129	49.13	41.1	1.195	49.37	37.6	1.315	45.11	37.5	1.204	44.61	39.1	1.141	37.78	36.6	1.021
November	43.19	38.3	1.130	49.26	41.1	1.200	50.25	38.1	1.320	45.26	37.4	1.209	44.82	39.3	1.141	39.85	38.2	1.029
December	44.12	39.4	1.122	48.81	40.8	1.197	51.61	38.9	1.319	43.77	36.5	1.198	44.66	39.2	1.140	39.37	38.0	1.021
Textile-mill products and other fiber manufactures—Continued																		
Year and month	Knitted underwear			Dyeing and finishing textiles, including woolen and worsted			Carpets and rugs, wool			Hats, fur-felt			Jute goods, except felts			Cordage and twine		
	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
1939: Average	\$15.05	36.9	\$0.410	\$20.82	38.6	\$0.535	\$23.25	36.1	\$0.644	\$22.73	32.2	\$0.707						
1941: January	16.06	36.0	.446	21.65	39.3	.551	25.18	37.3	.675	27.12	36.2	.755						
1947: December	38.17	40.2	.951	50.25	42.7	1.175	54.91	42.2	1.306	51.52	39.1	1.321	\$38.21	41.2	\$0.927	\$44.13	41.3	\$1.068
1948: January	37.77	39.4	.959	51.04	42.3	1.204	55.23	41.9	1.322	50.17	37.8	1.328	41.75	40.8	1.024	44.63	41.3	1.081
February	37.76	38.9	.969	51.80	42.2	1.227	55.35	42.0	1.319	51.79	38.7	1.328	42.28	40.1	1.053	44.44	40.8	1.091
March	38.89	39.5	.981	51.85	42.3	1.227	55.79	42.1	1.327	50.36	37.2	1.348	42.44	40.0	1.060	43.65	40.6	1.079
April	38.72	39.1	.988	51.44	41.8	1.229	55.18	41.4	1.336	48.58	35.3	1.379	42.93	40.6	1.057	42.21	39.1	1.079
May	37.88	38.3	.987	50.67	41.3	1.226	56.22	41.8	1.348	49.94	36.7	1.364	42.69	40.1	1.064	41.82	38.5	1.084
June	38.09	38.4	.994	51.05	41.5	1.229	57.86	42.0	1.380	51.72	37.7	1.375	42.65	40.2	1.060	42.68	39.0	1.094
July	36.98	37.3	.990	48.76	39.9	1.221	57.42	40.7	1.412	49.52	37.1	1.338	42.58	40.6	1.048	41.08	37.7	1.088
August	38.05	37.3	1.016	49.86	40.1	1.241	59.36	41.3	1.439	52.52	37.3	1.411	43.37	41.1	1.056	41.82	38.0	1.101
September	36.80	35.8	1.023	50.47	39.9	1.264	59.30	41.3	1.438	50.54	35.7	1.414	41.77	40.3	1.036	41.85	37.4	1.120
October	37.00	36.0	1.023	50.54	39.7	1.271	60.08	41.1	1.464	49.78	35.5	1.397	43.77	41.3	1.059	42.90	38.4	1.119
November	36.19	35.3	1.025	50.98	39.9	1.274	60.27	41.0	1.471	47.59	33.6	1.400	43.91	41.4	1.062	43.54	38.3	1.136
December	35.99	34.8	1.027	52.36	41.2	1.269	59.56	40.6	1.467	53.07	37.4	1.406	43.89	41.2	1.066	43.79	38.4	1.139

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries¹—Con.

MANUFACTURING—Continued

Year and month	Apparel and other finished textile products																	
	Total: Apparel and other finished textile products			Men's clothing, not elsewhere classified			Shirts, collars, and nightwear			Underwear and neckwear, men's			Work shirts			Women's clothing, not elsewhere classified		
	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
1939: Average.....	\$18.17	34.5	\$0.527	\$19.32	33.2	\$0.581	\$13.75	34.6	\$0.398	\$14.18	35.4	\$0.401	\$11.03	35.8	\$0.309	\$19.20	33.9	\$0.519
1941: January.....	18.76	33.5	.560	20.40	33.4	.607	14.22	33.0	.431	14.85	33.6	.442	12.33	33.6	.367	19.47	33.2	.553
1947: December.....	39.00	37.1	1.052	43.11	37.7	1.136	35.12	38.1	.918	35.56	37.3	.953	24.32	34.1	.712	46.76	36.2	1.270
1948: January.....	40.00	36.6	1.094	44.11	37.1	1.178	34.45	36.9	.929	35.03	36.4	.957	23.73	32.7	.725	48.52	36.0	1.327
February.....	40.23	36.7	1.098	44.05	37.1	1.176	34.20	36.8	.928	34.78	35.5	.974	25.69	35.6	.721	49.09	36.1	1.334
March.....	40.09	36.7	1.092	44.73	37.4	1.188	35.02	37.4	.934	35.77	36.3	.984	26.50	36.9	.718	48.10	36.1	1.310
April.....	37.61	36.2	1.040	44.31	37.3	1.173	34.39	36.9	.938	34.35	36.0	.954	26.85	36.8	.730	43.20	35.1	1.201
May.....	37.24	35.8	1.040	43.60	36.8	1.171	33.83	36.3	.927	34.80	36.8	.946	27.22	36.5	.744	43.27	35.1	1.206
June.....	37.61	35.6	1.055	43.19	36.4	1.169	33.00	35.5	.925	34.00	35.6	.950	27.21	37.1	.732	43.94	35.0	1.239
July.....	38.74	35.8	1.081	43.03	36.8	1.160	33.14	36.2	.924	34.54	36.0	.950	26.67	36.9	.735	46.09	34.9	1.304
August.....	40.27	36.4	1.106	43.98	36.8	1.180	32.88	35.7	.921	35.31	36.5	.968	27.70	37.4	.739	49.06	36.0	1.339
September.....	40.38	36.1	1.117	43.81	36.7	1.178	33.59	35.9	.933	35.74	36.0	.993	28.41	37.4	.759	49.15	35.6	1.352
October.....	37.77	34.8	1.087	41.07	35.0	1.160	33.44	35.9	.931	35.29	35.9	.982	28.34	37.6	.751	44.39	33.5	1.302
November.....	39.43	35.9	1.098	41.78	35.4	1.167	34.04	36.1	.942	37.03	37.1	.998	27.38	36.4	.749	48.05	35.7	1.321
December.....	39.00	35.4	1.100	41.95	35.3	1.180	32.26	34.2	.944	36.33	36.6	.991	26.72	34.6	.767	47.34	35.1	1.317
Apparel and other finished textile products—Continued																		
Year and month	Corsets and allied garments			Millinery			Handkerchiefs			Curtains, draperies, and bedspreads			Housefurnishings, other than curtains, etc.			Textile bags		
	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
1939: Average.....	\$17.15	37.5	\$0.456	\$22.19	33.8	\$0.636												
1941: January.....	17.24	35.6	.482	22.31	30.5	.648												
1947: December.....	36.89	39.0	.948	46.03	35.0	1.256	\$32.55	37.0	\$0.881	\$31.28	37.1	\$0.843	\$41.34	40.5	\$1.012	\$37.60	39.5	\$0.953
1948: January.....	37.37	38.0	.985	53.14	37.3	1.365	30.46	34.4	.884	\$1.44	36.8	.856	38.54	38.2	.999	37.20	38.9	.956
February.....	37.07	37.9	.979	57.84	39.3	1.415	32.66	36.4	.897	30.69	35.9	.854	36.83	37.7	.965	36.23	38.0	.952
March.....	38.14	38.5	.993	52.77	36.9	1.394	34.21	37.1	.922	31.40	35.4	.882	38.29	38.1	1.000	35.80	37.1	.964
April.....	37.39	37.8	.991	49.95	36.0	1.353	33.09	36.1	.917	30.17	33.1	.891	38.46	38.2	1.001	36.35	37.2	.977
May.....	35.85	35.8	1.003	42.82	31.5	1.333	31.66	34.8	.909	30.41	32.9	.912	37.52	37.2	.998	37.94	38.4	.987
June.....	36.58	36.2	1.013	45.29	32.7	1.352	31.40	34.3	.917	30.51	33.6	.898	40.19	39.1	1.019	38.10	38.3	.995
July.....	36.10	36.0	1.003	50.99	34.8	1.414	30.62	33.8	.907	30.33	34.6	.892	39.01	38.2	1.010	38.93	38.9	1.001
August.....	36.51	36.6	.999	54.26	36.7	1.449	32.79	35.7	.920	31.97	35.8	.898	39.72	38.6	1.014	39.68	39.2	1.012
September.....	37.07	37.1	1.002	55.64	36.5	1.467	34.34	37.2	.924	*32.54	*35.8	.922	38.65	36.7	1.032	41.34	39.7	1.042
October.....	37.66	37.0	1.019	51.37	34.0	1.467	36.24	38.7	.937	32.86	36.0	.920	41.33	39.4	1.036	41.42	40.2	1.030
November.....	38.31	37.7	1.016	42.97	30.4	1.381	36.70	38.0	.965	32.93	36.6	.909	41.78	39.8	1.038	40.98	39.8	1.029
December.....	37.70	37.3	1.012	48.46	34.4	1.380	35.69	37.7	.946	32.11	35.2	.920	42.00	39.6	1.045	41.99	40.3	1.033
Leather and leather products																		
Year and month	Total: Leather and leather products			Leather			Boot and shoe cut stock and findings			Boots and shoes			Leather gloves and mittens			Trunks and suitcases		
	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
1939: Average.....	\$19.13	36.2	\$0.528	\$24.43	38.7	\$0.634				\$17.83	35.7	\$0.503						
1941: January.....	20.66	37.3	.554	25.27	38.3	.662				19.58	37.0	.530						
1947: December.....	42.67	39.1	1.092	53.65	41.3	1.300	\$41.36	39.3	\$1.063	40.87	38.7	1.056	\$33.91	36.3	\$0.931	\$45.53	40.9	\$1.109
1948: January.....	42.63	39.0	1.095	53.06	40.8	1.299	41.36	38.9	1.075	41.09	38.8	1.059	33.75	35.7	.947	42.33	38.4	1.105
February.....	42.99	39.0	1.102	53.38	40.5	1.317	41.23	38.4	1.080	41.35	38.8	1.065	33.67	36.0	.941	45.61	40.6	1.129
March.....	41.87	37.8	1.106	51.91	39.4	1.315	40.55	37.6	1.086	40.21	37.5	1.071	33.82	36.0	.940	45.83	40.6	1.135
April.....	40.34	36.2	1.116	51.59	39.1	1.318	39.90	36.5	1.107	38.09	35.3	1.080	33.18	35.4	.938	45.35	40.1	1.130
May.....	39.65	35.5	1.118	52.38	39.4	1.330	39.72	36.3	1.105	36.79	34.3	1.074	34.77	35.2	.991	45.06	39.6	1.137
June.....	41.38	37.0	1.118	53.11	39.5	1.345	41.24	37.4	1.108	39.00	36.4	1.074	35.78	35.8	.999	44.86	39.0	1.150
July.....	41.64	37.4	1.114	53.39	39.5	1.351	41.09	37.4	1.104	39.41	37.0	1.069	35.01	35.8	.988	44.42	38.8	1.152
August.....	42.80	37.9	1.128	53.70	39.8	1.356	42.62	38.8	1.105	40.65	37.4	1.087	35.79	36.3	1.005	47.19	40.6	1.168
September.....	42.65	37.3	1.143	53.13	38.9	1.367	42.00	38.1	1.117	40.61	36.8	1.104	35.41	35.6	1.002	47.65	40.7	1.175
October.....	41.56	36.3	1.145	53.52	39.1	1.368	40.46	36.2	1.125	39.15	35.6	1.102	34.72	35.1	.995	47.61	40.0	1.193
November.....	40.79	35.5	1.149	53.82	39.1	1.377	39.73	35.6	1.134	37.91	34.4	1.103	34.74	34.9	1.004	49.47	41.6	1.201
December.....	42.59	37.2	1.146	55.39	40.1	1.381	42.51	37.6	1.137	40.18	36.6	1.099	33.15	34.4	.962	45.56	38.6	1.192

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries¹—Con.

MANUFACTURING—Continued

Year and month	Food																	
	Total: Food			Slaughtering and meat packing			Butter			Condensed and evaporated milk			Ice cream			Flour		
	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
1939: Average	\$24.43	40.3	\$0.607	\$27.85	40.6	\$0.686	\$22.60	46.7	\$0.484	-----	-----	-----	\$29.24	46.2	\$0.626	\$25.80	42.3	\$0.605
1941: January	24.69	39.0	.633	26.84	39.3	.681	22.84	44.6	.509	-----	-----	-----	29.41	44.2	.653	25.27	41.0	.608
1947: December	50.93	43.3	1.175	61.57	47.7	1.291	46.98	46.5	1.004	\$49.32	45.9	\$1.074	49.87	44.8	1.073	56.45	47.6	1.187
1948: January	49.44	42.0	1.177	57.12	44.8	1.275	45.92	45.9	.995	50.20	45.5	1.103	50.50	45.3	1.079	54.43	46.4	1.175
February	49.18	41.6	1.181	51.88	40.7	1.277	47.28	46.3	1.011	51.68	45.9	1.125	51.12	45.0	1.093	54.56	45.9	1.189
March	49.36	41.6	1.187	56.62	43.6	1.301	45.92	45.8	1.011	52.28	46.4	1.126	51.44	45.4	1.095	50.99	43.7	1.167
April	50.95	42.4	1.201	68.51	48.1	1.425	47.16	45.6	1.032	53.51	46.7	1.147	50.86	45.3	1.087	53.07	45.3	1.173
May	51.26	42.5	1.207	67.66	46.7	1.424	47.52	45.9	1.033	55.36	47.5	1.165	51.11	45.0	1.086	55.12	46.1	1.196
June	52.09	42.8	1.217	61.24	44.1	1.383	48.42	46.3	1.043	56.66	48.5	1.168	52.22	45.8	1.103	57.48	47.8	1.204
July	51.77	42.6	1.215	58.75	42.9	1.368	49.66	46.9	1.063	56.42	47.6	1.186	53.58	46.2	1.125	60.05	48.4	1.241
August	49.74	41.0	1.214	55.71	41.2	1.351	49.82	46.6	1.067	56.07	47.7	1.174	52.81	44.7	1.147	61.14	48.1	1.271
September	51.76	42.6	1.216	57.64	42.3	1.361	49.58	45.8	1.081	55.99	47.0	1.191	54.46	45.3	1.173	60.77	46.3	1.315
October	51.47	41.8	1.232	57.38	41.9	1.367	49.43	45.8	1.079	53.71	45.4	1.183	53.92	44.5	1.163	62.03	47.9	1.297
November	51.86	41.5	1.250	61.07	43.1	1.416	49.86	46.0	1.084	54.29	45.9	1.182	54.80	44.7	1.176	59.18	45.7	1.295
December	52.88	41.8	1.264	62.63	44.5	1.404	49.77	45.9	1.083	54.18	45.6	1.193	54.66	45.3	1.163	58.58	45.2	1.297
	Food—Continued																	
	Cereal preparations			Baking			Sugar refining, cane			Sugar, beet			Confectionery			Beverages, non-alcoholic		
1939: Average	-----	-----	-----	\$25.70	41.7	\$0.621	\$23.91	37.6	\$0.636	\$24.68	42.9	\$0.585	\$18.64	38.1	\$0.492	\$24.21	43.6	\$0.556
1941: January	-----	-----	-----	26.46	41.1	.644	22.73	35.0	.650	24.03	36.5	.630	19.19	37.6	.511	25.28	42.0	.602
1947: December	\$54.13	40.8	\$1.328	47.43	42.3	1.119	48.24	41.2	1.171	53.87	46.1	1.168	42.96	41.5	1.035	45.22	43.7	1.032
1948: January	54.10	40.5	1.335	47.03	41.6	1.131	45.66	38.0	1.201	50.45	39.0	1.293	40.82	39.6	1.034	45.05	43.0	1.055
February	55.58	40.6	1.369	49.30	43.6	1.132	44.66	37.9	1.177	55.30	42.4	1.305	40.45	38.9	1.045	44.99	42.9	1.048
March	52.46	38.7	1.356	47.38	41.9	1.131	49.30	41.0	1.202	50.11	38.7	1.296	40.48	39.1	1.050	44.93	43.0	1.044
April	54.50	39.8	1.370	48.00	42.1	1.138	52.57	43.2	1.217	50.19	38.4	1.302	40.83	38.6	1.060	45.46	43.7	1.041
May	55.64	40.4	1.377	49.09	42.7	1.148	51.08	41.9	1.220	50.27	37.5	1.339	39.21	37.5	1.036	45.75	43.9	1.041
June	58.00	41.5	1.398	50.03	42.9	1.165	53.14	44.0	1.207	50.71	38.9	1.303	42.15	39.5	1.069	47.20	45.0	1.052
July	57.92	41.7	1.391	50.01	42.7	1.168	57.73	45.9	1.258	51.94	39.4	1.321	*41.83	39.3	1.078	49.39	46.1	1.076
August	53.66	39.2	1.368	49.77	42.5	1.169	57.52	45.6	1.261	50.73	38.2	1.326	*42.98	40.2	1.088	45.18	42.5	1.059
September	52.61	37.8	1.391	51.11	42.8	1.191	54.79	43.7	1.254	56.21	41.3	1.362	44.20	40.7	1.087	47.05	43.8	1.073
October	54.96	39.4	1.395	50.89	42.4	1.197	51.04	41.5	1.229	52.12	42.5	1.226	43.93	40.7	1.077	44.45	41.8	1.061
November	55.53	39.3	1.413	50.41	41.9	1.202	50.69	41.9	1.210	60.20	47.9	1.257	44.67	41.4	1.081	45.48	42.6	1.069
December	55.49	38.7	1.435	50.88	42.0	1.210	51.17	39.8	1.275	51.58	38.2	1.349	43.52	40.6	1.074	46.18	42.9	1.080
	Food—Continued									Tobacco manufactures								
	Malt liquors			Canning and pre-serving			Total: Tobacco manufactures			Cigarettes			Cigars			Tobacco (chewing and smoking) and snuff		
1939: Average	\$35.01	38.3	\$0.916	\$16.77	37.0	\$0.464	\$16.84	35.4	\$0.476	\$20.88	37.2	\$0.561	\$14.59	34.7	\$0.419	\$17.53	34.1	\$0.514
1941: January	34.57	36.4	.952	16.67	33.0	.510	17.89	35.7	.501	22.38	37.3	.600	15.13	35.0	.432	18.60	34.9	.537
1947: December	63.54	42.1	1.511	41.14	37.7	1.093	39.16	39.9	.983	45.45	40.6	1.119	34.24	39.3	.868	37.16	39.1	.950
1948: January	61.03	40.4	1.510	41.10	37.3	1.102	37.97	38.6	.984	44.74	39.4	1.135	32.64	38.1	.860	35.38	37.1	.955
February	62.25	40.9	1.520	42.73	38.4	1.118	35.04	36.2	.968	37.93	33.9	1.120	32.59	37.9	.857	35.89	37.2	.961
March	62.57	41.2	1.516	40.77	36.5	1.120	36.52	37.7	.968	42.99	38.2	1.124	32.12	37.5	.852	35.78	36.9	.975
April	65.24	42.5	1.532	41.63	37.0	1.130	37.19	38.2	.973	44.35	39.6	1.119	32.13	37.4	.857	36.32	37.1	.979
May	65.31	42.5	1.537	41.35	36.8	1.125	37.12	37.7	.984	44.32	38.9	1.139	31.80	36.9	.858	36.91	37.3	.991
June	67.74	42.9	1.578	41.16	38.0	1.090	37.86	37.8	1.003	45.84	39.1	1.172	31.73	36.8	.863	37.93	37.6	1.009
July	71.35	44.1	1.610	41.78	39.0	1.083	38.51	38.0	1.014	46.59	39.8	1.171	32.24	36.7	.877	37.59	37.1	1.015
August	69.14	42.9	1.612	39.50	36.1	1.105	39.26	39.0	1.008	48.39	41.5	1.167	32.29	37.1	.867	38.81	38.4	1.012
September	70.27	43.4	1.618	46.01	41.4	1.121	37.97	38.0	1.000	44.47	38.4	1.159	32.84	37.6	.870	39.11	38.2	1.023
October	66.11	41.1	1.606	45.32	39.5	1.153	38.78	38.9	.998	45.95	40.0	1.149	33.43	38.0	.876	39.63	39.2	1.011
November	67.45	41.1	1.639	39.02	35.4	1.107	38.37	37.8	1.016	43.61	36.6	1.193	34.63	38.8	.889	38.62	37.5	1.031
December	67.14	41.5	1.613	42.02	36.3	1.162	38.79	38.1	1.018	45.74	37.9	1.207	33.58	38.1	.879	39.31	39.2	1.003

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries¹—Con.

MANUFACTURING—Continued

Year and month	Paper and allied products															Printing, publishing, and allied industries			
	Total: Paper and allied products			Paper and pulp			Envelopes			Paper bags			Paper boxes			Total: Printing, publishing, and allied 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	
1939: Average	\$23.72	40.1	\$0.592	\$24.92	40.3	\$0.620	-----	-----	-----	-----	-----	-----	\$21.78	40.2	\$0.547	\$32.42	37.4	\$0.866	
1941: January	25.16	40.0	.629	27.02	40.8	.662	-----	-----	-----	-----	-----	-----	22.26	38.8	.576	33.49	37.8	.886	
1947: December	53.69	43.8	1.226	58.21	44.9	1.295	\$47.35	42.2	\$1.122	\$45.29	40.7	\$1.113	49.44	43.3	1.144	63.37	40.4	1.568	
1948: January	53.20	43.1	1.235	57.75	44.4	1.301	46.50	41.4	1.139	45.23	40.8	1.112	48.35	42.0	1.155	62.41	39.5	1.579	
February	53.61	43.1	1.245	58.41	44.5	1.310	46.68	41.3	1.146	44.34	39.5	1.120	48.75	41.9	1.167	62.72	39.1	1.604	
March	53.82	43.1	1.249	58.50	44.5	1.313	46.30	41.1	1.144	45.69	40.7	1.121	49.14	41.8	1.177	63.97	39.5	1.621	
April	53.36	42.7	1.250	58.02	44.1	1.313	46.26	40.8	1.149	45.14	40.5	1.113	48.32	41.0	1.180	64.62	39.2	1.646	
May	54.28	42.8	1.269	59.47	44.6	1.334	46.34	40.8	1.150	44.93	39.8	1.126	48.64	40.7	1.199	65.06	39.1	1.663	
June	55.34	42.8	1.292	60.40	44.1	1.368	47.02	41.3	1.158	46.29	40.8	1.130	50.48	41.6	1.216	65.48	39.1	1.676	
July	55.97	42.5	1.317	61.49	43.9	1.400	45.87	40.6	1.148	48.61	41.6	1.167	49.87	40.7	1.229	65.08	38.9	1.675	
August	56.94	43.1	1.320	62.32	44.4	1.402	49.02	41.5	1.194	49.32	41.3	1.193	51.75	42.0	1.234	65.96	39.2	1.683	
September	56.98	42.7	1.334	62.21	43.8	1.419	49.10	41.5	1.203	48.69	41.0	1.192	52.05	41.9	1.245	67.39	39.4	1.712	
October	56.95	42.9	1.328	61.77	43.8	1.409	49.56	41.4	1.213	48.78	41.0	1.192	52.79	42.6	1.243	66.48	38.9	1.709	
November	57.35	42.9	1.336	62.50	44.0	1.419	50.34	42.0	1.212	47.14	39.6	1.194	52.23	42.2	1.239	66.97	39.1	1.712	
December	56.57	42.5	1.330	61.25	43.4	1.408	49.97	41.6	1.211	48.02	39.8	1.194	51.58	41.9	1.234	68.03	39.5	1.720	
Printing, publishing, and allied industries—Continued															Chemicals and allied products				
Newspapers and periodicals			Printing, book and job			Lithographing			Total: Chemicals and allied products			Paints, varnishes, and colors		Drugs, medicines, and insecticides					
1939: Average	\$37.58	36.1	\$1.004	\$30.30	38.3	\$0.804	-----	-----	-----	\$25.59	39.5	\$0.649	\$28.48	40.5	\$0.704	\$24.16	39.7	\$0.592	
1941: January	38.15	35.4	1.052	31.64	39.6	.810	-----	-----	-----	27.53	39.9	.690	29.86	40.3	.741	24.68	39.3	.619	
1947: December	71.45	39.1	1.791	60.22	41.1	1.479	\$62.91	42.3	\$1.486	53.73	41.5	1.293	55.11	42.0	1.314	47.90	40.4	1.185	
1948: January	68.96	37.8	1.797	60.23	40.7	1.493	61.03	40.4	1.511	54.31	41.4	1.311	55.34	42.0	1.321	48.31	40.4	1.196	
February	70.36	38.3	1.812	60.13	39.8	1.528	60.04	39.8	1.509	54.12	41.1	1.315	55.73	41.8	1.334	48.42	40.2	1.206	
March	71.32	38.4	1.843	60.96	40.3	1.528	62.92	40.3	1.560	54.15	41.2	1.315	55.71	41.7	1.338	48.44	40.2	1.205	
April	72.79	38.5	1.870	61.26	39.9	1.551	61.78	39.5	1.565	54.38	41.0	1.327	55.54	41.5	1.344	48.36	39.8	1.216	
May	73.04	38.4	1.877	61.92	39.8	1.570	63.24	39.5	1.601	55.24	41.0	1.347	57.22	42.2	1.358	48.91	39.4	1.241	
June	73.26	38.0	1.896	62.25	39.7	1.579	64.96	40.0	1.616	56.64	41.4	1.369	57.84	42.4	1.365	49.56	39.5	1.257	
July	72.39	37.8	1.894	62.06	39.7	1.576	62.45	38.6	1.618	57.21	41.1	1.390	59.24	42.9	1.385	49.21	39.0	1.260	
August	73.69	38.4	1.908	62.32	39.8	1.578	64.55	39.8	1.621	57.69	41.0	1.407	59.03	42.2	1.399	49.48	39.1	1.266	
September	76.80	38.9	1.954	63.02	39.8	1.595	65.38	39.9	1.638	58.20	41.3	1.410	59.34	42.2	1.410	49.75	39.7	1.255	
October	75.47	38.5	1.942	61.96	39.1	1.597	65.71	40.4	1.627	57.60	41.4	1.390	59.10	42.1	1.407	50.98	40.0	1.276	
November	76.04	38.3	1.956	62.79	39.6	1.598	65.34	40.5	1.612	57.84	41.4	1.398	58.22	41.3	1.411	51.24	40.1	1.279	
December	77.05	38.6	1.970	64.18	40.3	1.605	65.23	40.6	1.607	58.06	41.4	1.402	58.18	40.9	1.422	51.76	40.6	1.271	
Chemicals and allied products—Continued															Chemicals and allied products				
Soap			Rayon and allied products			Chemicals, not elsewhere classified			Explosives and safety fuses			Ammunition, small arms ^a		Cottonseed oil					
1939: Average	\$28.11	39.8	\$0.707	\$24.52	37.9	\$0.646	\$31.30	40.0	\$0.784	\$29.99	38.8	\$0.773	\$22.68	39.0	\$0.612	\$13.70	44.3	\$0.302	
1941: January	29.58	40.0	.740	27.26	39.2	.696	33.10	40.3	.822	31.56	37.8	.835	24.05	38.6	.623	15.55	44.6	.338	
1947: December	65.01	44.7	1.456	49.73	39.2	1.268	60.07	41.2	1.457	57.36	40.0	1.433	53.85	43.3	1.243	38.68	52.9	.731	
1948: January	64.69	44.1	1.466	50.36	39.2	1.284	60.80	41.2	1.477	58.85	40.8	1.441	48.09	40.5	1.188	38.86	52.2	.746	
February	64.54	43.8	1.475	50.33	39.3	1.280	60.82	41.1	1.479	59.20	41.2	1.438	48.19	40.6	1.187	36.59	48.8	.750	
March	62.83	42.8	1.467	50.68	39.5	1.284	60.84	41.0	1.483	58.24	40.5	1.437	49.04	40.7	1.204	37.95	50.3	.755	
April	64.29	42.1	1.528	51.29	39.8	1.287	60.97	41.1	1.484	56.47	39.6	1.427	49.37	40.8	1.209	37.50	49.4	.769	
May	64.99	42.1	1.543	51.46	39.7	1.296	61.48	41.2	1.493	59.34	40.6	1.462	50.28	41.3	1.218	38.07	49.0	.778	
June	63.09	41.5	1.521	51.72	39.8	1.298	63.17	41.9	1.509	61.58	41.9	1.471	51.48	41.2	1.257	37.94	48.0	.791	
July	62.44	41.0	1.523	53.38	40.1	1.330	63.49	41.3	1.539	61.65	41.8	1.473	53.05	41.2	1.294	38.77	47.6	.816	
August	63.49	41.6	1.525	55.32	39.8	1.391	63.80	41.1	1.552	63.93	41.8	1.529	52.64	41.0	1.285	38.59	49.0	.787	
September	64.76	42.3	1.532	55.31	39.5	1.400	65.27	40.9	1.566	64.01	41.9	1.527	53.61	41.5	1.291	41.64	52.3	.796	
October	66.24	42.9	1.543	54.99	39.2	1.402	64.02	41.0	1.563	61.26	40.8	1.501	53.55	41.7	1.283	43.69	55.3	.790	
November	66.79	42.3	1.579	55.55	39.5	1.406	64.65	41.1	1.574	60.71	40.3	1.508	53.46	41.4	1.291	43.56	55.5	.785	
December	66.72	42.3	1.575	55.79	39.5	1.413	64.72	41.1	1.574	60.58	40.3	1.502	53.53	41.5	1.290	44.56	55.7	.800	

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries¹—Con.

MANUFACTURING—Continued

Year and month	Chemicals and allied products—Con.			Products of petroleum and coal											Rubber products				
	Fertilizers			Total: Products of petroleum and coal			Petroleum refining			Coke and by-products			Roofing materials			Total: Rubber 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	
1939: Average	\$14.71	35.8	\$0.412	\$32.62	36.5	\$0.894	\$34.97	36.1	\$0.974								\$27.84	36.9	\$0.754
1941: January	14.89	34.8	.429	32.46	36.6	.887	34.46	35.7	.970								30.38	39.0	.779
1947: December	36.56	40.7	.897	63.21	40.8	1.551	66.32	40.3	1.647	\$54.37	39.7	\$1.371	\$60.60	45.5	\$1.331		59.47	40.9	1.454
1948: January	37.23	41.5	.897	64.47	40.7	1.586	67.54	39.8	1.699	56.70	40.4	1.404	58.35	44.4	1.314		57.33	39.7	1.444
February	34.96	39.7	.881	64.58	40.8	1.581	67.64	40.0	1.689	57.06	40.9	1.395	58.67	44.1	1.332		54.70	38.5	1.421
March	36.25	41.6	.871	64.62	40.6	1.593	67.77	40.1	1.692	56.74	40.3	1.408	59.51	44.3	1.342		53.24	37.8	1.408
April	36.49	41.5	.880	64.45	40.3	1.600	68.50	40.2	1.704	53.54	38.4	1.395	58.84	44.0	1.338		53.39	37.8	1.412
May	37.40	41.4	.904	67.16	41.2	1.631	71.14	40.9	1.740	57.01	40.2	1.419	60.66	44.9	1.352		55.45	39.0	1.424
June	39.34	41.2	.954	67.18	40.7	1.650	70.96	40.2	1.763	57.84	40.3	1.437	61.09	44.7	1.367		57.14	39.7	1.430
July	40.82	42.1	.970	69.45	40.8	1.716	75.13	41.0	1.832	57.44	39.8	1.443	62.78	45.2	1.390		58.37	39.7	1.472
August	40.32	40.7	.990	70.71	41.2	1.716	75.13	41.0	1.832	59.97	39.9	1.503	63.58	44.9	1.415		60.47	40.3	1.500
September	40.37	40.4	1.011	68.72	39.3	1.748	72.09	39.5	1.873	60.59	39.1	1.551	63.67	44.5	1.431		59.31	39.4	1.504
October	39.37	39.9	.988	71.48	41.1	1.738	76.14	40.8	1.868	60.51	39.9	1.517	65.69	45.6	1.440		59.19	39.3	1.507
November	37.86	38.4	.985	71.31	40.4	1.763	76.35	40.3	1.894	60.03	39.5	1.521	61.76	43.3	1.428		58.27	38.6	1.508
December	38.69	39.5	.980	70.52	40.5	1.740	75.03	40.6	1.854	60.96	40.0	1.530	57.12	41.0	1.394		57.75	38.5	1.501
Rubber products—Continued										Miscellaneous industries									
Rubber tires and inner tubes			Rubber boots and shoes			Rubber goods, other			Total: Miscellaneous industries			Instruments (professional and scientific), and fire-control equipment			Pianos, organs, and parts				
1939: Average	\$33.36	35.0	\$0.957	\$22.80	37.5	\$0.607	\$23.34	38.9	\$0.605	\$24.48	39.2	\$0.624							
1941: January	36.67	37.7	.975	26.76	41.9	.639	24.97	39.4	.639	25.35	39.3	.645							
1947: December	65.74	39.5	1.658	54.72	44.5	1.231	52.93	41.8	1.261	50.21	41.2	1.219	57.99	40.8	1.391		\$56.25	42.9	\$1.326
1948: January	62.72	38.2	1.646	51.08	42.1	1.214	51.79	41.1	1.260	49.60	40.4	1.227	59.59	41.2	1.419		52.52	40.4	1.311
February	55.22	36.0	1.613	50.65	41.7	1.214	51.33	40.8	1.258	50.11	40.8	1.230	57.20	40.0	1.388		51.88	40.0	1.305
March	55.54	34.8	1.599	51.42	42.2	1.219	50.60	40.4	1.251	49.84	40.6	1.229	57.54	40.1	1.407		51.82	40.3	1.288
April	55.54	35.3	1.603	50.50	41.7	1.214	50.16	39.9	1.256	49.60	40.4	1.228	58.16	40.5	1.413		52.84	40.8	1.286
May	61.15	37.4	1.636	50.61	41.7	1.214	50.34	40.0	1.260	50.19	40.3	1.244	58.35	40.2	1.430		52.36	40.8	1.286
June	63.96	38.3	1.651	50.69	41.7	1.215	51.15	40.2	1.272	50.92	40.3	1.262	57.73	39.7	1.434		52.11	40.9	1.280
July	66.30	39.3	1.684	52.12	42.3	1.231	51.07	39.4	1.296	50.02	39.4	1.269	56.68	39.7	1.448		52.07	40.9	1.283
August	68.29	39.5	1.730	52.53	41.5	1.266	53.70	40.9	1.312	51.24	40.3	1.271	58.44	40.0	1.458		52.42	40.7	1.293
September	65.27	37.7	1.732	53.38	41.6	1.283	54.35	40.8	1.333	51.63	40.3	1.280	59.26	40.1	1.472		52.54	39.9	1.322
October	64.82	37.2	1.734	53.86	42.2	1.278	55.08	40.8	1.350	51.86	40.6	1.279	60.90	40.4	1.491		53.73	40.3	1.339
November	62.79	36.2	1.735	54.29	41.6	1.305	54.61	40.5	1.347	52.47	40.8	1.287	61.75	40.9	1.487		55.41	40.8	1.365
December	61.10	35.6	1.721	55.23	42.4	1.303	54.64	40.5	1.349	52.75	40.5	1.303	62.18	40.7	1.506		55.26	40.4	1.375
NONMANUFACTURING																			
Mining																			
Coal										Metal									
Anthracite ²			Bituminous ³			Total: Metal			Iron			Copper			Lead and zinc				
1939: Average	\$25.67	27.7	\$0.923	\$23.88	27.1	\$0.886	\$28.93	40.9	\$0.708	\$26.36	35.7	\$0.738	\$28.08	41.9	\$0.679	\$26.39	38.7	\$0.683	
1941: January	25.13	27.0	.925	26.00	29.7	.885	30.63	41.0	.747	29.26	39.0	.750	30.93	41.8	.749	28.61	38.2	.749	
1947: December	67.42	38.4	1.756	75.22	41.2	1.826	58.11	42.7	1.360	54.26	40.3	1.346	62.39	45.5	1.370	60.83	43.3	1.406	
1948: January	68.79	39.0	1.764	75.78	40.9	1.847	58.23	42.5	1.371	54.99	40.5	1.356	62.21	45.2	1.377	59.88	42.0	1.425	
February	65.78	36.2	1.817	70.54	38.7	1.826	58.79	42.9	1.370	56.40	41.4	1.361	62.84	45.8	1.373	59.16	41.9	1.412	
March	71.59	40.3	1.776	74.84	40.6	1.842	57.90	42.4	1.366	56.04	41.3	1.357	61.25	44.7	1.371	59.04	41.6	1.415	
April	55.05	32.1	1.708	49.53	27.0	1.821	57.84	42.1	1.373	55.48	40.7	1.364	61.04	44.6	1.369	59.58	41.7	1.430	
May	69.89	39.4	1.774	74.08	40.3	1.841	59.26	42.8	1.384	57.91	42.1	1.377	61.73	45.0	1.373	60.27	41.8	1.442	
June	68.91	39.4	1.749	73.87	39.9	1.850	58.79	42.4	1.386	57.41	41.5	1.383	61.33	44.5	1.378	60.42	41.7	1.449	
July	55.11	31.7	1.736	67.62	34.2	1.936	58.00	40.6	1.427	55.30	40.3	1.371	63.99	43.6	1.468	53.11	35.3	1.505	
August	72.77	38.3	1.901	78.10	39.4	1.967	62.49	42.9	1.455	59.21	41.6	1.424	67.62	45.1	1.498	64.95	42.9	1.515	
September	69.35	36.6	1.897	75.51	37.9	1.970	62.07	41.4	1.501	60.77	40.4	1.504	64.67	42.8	1.513	63.26	41.4	1.529	
October	73.74	38.7	1.904	76.40	38.6	1.959	64.18	42.7	1.502	63.56	42.2	1.506	66.62	44.6	1.494	64.19	41.5	1.544	
November	60.90	33.4	1.824	73.52	37.1	1.951	64.19	42.3	1.518	62.02	41.2	1.506	68.26	44.8	1.524	66.04	42.3	1.500	
December	63.39	34.0	1.862	75.06	38.1	1.955	65.70	43.2	1.522	62.45	41.6	1.502	70.27	45.9	1.533	67.77	43.3	1.569	

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries¹—Con.

NONMANUFACTURING—Continued

Year and month	Mining—Continued						Public utilities												
	Quarrying and nonmetallic			Crude petroleum and natural gas production			Street railways and busses ⁴			Telephone ⁵			Telegraph ⁶			Electric light and power			
	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	
1939: Average.....	\$21.61	39.2	\$0.550	\$34.09	38.3	\$0.873	\$33.13	45.9	\$0.714	\$31.94	39.1	\$0.822	-----	-----	-----	\$34.38	39.6	\$0.869	
1941: January.....	22.06	38.2	.576	33.99	37.7	.885	33.63	45.3	.731	32.52	39.7	.824	-----	-----	-----	35.49	39.4	.903	
1947: December.....	52.39	44.4	1.176	60.90	39.5	1.543	60.11	46.8	1.288	47.83	39.0	1.229	\$55.14	43.9	\$1.257	59.01	42.2	1.414	
1948: January.....	50.92	42.7	1.187	64.53	39.9	1.627	60.73	46.3	1.299	48.20	38.9	1.241	55.81	44.4	1.257	59.87	42.4	1.426	
February.....	50.39	42.1	1.199	65.77	40.4	1.638	62.15	47.7	1.295	47.82	38.7	1.238	56.26	44.5	1.265	59.60	42.2	1.428	
March.....	51.04	42.9	1.190	63.44	39.7	1.605	61.36	47.3	1.295	47.31	38.7	1.223	56.19	44.4	1.267	58.27	41.6	1.408	
April.....	52.83	43.7	1.206	63.96	40.0	1.599	60.10	46.6	1.293	47.56	38.8	1.225	59.45	44.1	1.349	59.10	41.8	1.427	
May.....	54.73	44.4	1.226	65.88	40.2	1.646	60.32	46.8	1.302	48.82	39.4	1.240	62.12	45.0	1.381	59.83	41.7	1.444	
June.....	55.38	45.0	1.228	64.88	39.5	1.636	61.21	46.8	1.315	48.67	39.5	1.232	61.63	45.1	1.367	60.41	41.8	1.455	
July.....	55.83	44.1	1.266	67.17	40.1	1.676	62.01	47.0	1.328	49.19	39.8	1.237	63.10	45.8	1.379	61.46	41.8	1.483	
August.....	58.72	45.9	1.281	69.59	41.3	1.682	62.68	47.5	1.327	48.35	39.4	1.229	62.59	45.6	1.373	61.46	42.1	1.472	
September.....	57.82	45.0	1.284	67.58	39.6	1.711	62.29	46.3	1.355	49.21	39.4	1.250	61.83	44.8	1.379	61.75	41.6	1.490	
October.....	59.08	45.8	1.288	67.67	39.7	1.716	63.40	46.4	1.380	49.81	39.5	1.263	61.46	44.5	1.380	62.38	41.6	1.509	
November.....	57.22	44.3	1.291	68.80	39.6	1.734	62.51	46.1	1.384	51.37	39.4	1.305	61.44	44.5	1.381	62.57	41.8	1.510	
December.....	57.12	44.1	1.290	69.12	40.0	1.730	63.26	46.4	1.393	49.95	38.7	1.290	61.20	44.2	1.385	62.72	41.9	1.509	
Trade																			
	Wholesale						Retail												
							Total: Retail			Food			General merchandise			Apparel			Furniture and house-furnishings
1939: Average.....	\$29.85	41.7	\$0.715	\$21.17	43.0	\$0.536	\$23.37	43.9	\$0.525	\$17.80	38.8	\$0.454	\$21.23	38.8	\$0.543	\$28.62	44.5	\$0.660	
1941: January.....	30.59	40.6	.756	21.53	42.9	.549	23.78	43.6	.537	18.22	38.8	.466	21.89	39.0	.560	27.96	43.9	.666	
1947: December.....	54.97	41.6	1.300	37.36	39.7	1.016	44.74	39.9	1.079	31.87	36.0	.853	38.18	37.2	1.024	53.79	43.2	1.288	
1948: January.....	54.36	41.0	1.309	37.62	39.8	1.044	45.46	39.9	1.108	32.09	35.9	.889	37.68	36.9	1.007	50.62	42.3	1.254	
February.....	55.87	41.1	1.343	38.33	40.0	1.050	46.33	39.7	1.119	32.09	35.7	.883	37.94	37.3	1.002	53.05	43.9	1.253	
March.....	55.17	40.9	1.334	38.89	39.8	1.044	46.14	40.0	1.123	32.28	35.3	.878	37.50	36.2	1.025	51.30	43.7	1.242	
April.....	55.84	41.0	1.346	39.27	39.8	1.055	46.66	39.6	1.150	33.17	35.3	.895	38.23	36.6	1.030	50.24	43.5	1.261	
May.....	56.61	41.2	1.363	39.84	39.9	1.064	47.08	39.6	1.148	34.04	35.2	.907	38.54	36.5	1.040	50.96	43.4	1.281	
June.....	56.00	41.1	1.353	40.52	40.3	1.070	48.52	40.6	1.159	35.04	35.8	.915	39.33	36.9	1.049	50.86	43.4	1.281	
July.....	56.54	41.2	1.365	41.19	40.8	1.077	49.44	41.0	1.162	35.30	36.5	.915	39.48	37.2	1.045	51.31	43.3	1.284	
August.....	57.51	41.3	1.379	41.19	41.0	1.080	49.35	41.1	1.160	35.03	36.5	.914	39.17	37.1	1.043	51.33	43.7	1.280	
September.....	57.67	41.2	1.378	40.48	40.2	1.086	48.86	40.3	1.177	34.20	36.5	.903	38.96	36.8	1.050	50.87	43.2	1.290	
October.....	57.54	41.0	1.381	40.32	39.7	1.080	48.15	39.8	1.172	34.10	35.9	.902	39.43	36.3	1.063	51.79	42.9	1.297	
November.....	57.60	41.2	1.383	39.67	39.5	1.084	48.58	39.4	1.186	33.77	35.7	.907	39.08	36.2	1.060	51.65	43.0	1.306	
December.....	57.88	41.4	1.384	40.27	40.2	1.072	49.47	39.9	1.191	34.58	37.3	.894	39.68	37.1	1.058	54.65	43.8	1.320	

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries¹—Con.
NONMANUFACTURING—Continued

Year and month	Trade—Continued						Finance ⁷		Service								
	Retail—Continued						Brokerage	Insurance	Hotels ⁸ (year-round)			Power laundries			Cleaning and dyeing		
	Automotive			Lumber and building materials													
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. 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
1939: Average.....	\$27.07	47.6	\$0.571	\$26.22	42.7	\$0.619	\$36.63	\$36.32	\$15.25	46.6	\$0.324	\$17.69	42.7	\$0.417	\$19.96	41.8	\$0.490
1941: January.....	28.26	46.8	.606	26.16	41.7	.634	38.25	37.52	15.65	45.9	.338	18.37	42.9	.429	19.92	41.9	.488
1947: December.....	52.71	45.5	1.168	49.03	42.7	1.143	62.85	53.92	30.89	44.1	.693	33.88	42.6	.797	37.70	41.5	.921
1948: January.....	51.66	44.4	1.179	48.19	41.8	1.154	62.35	55.09	30.55	43.9	.695	33.99	42.3	.807	37.64	41.4	.924
February.....	53.03	45.0	1.186	49.56	42.1	1.174	63.37	56.63	31.19	44.6	.695	33.54	41.9	.802	36.55	40.5	.923
March.....	52.98	44.6	1.202	49.24	42.5	1.170	62.60	55.51	30.96	44.0	.695	33.74	42.0	.805	37.96	41.5	.924
April.....	54.53	45.5	1.216	49.64	42.6	1.175	65.76	54.94	31.59	44.2	.700	34.29	42.2	.810	39.18	42.1	.933
May.....	54.49	45.5	1.220	50.32	42.8	1.193	71.15	56.22	31.70	44.2	.707	34.22	41.8	.817	39.13	42.0	.936
June.....	54.65	45.5	1.221	51.08	43.2	1.202	69.35	54.75	31.88	44.1	.711	34.36	41.8	.823	40.14	42.4	.947
July.....	55.03	45.1	1.237	51.31	42.8	1.216	68.12	55.22	32.04	44.0	.714	34.55	42.2	.820	39.02	41.7	.942
August.....	56.04	45.6	1.251	52.51	43.4	1.220	65.42	55.09	32.34	44.9	.709	33.70	41.1	.822	37.55	39.8	.951
September.....	55.87	45.3	1.247	52.00	42.4	1.231	63.59	54.35	32.21	43.9	.725	34.56	41.8	.828	39.36	41.1	.963
October.....	55.53	45.4	1.241	52.68	42.7	1.233	66.27	53.97	32.45	44.2	.726	34.16	41.3	.829	39.42	41.0	.970
November.....	55.99	45.4	1.245	51.92	42.0	1.235	64.71	54.45	32.52	44.1	.734	34.71	41.6	.838	39.01	40.8	.958
December.....	55.92	46.0	1.232	52.85	42.5	1.230	67.03	54.66	33.02	44.1	.739	34.72	41.7	.838	39.97	41.4	.963

¹ These figures are based on reports from cooperating establishments covering both full- and part-time employees who worked or received pay during the pay period ending nearest the 15th of the month. As not all reporting firms supply man-hour data, the average weekly hours and average hourly earnings for individual industries are based on a slightly smaller sample than are average weekly earnings.

For manufacturing, mining, power laundries, and cleaning and dyeing industries, the data relate to production and related workers only. For the remaining industries, unless otherwise noted, the data relate to all non-supervisory employees and working supervisors. Data for 1939 and January 1941, for some industries, are not strictly comparable with the periods currently presented. All series, by month, are available upon request to the Bureau of Labor Statistics. Such requests should specify the series desired. Data for the two current months are subject to revision without notation. Revised figures for earlier months are identified by an asterisk for the first month's publication of such data.

² New series beginning with month and year shown below; not comparable with data shown for earlier periods:

Glass products made from purchased glass.—May 1948; comparable

April data are \$44.36 and \$1.121.

Ammunition, small-arms.—June 1948; comparable May data are \$1.232.

³ April 1948 data reflect work stoppages.

⁴ Data include private and municipal street-railway companies and affiliated, subsidiary, or successor trolley-bus and motor-bus companies.

⁵ Prior to April 1945 the averages of hours and earnings related to all employees except executives; beginning with April 1945 these averages reflect mainly the hours and earnings of employees subject to the Fair Labor Standards Act. At the same time the reporting sample was expanded to include a greater number of employees of "long lines." The April 1945 data are \$40.72, 42.9 hours, and \$0.952 on the old basis, and \$37.50, 40.6 hours, and \$0.926 on the new basis.

⁶ Data relate to all land-line employees except those compensated on a commission basis. Excludes general and divisional headquarters personnel, trainees in school, and messengers.

⁷ Data on average weekly hours and average hourly earnings are not available.

⁸ Money payments only; additional value of board, room, uniforms, and tips, not included.

* Revised.

NOTE: Explanatory notes outlining briefly the concepts, methodology, size of the reporting sample, and sources used in preparing the data presented in tables C-1 through C-5 are contained in the Bureau's monthly mimeographed release, "Hours and Earnings—Industry Report," which is available upon request.

TABLE C-2: Hours and Gross Earnings of Production Workers in Manufacturing Industries for Selected States and Areas ¹

Year and month	Arizona			California									Connecticut			Delaware		
	State			State			Los Angeles			San Francisco Bay			State			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
1947: December	\$55.94	43.0	\$1.301	\$58.51	39.5	\$1.482	\$58.02	39.7	\$1.461	\$61.96	39.7	\$1.561				\$46.84	40.6	\$1.153
1948: January	55.77	43.3	1.288	57.84	38.7	1.494	57.64	39.1	1.476	60.72	38.7	1.570	\$54.08	41.9	\$1.29	46.79	40.0	1.171
February	54.48	42.3	1.288	58.20	39.1	1.488	58.21	39.4	1.476	60.07	38.7	1.551	54.54	41.9	1.30	46.36	39.5	1.172
March	54.98	42.0	1.309	57.51	38.6	1.491	58.11	39.2	1.482	58.16	37.6	1.547	64.94	41.9	1.31	47.11	40.0	1.177
April	56.71	42.8	1.325	57.54	38.5	1.495	58.08	39.1	1.486	58.56	37.8	1.548	54.21	41.4	1.28	47.49	39.9	1.165
May	57.43	42.7	1.345	59.04	38.9	1.516	58.03	39.3	1.500	60.62	38.7	1.566	53.52	40.9	1.31	46.51	40.0	1.184
June	55.11	41.5	1.328	59.62	38.9	1.531	58.69	38.9	1.507	61.10	38.5	1.589	54.51	41.1	1.33	47.75	39.6	1.207
July	55.51	41.0	1.354	59.78	38.8	1.542	59.28	39.0	1.522	61.94	38.6	1.603	54.86	40.8	1.34	46.62	40.1	1.161
August	55.97	41.4	1.352	60.52	38.9	1.555	60.94	39.6	1.538	61.20	38.2	1.601	56.02	41.2	1.36	46.62	40.1	1.161
September	57.63	41.7	1.382	60.38	38.8	1.558	59.84	39.6	1.538	61.08	38.4	1.593	56.33	41.0	1.37	46.62	41.6	1.122
October	57.49	41.9	1.372	61.70	39.6	1.559	60.60	39.1	1.550	64.20	38.7	1.657	56.64	41.1	1.38	48.24	40.2	1.200
November	57.12	41.3	1.383	60.57	38.4	1.579	60.92	39.1	1.560	62.02	37.6	1.648	56.78	41.2	1.38	49.02	39.3	1.248
December	55.86	40.3	1.386	61.33	38.7	1.586	61.16	39.0	1.567	63.94	38.7	1.651	57.04	41.1	1.39	50.96	40.0	1.273
Delaware—Continued			Illinois						Indiana			Massachusetts			Michigan			
Wilmington			State			Chicago City			State			State			State			
1947: December	\$55.11	41.8	\$1.310	\$58.02	42.3	\$1.37	\$60.28									\$62.91	42.1	\$1.496
1948: January	55.07	40.8	1.318	57.06	41.5	1.37	59.08						\$50.73			60.63	40.8	1.488
February	54.50	40.7	1.331	57.58	41.6	1.38	59.47						51.43			59.02	39.7	1.489
March	55.43	41.1	1.343	56.98	41.2	1.38	58.60						51.39			59.68	40.1	1.488
April	55.68	41.1	1.345	57.14	40.9	1.40	58.85						51.07			59.04	39.7	1.489
May	55.27	40.9	1.361	56.77	40.3	1.41	58.79	40.7	\$1.44	\$55.53	40.1	\$1.386	51.28			56.75	38.9	1.500
June	55.99	40.7	1.384	58.06	41.0	1.41	59.76	41.1	1.45	57.19	40.6	1.407	51.76			60.81	39.7	1.539
July	57.14	40.6	1.419	57.92	40.5	1.43	59.70	40.7	1.47	57.51	40.2	1.431	51.44			62.57	39.9	1.586
August	58.15	40.7	1.424	59.26	40.9	1.45	61.51	41.1	1.50	58.37	40.6	1.436	52.29			63.44	40.1	1.584
September	57.03	40.5	1.422	60.01	41.0	1.46	62.03	41.3	1.50	57.75	40.5	1.427	52.41			63.32	39.4	1.610
October	58.78	41.1	1.429	60.43	41.0	1.47	62.06	41.2	1.51	59.93	40.9	1.466	50.74			64.86	40.4	1.608
November	58.85	40.4	1.442	60.05	40.6	1.48	61.78	40.9	1.51	59.95	40.8	1.470	50.87			64.40	39.7	1.636
December	61.07	41.6	1.466	60.60	41.0	1.48	62.30	41.2	1.51	60.58	40.9	1.480	52.13			64.81	40.3	1.611
Minnesota											New Jersey			New York				
State			Duluth			Minneapolis			St. Paul			State			State			
1947: December	\$52.88	42.3	\$1.250	\$51.18	40.3	\$1.270	\$51.46	41.5	\$1.240	\$55.26	43.0	\$1.285	\$56.38	41.6	\$1.355	\$56.85	40.4	\$1.41
1948: January	51.92	41.6	1.248	51.19	39.9	1.283	51.13	41.0	1.247	53.30	41.8	1.275	57.15	41.6	1.374	56.97	40.1	1.42
February	51.74	41.1	1.259	53.45	41.6	1.288	51.29	40.8	1.257	53.67	41.7	1.287	56.71	41.2	1.377	56.87	39.7	1.43
March	51.58	41.0	1.258	52.97	40.4	1.289	50.52	40.0	1.263	52.48	41.1	1.277	56.71	41.1	1.379	56.88	39.8	1.43
April	52.22	40.8	1.280	51.48	40.0	1.287	50.94	40.3	1.264	53.03	41.3	1.284	56.29	40.8	1.380	55.49	39.3	1.41
May	53.19	41.3	1.288	52.25	39.9	1.303	51.67	40.4	1.279	52.54	40.6	1.294	56.49	40.7	1.387	55.94	39.2	1.43
June	52.46	40.7	1.289	52.59	39.9	1.318	53.42	40.5	1.319	52.32	40.0	1.308	57.38	40.9	1.403	56.97	39.5	1.44
July	53.78	41.4	1.299	57.43	41.5	1.384	53.99	40.5	1.333	54.89	41.0	1.339	57.73	40.7	1.419	57.75	39.5	1.46
August	53.78	40.7	1.303	58.98	42.1	1.401	54.81	41.0	1.337	56.03	41.2	1.360	58.57	40.8	1.435	58.36	39.4	1.48
September	53.70	41.0	1.311	54.78	39.1	1.401	53.38	39.6	1.348	55.35	40.7	1.360	59.25	40.9	1.448	59.39	39.6	1.50
October	54.87	41.0	1.338	57.14	40.7	1.404	54.18	40.1	1.351	55.50	40.6	1.367	59.01	40.6	1.452	57.47	38.4	1.50
November	55.79	41.5	1.349	56.04	40.0	1.401	54.64	40.4	1.350	55.73	40.8	1.366	59.03	40.5	1.457	59.42	39.5	1.51
December	56.14	41.5	1.353	57.11	40.3	1.417	54.81	40.6	1.350	55.23	40.4	1.367	59.97	40.9	1.465	59.73	39.6	1.51

See footnote at end of table.

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TABLE C-2: Hours and Gross Earnings of Production Workers in Manufacturing Industries for Selected States and Areas¹—Continued

Year and month	New York—Continued															North Carolina		
	Albany-Schenectady-Troy			Buffalo			New York City			Rochester			Syracuse			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
1947: December	\$56.16	40.9	\$1.38	\$57.65	41.3	\$1.40	\$61.01	39.0	\$1.57	\$54.65	40.5	\$1.35	\$56.14	42.8	\$1.32	\$41.64	40.6	\$1.026
1948: January	55.37	40.3	1.38	56.72	40.6	1.40	61.55	38.8	1.60	55.11	40.3	1.37	55.69	42.3	1.32	40.86	39.7	1.029
February	54.40	39.6	1.38	57.15	40.6	1.41	61.65	38.4	1.62	55.10	40.1	1.37	55.05	41.9	1.32	38.79	37.6	1.031
March	56.52	40.2	1.41	56.99	40.5	1.41	60.53	38.3	1.60	55.34	40.1	1.38	55.37	42.1	1.32	41.30	40.0	1.032
April	56.39	39.9	1.42	56.56	40.0	1.41	58.19	37.7	1.55	55.41	39.9	1.39	55.70	42.1	1.33	40.54	39.4	1.028
May	56.65	39.7	1.43	57.59	40.2	1.43	59.09	37.6	1.57	55.14	39.6	1.39	54.65	41.3	1.33	40.12	38.9	1.031
June	57.21	39.8	1.44	58.32	40.2	1.45	60.09	37.8	1.59	57.19	39.8	1.43	56.39	42.2	1.34	39.80	38.4	1.036
July	57.88	39.1	1.49	59.34	40.5	1.47	61.61	37.9	1.64	57.67	40.5	1.43	55.26	40.8	1.36	39.20	37.8	1.037
August	60.55	40.0	1.52	60.70	40.7	1.49	62.39	37.9	1.66	57.32	39.6	1.44	56.39	41.1	1.38	40.36	38.1	1.059
September	62.12	40.6	1.53	61.61	40.5	1.52	63.22	37.9	1.68	58.37	40.2	1.45	57.83	41.8	1.40	40.75	37.7	1.082
October	59.79	39.7	1.51	61.71	40.5	1.53	58.86	35.6	1.66	57.88	39.7	1.46	56.78	41.0	1.39	41.58	38.4	1.084
November	63.65	41.7	1.53	61.71	40.6	1.52	62.59	37.7	1.67	58.56	40.0	1.46	56.42	40.7	1.38	41.40	38.0	1.090
December	64.87	41.8	1.56	62.17	40.7	1.53	62.63	37.9	1.66	58.25	39.6	1.47	55.87	39.9	1.40	41.58	38.1	1.093
	Oklahoma			Pennsylvania														
	State			State			Allentown-Bethlehem			Philadelphia			Pittsburgh			Reading-Lebanon		
1947: December				\$49.77	40.4	\$1.232	\$51.71	39.9	\$1.302	\$55.25	41.3	\$1.330	\$57.96	40.0	\$1.401	\$51.85	40.6	\$1.280
1948: January				49.69	40.0	1.243	51.92	39.8	1.320	54.78	40.6	1.338	56.97	39.1	1.421	52.63	40.4	1.301
February				49.50	39.9	1.242	51.58	39.7	1.306	54.78	40.4	1.339	56.84	39.0	1.425	52.34	40.5	1.306
March				49.91	40.0	1.246	51.10	39.5	1.299	54.91	41.3	1.310	57.96	39.9	1.421	52.31	40.5	1.304
April				49.63	39.6	1.252	49.25	37.8	1.303	55.22	40.3	1.355	57.55	39.5	1.437	51.98	40.2	1.307
May				50.32	39.9	1.260	52.65	38.8	1.340	55.19	40.1	1.356	58.54	40.3	1.433	52.25	40.6	1.305
June	\$53.15	42.5	\$1.250	50.38	39.8	1.267	51.15	38.8	1.349	55.44	40.1	1.364	58.55	39.7	1.455	53.43	40.7	1.317
July	53.03	41.5	1.277	50.20	39.2	1.282	51.78	38.4	1.372	55.60	39.9	1.374	58.07	39.0	1.490	51.71	39.5	1.324
August	55.30	42.7	1.296	52.20	39.5	1.320	52.88	38.5	1.392	56.88	40.0	1.404	62.34	39.9	1.566	53.74	39.7	1.362
September	55.70	42.2	1.320	52.73	39.5	1.355	54.06	38.8	1.407	57.37	40.1	1.415	62.32	39.2	1.586	54.26	39.4	1.393
October	54.74	42.6	1.286	53.38	39.9	1.339	54.65	39.5	1.386	57.42	39.9	1.422	63.40	40.3	1.575	55.39	40.1	1.388
November	54.15	41.7	1.297	53.24	39.7	1.342	53.77	38.8	1.392	57.78	40.2	1.438	62.51	39.6	1.578	56.23	40.4	1.396
December	55.46	42.3	1.310	53.62	39.8	1.346	54.97	39.1	1.410	57.43	40.2	1.428	62.17	39.8	1.559	55.01	39.7	1.392
	Pennsylvania—Con.			Rhode Island			Tennessee			Texas			Utah			Wisconsin		
	York-Adams			State			State			State			State			State		
1947: December	\$44.70	41.8	\$1.092				\$41.72	41.6	\$1.003				\$53.69	43.3	\$1.24	\$55.74	43.1	\$1.203
1948: January	43.67	40.8	1.091	\$48.12	40.8	\$1.180	41.43	40.7	1.018				52.78	40.6	1.30	55.05	42.3	1.303
February	44.89	41.0	1.107	50.22	41.2	1.218	41.55	40.7	1.021				51.97	40.6	1.28	54.63	41.9	1.303
March	45.49	41.3	1.115	50.36	41.3	1.220	41.86	40.8	1.026				52.50	40.7	1.29	55.56	42.3	1.313
April	44.72	41.0	1.113	49.82	40.7	1.225	41.67	40.3	1.034				50.05	39.1	1.28	55.11	42.0	1.314
May	46.49	41.8	1.132	49.60	40.4	1.228	41.67	40.3	1.034				53.04	40.8	1.30	55.73	42.0	1.326
June	46.34	41.9	1.132	49.82	40.1	1.241	42.03	40.3	1.043	\$52.71	43.6	\$1.209	53.99	40.9	1.32	56.69	42.1	1.347
July	46.26	41.2	1.147	49.52	39.9	1.242	43.13	40.5	1.065	51.54	42.7	1.207	51.73	40.1	1.29	54.96	41.6	1.320
August	46.76	41.4	1.150	47.85	39.0	1.228	43.09	40.5	1.064	53.39	43.3	1.233	53.28	41.3	1.29	56.46	41.9	1.346
September	45.49	40.5	1.136	48.37	39.0	1.242	42.85	39.9	1.074	53.98	42.5	1.270	53.45	40.8	1.31	55.74	41.5	1.342
October	47.33	42.0	1.146	44.87	36.1	1.244	43.63	40.4	1.080	55.09	43.9	1.255	53.73	39.8	1.35	58.04	42.0	1.383
November	46.87	41.3	1.156	47.57	37.9	1.254	43.80	40.0	1.095	52.67	42.1	1.251	56.99	41.3	1.38	58.16	41.9	1.388
December	47.72	40.8	1.191	49.18	39.2	1.254	44.13	40.3	1.095	52.75	42.5	1.243	56.56	40.4	1.40	58.15	41.7	1.396

See footnote at end of table.

TABLE C-2: Hours and Gross Earnings of Production Workers in Manufacturing Industries for Selected States and Areas ¹—Continued

Year and month	Wisconsin—Continued														
	Kenosha city			LaCrosse city			Madison city			Milwaukee county			Racine city		
	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
1947: December.....	\$59.05	41.0	\$1.441	\$52.55	41.8	\$1.256	\$54.41	42.4	\$1.281	\$59.84	42.5	\$1.408	\$61.98	42.6	\$1.456
1948: January.....	60.41	41.6	1.453	52.30	41.4	1.263	49.85	39.6	1.253	58.76	41.6	1.411	61.48	42.0	1.465
February.....	54.11	37.5	1.444	49.35	40.0	1.233	50.11	38.7	1.290	58.20	41.3	1.411	60.27	41.5	1.451
March.....	60.41	41.4	1.460	50.17	40.3	1.246	50.97	39.5	1.289	59.09	41.7	1.418	61.44	41.8	1.469
April.....	57.12	39.6	1.443	49.60	39.7	1.250	55.54	41.4	1.343	58.77	41.4	1.419	60.58	41.2	1.470
May.....	58.38	40.1	1.455	49.60	39.7	1.251	59.10	42.9	1.377	58.82	41.0	1.434	61.97	41.7	1.485
June.....	63.01	41.1	1.532	49.74	39.5	1.259	58.12	42.0	1.385	60.20	41.2	1.461	63.32	42.4	1.493
July.....	67.31	40.3	1.671	50.13	39.6	1.267	54.70	39.7	1.377	60.92	41.1	1.481	63.46	42.0	1.509
August.....	61.38	39.5	1.552	53.35	39.2	1.362	54.15	39.5	1.372	61.44	41.3	1.489	65.35	42.1	1.553
September.....	61.79	40.0	1.545	54.32	39.7	1.369	52.59	38.5	1.365	61.81	40.8	1.515	65.15	41.6	1.568
October.....	61.73	39.7	1.554	52.61	38.7	1.361	54.55	40.1	1.362	63.09	41.5	1.521	65.28	41.4	1.575
November.....	60.72	39.2	1.548	53.92	39.4	1.369	55.27	41.2	1.364	62.69	41.3	1.516	65.78	41.5	1.585
December.....	61.22	39.3	1.558	55.24	40.1	1.378	57.98	40.9	1.416	62.54	41.2	1.516	64.83	40.9	1.586

¹ State and area hours and gross earnings are prepared by various cooperating State agencies. Owing to differences in methodology the data may not be strictly comparable among the States or with the national averages. Variations in earnings among the States and areas reflect, to some extent, differences with respect to industrial composition. Revised data for all

except the two most recent months are identified by an asterisk for the first month's publication of such data. A number of States also make available more detailed industry data, as well as information for earlier periods, which may be secured directly upon request to the appropriate State agency as listed in footnote 1, table A-5.

TABLE C-3: Estimated Average Hourly Earnings, Gross and Exclusive of Overtime, of Production Workers in Manufacturing Industries ¹

Year and month	All manufacturing		Durable goods		Nondurable goods		Year and month	All manufacturing		Durable goods		Nondurable goods	
	Gross	Exclud- ing over- time	Gross	Exclud- ing over- time	Gross	Exclud- ing over- time		Gross	Exclud- ing over- time	Gross	Exclud- ing over- time	Gross	Exclud- ing over- time
January 1941.....	\$0.683	\$0.664	\$0.749	\$0.722	\$0.610	\$0.601	1947: December....	\$1.278	\$1.228	\$1.354	\$1.299	\$1.196	\$1.152
January 1945.....	1.046	.970	1.144	1.053	.891	.840	1948: January.....	1.285	1.243	1.355	1.308	1.210	1.173
July 1945.....	1.033	.969	1.127	1.052	.902	.854	February.....	1.287	1.247	1.352	1.309	1.217	1.181
June 1946.....	1.084	1.053	1.165	1.134	1.003	.972	March.....	1.289	1.248	1.352	1.306	1.220	1.183
1941: Average.....	.729	.702	.808	.770	.640	.625	April.....	1.292	1.253	1.357	1.314	1.220	1.184
1942: Average.....	.853	.805	.947	.881	.723	.698	May.....	1.301	1.262	1.366	1.324	1.230	1.194
1943: Average.....	.961	.894	1.059	.976	.803	.763	June.....	1.316	1.275	1.385	1.341	1.242	1.204
1944: Average.....	1.019	.947	1.117	1.029	.861	.814	July.....	1.332	1.295	1.407	1.369	1.252	1.216
1945: Average.....	1.023	2.963	1.111	2.1042	.904	2.858	August.....	1.349	1.309	1.431	1.385	1.262	1.228
1946: Average.....	1.084	1.049	1.156	1.122	1.012	.978	September.....	1.362	1.323	1.448	1.408	1.272	1.235
1947: Average.....	1.221	1.182	1.292	1.250	1.145	1.109	October.....	1.366	1.323	1.452	1.403	1.271	1.236
							November ²	1.371	1.332	1.454	1.409	1.282	1.248
							December ²	1.376	1.333	1.457	1.408	1.286	1.251

¹ Overtime is defined as work in excess of 40 hours a week and paid for at time and one-half. The method of estimating average hourly earnings exclusive of overtime makes no allowance for special rates of pay for work done on holidays.

² Eleven-month average only; August 1945 excluded because of VJ-day holiday period.

³ Preliminary.

TABLE C-4: Gross Average Weekly Earnings of Production Workers in Selected Industries, in Current and 1939 Dollars ¹

Year and month	All manufacturing		Bituminous-coal mining		Electric light and power ²		Year and month	All manufacturing		Bituminous-coal mining		Electric light and power ²	
	Current dollars	1939 dollars	Current dollars	1939 dollars	Current dollars	1939 dollars		Current dollars	1939 dollars	Current dollars	1939 dollars	Current dollars	1939 dollars
January 1941.....	\$26.64	\$26.27	\$26.00	\$25.64	\$35.49	\$35.00	1947: December....	\$52.69	\$31.36	\$75.22	\$44.77	\$59.01	\$35.12
January 1945.....	47.50	37.15	54.11	42.32	48.90	38.24	1948: January.....	52.07	30.66	75.78	44.62	59.87	35.26
July 1945.....	45.45	34.91	50.66	38.92	50.34	38.67	February.....	51.75	30.71	70.54	41.86	59.60	35.37
June 1946.....	43.31	32.30	64.44	48.06	52.07	38.83	March.....	52.07	31.01	74.84	44.57	58.27	34.70
1939: Average.....	23.86	23.86	23.88	23.88	34.38	34.38	April.....	51.79	30.41	* 49.53	* 29.08	59.10	34.70
1940: Average.....	25.20	25.00	24.71	24.51	35.10	34.82	May.....	51.86	30.23	74.08	43.19	59.83	34.88
1941: Average.....	29.58	27.95	30.86	29.16	36.54	34.53	June.....	52.85	30.60	73.87	42.76	60.41	34.97
1942: Average.....	36.65	31.27	35.02	29.88	39.60	33.79	July.....	52.95	30.30	67.62	38.70	61.46	35.17
1943: Average.....	43.14	34.69	41.62	33.47	44.16	35.51	August.....	54.05	30.79	78.10	44.49	61.46	35.01
1944: Average.....	46.08	36.50	51.27	40.61	48.04	38.05	September.....	54.19	30.87	75.51	43.01	61.75	35.17
1945: Average.....	44.39	34.36	52.25	40.45	50.05	38.75	October.....	54.65	31.29	76.40	43.75	62.38	35.72
1946: Average.....	43.74	31.21	58.03	41.41	52.04	37.13	November ⁴	54.57	31.50	73.52	42.44	62.57	36.12
1947: Average.....	49.25	30.75	66.86	41.75	57.12	35.66	December ⁴	55.10	31.95	75.06	43.53	62.72	36.37

¹ These series indicate changes in the level of weekly earnings prior to and after adjustment for changes in purchasing power as determined from the Bureau's consumers' price index, the year 1939 having been selected for the base period. Estimates of World War II and postwar understatement by the consumers' price index were not included. See Monthly Labor Review, March 1947, p. 498. (See also footnote 1, table D-1.)

² Data relate to all nonsupervisory employees and working supervisors.

³ April data reflect work stoppages.

⁴ Preliminary.

TABLE C-5: Gross and Net Spendable Average Weekly Earnings of Production Workers in Manufacturing Industries, in Current and 1939 Dollars ¹

Year and month	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 three dependents				Worker with no dependents		Worker with three dependents	
		Current dollars	1939 dollars	Current dollars	1939 dollars			Current dollars	1939 dollars	Current dollars	1939 dollars
January 1941.....	\$26.64	\$25.41	\$25.06	\$26.37	\$26.00	1947: December....	\$52.69	\$44.98	\$26.77	\$50.46	\$30.03
January 1945.....	47.50	39.40	30.81	45.17	35.33	1948: January.....	52.07	45.69	26.91	51.43	30.29
July 1945.....	45.45	37.80	29.04	43.57	33.47	February.....	51.75	45.42	26.95	51.16	30.36
June 1946.....	43.31	37.30	27.81	42.78	31.90	March.....	52.07	45.69	27.21	51.43	30.63
1939: Average.....	23.86	23.58	23.58	23.62	23.62	April.....	51.79	45.45	26.68	51.19	30.05
1940: Average.....	25.20	24.69	24.49	24.95	24.75	May.....	51.86	45.51	26.53	51.25	29.88
1941: Average.....	29.58	28.05	26.51	29.28	27.67	June.....	52.85	46.35	26.83	52.08	30.15
1942: Average.....	36.65	31.77	27.11	36.28	30.96	July.....	52.95	46.48	26.60	52.22	29.88
1943: Average.....	43.14	36.01	28.97	41.39	33.30	August.....	54.05	47.35	26.97	53.09	30.24
1944: Average.....	46.08	38.29	30.32	44.06	34.89	September.....	54.19	47.47	27.04	53.21	30.31
1945: Average.....	44.39	36.97	28.61	42.74	33.08	October.....	54.65	47.86	27.40	53.60	30.69
1946: Average.....	43.74	37.65	26.87	43.13	30.78	November ²	54.57	47.79	27.59	53.53	30.90
1947: Average.....	49.25	42.17	26.33	47.65	29.75	December ²	55.10	48.24	27.98	53.98	31.30

¹ Net spendable average weekly earnings are obtained by deducting from gross weekly earnings, social security and income taxes for which the specified type of 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 two types of income-receivers: (1) A worker with no dependents; (2) A worker with three dependents.

The computations of net spendable earnings for both the factory worker with no dependents and the factory worker with three dependents are based

upon the estimates of 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 two types of income-receivers. That series does not, therefore, reflect actual differences in levels of earnings for workers of varying age, occupation, skill, family composition, etc.

² Preliminary.

TABLE C-6: Average Earnings and Hours on Private Construction Projects, by Type of Firm ¹

Year and month	Building construction																		
	All types, private construction projects			Total building						General contractors			Special building trades						
				All trades ²			Plumbing and heating			Painting and decorating									
	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hrly. earnings	
1940: Average-----	(4)	(4)	(4)	\$31.70	33.1	\$0.958	\$30.56	33.3	\$0.918	\$33.11	32.7	\$1.012	\$32.87	34.6	\$0.949	\$33.05	32.5	\$1.016	
1941: January-----	(4)	(4)	(4)	32.18	32.6	.986	30.10	32.7	.946	33.42	32.6	1.025	34.16	35.8	.955	31.49	29.7	1.062	
1947: December....	\$66.47	38.0	\$1.748	67.31	37.9	1.774	62.86	37.1	1.695	72.64	38.9	1.865	76.61	40.6	1.887	65.33	36.0	1.812	
1948: January-----	65.73	37.3	1.762	66.28	37.2	1.781	62.05	36.4	1.707	71.43	38.2	1.868	75.79	40.7	1.862	65.79	35.7	1.840	
February-----	66.17	37.0	1.788	66.31	36.7	1.806	62.70	36.3	1.727	70.99	37.3	1.899	74.17	39.1	1.895	65.03	34.7	1.872	
March-----	66.73	37.4	1.786	66.89	37.1	1.805	63.28	36.7	1.724	71.47	37.5	1.905	74.01	39.0	1.897	66.80	35.7	1.870	
April-----	67.25	37.5	1.795	67.31	37.0	1.818	63.62	36.5	1.745	72.08	37.7	1.909	74.64	38.9	1.919	68.29	36.3	1.880	
May-----	67.90	37.5	1.812	68.13	37.1	1.835	64.74	36.5	1.772	72.67	37.9	1.916	75.55	39.1	1.933	69.76	36.6	1.906	
June-----	70.57	38.5	1.835	70.49	37.9	1.858	67.00	37.4	1.789	75.14	38.6	1.948	79.03	40.0	1.976	70.27	36.4	1.930	
July-----	71.53	38.4	1.865	71.38	37.8	1.890	68.90	37.2	1.826	75.88	38.5	1.972	78.89	39.2	2.014	71.20	36.8	1.934	
August-----	71.99	38.4	1.876	71.89	37.8	1.901	68.47	37.4	1.833	76.57	38.5	1.991	79.81	39.1	2.041	71.27	36.5	1.951	
September-----	72.12	38.1	1.894	72.06	37.5	1.919	68.56	37.0	1.853	76.67	38.2	2.005	78.97	38.7	2.042	71.67	36.6	1.959	
October-----	71.71	37.9	1.894	71.69	37.4	1.919	68.10	36.8	1.852	76.33	38.1	2.005	77.97	38.5	2.026	70.72	35.7	1.980	
November ⁶ -----	70.46	37.0	1.906	70.73	36.7	1.929	67.25	36.0	1.867	75.25	37.5	2.009	76.44	38.0	2.010	69.92	34.9	2.001	
December ⁷ -----	73.18	38.0	1.926	73.44	37.8	1.945	70.47	37.4	1.884	77.41	38.2	2.025	81.74	40.3	2.026	71.73	35.7	2.011	

Year and month	Building construction—Continued																	
	Special building trades—Continued																	
	Electrical work			Masonry			Plastering and lathing			Carpentry			Roofing and sheet metal			Excavation and foundation		
	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hourly earnings
1940: Average-----	\$41.18	34.5	\$1.196	\$29.47	29.8	\$0.988	\$36.60	28.5	\$1.286	\$31.23	33.0	\$0.947	\$28.07	31.8	\$0.883	\$26.53	30.9	\$0.859
1941: January-----	43.18	36.5	1.184	25.66	25.3	1.012	35.36	27.5	1.287	30.40	31.2	.974	27.60	30.3	.910	23.86	29.1	.820
1947: December-----	81.20	40.6	2.000	66.69	36.3	1.836	76.63	36.5	2.100	64.94	37.8	1.718	60.64	37.1	1.634	63.33	37.8	1.676
1948: January-----	81.62	40.6	2.012	61.51	33.0	1.862	75.84	36.7	2.069	63.94	36.5	1.750	56.54	34.5	1.638	63.79	37.7	1.690
February-----	82.10	40.0	2.052	59.50	31.6	1.881	74.81	35.9	2.087	61.60	35.2	1.752	55.38	33.7	1.643	64.37	37.3	1.725
March-----	83.75	40.6	2.064	61.38	32.6	1.883	75.10	36.0	2.087	62.93	35.4	1.778	55.86	34.4	1.622	61.57	36.4	1.689
April-----	81.76	39.7	2.061	64.61	34.3	1.885	76.61	36.6	2.094	68.41	38.0	1.799	58.33	35.3	1.652	63.40	37.9	1.672
May-----	81.44	39.7	2.051	66.91	34.8	1.923	79.22	37.1	2.137	69.55	38.8	1.795	59.89	35.9	1.669	65.72	39.3	1.671
June-----	82.60	39.8	2.075	71.21	36.2	1.967	83.54	38.2	2.185	70.64	39.4	1.794	63.15	36.8	1.717	68.45	40.4	1.695
July-----	84.31	40.3	2.090	74.78	37.8	1.977	83.12	37.4	2.223	70.28	39.2	1.795	64.42	37.1	1.736	66.63	38.6	1.724
August-----	85.63	40.3	2.126	73.83	37.0	1.994	82.07	36.8	2.231	70.65	39.3	1.800	65.36	37.7	1.734	69.11	39.5	1.749
September-----	85.69	39.7	2.159	73.97	36.9	2.005	84.29	37.3	2.258	70.50	38.4	1.837	66.27	37.8	1.753	69.77	39.5	1.768
October-----	87.62	40.0	2.191	73.74	36.6	2.015	82.28	36.6	2.250	69.77	37.6	1.854	65.15	37.3	1.749	68.37	38.8	1.760
November ⁶ -----	86.72	39.4	2.203	72.66	36.1	2.022	77.66	34.7	2.238	68.69	37.2	1.855	65.17	37.2	1.751	68.61	38.4	1.789
December ⁷ -----	89.47	40.5	2.207	71.12	35.2	2.019	81.52	35.6	2.291	68.59	36.9	1.856	64.80	36.4	1.778	66.43	37.6	1.767

See footnotes at end of table.

TABLE C-6: Average Earnings and Hours on Private Construction Projects, by Type of Firm ¹—Con.

Year and month	Nonbuilding construction											
	Total nonbuilding			Highway and street			Heavy construction			Other		
	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hourly earnings
1940: Average-----	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1941: January-----	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
1947: December-----	\$62.83	38.4	\$1.638	\$60.21	38.4	\$1.570	\$65.24	38.4	\$1.697	\$58.35	38.2	\$1.528
1948: January-----	63.28	37.8	1.676	61.25	37.9	1.618	65.57	37.6	1.745	58.14	38.1	1.524
February-----	65.42	38.5	1.700	60.96	37.4	1.629	68.78	38.6	1.781	61.24	39.0	1.570
March-----	65.85	38.9	1.692	60.71	37.7	1.609	68.79	39.3	1.750	62.89	38.9	1.615
April-----	66.92	39.6	1.691	61.63	38.5	1.601	69.53	39.9	1.743	65.08	39.8	1.637
May-----	66.72	39.1	1.706	63.09	38.8	1.627	69.30	39.4	1.760	63.86	38.8	1.647
June-----	70.93	40.9	1.735	67.53	40.8	1.656	74.06	41.5	1.785	66.61	39.5	1.685
July-----	72.27	41.2	1.756	69.73	42.2	1.652	74.42	41.0	1.814	69.23	40.6	1.705
August-----	72.26	40.9	1.768	68.85	41.6	1.657	75.06	40.6	1.847	69.02	40.7	1.694
September-----	72.42	40.7	1.779	69.22	41.3	1.676	74.90	40.4	1.854	69.88	40.9	1.708
October-----	71.82	40.3	1.780	68.63	40.2	1.707	73.85	40.0	1.846	70.23	41.2	1.704
November ⁶ -----	69.25	38.4	1.803	63.27	37.6	1.684	72.05	38.3	1.881	67.58	39.4	1.717
December ⁷ -----	72.02	39.0	1.847	66.18	38.5	1.720	74.50	38.8	1.920	70.23	39.9	1.760

¹ Covers all contract construction firms reporting to the Bureau during the months shown (over 14,000), but not necessarily identical establishments. The data include all employees of these construction firms working at the site of privately financed projects (skilled, semiskilled, unskilled, superintendents, time clerks, etc.). Employees of these firms engaged on publicly financed projects and off-site work are excluded.

² Includes types not shown separately.

³ Hourly earnings, when multiplied by weekly hours of work, may not exactly equal weekly earnings because of rounding.

⁴ Not available prior to February 1946.

⁵ Includes general contracting as well as general building maintenance, and other special building data.

⁶ Revised.

⁷ Preliminary.

D: Prices and Cost of Living

TABLE D-1: Consumers' Price Index¹ for Moderate-Income Families in Large Cities, by Group of Commodities

[1935-39=100]

Year and month	All items	Food	Apparel	Rent	Fuel, electricity, and refrigeration*				Housefurnishings	Miscellaneous
					Total	Gas and electricity	Other fuels	Ice		
1913: Average	70.7	79.9	69.3	92.2	61.9	(2)	(2)	(2)	59.1	50.9
1914: July	71.7	81.7	69.8	92.2	62.3	(2)	(2)	(2)	60.8	52.0
1918: December	118.0	149.6	147.9	97.1	90.4	(2)	(2)	(2)	121.2	83.1
1920: June	149.4	185.0	209.7	119.1	104.8	(2)	(2)	(2)	169.7	100.7
1929: Average	122.5	132.5	115.3	141.4	112.5	(2)	(2)	(2)	111.7	104.6
1932: Average	97.6	86.5	90.8	116.9	103.4	(2)	(2)	(2)	85.4	101.7
1939: Average	99.4	95.2	100.5	104.3	99.0	98.9	99.1	100.2	101.3	100.7
August 15	98.6	93.5	100.3	104.3	97.5	99.0	95.2	100.0	100.6	100.4
1940: Average	100.2	96.6	101.7	104.6	99.7	98.0	101.9	100.4	100.5	101.1
1941: January 1	105.2	105.5	106.3	106.2	102.2	97.1	108.3	104.1	107.3	104.0
December 15	100.8	97.6	101.2	105.0	100.8	97.5	105.4	100.3	100.2	101.8
	110.5	113.1	114.8	108.2	104.1	96.7	113.1	105.1	116.8	107.7
1942: Average	116.5	123.9	124.2	108.5	105.4	96.7	115.1	110.0	122.2	110.9
1943: Average	123.6	138.0	129.7	108.0	107.7	96.1	120.7	114.2	125.6	115.8
1944: Average	125.5	136.1	138.8	108.2	109.8	95.8	126.0	115.8	136.4	121.3
1945: Average	128.4	139.1	145.9	108.3	110.3	95.0	128.3	115.9	145.8	124.1
August 15	129.3	140.9	146.4	(9)	111.4	95.2	131.0	115.8	146.0	124.5
1946: Average	139.3	159.6	160.2	108.6	112.4	92.4	136.9	115.9	159.2	128.8
June 15	133.3	145.6	157.2	108.5	110.5	92.1	133.0	115.1	156.1	127.9
November 15	152.2	187.7	171.0	(9)	114.8	91.8	142.6	117.9	171.0	132.5
1947: Average	159.2	193.8	185.8	111.2	121.1	92.0	156.1	125.9	184.4	139.9
December 15	167.0	206.9	191.2	115.4	127.8	92.6	171.1	129.8	191.4	144.4
1948: Average	171.2	210.2	198.0	117.4	133.9	94.3	183.4	135.2	195.8	149.9
January 15	168.8	209.7	192.1	115.9	129.5	93.1	174.6	131.2	192.3	146.4
February 15	167.5	204.7	195.1	116.0	130.0	93.2	175.4	132.2	193.0	146.4
March 15	166.9	202.3	196.3	116.3	130.3	93.8	175.5	132.2	194.9	146.2
April 15	169.3	207.9	196.4	116.3	130.7	93.9	176.1	133.2	194.7	147.8
May 15	170.5	210.9	197.5	116.7	131.8	94.1	178.5	133.7	193.6	147.5
June 15	171.7	214.1	196.9	117.0	132.6	94.2	180.6	134.2	194.8	147.5
July 15	173.7	216.8	197.1	117.3	134.8	94.4	185.0	136.5	195.9	150.8
August 15	174.5	216.6	199.7	117.7	136.8	94.5	190.1	137.3	196.3	152.4
September 15	174.5	215.2	201.0	118.5	137.3	94.6	191.0	137.6	198.1	152.7
October 15	173.6	211.5	201.6	118.7	137.8	95.4	191.4	137.9	198.8	153.7
November 15	172.2	207.5	201.4	118.8	137.9	95.4	191.6	138.0	198.7	153.9
December 15	171.4	205.0	200.4	119.5	137.8	95.3	191.3	138.4	198.6	154.0
1949: January 15	170.9	204.8	196.5	119.7	138.2	95.5	191.8	139.0	196.5	154.1

¹ The "Consumers' price index for moderate-income families in large cities," formerly known as the "Cost of living index" measures average changes in retail prices of selected goods, rents, and services weighted by quantities bought in 1934-36 by families of wage earners and moderate-income workers in large cities whose incomes averaged \$1,524 in 1934-36.

Bureau of Labor Statistics Bulletin 699, Changes in Cost of Living in Large Cities in the United States, 1913-41, contains a detailed description of methods used in constructing this index. Additional information on the consumers' price index is given in a compilation of reports published by the Office of Economic Stabilization, Report of the President's Committee on the Cost of Living.

Mimeographed tables are available upon request showing indexes for each

of the cities regularly surveyed by the Bureau and for each of the major groups of living essentials. Indexes for all large cities combined are available since 1913. The beginning date for series of indexes for individual cities varies from city to city but indexes are available for most of the 34 cities since World War I.

² Data not available.

³ Rents not surveyed this month.

*The group index formerly entitled "Fuel, electricity, and ice" is now designated "Fuel, electricity, and refrigeration". Indexes are comparable with those previously published for "Fuel, electricity, and ice." The subgroup "Other fuels and ice" has been discontinued; separate indexes are presented for "Other fuels" and "Ice."

TABLE D-2: Consumers' Price Index for Moderate-Income Families, by City,¹ for Selected Periods

[1935-39=100]

City	Jan. 15, 1949	Dec. 15, 1948	Nov. 15, 1948	Oct. 15, 1948	Sept. 15, 1948	Aug. 15, 1948	July 15, 1948	June 15, 1948	May 15, 1948	Apr. 15, 1948	Mar. 15, 1948	Feb. 15, 1948	Jan. 15, 1948	June 15, 1946	Aug. 15, 1939
Average.....	170.9	171.4	172.2	173.6	174.5	174.5	173.7	171.7	170.5	169.3	166.9	167.5	168.8	133.3	98.6
Atlanta, Ga.....	(2)	(2)	173.7	(2)	(2)	176.2	(2)	(2)	170.8	(2)	(2)	169.2	(2)	133.8	98.0
Baltimore, Md.....	(2)	174.0	(2)	(2)	179.2	(2)	(2)	176.1	(2)	(2)	170.9	(2)	(2)	135.6	98.7
Birmingham, Ala.....	173.7	174.8	175.0	176.9	178.6	179.3	177.0	174.7	173.7	172.7	172.0	172.8	174.4	136.5	98.5
Boston, Mass.....	163.9	164.7	166.7	167.8	169.0	168.7	168.6	166.1	164.1	163.6	160.8	161.3	163.1	127.9	97.1
Buffalo, N. Y.....	169.8	(2)	(2)	172.7	(2)	(2)	173.1	(2)	(2)	167.2	(2)	(2)	167.4	132.6	98.5
Chicago, Ill.....	174.9	175.4	175.9	178.1	179.4	178.8	178.6	176.2	174.9	172.1	169.0	168.8	171.5	130.9	98.7
Cincinnati, Ohio.....	172.0	172.2	173.8	175.5	176.3	175.7	175.9	173.5	172.3	170.8	169.3	170.1	171.2	132.2	97.3
Cleveland, Ohio.....	(2)	(2)	176.8	(2)	(2)	179.3	(2)	(2)	173.7	(2)	(2)	171.6	(2)	135.7	100.0
Denver, Colo.....	171.0	(2)	(2)	171.0	(2)	(2)	172.5	(2)	(2)	168.5	(2)	(2)	167.0	131.7	98.6
Detroit, Mich.....	171.6	172.8	173.1	174.6	175.4	176.1	175.9	174.5	173.2	171.8	168.7	169.0	170.6	136.4	98.5
Houston, Tex.....	172.6	173.8	173.9	174.7	175.4	175.2	173.7	172.5	171.5	171.4	170.0	170.4	170.8	130.5	100.7
Indianapolis, Ind.....	173.6	(2)	(2)	178.0	(2)	(2)	176.5	(2)	(2)	172.5	(2)	(2)	172.3	131.9	98.0
Jacksonville, Fla.....	(2)	176.2	(2)	(2)	179.1	(2)	(2)	178.3	(2)	(2)	172.8	(2)	(2)	138.4	98.5
Kansas City, Mo.....	165.1	(2)	(2)	167.5	(2)	(2)	166.3	(2)	(2)	163.3	(2)	(2)	162.4	129.4	98.6
Los Angeles, Calif.....	172.7	172.7	172.2	171.8	171.0	171.0	170.3	168.8	169.1	169.3	167.4	168.1	167.6	136.1	100.5
Manchester, N. H.....	172.3	(2)	(2)	175.5	(2)	(2)	178.1	(2)	(2)	172.0	(2)	(2)	172.5	134.7	97.8
Memphis, Tenn.....	(2)	174.3	(2)	(2)	177.1	(2)	(2)	174.7	(2)	(2)	172.4	(2)	(2)	134.5	97.8
Milwaukee, Wis.....	(2)	(2)	171.2	(2)	(2)	174.5	(2)	(2)	171.1	(2)	(2)	166.9	(2)	131.2	97.0
Minneapolis, Minn.....	(2)	170.8	(2)	(2)	173.8	(2)	(2)	171.4	(2)	(2)	167.7	(2)	(2)	129.4	99.7
Mobile, Ala.....	(2)	173.5	(2)	(2)	177.3	(2)	(2)	173.5	(2)	(2)	169.9	(2)	(2)	132.9	98.6
New Orleans, La.....	(2)	(2)	176.6	(2)	(2)	179.8	(2)	(2)	176.5	(2)	(2)	177.1	(2)	138.0	99.7
New York, N. Y.....	169.2	169.2	171.0	171.7	173.3	173.3	172.6	169.1	167.5	167.0	164.3	166.4	167.1	136.8	99.0
Norfolk, Va.....	(2)	(2)	174.0	(2)	(2)	176.2	(2)	(2)	171.9	(2)	(2)	170.1	(2)	135.2	97.8
Philadelphia, Pa.....	170.4	170.6	171.7	174.1	174.8	174.8	172.9	172.1	170.4	169.3	165.5	166.6	168.4	132.5	97.8
Pittsburgh, Pa.....	174.6	174.9	175.9	177.1	178.3	178.3	177.8	175.7	173.5	171.9	170.1	170.1	172.3	134.7	98.4
Portland, Maine.....	(2)	167.1	(2)	(2)	170.7	(2)	(2)	167.4	(2)	(2)	162.7	(2)	(2)	128.7	97.1
Portland, Ore.....	178.6	(2)	(2)	180.1	(2)	(2)	180.3	(2)	(2)	175.8	(2)	(2)	174.4	140.3	100.1
Richmond, Va.....	166.5	(2)	(2)	170.0	(2)	(2)	168.9	(2)	(2)	163.4	(2)	(2)	165.1	128.2	98.0
St. Louis, Mo.....	(2)	171.1	(2)	(2)	175.0	(2)	(2)	172.1	(2)	(2)	167.8	(2)	(2)	131.2	98.1
San Francisco, Calif.....	(2)	176.7	(2)	(2)	177.1	(2)	(2)	174.2	(2)	(2)	171.4	(2)	(2)	137.8	99.3
Savannah, Ga.....	176.7	(2)	(2)	178.4	(2)	(2)	180.2	(2)	(2)	177.6	(2)	(2)	175.6	140.6	99.3
Scranton, Pa.....	(2)	(2)	169.4	(2)	(2)	174.7	(2)	(2)	170.2	(2)	(2)	166.5	(2)	132.2	96.0
Seattle, Wash.....	(2)	(2)	174.3	(2)	(2)	176.2	(2)	(2)	174.3	(2)	(2)	170.7	(2)	137.0	100.3
Washington, D. C.....	(2)	(2)	167.1	(2)	(2)	169.2	(2)	(2)	166.7	(2)	(2)	163.2	(2)	133.8	98.6

¹ The indexes are based on time-to-time changes in the cost of goods and services purchased by moderate-income families in large cities. They do not indicate whether it costs more to live in one city than in another.

² Through June 1947, consumers' price indexes were computed monthly for

21 cities and in March, June, September, and December for 13 additional cities; beginning July 1947 indexes were computed monthly for 10 cities and once every 3 months for 24 additional cities according to a staggered schedule.

TABLE D-3: Consumers' Price Index for Moderate-Income Families, by City and Group of Commodities¹

[1935-39=100]

City	Food		Apparel		Rent		Fuel, electricity, and refrigeration				Housefurnishings		Miscellaneous	
	Jan. 15, 1949	Dec. 15, 1948	Jan. 15, 1949	Dec. 15, 1948	Jan. 15, 1949	Dec. 15, 1948	Total		Gas and electricity		Jan. 15, 1949	Dec. 15, 1948	Jan. 15, 1949	Dec. 15, 1948
							Jan. 15, 1949	Dec. 15, 1948	Jan. 15, 1949	Dec. 15, 1948				
Average.....	204.8	205.0	196.5	200.4	119.7	119.5	138.2	137.8	95.5	95.3	196.5	198.6	154.1	154.0
Atlanta, Ga.....	202.1	203.3	(1)	(1)	(2)	(2)	151.2	151.2	83.3	83.3	(1)	(1)	(1)	(1)
Baltimore, Md.....	213.5	214.6	(1)	198.3	(2)	116.5	148.4	148.3	122.0	122.0	(1)	201.9	(1)	149.4
Birmingham, Ala.....	202.0	204.8	206.2	207.4	(2)	(2)	135.6	135.6	79.6	79.6	191.5	193.0	150.0	150.0
Boston, Mass.....	194.1	194.2	185.6	192.1	(2)	115.2	154.9	154.8	117.3	116.9	187.7	193.0	146.5	146.1
Buffalo, N. Y.....	197.9	200.0	197.7	(1)	124.0	(2)	140.2	140.2	96.0	96.0	195.3	(1)	158.8	(1)
Chicago, Ill.....	207.3	208.2	199.6	202.4	(2)	138.3	131.4	131.4	83.5	83.5	184.7	186.0	155.6	155.0
Cincinnati, Ohio.....	205.5	205.2	193.4	196.1	(2)	115.1	146.4	145.7	101.9	101.9	193.7	193.5	154.1	154.5
Cleveland, Ohio.....	212.8	213.0	(1)	(1)	(2)	(2)	145.1	145.1	105.6	105.6	(1)	(1)	(1)	(1)
Denver, Colo.....	209.6	211.0	193.9	(1)	124.2	(2)	112.1	112.1	69.2	69.2	214.8	(1)	152.5	(1)
Detroit, Mich.....	197.3	198.7	192.7	198.3	127.4	(2)	150.5	150.4	87.1	87.1	202.2	206.7	166.5	166.7
Houston, Tex.....	215.7	218.1	207.2	211.0	(2)	(2)	99.4	99.4	81.5	81.5	198.5	198.5	153.3	153.4
Indianapolis, Ind.....	200.9	204.8	187.6	(1)	129.7	(2)	157.4	155.2	86.6	86.6	189.2	(1)	160.3	(1)
Jacksonville, Fla.....	210.6	209.9	(1)	198.1	(2)	127.7	146.8	146.8	100.2	100.2	(1)	190.7	(1)	159.6
Kansas City, Mo.....	194.6	194.7	187.4	(1)	124.2	(2)	128.5	129.0	67.0	66.5	186.9	(1)	154.2	(1)
Los Angeles, Calif.....	215.5	214.9	192.0	194.8	(2)	(2)	94.0	94.0	89.3	89.3	189.3	189.0	154.3	154.1
Manchester, N. H.....	201.8	203.6	184.6	(1)	113.3	(2)	156.9	156.9	99.2	99.3	201.2	(1)	148.4	(1)
Memphis, Tenn.....	217.1	217.9	(1)	210.5	(2)	129.5	135.0	135.0	77.0	77.0	(1)	182.6	(1)	141.5
Milwaukee, Wis.....	206.5	205.0	(1)	(1)	(2)	(2)	145.8	145.8	104.5	104.5	(1)	(1)	(1)	(1)
Minneapolis, Minn.....	195.3	195.6	(1)	204.2	(2)	129.8	142.6	142.8	78.9	78.9	(1)	191.7	(1)	159.5
Mobile, Ala.....	214.5	211.8	(1)	203.5	(2)	125.9	129.8	129.8	83.9	84.0	(1)	178.2	(1)	145.3
New Orleans, La.....	213.2	216.1	(1)	(1)	(2)	(2)	113.4	113.4	75.1	75.1	(1)	(1)	(1)	(1)
New York, N. Y.....	205.3	204.3	196.4	200.7	107.8	(2)	134.2	133.3	101.6	100.8	185.9	187.4	159.7	159.6
Norfolk, Va.....	208.7	209.8	(1)	(1)	(2)	(2)	149.9	149.9	102.6	102.6	(1)	(1)	(1)	(1)
Philadelphia, Pa.....	200.4	199.3	190.7	195.5	(2)	(2)	144.1	142.6	103.0	103.0	196.8	201.7	152.4	152.6
Pittsburgh, Pa.....	208.0	208.0	230.7	234.1	120.1	(2)	140.3	139.7	103.3	103.3	201.7	205.4	148.4	148.5
Portland, Maine.....	194.3	195.0	(1)	200.2	(2)	113.3	153.9	154.0	108.6	108.5	(1)	193.4	(1)	152.0
Portland, Oreg.....	224.2	223.5	194.9	(1)	125.8	(2)	130.6	130.6	95.6	95.6	187.3	(1)	156.5	(1)
Richmond, Va.....	200.3	201.5	196.7	(1)	114.5	(2)	142.5	142.4	95.6	95.6	207.1	(1)	144.0	(1)
St. Louis, Mo.....	212.4	212.2	(1)	201.4	(2)	119.7	135.7	135.7	88.4	88.4	(1)	175.4	(1)	145.3
San Francisco, Calif.....	223.2	221.1	(1)	196.0	(2)	115.9	82.8	82.8	72.7	72.7	(1)	169.6	(1)	164.2
Savannah, Ga.....	215.3	216.0	192.9	(1)	118.2	(2)	156.9	153.4	108.6	101.5	205.1	(1)	155.4	(1)
Scranton, Pa.....	201.6	201.1	(1)	(1)	(2)	(2)	144.7	144.7	91.8	91.8	(1)	(1)	(1)	(1)
Seattle, Wash.....	214.4	211.8	(1)	(1)	(2)	(2)	127.2	126.4	93.2	91.5	(1)	(1)	(1)	(1)
Washington, D. C.....	202.4	201.8	(1)	(1)	(2)	(2)	137.5	137.5	98.6	98.6	(1)	(1)	(1)	(1)

¹ Prices of apparel, housefurnishings, and miscellaneous goods and services are obtained monthly in 10 cities and once every 3 months in 24 additional cities according to a staggered schedule.

² Rents are surveyed every 3 months in 34 large cities according to a staggered schedule.

TABLE D-4: Indexes of Retail Prices of Foods,¹ by Group, for Selected Periods

[1935-39=100]

Year and month	All foods	Cereals and bakery products	Meats, poultry, and fish	Meats				Chickens	Fish	Dairy products	Eggs	Fruits and vegetables				Beverages	Fats and oils	Sugar and sweets
				Total	Beef and veal	Pork	Lamb					Total	Fresh	Canned	Dried			
1923: Average	124.0	105.5	101.2						129.4	136.1	169.5	173.6	124.8	175.4	131.5	126.2	175.4	
1926: Average	137.4	115.7	117.8						127.4	141.7	210.8	226.2	122.9	162.4	170.4	145.0	120.0	
1929: Average	132.5	107.6	127.1						131.0	143.8	169.0	173.5	124.3	171.0	164.8	127.2	114.3	
1932: Average	86.5	82.6	79.3						84.9	82.3	103.5	105.9	91.1	91.2	112.6	71.1	89.6	
1939: Average	95.2	94.5	96.6	96.6	101.1	88.9	99.5	93.8	101.0	95.9	91.0	94.5	95.1	92.3	93.3	95.5	87.7	
August	93.5	93.4	95.7	95.4	99.6	88.0	98.8	94.6	99.6	93.1	90.7	92.4	92.8	91.6	90.3	94.9	84.5	
1940: Average	96.6	96.8	95.8	94.4	102.8	81.1	99.7	94.8	110.6	101.4	93.8	96.5	97.3	92.4	100.6	92.5	96.8	
1941: Average	105.5	97.9	107.5	106.5	110.8	100.1	106.6	102.1	124.5	112.0	112.2	103.2	104.2	97.9	106.7	101.5	94.0	
December	113.1	102.5	111.1	109.7	114.4	103.2	108.1	100.5	138.9	120.5	138.1	110.5	111.0	106.3	118.3	114.1	108.5	
1942: Average	123.9	105.1	126.0	122.5	123.6	120.4	124.1	122.6	163.0	125.4	136.5	130.8	132.8	121.6	136.3	122.1	119.6	
1943: Average	138.0	107.6	133.8	124.2	124.7	119.9	136.9	146.1	206.5	134.6	161.9	168.8	178.0	130.6	158.9	124.8	126.1	
1944: Average	136.1	108.4	129.9	117.9	118.7	112.2	134.5	151.0	207.6	133.6	153.9	168.2	177.2	129.5	164.5	124.3	123.3	
1945: Average	139.1	109.0	131.2	118.0	118.4	112.6	136.0	154.4	217.1	133.9	164.4	177.1	188.2	130.2	168.2	124.0	126.5	
August	140.9	109.1	131.8	118.1	118.5	112.6	136.4	157.3	217.8	133.4	171.4	183.5	196.2	130.3	168.6	124.7	126.6	
1946: Average	159.6	125.0	161.3	150.8	150.5	148.2	163.9	174.0	236.2	165.1	168.8	182.4	190.7	140.8	190.4	139.6	152.1	
June	145.6	122.1	134.0	120.4	121.2	114.3	139.0	162.8	219.7	147.8	147.1	183.5	196.7	127.5	172.5	125.4	136.2	
November	187.7	140.6	203.6	197.9	191.0	207.1	205.4	188.9	265.0	198.5	201.6	184.5	182.3	167.7	251.6	167.8	244.4	
1947: Average	193.8	155.4	217.1	214.7	213.6	215.9	220.1	183.2	271.4	186.2	200.8	199.4	201.5	166.2	263.5	186.8	197.5	
1948: Average	210.2	170.9	246.5	243.9	258.5	222.5	246.8	203.2	312.8	204.8	208.7	205.2	212.4	158.0	246.8	205.0	195.5	
January	209.7	172.7	237.5	233.4	239.7	225.9	231.5	200.0	310.9	205.7	213.6	208.3	215.7	168.0	256.8	201.9	209.3	
February	204.7	171.8	224.8	218.0	228.2	202.2	223.4	196.4	315.0	204.4	189.2	213.0	222.0	157.7	256.0	204.0	194.2	
March	202.3	171.0	224.7	218.2	228.5	204.3	216.8	194.7	313.6	201.1	186.3	208.9	214.2	157.7	253.9	204.4	191.7	
April	207.9	171.0	233.8	229.5	241.2	212.3	232.6	198.4	307.2	205.8	184.7	217.4	228.4	156.4	252.1	204.4	191.4	
May	210.9	171.1	244.2	242.0	255.8	210.1	253.5	202.1	305.0	204.8	184.9	218.0	229.4	156.4	250.0	204.6	196.6	
June	214.1	171.2	255.1	255.2	273.9	223.5	271.2	207.6	299.3	205.9	194.2	214.9	225.2	157.4	248.0	205.1	200.5	
July	216.8	171.0	261.8	263.0	280.9	233.8	275.0	200.3	301.6	209.0	204.3	213.4	228.2	157.7	248.0	205.2	200.8	
August	216.6	170.8	267.0	269.3	286.2	246.1	266.6	207.8	304.4	211.0	220.2	199.6	204.8	157.8	249.2	205.3	197.8	
September	215.2	170.7	265.3	265.9	280.8	247.9	256.6	209.4	314.9	208.7	226.6	195.8	199.6	159.0	249.1	205.6	196.8	
October	211.5	170.0	256.1	254.3	269.8	233.9	249.4	204.0	325.9	203.0	239.0	193.5	197.3	158.9	238.1	205.9	193.0	
November	207.5	169.9	246.7	243.1	262.4	214.4	246.5	200.5	328.1	199.5	244.3	189.4	192.4	159.4	230.6	206.4	189.4	
December	205.0	170.2	241.3	235.4	255.1	206.2	238.6	208.0	328.1	199.2	217.3	192.3	196.2	159.4	229.8	207.8	184.4	
1949: January	204.8	170.5	235.9	228.2	244.5	203.1	234.4	208.9	331.7	196.0	209.6	205.2	213.3	159.2	228.4	208.7	174.7	

¹ The Bureau of Labor Statistics retail food prices are obtained monthly during the first three days of the week containing the fifteenth of the month, through voluntary reports from chain and independent retail food dealers. Articles included are selected to represent food sales to moderate-income families.

² The indexes, based on the retail prices of 50 foods, are computed by the fixed-base-weighted-aggregate method, using weights representing (1) relative importance of chain and independent store sales, in computing city average prices; (2) food purchases by families of wage earners and moderate-

income workers, in computing city indexes; and (3) population weights, in combining city aggregates in order to derive average prices and indexes for all cities combined.

Indexes of retail food prices in 56 large cities combined, by commodity groups, for the years 1923 through 1947 (1935-39=100), may be found in Bulletin No. 938, "Retail Prices of Food—1946 and 1947," Bureau of Labor Statistics, U. S. Department of Labor, table 3, p. 42. Mimeographed tables of the same data, by months, January 1935 to date, are available upon request.

TABLE D-5: Indexes of Retail Prices of Foods, by City

[1935-39=100]

City	Jan. 1949	Dec. 1948	Nov. 1948	Oct. 1948	Sept. 1948	Aug. 1948	July 1948	June 1948	May 1948	Apr. 1948	Mar. 1948	Feb. 1948	Jan. 1948	June 1946	Aug. 1939
United States.....	204.8	205.0	207.5	211.5	215.2	216.6	216.8	214.1	210.9	207.9	202.3	204.7	209.7	145.6	93.5
Atlanta, Ga.....	202.1	203.3	205.9	208.3	214.2	215.7	212.4	209.9	207.9	204.7	201.1	205.6	211.9	141.0	92.5
Baltimore, Md.....	213.5	214.6	218.7	224.5	228.7	228.9	227.7	225.3	221.6	217.8	212.3	214.5	220.2	152.4	94.7
Birmingham, Ala.....	202.0	204.8	205.4	210.8	216.3	219.3	218.0	212.7	209.6	207.5	207.2	211.1	218.0	147.7	90.7
Boston, Mass.....	194.1	194.2	199.2	202.6	207.2	208.8	210.2	204.1	199.2	198.2	192.2	195.0	200.3	138.0	93.5
Bridgeport, Conn.....	200.0	201.0	205.9	209.3	212.7	214.6	214.4	210.3	207.5	201.4	195.6	197.5	204.5	139.1	93.2
Buffalo, N. Y.....	197.9	200.0	201.6	206.4	210.1	213.0	212.9	211.6	207.9	200.2	196.6	196.7	202.1	140.2	94.5
Butte, Mont.....	205.0	205.7	209.3	214.9	214.5	215.1	216.6	214.7	207.4	201.3	200.5	202.1	204.8	139.7	94.1
Cedar Rapids, Iowa ¹	211.5	211.8	214.4	218.0	220.2	222.2	224.4	224.3	219.7	217.0	208.2	208.9	214.6	148.2	88.1
Charleston, S. C.....	196.9	197.1	198.9	204.9	207.7	208.0	211.4	208.1	206.7	204.8	199.1	200.2	206.6	140.8	95.1
Chicago, Ill.....	207.3	208.2	211.9	218.0	221.4	223.6	224.7	221.3	218.4	212.2	204.3	204.8	213.2	142.8	92.3
Cincinnati, Ohio.....	205.5	205.2	209.4	214.4	218.0	218.1	220.4	216.3	213.5	210.1	206.1	209.0	213.0	141.4	90.4
Cleveland, Ohio.....	212.8	213.0	217.0	220.9	225.6	229.0	226.2	223.7	218.0	213.0	209.3	212.5	217.6	149.3	93.6
Columbus, Ohio.....	188.6	189.4	193.1	197.2	200.8	202.2	201.9	199.2	195.3	193.1	190.8	192.6	196.7	136.4	88.1
Dallas, Tex.....	207.1	208.2	212.7	214.7	217.3	215.2	213.3	210.8	210.5	206.7	203.0	205.7	210.3	142.4	91.7
Denver, Colo.....	209.6	211.0	207.7	208.3	210.5	213.1	217.0	216.5	213.3	208.5	202.3	203.4	208.6	145.3	92.7
Detroit, Mich.....	197.3	198.7	199.9	204.4	207.6	210.1	213.2	211.3	208.0	203.9	197.7	199.4	205.1	145.4	90.6
Fall River, Mass.....	199.8	200.4	202.5	209.1	211.6	213.5	214.1	211.3	207.2	201.2	197.2	198.4	202.6	138.1	95.4
Houston, Tex.....	215.7	218.1	217.6	220.8	223.7	223.8	222.1	220.0	218.1	219.3	216.0	218.1	221.5	144.0	97.8
Indianapolis, Ind.....	200.9	204.8	206.8	211.8	216.0	217.1	212.6	211.5	208.0	205.7	203.8	204.2	208.2	141.5	90.7
Jackson, Miss. ¹	209.5	213.8	212.7	218.6	220.7	220.6	220.8	216.7	218.0	218.3	214.6	221.3	223.3	150.6	-----
Jacksonville, Fla.....	210.6	209.9	212.6	217.5	219.3	220.7	222.8	222.9	217.3	214.7	208.1	212.2	216.2	150.8	95.8
Kansas City, Mo.....	194.6	194.7	198.5	201.1	204.4	205.4	204.4	204.4	202.2	197.9	193.0	192.5	199.4	134.8	91.5
Knoxville, Tenn. ¹	230.0	233.9	233.0	236.7	241.6	244.6	241.7	238.4	236.2	233.9	230.0	239.6	244.3	165.6	-----
Little Rock, Ark.....	199.8	201.6	202.4	206.5	212.0	212.4	213.4	210.0	209.2	206.4	203.8	206.1	211.4	139.1	94.0
Los Angeles, Calif.....	215.5	214.9	213.7	213.1	212.1	212.7	213.1	212.1	212.6	213.9	208.9	210.9	212.2	154.8	94.6
Louisville, Ky.....	193.9	196.6	198.9	201.7	207.2	207.4	206.8	203.8	201.6	198.2	193.9	198.0	200.1	135.6	92.1
Manchester, N. H.....	201.8	203.6	204.8	210.4	215.5	217.8	218.4	213.0	208.9	204.9	202.0	203.2	208.8	144.4	94.9
Memphis, Tenn.....	217.1	217.9	219.0	223.7	227.8	227.1	229.8	226.7	223.2	222.2	219.9	224.5	230.7	163.6	89.7
Milwaukee, Wis.....	206.5	205.0	207.5	211.2	216.3	218.8	218.3	215.3	213.7	210.9	204.6	203.4	206.4	144.3	91.1
Minneapolis, Minn.....	195.3	195.6	197.8	202.2	206.0	209.2	208.2	206.2	208.0	203.0	198.1	197.2	202.6	137.5	95.0
Mobile, Ala.....	214.5	211.8	211.3	213.8	222.1	222.7	222.5	219.8	217.0	216.3	212.2	215.5	219.6	149.8	95.5
Newark, N. J.....	200.1	201.2	203.9	205.8	211.1	212.6	212.8	209.9	204.7	203.0	196.4	200.3	201.4	147.9	95.6
New Haven, Conn.....	195.1	194.5	199.6	203.5	205.3	205.6	208.3	205.4	201.2	197.7	193.0	195.8	201.5	140.4	93.7
New Orleans, La. ²	213.2	216.1	218.0	220.5	227.7	228.5	233.2	227.3	223.0	228.7	224.3	225.6	226.4	157.6	97.6
New York, N. Y.....	205.3	204.3	208.7	211.5	216.2	216.9	217.9	213.9	210.0	208.6	201.2	206.7	209.7	149.2	95.8
Norfolk, Va.....	208.7	209.8	211.8	217.1	220.2	220.5	216.9	214.4	213.3	210.5	206.0	210.2	216.5	146.0	93.6
Omaha, Nebr.....	198.0	203.1	205.6	210.2	210.3	211.1	208.6	210.1	207.2	202.5	197.7	197.7	204.2	139.5	92.3
Peoria, Ill.....	215.7	216.8	218.0	222.1	230.3	230.8	224.9	227.3	223.8	217.0	205.8	206.9	219.5	151.3	93.4
Philadelphia, Pa.....	200.4	199.3	202.0	212.0	212.5	210.9	210.9	209.4	205.0	202.8	196.3	199.3	205.6	143.5	90.8
Pittsburgh, Pa.....	208.0	208.0	211.0	215.1	219.5	220.9	222.3	219.6	213.7	209.8	204.8	205.4	212.8	147.1	92.5
Portland, Maine.....	194.3	195.0	198.0	204.1	207.0	209.8	209.7	204.1	199.4	197.0	192.4	193.5	199.6	138.4	95.9
Portland, Ore.....	224.2	223.5	222.9	227.7	231.4	234.1	233.7	228.2	229.5	223.2	220.4	219.2	223.0	158.4	96.1
Providence, R. I.....	210.1	209.2	211.7	218.4	223.8	227.2	224.9	222.0	217.9	213.1	205.5	210.5	215.0	144.9	93.7
Richmond, Va.....	200.3	201.5	203.6	209.7	214.1	211.7	209.4	205.3	203.4	200.6	197.6	201.3	209.1	138.4	92.2
Rochester, N. Y.....	195.5	196.5	196.7	200.7	207.3	209.7	211.2	208.8	205.1	200.8	196.7	196.9	202.1	142.5	92.3
St. Louis, Mo.....	212.4	212.2	213.1	217.4	223.0	225.3	224.2	222.0	218.2	213.6	210.9	212.8	217.2	147.4	93.8
St. Paul, Minn.....	192.9	192.1	194.8	199.7	203.1	204.5	204.7	203.7	203.5	200.5	195.3	194.0	198.6	137.3	94.3
Salt Lake City, Utah.....	211.8	209.8	208.8	211.2	214.7	216.0	217.1	215.8	216.8	212.9	207.3	207.9	211.3	151.7	94.6
San Francisco, Calif.....	223.2	221.1	219.5	223.0	224.2	224.3	223.2	221.6	223.4	219.5	215.4	218.9	218.9	155.5	93.8
Savannah, Ga.....	215.3	216.0	215.0	219.2	222.4	223.3	228.3	224.5	223.3	221.4	213.6	219.6	222.9	158.5	96.7
Scranton, Pa.....	201.6	201.1	202.8	209.2	213.2	217.3	218.2	216.1	212.2	208.9	201.8	203.2	213.1	144.0	92.1
Seattle, Wash.....	214.4	211.8	213.4	217.5	221.0	221.9	223.4	220.3	221.4	215.5	212.5	214.7	218.4	151.6	94.5
Springfield, Ill.....	214.0	214.4	215.2	219.5	226.4	227.0	224.9	224.4	219.3	212.6	209.1	211.4	217.9	150.1	94.1
Washington, D. C.....	202.4	201.8	203.5	209.2	212.9	214.9	215.1	215.4	209.7	205.1	198.9	202.0	209.5	145.5	94.1
Wichita, Kans. ¹	219.0	220.4	222.2	220.0	223.0	224.7	226.7	226.4	225.3	220.3	215.9	215.1	222.4	154.4	-----
Winston-Salem, N. C. ¹	203.7	206.6	206.1	212.7	215.6	215.8	212.9	209.5	208.4	206.0	202.7	207.9	214.5	145.3	-----

¹ June 1940=100.

² Estimated index based on half the usual sample of reports. Remaining

reports lost in the mails. Index for Feb. 15, will reflect the correct level of food prices for New Orleans.

TABLE D-6: Average Retail Prices and Indexes of Selected Foods

Commodity	Average price Jan. 1949	Indexes 1935-39=100													
		Jan. 1949	Dec. 1948	Nov. 1948	Oct. 1948	Sept. 1948	Aug. 1948	July 1948	June 1948	May 1948	Apr. 1948	Mar. 1948	Feb. 1948	Jan. 1948	Aug. 1939
Cereals and bakery products:															
Cereals:															
Flour, wheat.....5 pounds.....	48.3	187.0	185.7	184.0	184.2	184.9	185.7	186.9	188.4	189.4	189.6	192.4	197.3	210.9	82.1
Corn flakes.....11 ounces.....	16.8	177.4	177.8	177.6	177.2	177.1	176.8	177.2	175.7	175.8	173.3	172.8	172.9	172.9	92.7
Corn meal.....pound.....	9.7	189.0	194.9	199.5	210.5	214.0	215.2	215.5	213.7	215.7	216.4	216.6	219.9	219.9	90.7
Rice.....do.....	19.1	107.2	107.6	109.4	112.1	121.1	121.5	120.6	119.6	118.6	118.4	118.1	118.4	117.3	(?)
Rollod oats.....20 ounces.....	17.1	155.5	155.8	155.2	155.5	155.6	155.4	155.2	155.0	154.8	154.8	153.5	153.4	153.6	(?)
Bakery products:															
Bread, white.....pound.....	13.9	163.2	163.0	162.8	162.7	163.1	163.1	163.1	163.5	163.5	163.2	163.1	163.1	162.3	93.2
Vanilla cookies.....do.....	45.2	195.6	194.9	194.1	193.0	192.4	191.7	192.1	190.3	188.8	189.2	187.9	187.7	183.7	(4)
Meats, poultry, and fish:															
Meats:															
Beef:															
Round steak.....do.....	83.9	248.3	261.1	269.3	277.3	292.5	299.5	294.4	287.6	267.3	250.7	234.0	231.4	248.4	102.7
Rib roast.....do.....	69.6	241.7	253.1	262.0	267.2	277.6	283.1	276.6	266.7	249.9	238.2	227.0	227.9	242.3	97.4
Chuck roast.....do.....	57.8	257.7	276.8	291.5	301.1	315.0	322.2	315.5	309.6	283.4	263.3	249.6	250.6	263.1	97.1
Hamburger.....do.....	54.4	175.9	181.7	184.6	193.7	199.2	202.5	199.3	194.7	178.6	166.3	158.0	157.3	159.7	(4)
Veal:															
Cutlets.....do.....	99.2	248.7	248.7	248.4	253.6	258.5	259.6	256.1	252.5	245.6	234.9	226.8	228.0	230.0	101.1
Pork:															
Chops.....do.....	67.0	203.4	204.6	219.7	254.1	278.6	276.5	252.7	238.1	233.5	223.2	212.1	200.1	219.4	90.8
Bacon, sliced.....do.....	72.4	190.0	195.8	200.7	207.0	207.2	206.3	204.5	201.9	199.1	191.3	185.7	194.7	227.7	80.9
Ham, whole.....do.....	65.4	222.5	233.3	227.2	239.4	253.3	251.1	244.2	231.2	223.7	220.9	213.6	212.0	234.8	92.7
Salt pork.....do.....	40.0	191.6	211.6	200.1	200.2	196.1	194.1	196.0	196.6	203.5	209.9	214.7	238.2	259.6	69.0
Lamb:															
Leg.....do.....	67.6	238.1	242.4	250.4	253.4	260.7	270.8	279.4	275.6	257.6	236.3	220.3	226.9	235.2	95.7
Poultry:															
Roasting chickens.....do.....	63.0	208.9	208.0	200.5	204.0	209.4	207.8	209.3	207.6	202.1	198.4	194.7	196.4	200.0	94.6
Fish:															
Fish (fresh, frozen).....do.....	(6)	272.4	268.5	268.1	270.2	264.0	254.4	253.9	251.8	261.3	264.9	274.4	276.3	270.5	98.8
Salmon, pink.....16-ounce can.....	61.4	468.3	466.0	467.0	452.6	429.2	417.1	408.1	405.2	399.7	397.1	394.1	393.7	394.9	97.4
Dairy products:															
Butter.....pound.....	75.0	205.9	207.6	205.7	212.7	232.7	245.6	252.0	249.8	254.2	255.4	237.4	248.4	258.1	84.0
Cheese.....do.....	63.9	245.8	246.8	246.6	259.0	264.1	268.6	262.1	254.6	248.1	241.5	243.7	247.9	242.2	92.3
Milk, fresh (delivered).....quart.....	22.0	179.9	184.5	185.3	186.0	185.4	182.0	177.1	174.0	171.5	174.3	174.6	174.3	173.3	97.1
Milk, fresh (grocery).....do.....	20.9	185.7	189.4	191.4	191.1	189.4	187.8	182.1	179.3	177.3	179.0	179.5	179.7	178.5	96.3
Milk, evaporated.....14 1/2-ounce can.....	14.6	204.6	208.0	210.0	216.9	220.8	218.3	212.8	210.9	202.1	197.2	197.1	195.8	189.6	93.9
Eggs: Eggs, fresh.....dozen.....	72.5	209.6	217.3	244.3	239.0	226.6	220.2	204.3	194.2	184.9	184.7	186.3	189.2	213.6	90.7
Fruits and vegetables:															
Fresh fruits:															
Apples.....pound.....	13.4	255.7	241.5	229.1	220.7	216.7	225.1	265.3	269.2	229.1	208.2	205.6	208.6	219.2	81.6
Bananas.....do.....	16.2	267.7	269.3	270.6	269.9	269.3	270.7	269.3	261.7	257.8	256.3	255.3	257.4	257.9	97.3
Oranges, size 200.....dozen.....	47.6	168.4	153.7	151.0	192.1	187.2	183.3	169.2	155.1	149.2	142.9	145.1	135.9	133.5	96.9
Fresh vegetables:															
Beans, green.....pound.....	25.5	234.6	173.3	224.9	155.1	172.0	176.0	187.7	185.1	229.1	229.5	191.2	257.2	199.9	61.7
Cabbage.....do.....	6.2	163.7	142.5	133.7	139.7	136.5	139.2	155.1	180.1	202.3	250.5	174.8	191.5	222.9	103.2
Carrots.....bunch.....	10.7	199.9	184.2	184.3	191.6	190.8	183.6	202.1	263.2	310.1	254.3	227.8	261.3	245.3	84.9
Lettuce.....head.....	15.3	185.9	170.8	158.9	163.0	156.2	143.1	177.8	164.1	200.7	159.9	158.0	153.5	201.0	97.6
Onions.....pound.....	6.4	155.7	156.9	154.6	147.8	154.2	176.3	251.9	262.4	291.0	440.9	386.2	364.8	285.6	86.8
Potatoes.....15 pounds.....	81.0	225.5	208.3	199.1	202.4	210.8	223.5	248.4	263.5	261.7	253.6	247.0	246.9	234.4	91.9
Spinach.....pound.....	14.5	202.3	163.2	155.1	161.2	183.9	205.0	174.7	145.0	158.4	167.4	171.5	221.5	191.4	118.4
Sweetpotatoes.....do.....	11.0	211.4	198.1	181.9	181.1	196.2	235.5	286.9	273.4	225.2	213.1	208.3	207.2	196.4	115.7
Canned fruits:															
Peaches.....No. 2 1/2 can.....	32.6	169.0	168.2	168.2	166.5	165.1	163.0	161.6	160.8	160.8	160.6	161.0	161.5	162.4	92.3
Pineapple.....do.....	39.3	180.4	181.3	178.1	176.2	174.4	170.0	168.5	168.1	166.7	166.3	164.3	163.0	162.1	96.0
Canned vegetables:															
Corn.....No. 2 can.....	19.9	160.2	160.4	159.7	160.2	159.3	158.8	158.6	158.2	157.9	156.6	156.9	157.0	156.6	88.6
Peas.....do.....	15.3	117.1	117.2	117.5	116.7	116.9	115.8	113.5	112.8	112.3	113.5	115.5	118.0	118.0	89.8
Tomatoes.....do.....	16.2	179.6	180.0	181.4	181.3	183.2	182.6	184.7	184.8	183.0	183.2	186.2	185.0	185.9	92.5
Dried fruits: Prunes.....pound.....	22.3	218.9	216.6	211.6	209.1	205.6	204.7	204.9	204.3	206.9	208.6	211.2	216.0	217.8	94.7
Dried vegetables: Navy beans.....do.....	17.6	239.1	246.2	255.7	278.2	311.5	312.9	309.7	310.5	311.6	314.3	314.9	312.9	311.9	83.0
Beverages: Coffee.....do.....	52.3	208.3	207.4	206.0	205.5	205.2	204.9	204.8	204.7	204.2	204.0	204.0	203.6	201.5	93.3
Fats and oils:															
Lard.....do.....	24.3	163.2	181.0	191.4	196.1	198.5	197.3	198.1	198.5	198.2	194.1	191.9	196.0	238.8	65.2
Hydrogenated veg. shortening.....do.....	40.9	197.2	202.8	204.9	205.6	207.3	209.6	220.3	218.2	211.4	214.4	217.6	225.8	225.8	93.9
Salad dressing.....pint.....	38.6	159.3	162.7	163.7	165.7	168.6	168.3	168.4	167.1	164.4	159.8	159.0	158.8	156.1	(4)
Margarine.....pound.....	36.3	199.0	208.6	213.4	220.4	229.8	235.3	240.1	242.0	232.6	223.9	224.0	227.8	230.5	93.6
Sugar and sweets:															
Sugar.....do.....	9.4	174.2	173.8	174.2	174.0	174.0	173.2	171.8	171.4	173.8	174.5	175.3	177.7	184.3	95.6

1 July 1947=100.
 2 Index not computed.
 3 February 1943=100.
 4 Not priced in earlier period.

5 1938-39=100.
 6 Average price not computed.
 7 Formerly published as shortening in other containers.

TABLE D-7: Indexes of Wholesale Prices,¹ by Group of Commodities, for Selected Periods
[1926=100]

Year and month	All commodities ²	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting materials	Metals and metal products ³	Building materials	Chemicals and allied products	House-furnishing goods	Miscellaneous commodities	Raw materials	Semi-manufactured articles	Manufactured products ⁴	All commodities except farm products ⁵	All commodities except farm products and foods ⁶
1913: Average.....	69.8	71.5	64.2	68.1	57.3	61.3	90.8	56.7	80.2	56.1	93.1	68.8	74.9	69.4	69.0	70.0
1914: July.....	67.3	71.4	62.9	69.7	55.3	55.7	79.1	52.9	77.9	56.7	88.1	67.3	67.8	66.9	65.7	65.7
1918: November.....	136.3	150.3	128.6	131.6	142.6	114.3	143.5	101.8	178.0	99.2	142.3	138.8	162.7	130.4	131.0	129.9
1920: May.....	167.2	169.8	147.3	193.2	188.3	159.8	155.5	164.4	173.7	143.3	176.5	163.4	253.0	157.8	165.4	170.6
1929: Average.....	95.3	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6	97.5	93.9	94.5	93.3	91.6
1932: Average.....	64.8	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4	55.1	59.3	70.3	68.3	70.2
1939: Average.....	77.1	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8	70.2	77.0	80.4	79.5	81.3
August.....	75.0	61.0	67.2	92.7	67.8	72.6	93.2	89.6	74.2	85.6	73.3	66.5	74.5	79.1	77.9	80.1
1940: Average.....	78.6	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3	71.9	79.1	81.6	80.8	83.0
1941: Average.....	87.3	82.4	82.7	108.3	84.8	76.2	99.4	103.2	84.4	94.3	82.0	83.5	86.9	89.1	88.3	89.0
December.....	93.6	94.7	90.5	114.8	91.8	78.4	103.3	107.8	90.4	101.1	87.6	92.3	90.1	94.6	93.3	93.7
1942: Average.....	98.8	105.9	99.6	117.7	96.9	78.5	103.8	110.2	95.5	102.4	89.7	100.6	92.6	98.6	97.0	95.5
1943: Average.....	103.1	122.6	106.6	117.5	97.4	80.8	103.8	111.4	94.9	102.7	92.2	112.1	92.9	100.1	98.7	96.9
1944: Average.....	104.0	123.3	104.9	116.7	98.4	83.0	103.8	115.5	95.2	104.3	93.6	113.2	94.1	100.8	99.6	98.5
1945: Average.....	105.8	128.2	106.2	118.1	100.1	84.0	104.7	117.8	95.2	104.5	94.7	116.8	95.9	101.8	100.8	99.7
August.....	105.7	126.9	106.4	118.0	99.6	84.8	104.7	117.8	95.3	104.5	94.8	116.3	95.5	101.8	100.9	99.9
1946: Average.....	121.1	148.9	130.7	137.2	116.3	90.1	115.5	132.6	101.4	111.6	100.3	134.7	110.8	116.1	114.9	109.5
June.....	112.9	140.1	112.9	122.4	109.2	87.8	112.2	129.9	96.4	110.4	98.5	126.3	105.7	107.3	106.7	105.6
November.....	139.7	169.8	165.4	172.5	131.6	94.5	130.2	145.5	118.9	118.2	106.5	153.4	129.1	134.7	132.9	120.7
1947: Average.....	152.1	181.2	168.7	182.4	141.7	108.7	145.0	179.7	127.3	131.1	115.5	165.6	148.5	146.0	145.5	135.2
1948: Average.....	165.0	188.3	179.1	188.8	148.6	134.1	163.6	199.0	135.1	144.5	120.5	178.4	156.6	159.4	159.6	150.7
January.....	165.7	199.2	179.9	200.3	148.4	130.0	154.3	193.3	138.8	141.3	123.6	183.9	156.8	157.8	158.2	148.3
February.....	160.9	185.3	172.4	192.8	148.9	130.8	155.3	192.7	134.6	141.8	120.1	174.9	155.2	154.5	155.3	147.6
March.....	161.4	186.0	173.8	185.4	149.8	130.9	155.9	193.1	136.1	142.0	120.8	174.7	152.9	155.8	155.7	147.7
April.....	162.8	186.7	176.7	186.1	150.3	131.6	157.2	195.0	136.2	142.3	121.8	175.5	154.1	157.6	157.3	148.7
May.....	163.9	189.1	177.4	188.4	150.2	132.6	157.1	196.4	134.7	142.6	121.5	177.6	153.8	158.5	158.2	149.1
June.....	166.2	196.0	181.4	187.7	149.6	133.1	158.5	196.8	135.8	143.2	121.5	182.6	154.5	159.6	159.4	149.5
July.....	168.7	195.2	188.3	189.2	149.4	135.7	162.2	199.9	134.4	144.5	120.3	184.3	155.9	162.6	162.6	151.1
August.....	169.5	191.0	189.5	188.4	148.9	136.6	170.9	203.6	132.0	145.4	119.7	182.0	159.6	164.6	164.6	153.1
September.....	168.7	189.9	186.9	187.5	147.9	136.7	172.0	204.0	133.3	146.6	119.9	181.0	158.8	163.9	163.8	153.3
October.....	165.2	183.5	178.2	185.5	146.9	137.2	172.4	203.5	134.8	147.5	119.0	177.0	158.4	160.2	161.0	153.2
November.....	164.0	180.8	174.3	186.2	147.5	137.3	173.3	203.0	133.9	148.2	119.2	175.2	161.0	158.7	160.1	153.5
December.....	162.3	177.3	170.2	185.3	146.7	137.0	173.8	202.1	130.6	148.4	118.5	172.1	160.8	157.5	158.8	153.0
1949: January.....	160.6	172.5	165.8	184.8	146.0	137.0	175.9	202.2	125.7	148.2	117.3	169.3	160.3	156.3	157.8	152.9

¹ BLS wholesale price data, for the most part, represent prices in primary markets. They are prices charged by manufacturers or producers or are prices prevailing on organized exchanges. The weekly index is calculated from 1-day-a-week prices; the monthly index from an average of these prices. Monthly indexes for the last 2 months are preliminary.

The indexes currently are computed by the fixed base aggregate method, with weights representing quantities produced for sale in 1929-31. (For a detailed description of the method of calculation see "Revised Method of Calculation of the Bureau of Labor Statistics Wholesale Price Index," in the Journal of the American Statistical Association, December 1937.)

Mimeographed tables are available, upon request to the Bureau, giving monthly indexes for major groups of commodities since 1890 and for subgroups and economic groups since 1913. The weekly wholesale price indexes are

available in summary form since 1947 for all commodities; all commodities less farm products and foods; farm products; foods; textile products; fuel and lighting materials; metals and metal products; and building materials. Weekly indexes are also available for the subgroups of grains, livestock, meats, and hides and skins.

² Includes current motor vehicle prices beginning with October 1946. The rate of production of motor vehicles in October 1946 exceeded the monthly average rate of civilian production in 1941, and in accordance with the announcement made in September 1946, the Bureau introduced current prices for motor vehicles in the October calculations. During the war, motor vehicles were not produced for general civilian sale and the Bureau carried April 1942 prices forward in each computation through September 1946.

³ Corrected.

TABLE D-8: Indexes of Wholesale Prices,¹ by Group and Subgroup of Commodities

[1926=100]

Group and subgroup	1949			1948									1946	1939	
	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	June	Aug.
All commodities ^a	160.6	° 162.3	° 164.0	165.2	168.7	169.5	168.7	166.2	163.9	162.8	161.4	160.9	165.7	112.9	75.0
Farm products.....	172.5	177.3	180.8	183.5	189.9	191.0	195.2	196.0	189.1	186.7	186.0	185.3	199.2	140.1	61.0
Grains.....	167.7	171.1	171.1	170.4	176.9	179.2	190.6	209.2	213.5	217.9	218.0	220.0	256.3	151.8	51.5
Livestock and poultry.....	194.7 ¹	204.6	213.4	223.4	244.2	250.0	250.8	239.2	219.0	204.4	209.4	210.0	232.9	137.4	66.0
Livestock.....	209.9	221.7	234.1	246.9	268.8	273.3	272.8	259.5	236.1	219.7	224.1	225.5	250.9	143.4	(²)
Other farm products.....	159.4	161.4	162.6	162.0	169.6	157.8	161.9	165.4	163.3	166.4	162.2	159.9	162.4	137.5	60.1
Foods.....	165.8	170.2	174.3	178.2	186.9	189.5	188.3	181.4	177.4	176.7	173.8	172.4	179.9	112.9	67.2
Dairy products.....	163.6	° 171.2	170.7	174.9	179.9	185.1	182.9	181.3	176.6	181.0	179.8	184.8	183.9	127.3	67.9
Cereal products.....	148.0	149.8	105.5	149.6	153.3	154.0	154.5	155.1	156.3	158.0	158.6	160.2	170.1	101.7	71.9
Fruits and vegetables.....	145.3	139.8	139.6	137.1	139.4	140.5	151.2	147.7	147.0	148.6	145.7	144.5	140.7	136.1	58.5
Meats, poultry, and fish.....	214.2	220.8	227.4	239.8	266.5	273.7	263.8	241.3	233.2	226.0	217.1	206.2	222.3	110.1	73.7
Meats.....	222.8	230.8	240.0	255.0	277.4	279.6	277.2	265.1	262.3	251.5	240.6	230.7	248.0	116.6	78.1
Other foods.....	134.4	140.9	149.4	150.4	149.1	146.9	148.5	148.1	144.2	144.4	144.3	146.7	155.0	98.1	60.3
Hides and leather products.....	184.8	185.3	186.2	185.5	187.5	188.4	189.2	187.7	188.4	186.1	185.4	192.8	200.3	122.4	92.7
Shoes.....	187.8	188.0	188.1	189.7	190.0	189.4	186.3	185.8	185.6	191.7	193.8	194.7	194.3	129.5	100.8
Hides and skins.....	198.7	197.2	206.0	202.0	210.6	212.1	220.3	215.2	218.0	199.3	186.2	207.2	238.9	121.5	77.2
Leather.....	185.4	186.5	183.8	180.4	181.9	186.0	189.2	186.9	188.2	183.6	185.9	199.6	209.4	110.7	84.0
Other leather products.....	145.4	148.6	148.6	148.6	148.6	148.6	149.9	160.9	150.9	143.3	143.8	143.8	143.8	115.2	97.1
Textile products.....	146.0	° 146.7	° 147.5	146.9	147.9	148.9	149.4	149.6	150.2	150.3	149.8	148.9	148.4	106.2	67.8
Clothing.....	147.7	148.8	° 149.1	148.8	148.6	148.3	148.3	145.2	145.8	145.8	144.6	144.7	143.4	120.3	81.5
Cotton goods.....	186.9	189.2	191.7	195.0	199.8	205.3	209.3	213.1	217.8	219.2	218.3	214.9	214.8	139.4	65.5
Hosiery and underwear.....	102.5	° 103.7	° 104.0	104.6	104.8	104.9	104.9	105.3	105.4	105.4	105.4	105.0	104.4	75.8	61.5
Rayon.....	41.8	41.8	41.8	41.8	41.8	41.6	40.7	40.7	40.7	40.7	40.7	40.7	40.7	30.2	28.5
Silk.....	(⁴)	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4	(⁵)	44.3
Woolen and worsted.....	161.6	° 159.6	° 159.6	150.7	150.0	149.4	147.5	147.5	147.5	147.5	145.7	143.0	141.9	112.7	75.5
Other textile products.....	189.0	190.0	190.5	190.5	189.3	186.6	184.5	183.1	174.2	170.0	174.7	180.2	181.2	112.3	63.7
Fuel and lighting materials.....	137.0	137.0	137.3	137.2	136.7	136.6	135.7	133.1	132.6	131.6	130.9	130.8	130.0	87.8	72.6
Anthracite.....	137.7	136.4	136.4	136.4	136.5	136.0	131.6	127.1	125.5	124.6	124.6	124.5	124.2	106.0	72.1
Bituminous coal.....	195.6	194.9	195.1	195.1	195.1	194.6	193.1	182.6	181.8	178.9	177.9	177.9	176.8	132.8	96.0
Coke.....	220.5	219.0	219.0	218.7	217.5	217.4	212.3	206.6	205.4	197.5	190.6	190.6	190.6	133.5	104.2
Electricity.....	(⁶)	(⁶)	67.3	66.5	66.3	65.5	66.4	65.7	65.4	66.1	65.7	66.6	66.4	67.2	75.8
Gas.....	(⁶)	91.0	92.6	90.9	90.7	86.9	90.4	90.7	89.3	89.1	88.7	85.8	84.5	79.6	86.7
Petroleum and products.....	121.3	122.0	122.8	122.8	122.2	122.1	122.1	122.1	122.1	121.8	121.8	121.7	120.7	64.0	51.7
Metals and metal products ^a	175.9	173.8	173.3	172.4	172.0	170.9	162.2	158.5	157.1	157.2	155.9	155.3	154.3	112.2	93.2
Agricultural machinery and equipment.....	144.0	° 143.9	° 143.5	142.5	140.5	135.6	134.1	132.2	130.5	129.8	129.3	128.9	128.6	104.5	93.5
Farm machinery.....	146.5	146.5	146.0	144.9	142.8	137.7	136.3	134.1	132.1	131.3	130.8	130.4	130.0	104.9	94.7
Iron and steel.....	169.1	165.4	165.0	164.5	164.0	163.1	153.2	149.4	148.9	149.4	147.7	146.3	144.6	110.1	95.1
Motor vehicles.....	176.8	175.6	175.3	175.3	175.0	174.1	168.2	163.9	161.7	161.6	161.6	161.6	161.6	135.5	92.5
Passenger cars.....	184.5	183.2	183.2	183.2	182.9	181.9	175.0	171.0	169.0	169.0	169.0	169.0	169.0	142.8	95.6
Trucks.....	142.4	142.0	140.4	140.3	140.2	139.7	137.3	132.1	129.7	129.2	129.3	129.3	129.3	104.3	77.4
Nonferrous metals.....	172.5	172.5	171.4	167.0	166.4	165.9	153.7	152.1	150.0	149.8	146.8	146.8	145.5	99.2	74.6
Plumbing and heating.....	156.9	157.3	157.3	157.3	157.0	153.9	145.3	143.2	138.7	138.7	138.7	138.7	138.8	106.0	79.3
Building materials.....	202.2	° 202.1	° 203.0	203.5	204.0	203.6	199.9	196.8	196.4	195.0	193.1	192.7	193.3	129.9	89.6
Brick and tile.....	162.4	160.5	160.4	160.1	158.9	158.6	157.9	153.3	152.8	152.5	151.6	151.1	150.9	121.3	90.5
Cement.....	134.0	133.5	133.7	133.7	133.3	133.2	132.2	128.8	128.2	127.5	127.4	127.2	126.5	102.6	91.3
Lumber.....	299.1	° 305.5	° 310.7	314.5	317.1	319.5	318.1	313.2	312.9	309.2	303.8	303.8	307.3	176.0	90.1
Paint and paint materials.....	166.3	161.5	161.6	160.4	160.2	158.1	157.9	158.7	158.4	158.6	156.7	159.6	163.2	108.6	82.1
Prepared paint.....	151.3	142.9	142.9	142.9	142.9	142.9	142.9	142.9	143.1	143.1	143.1	143.1	143.1	99.3	92.9
Paint materials.....	185.8	184.8	185.2	182.5	182.2	177.6	177.3	179.1	178.2	178.5	174.7	178.0	188.4	109.9	71.8
Plumbing and heating.....	156.9	157.3	157.3	157.3	157.0	153.9	145.3	143.2	138.7	138.7	138.7	138.7	138.8	106.0	79.3
Structural steel.....	178.8	178.8	178.8	178.8	178.8	178.8	159.6	153.3	153.3	155.8	155.8	149.4	143.0	120.1	107.3
Other building materials.....	179.1	176.9	175.6	174.8	174.8	173.4	167.1	163.5	163.1	162.2	161.8	159.8	157.9	118.4	89.5
Chemicals and allied products.....	125.7	° 130.6	° 133.9	134.8	133.3	132.0	134.4	135.8	134.7	136.2	136.1	134.6	138.8	96.4	74.2
Chemicals.....	121.2	° 122.4	124.8	127.5	126.0	126.3	127.8	126.2	125.9	126.8	126.8	126.5	125.8	98.0	83.8
Drug and pharmaceutical materials.....	150.3	151.4	151.9	152.6	152.7	153.3	153.6	153.7	153.3	153.8	154.4	154.3	154.4	109.4	77.1
Fertilizer materials.....	120.8	120.1	119.5	117.2	116.2	114.9	115.0	113.9	115.0	115.2	114.9	115.1	115.7	82.7	65.5
Mixed fertilizers.....	108.7	108.3	107.9	107.9	107.8	105.9	104.4	103.2	103.2	103.1	103.1	102.8	102.4	86.6	73.1
Oils and fats.....	146.1	° 179.4	° 195.1	192.9	188.6	180.3	193.2	212.7	205.0	212.3	211.4	201.5	236.7	102.1	40.6
Housefurnishing goods.....	148.2	148.4	148.2	147.5	146.6	145.4	144.5	143.2	142.6	142.3	142.0	141.8	141.3	110.4	85.6
Furnishings.....	163.6	153.6	153.6	152.5	151.5	149.3	148.6	146.7	144.7	145.8	144.2	144.7	143.8	114.5	90.0
Furniture.....	142.7	143.1	142.8	142.5	141.6	141.6	140.4	139.9	139.6	139.6	139.4	139.4	139.1	108.5	81.1
Miscellaneous.....	117.3	118.5	119.2	119.0	119.9	119.7	120.3	121.5	121.5	121.8	120.8	120.1	123.6	98.5	73.3
Tires and tubes.....	65.5	66.2	66.2	66.2	66.2	66.2	66.2	63.5	63.5	63.4	63.4	63.4	63.4	65.7	59.5
Cattle feed.....	212.0	217.1	217.9	195.4	201.7	198.4	239.6	292.4	291.1	296.9	284.2	262.0	336.0	197.8	68.4
Paper and pulp.....	168.3	169.5	169.9	170.2	170.9	169.0	166.8	167.3	167.4	167.5	167.3	167.4	168.1	115.6	80.0
Paperboard.....	169.0	161.7	162.2	164.0	165.6	169.7	1								

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
1945.....	4,760		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: ² January.....	215	300	76,500	100,000	1,050,000	.15
February.....	245	355	88,200	127,000	900,000	.14
March.....	265	415	493,000	550,000	6,430,000	.83
April.....	315	485	174,000	621,000	7,420,000	1.01
May.....	330	535	166,000	347,000	4,100,000	.57
June.....	335	540	165,000	245,000	2,200,000	.28
July.....	365	575	220,000	312,000	2,750,000	.37
August.....	350	575	150,000	250,000	2,100,000	.26
September.....	285	500	166,000	275,000	2,500,000	.33
October.....	250	425	110,000	200,000	2,000,000	.26
November.....	200	375	90,000	190,000	1,900,000	.26
December ²	125	225	40,000	100,000	600,000	.08
1949: January.....	225	400	70,000	110,000	800,000	.11

¹ All known work stoppages, arising out of labor-management disputes, involving six or more workers and continuing as long as a full day or shift are included in reports of the Bureau of Labor Statistics. Figures on "workers involved" and "man-days idle" cover all workers made idle 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 Revised estimates for some months but figures are not final. December estimates particularly are based on incomplete data.

F: Building and Construction

TABLE F-1: Expenditures for New Construction ¹

[Value of work put in place]

Type of construction	Expenditures (in millions)														
	1949		1948										1948	1947	
	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Total	Total
Total new construction ²	\$1,146	\$1,261	\$1,391	\$1,552	\$1,707	\$1,782	\$1,799	\$1,715	\$1,616	\$1,461	\$1,311	\$1,166	\$1,009	\$17,666	\$13,977
Private construction.....	889	974	1,080	1,178	1,265	1,332	1,354	1,318	1,235	1,120	1,024	940	837	13,631	10,893
Residential building (nonfarm).....	425	490	550	600	650	685	695	680	585	525	475	400	400	6,980	5,260
Nonresidential building (nonfarm) ³	278	292	312	330	333	334	332	324	305	277	264	266	265	3,615	3,131
Industrial.....	105	110	114	115	116	113	111	110	110	111	116	120	125	1,391	1,702
Commercial.....	84	89	100	112	115	122	127	125	116	97	87	88	84	1,258	835
Warehouses, office and loft buildings.....	33	36	38	38	36	35	34	29	28	25	23	22	22	354	216
Stores, restaurants, and garages.....	51	53	62	74	79	87	93	96	88	72	64	66	62	904	619
Other nonresidential building.....	89	93	98	103	102	99	94	89	79	69	61	58	56	966	594
Religious.....	25	26	28	28	27	26	23	21	18	16	14	13	12	239	118
Educational.....	21	22	24	25	26	25	24	22	19	17	16	15	15	244	164
Hospital and institutional.....	11	10	10	10	10	10	10	10	10	9	9	9	9	116	107
Remaining types ⁴	32	35	36	40	39	38	37	36	32	26	22	21	20	367	205
Farm construction.....	10	12	13	22	39	63	82	81	62	56	37	23	14	500	450
Public utilities.....	176	180	205	226	243	250	245	233	233	208	198	176	158	2,536	2,052
Railroad.....	20	25	30	32	34	36	33	30	26	25	23	21	21	350	318
Telephone and telegraph.....	46	45	55	55	60	61	57	55	63	60	54	48	48	676	510
Other public utilities.....	110	110	120	139	149	153	152	145	140	122	110	99	89	1,510	1,224
Public construction.....	257	287	311	374	442	450	445	397	381	341	287	226	172	4,035	3,084
Residential building.....	4	4	3	3	4	5	5	5	5	6	6	5	6	61	182
Nonresidential building (other than military or naval facilities).....	104	104	106	108	106	102	96	88	79	77	71	65	49	1,000	505
Industrial ⁵	0	0	1	1	2	2	2	2	2	2	2	1	1	19	25
Educational.....	60	60	60	61	58	56	52	48	43	40	37	36	30	553	275
Hospital and institutional.....	25	24	25	25	24	23	22	18	15	15	13	10	7	204	81
All other nonresidential.....	19	20	20	21	22	21	20	20	19	20	19	18	11	224	124
Military and naval facilities.....	7	9	10	11	12	13	13	12	11	13	13	12	11	145	204
Highways.....	55	68	80	126	180	190	200	169	167	136	98	57	41	1,500	1,233
Sewer and water.....	38	38	40	43	47	44	41	41	40	39	38	33	25	458	331
Miscellaneous public-service enterprises ⁶	5	7	6	8	10	10	9	10	10	11	9	9	6	106	117
Conservation and development.....	36	46	54	61	67	69	65	58	56	47	41	36	28	615	398
All other public ⁷	10	11	12	14	16	17	16	14	13	13	11	9	6	150	116

¹ Joint estimates of the Bureau of Labor Statistics, U. S. Department of Labor, and the Office of Domestic Commerce, 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 urban building authorized and the data on value of contract awards reported in table F-2.

² Includes major additions and alterations.
³ Excludes nonresidential building by privately owned public utilities.
⁴ Includes social and recreational buildings, hotels, and miscellaneous buildings not elsewhere classified.
⁵ Excludes expenditures to construct facilities used in atomic energy projects.
⁶ Covers primarily publicly owned electric light and power systems and local transit facilities.
⁷ Covers miscellaneous construction items such as airports, monuments, memorials, etc.

TABLE F-2: Value of Contracts Awarded and Force-Account Work Started on Federally Financed New Construction, by Type of Construction ¹

Period	Value (in thousands)															
	Total new construction ²	Airports ³	Building								Conservation and development			Highways	All other ⁴	
			Total	Residential	Nonresidential					Total	Reclamation	River, harbor, and flood control				
					Total	Educational ⁵	Hospital and institutional		Administration and general ⁶				Other non-residential			
							Total	Veterans ⁷								Other
1936	\$1,533,439	(7)	\$561,394	\$63,465	\$497,929	(8)	(8)	(8)	(8)	(8)	(8)	\$189,710	\$73,797	\$115,913	\$511,685	\$270,650
1939	1,586,604	\$4,753	669,222	231,071	438,151	(9)	(9)	(9)	(9)	(9)	(9)	225,423	115,612	109,811	355,701	331,505
1942	7,775,497	579,176	6,130,389	549,472	5,580,917	(9)	(9)	(9)	(9)	(9)	(9)	217,795	150,708	67,087	347,988	500,149
1946	1,450,252	14,859	549,656	435,463	114,203	(9)	(9)	(9)	(9)	(9)	(9)	300,405	169,253	131,152	535,784	49,548
1947	1,294,069	24,645	276,514	51,186	225,328	\$47,692	\$101,831	\$96,123	\$5,708	\$31,159	\$44,646	308,029	77,095	230,934	657,087	27,794
1948 ⁹	1,562,909	18,409	268,141	8,260	259,881	1,363	197,781	170,428	27,353	26,455	34,282	465,963	147,568	318,395	767,822	42,574
1948: January	105,737	808	14,136	149	13,987	253	8,818	8,603	215	1,961	2,955	41,585	4,667	36,918	47,268	1,940
February	155,428	645	46,632	859	45,773	168	41,762	41,557	205	1,735	2,108	57,361	1,229	56,132	49,426	1,364
March	145,350	5,322	63,193	61	63,132	256	59,131	58,920	211	1,230	2,515	21,793	6,639	15,154	51,561	3,481
April	154,375	2,521	9,867	553	9,314	12	5,606	5,049	557	1,863	1,833	79,782	56,934	22,848	58,247	3,958
May	114,040	1,199	24,712	364	24,348	468	20,215	20,045	170	1,861	1,804	10,309	4,738	5,571	75,648	2,172
June	134,800	2,003	35,989	825	35,164	89	15,156	13,739	1,417	9,696	10,223	23,628	8,877	14,751	68,486	4,694
July	137,730	1,578	9,944	254	9,690	0	6,691	1,493	5,198	1,185	1,814	41,546	1,327	40,219	78,428	6,234
August	123,433	1,997	6,384	120	6,264	2	4,402	872	3,530	887	973	21,982	4,269	17,713	91,305	1,765
September	117,055	423	18,793	66	18,727	31	13,364	13,178	186	2,190	3,142	28,479	2,959	25,520	65,965	3,395
October	126,011	816	26,561	783	25,778	0	21,952	6,448	15,504	1,547	2,279	37,080	19,488	17,592	55,741	5,813
November	97,474	238	5,187	2,371	2,816	84	544	429	115	750	1,438	35,387	13,883	21,504	51,662	5,000
December ⁹	151,476	859	6,743	1,855	4,888	0	140	95	45	1,550	3,198	67,031	22,558	44,473	74,085	2,758
1949: January ¹⁰	76,851	(8)	28,017	87	27,930	148	374	277	97	24,470	2,938	13,133	5,773	7,360	34,458	1,243

¹ Excludes projects classified as "secret" by the military, and all construction for the Atomic Energy Commission. Data for Federal-aid programs cover amounts contributed by both the owner and the Federal Government.

² Includes major additions and alterations.

³ Excludes hangars and other buildings, which are included under "Other nonresidential" building construction.

⁴ Includes educational facilities under the Federal temporary reuse educational facilities program.

⁵ Includes post offices, armories, offices, and customs houses. Also

includes, in January 1949, one contract in amount of \$23,810,000 for construction at site of United Nations headquarters in New York City, N. Y.

⁶ Includes electrification projects, water-supply and sewage-disposal systems, forestry projects, railroad construction, and other types of projects not elsewhere classified.

⁷ Included in "All other."

⁸ Unavailable.

⁹ Revised.

¹⁰ Preliminary.

TABLE F-3: Urban Building Authorized, by Principal Class of Construction and by Type of Building¹

Period	Total all classes ²	Valuation (in thousands)							Number of new dwelling units—House-keeping only						
		New residential building						Non-house-keeping ³	New nonresidential building	Additions, alterations, and repairs	Privately financed				Publicly financed
		Housekeeping				Publicly financed dwelling units	Total				1-family	2-family ⁴	Multi-family ⁴		
		Privately financed dwelling units													
		Total	1-family	2-family ⁴	Multi-family ⁴										
1942.....	\$2,707,573	\$598,570	\$478,655	\$42,629	\$77,283	\$296,933	\$22,910	\$1,510,688	\$278,472	184,892	138,908	15,747	30,237	95,946	
1946.....	4,743,414	2,114,833	1,830,260	103,042	181,531	355,587	43,369	1,458,602	771,023	430,195	358,151	24,326	47,718	98,310	
1947 ⁶	5,561,754	2,892,003	2,362,600	156,751	372,646	35,177	29,831	1,712,817	891,926	503,094	393,720	34,105	75,269	5,100	
1948 ⁷	6,944,952	3,429,891	2,748,101	184,093	497,697	138,372	38,027	2,338,684	999,978	516,454	392,861	36,646	86,947	15,075	
1947: December.....	479,967	227,675	179,806	11,951	35,918	3,000	2,276	177,386	69,630	36,088	26,596	2,443	7,049	364	
1948: January.....	426,531	198,698	150,879	11,501	36,318	6,616	3,224	152,086	65,907	32,523	23,704	2,280	6,539	820	
February.....	414,339	202,050	146,934	8,954	46,162	9,237	1,441	141,188	60,423	32,166	22,180	1,863	8,123	1,125	
March.....	631,621	321,562	252,778	20,016	48,768	597	4,082	222,565	82,815	50,788	37,520	4,092	9,176	85	
April.....	714,954	411,300	317,892	34,372	59,036	1,990	6,166	196,095	99,433	64,387	45,700	6,997	11,600	254	
May.....	657,480	349,949	291,208	17,895	40,846	5,393	2,729	205,619	93,790	52,811	41,423	3,769	7,619	733	
June.....	699,657	365,656	301,698	16,432	47,626	3,350	4,711	219,962	105,978	54,112	42,106	3,327	8,679	439	
July.....	650,119	320,797	264,509	15,899	40,389	10,069	3,167	219,598	95,588	46,573	36,661	2,971	6,941	1,260	
August.....	648,261	349,593	264,588	13,568	71,437	7,761	3,186	193,667	94,054	46,951	35,894	2,328	8,729	806	
September.....	587,633	268,561	228,258	14,157	26,146	14,595	3,162	215,929	85,386	39,443	31,781	2,837	4,825	1,484	
October ⁶	584,813	258,042	217,539	11,833	28,670	13,778	2,728	230,118	80,147	38,451	31,175	2,393	4,883	1,541	
November ⁶	473,476	213,863	178,051	9,142	26,670	23,913	1,490	165,182	69,028	32,314	25,600	1,729	4,985	2,205	
December ⁷	424,366	169,927	134,945	10,043	24,939	28,024	1,940	158,859	65,616	25,700	19,196	1,995	4,509	3,097	

¹ Building for which building permits were issued and Federal contracts awarded in all urban places, including an estimate of building undertaken in some smaller urban places that do not issue permits.

The data cover federally and nonfederally financed building construction combined. Estimates of nonfederal (private, and State and local government) urban building construction are based primarily on building-permit reports received from places containing about 85 percent of the urban population of the country; estimates of federally financed projects are compiled from notifications of construction contracts awarded, which are obtained from other Federal agencies. Data from building permits are not adjusted to allow for lapsed permits or for lag between permit issuance and the start of construction. Thus, the estimates do not represent construction actually started during the month.

Urban, as defined by the Bureau of the Census, covers all incorporated places of 2,500 population or more in 1940, and, by special rule, a small number of unincorporated civil divisions.

² Covers additions, alterations, and repairs, as well as new residential and nonresidential building.

³ Includes units in 1-family and 2-family structures with stores.

⁴ Includes units in multifamily structures with stores.

⁵ Covers hotels, dormitories, tourist cabins, and other nonhousekeeping residential buildings.

⁶ Revised.

⁷ Preliminary. Totals for 1948 include revisions which do not appear in data shown for January through October. Revised monthly data will appear in Monthly Labor Review for April.

TABLE F-4: New Nonresidential Building Authorized in All Urban Places,¹ by General Type and by Geographic Division²

Geographic division and type of new nonresidential building	Valuation (in thousands)														
	1948											1947 ³	1948 ⁴	1947 ⁵	
	Dec. 4	Nov. 3	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Total	Total
All types.....	\$158,869	\$165,182	\$230,118	\$215,929	\$193,667	\$219,598	\$219,962	\$205,619	\$196,005	\$222,565	\$141,188	\$152,086	\$177,386	\$2,338,684	\$1,712,817
New England.....	8,092	8,282	11,318	9,576	10,532	15,340	20,512	10,142	10,279	8,956	5,236	26,689	6,307	146,066	109,977
Middle Atlantic.....	26,938	29,184	43,840	29,725	32,814	30,752	32,431	50,807	27,338	55,770	20,497	9,305	42,569	391,784	272,627
East North Central.....	32,203	32,256	53,569	55,257	49,368	57,717	55,231	37,507	45,082	33,614	26,458	21,268	29,084	503,173	371,948
West North Central.....	10,447	10,462	22,623	14,370	17,027	12,114	13,671	12,079	14,985	16,434	16,566	8,813	19,008	170,345	132,163
South Atlantic.....	16,422	17,878	23,411	24,201	17,104	34,906	24,833	19,745	22,840	25,267	14,562	18,547	21,414	262,587	200,053
East South Central.....	8,076	5,198	14,748	9,708	8,649	6,892	8,682	7,798	6,176	9,902	3,928	7,152	7,945	100,297	73,009
West South Central.....	17,273	25,678	16,476	25,387	14,884	25,965	20,319	24,584	21,805	21,558	27,433	27,121	17,928	270,425	193,220
Mountain.....	4,199	3,201	5,697	18,290	8,567	7,778	4,429	7,818	6,240	8,724	3,826	2,761	4,067	81,899	58,163
Pacific.....	35,269	32,979	38,436	29,415	34,722	28,635	39,754	34,989	41,350	42,340	22,682	30,480	29,669	412,108	301,658
Industrial buildings ⁶	19,965	20,387	33,632	21,172	27,068	24,387	32,832	26,233	26,899	32,610	10,833	17,453	33,534	300,028	322,200
New England.....	1,445	1,483	2,569	3,087	3,546	3,526	2,365	2,300	1,806	1,806	1,061	1,803	1,642	19,839	26,098
Middle Atlantic.....	5,083	7,347	4,955	9,423	7,243	5,155	4,838	8,375	7,518	6,823	3,699	2,250	7,063	66,589	68,139
East North Central.....	7,601	4,393	8,137	9,437	1,958	9,217	15,607	7,997	9,262	9,513	3,859	5,477	10,137	100,034	118,667
West North Central.....	996	832	822	756	1,058	713	2,039	908	3,081	1,728	1,205	971	1,781	10,508	19,890
South Atlantic.....	1,454	2,010	6,972	1,262	1,670	1,180	2,159	1,496	1,619	1,499	1,640	1,927	3,851	27,776	20,549
East South Central.....	843	458	1,506	507	1,023	452	1,465	691	225	1,088	350	466	1,489	9,054	13,426
West South Central.....	244	786	1,431	980	1,799	1,836	1,023	1,316	2,400	1,637	1,640	2,666	1,861	15,854	17,519
Mountain.....	380	69	413	367	120	65	248	147	79	383	119	381	181	2,770	2,832
Pacific.....	1,919	2,959	6,827	3,876	3,198	2,243	2,993	2,943	3,484	4,691	3,343	3,568	4,724	42,044	45,000
Commercial buildings ⁶	54,107	66,848	84,895	93,956	79,526	92,057	82,407	84,424	83,852	82,366	47,315	72,617	65,621	927,005	686,282
New England.....	2,692	3,918	2,453	5,688	4,718	5,780	7,307	3,275	3,401	2,547	1,267	12,431	1,804	55,468	32,853
Middle Atlantic.....	6,720	13,002	15,091	10,913	12,884	17,177	13,508	10,550	11,506	12,763	5,411	5,412	13,252	132,963	91,206
East North Central.....	11,498	11,907	23,614	20,923	15,725	17,174	17,903	14,660	15,198	10,010	7,891	10,188	13,518	177,322	118,839
West North Central.....	4,172	3,666	10,263	9,390	7,128	6,575	4,647	6,022	6,692	8,286	2,586	5,171	6,885	73,600	57,240
South Atlantic.....	8,126	9,261	8,789	10,954	10,426	13,501	10,361	11,923	13,498	9,118	8,170	7,445	7,949	121,570	106,788
East South Central.....	2,674	3,192	3,016	3,502	3,864	3,202	3,232	3,375	3,891	3,245	2,027	4,172	1,978	39,391	34,680
West South Central.....	6,804	10,684	8,342	17,793	7,076	12,324	8,120	13,455	10,441	10,917	8,062	12,036	8,705	126,056	91,546
Mountain.....	1,414	1,523	2,640	2,183	4,965	4,192	2,761	3,275	3,747	4,998	2,093	1,484	1,651	35,274	26,855
Pacific.....	10,007	9,695	10,687	12,610	12,740	16,132	14,568	17,889	16,478	20,492	9,818	14,278	11,879	165,364	126,273
Community buildings ⁷	64,612	54,177	82,884	66,899	57,046	67,786	66,074	66,775	51,410	78,226	68,666	34,404	50,004	762,233	406,920
New England.....	1,651	1,741	4,404	1,580	4,137	3,443	8,780	3,457	4,255	3,477	1,465	5,944	638	45,440	25,759
Middle Atlantic.....	12,982	7,279	10,166	11,588	9,125	8,658	8,763	26,082	11,616	32,780	10,049	666	2,929	152,364	80,100
East North Central.....	10,414	11,143	16,034	11,429	13,394	21,303	14,105	10,354	13,954	8,707	10,989	2,623	4,236	146,050	82,542
West North Central.....	4,280	4,243	7,798	2,589	3,521	2,796	3,994	2,528	2,665	3,796	11,998	787	7,752	51,448	34,639
South Atlantic.....	4,316	4,437	5,471	7,832	3,869	10,567	6,508	2,887	4,761	9,623	3,341	7,570	3,628	73,936	40,172
East South Central.....	3,668	1,215	8,459	3,906	2,409	2,297	2,591	2,931	1,243	1,134	675	1,757	3,257	35,926	16,913
West South Central.....	8,420	11,206	3,531	4,595	4,481	9,545	8,835	7,999	7,259	6,463	16,591	11,007	4,813	101,975	65,399
Mountain.....	1,197	756	2,113	14,175	2,578	2,825	5,66	3,907	1,299	2,778	608	409	1,270	33,378	18,366
Pacific.....	17,675	12,157	14,908	9,205	13,532	6,415	11,942	6,630	11,501	9,468	2,950	3,641	3,881	121,361	63,030
Public buildings ⁸	4,420	1,938	4,452	6,201	5,155	5,629	14,736	4,296	5,508	7,055	5,323	5,577	4,566	70,633	41,049
New England.....	300	7	453	166	100	55	613	90	121	455	1,250	2,289	502	5,900	3,418
Middle Atlantic.....	194	140	640	1,259	498	337	2,463	1,147	659	488	112	214	219	8,151	4,712
East North Central.....	158	136	15	14	3,385	3,700	1,276	101	475	849	568	684	900	11,173	8,372
West North Central.....	215	251	25	45	138	36	754	26	1,500	124	77	535	200	3,974	1,996
South Atlantic.....	1,226	489	633	1,441	47	913	1,449	91	648	394	349	80	92	7,712	6,285
East South Central.....	721	80	961	1,280	0	0	1,029	413	209	3,374	417	206	150	8,936	8,830
West South Central.....	364	211	121	782	260	286	1,467	333	203	496	566	1,023	551	6,113	4,579
Mountain.....	803	260	37	877	73	68	4,475	36	341	61	259	113	180	3,605	2,416
Pacific.....	439	364	1,567	337	654	234	5,210	2,059	1,852	814	1,725	483	1,762	15,069	8,741
Public works and utility buildings ⁹	9,247	11,854	11,952	15,425	11,870	17,846	9,306	10,167	15,639	12,715	7,483	16,284	16,442	149,950	143,824
New England.....	1,584	371	455	273	290	1,736	630	119	581	300	75	5,113	1,092	11,438	15,085
Middle Atlantic.....	1,028	262	1,423	1,280	1,586	1,923	1,252	3,045	1,839	1,784	671	365	576	16,589	24,968
East North Central.....	1,339	2,148	2,274	9,801	3,584	3,729	2,549	1,094	2,692	2,889	2,481	1,649	1,211	35,809	35,972
West North Central.....	223	620	2,327	3,25	3,103	882	1,082	1,055	701	1,762	469	1,035	1,803	13,574	8,737
South Atlantic.....	787	893	779	1,946	389	7,845	3,051	2,572	1,556	592	670	1,125	5,347	22,203	19,046
East South Central.....	3	36	534	270	864	193	11	86	315	702	325	410	307	3,750	4,154
West South Central.....	1,044	2,241	2,241	579	414	1,494	322	669	2,099	688	208	814	1,241	12,811	7,647
Mountain.....	131	148	66	139	334	209	8	2	238	155	575	50	499	2,055	3,520
Pacific.....	3,108	5,135	1,853	812	1,306	285	501	1,525	5,618	3,834	2,019	5,722	4,866	31,721	24,695
All other buildings ¹⁰	6,508	9,972	12,303	12,276	13,002	11,893	14,607	13,724	12,787	9,293	5,518	5,751	6,729	128,855	112,512
New England.....	420	766	984	955	741	800	917	841	960	362	138	109	329	7,981	6,764
Middle Atlantic.....	931	1,154	1,565	1,598	1,478	1,602	1,517	1,698	1,443	1,142	555	395	830	15,128	13,412
East North Central.....	1,193	2,529	3,495	3,667	3,769	3,044	3,797	3,361	3,501	1,646	670	647	982	32,430	27,556
West North Central.....	552	800	1,388	1,265	1,179	1,172	1,155	1,540	1,346	738	241	314	587	11,691	9,961
South Atlantic.....	513	788	767	766	704	899	1,405	776	858	1,071	392	450	547	9,390	7,213
East South Central.....	167	217	272	243	4										

TABLE F-5: Number and Construction Cost of New Permanent Nonfarm Dwelling Units Started, by Urban or Rural Location, and by Source of Funds ¹

Period	Number of new dwelling units started									Estimated construction cost (in thousands) ²		
	All units			Privately financed			Publicly financed			Total	Privately financed	Publicly financed
	Total nonfarm	Urban	Rural nonfarm	Total nonfarm	Urban	Rural nonfarm	Total nonfarm	Urban	Rural nonfarm			
1925 ³	937,000	752,000	185,000	937,000	752,000	185,000	0	0	0	\$4,475,000	\$4,475,000	0
1933 ⁴	93,000	45,000	48,000	93,000	45,000	48,000	0	0	0	285,446	285,446	0
1941 ⁵	706,100	434,300	271,800	619,511	369,499	250,012	86,589	64,801	21,788	2,825,895	2,530,765	\$295,130
1944 ⁶	141,800	96,200	45,600	138,692	93,216	45,476	3,108	2,984	124	495,054	483,231	11,823
1946	670,500	403,700	266,800	662,473	395,673	266,800	8,027	8,027	0	3,769,767	3,713,776	55,991
1947	849,000	479,800	369,200	845,560	476,360	369,200	3,440	3,440	0	5,642,798	5,617,425	25,373
1947: First quarter	138,100	81,000	57,100	137,016	79,916	57,100	1,084	1,084	0	808,263	800,592	7,671
January	39,300	24,200	15,100	38,216	23,116	15,100	1,084	1,084	0	223,577	215,906	7,671
February	42,800	25,000	17,800	42,800	25,000	17,800	0	0	0	244,425	244,425	0
March	56,000	31,800	24,200	56,000	31,800	24,200	0	0	0	340,261	340,261	0
Second quarter	217,200	119,100	98,100	217,000	118,900	98,100	200	200	0	1,361,677	1,360,477	1,200
April	67,100	37,600	29,500	67,100	37,600	29,500	0	0	0	418,451	418,451	0
May	72,900	39,300	33,600	72,900	39,300	33,600	0	0	0	452,236	452,236	0
June	77,200	42,200	35,000	77,000	42,000	35,000	200	200	0	490,990	489,790	1,200
Third quarter	261,200	142,200	119,000	260,733	141,733	119,000	467	467	0	1,774,150	1,770,475	3,675
July	81,100	44,500	36,600	81,100	44,500	36,600	0	0	0	539,333	539,333	0
August	86,300	47,400	38,900	86,103	47,203	38,900	192	192	0	559,470	557,742	1,728
September	93,800	50,300	43,500	93,525	50,025	43,500	275	275	0	645,347	643,400	1,947
Fourth quarter	232,500	137,500	95,000	230,811	135,811	95,000	1,689	1,689	0	1,698,708	1,685,881	12,827
October	94,000	53,200	40,800	93,540	52,740	40,800	460	460	0	675,687	675,197	3,490
November	79,700	45,000	31,700	78,835	47,135	31,700	865	865	0	584,781	578,324	6,457
December	58,800	36,300	22,500	58,436	35,936	22,500	364	364	0	435,290	432,360	2,930
1948: First quarter	177,300	101,200	76,100	174,996	99,052	75,944	2,304	2,148	156	1,287,460	1,268,661	18,799
January	52,600	30,400	22,200	51,776	29,603	22,173	824	797	27	372,657	365,886	6,771
February	49,600	28,800	20,800	48,445	27,774	20,671	1,155	1,026	129	363,421	354,218	9,203
March	75,100	42,000	33,100	74,775	41,675	33,100	325	325	0	551,382	548,557	2,825
Second quarter	295,700	165,500	130,200	291,828	163,812	128,016	3,872	1,688	2,184	2,246,248	2,210,485	35,763
April	98,800	54,400	44,400	97,518	54,156	43,362	1,282	244	1,038	729,713	717,996	11,717
May	99,400	56,700	42,700	97,902	55,693	42,209	1,498	1,007	491	753,661	739,605	14,056
June	97,500	54,400	43,100	96,408	53,963	42,445	1,092	437	655	762,874	752,884	9,990
Third quarter ⁷	262,000	143,250	118,750	257,549	139,320	118,229	4,451	3,930	521	2,099,489	2,054,651	44,838
July	93,500	51,600	41,900	92,237	50,357	41,880	1,263	1,243	20	738,232	726,333	11,899
August	86,300	47,400	38,900	84,863	46,463	38,400	1,437	937	500	716,972	701,343	15,629
September ⁷	82,200	44,250	37,950	80,449	42,500	37,949	1,751	1,750	1	644,285	626,975	17,310
Fourth quarter ⁸	193,000	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	1,512,407	(9)	(9)
October ⁸	72,000	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	564,117	(9)	(9)
November ⁸	65,000	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	509,901	(9)	(9)
December ⁸	56,000	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	438,389	(9)	(9)

¹ The estimates shown here do not include temporary units, conversions, dormitory accommodations, trailers, or military barracks. They do include prefabricated housing units.

These estimates are based on building-permit records, which, beginning with 1945, have been adjusted for lapsed permits and for lag between permit issuance and start of construction. They are based also on reports of Federal construction contract awards and beginning in 1948, on field surveys in nonpermit-issuing places. The data in this table refer to nonfarm dwelling units started, and not to urban dwelling units authorized, as shown in table F-3.

All of these estimates contain some error. In 1948, for example, if the estimate of nonfarm starts is 50,000, the chances are about 19 out of 20 that an actual enumeration would produce a figure between 47,600 and 52,400. In 1946 and 1947, the range of error was approximately twice as large. The

reduction was achieved by improvements in estimating and survey techniques.

² 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.

³ Housing peak year.

⁴ Depression, low year.

⁵ Recovery peak year prior to wartime limitations.

⁶ Last full year under wartime control.

⁷ Revised.

⁸ Preliminary.

⁹ Not available.

